## » opc\_compute\_image\_list\_entry

Use this data source to access the configuration of an Image List Entry.

## » Example Usage

```
data "opc_compute_image_list_entry" "foo" {
   image_list = "my_image_list"
   version = "version_of_my_list"
}

output "machine_images" {
   value = "${data.opc_compute_image_list_entry.foo.machine_images}"
}

output "single_image" {
   value = "${data.opc_compute_image_list_entry.foo.machine_images[1]}"
}
```

## » Argument Reference

- image\_list (Required) The name of the image list to lookup.
- version (Required) The version (integer) of the Image List to use.
- entry (Optional) Which machine image to use. See Entry below for more details

### » Entry

The entry argument is fully optional when configuring the Data Source. If specified, however, the returned array of machine images will have a length of 1, and only contain the desired image.

Thus, if "my\_image\_list" is an image list that contains the following images:

```
["image1", "image2", "image3", "image4", "image5"]
```

Then specifing an entry of 3, the returned machine\_images array will have a sigle element: "image3". If entry was omitted, or set to 0, the returned machine\_images array will contain all of the images for that image list version.

If the supplied entry value is invalid for the image list, Terraform will exit with an error, that the desired image list entry was not found.

### » Attributes Reference

- dns Array of DNS servers for the interface.
- attributes JSON object of all of the image list's attributes
- machine\_images An array of machine images as strings
- uri The URI of the image list

# » opc\_compute\_ip\_address\_reservation

Use this data source to access the attributes of an existing IP Network IP Address Reservation.

## » Example Usage

```
data "opc_compute_ip_address_reservation" "example" {
   name = "/Compute-${var.domain}/${var.user}/ipaddressreservation1"
}

output "public_ip_address" {
   value = "${data.opc_compute_ip_address_reservation.example.ip_address}"
}
```

## » Argument Reference

The following arguments are supported:

• name - (Required) The name of the ip address reservation.

## » Attributes Reference

- ip\_address\_pool The IP address pool from which the IP address is allocated.
- description A description of the ip address reservation.
- tags List of tags that applied to the IP address reservation.
- ip address The reserved IPv4 Public IP address.
- uri The Uniform Resource Identifier of the ip address reservation

## » opc\_compute\_ip\_reservation

Use this data source to access the attributes of an existing Shared Network IP Reservation.

## » Example Usage

```
data "opc_compute_ip_reservation" "example" {
   name = "/Compute-${var.domain}/${var.user}/309dd783-552d-4b8a-a3aa-a71109f703df"
}`
output "public_ip_address" {
   value = "${data.opc_compute_ip_reservation.example.ip}"
}
```

## » Argument Reference

The following arguments are supported:

• name - (Required) Name of the IP Reservation.

## » Attributes Reference

- ip The reserved IPv4 Public IP address.
- permanent Whether the IP address remains reserved even when it is no longer associated with an instance.
- parent\_pool The pool from which to allocate the IP address.
- tags List of tags applied to the IP reservation.
- used indicates that the IP reservation is associated with an instance.

# » opc\_compute\_machine\_image

Use this data source to access the configuration of an Machine Image.

### » Example Usage

```
data "opc_compute_machine_image" "foo" {
  account = "/Compute-${var.domain}/cloud_storage"
  name = "Microsoft_Windows_Server_2012_R2"
```

```
}
output "attributes" {
  value = "${data.opc_compute_machine_image.foo.attributes}"
}
```

## » Argument Reference

- account (Required) The two part name of the compute object storage account in the format /Compute-{identity\_domain}/cloud\_storage
- name (Required) The name of the Machine Image.

#### » Attributes Reference

- file The name of the Machine Image .tar.gz file in the compute\_images storage container.
- description A description of the Machine Image.
- attributes An optional JSON object of arbitrary attributes to be made available to the instance. These are user-defined tags. After defining attributes, you can view them from within an instance at http://192.0.0. 192/
- error\_reason Description of the state of the machine image if there is an error.
- hypervisor Dictionary of hypervisor-specific attributes.
- image\_format The format of the image.
- platform The OS platform of the image.
- state The state of the uploaded machine image.
- uri The Uniform Resource Identifier for the Machine Image.

# » opc\_compute\_network\_interface

Use this data source to access the configuration of an instance's network interface

## » Example Usage

```
data "opc_compute_network_interface" "foo" {
  instance_id = "${opc_compute_instance.my_instance.id}"
```

```
instance_name = "${opc_compute_instance.my_instance.name}"
interface = "eth0"
}

output "mac_address" {
  value = "${data.opc_compute_network_interface.foo.mac_address}"
}

output "vnic" {
  value = "${data.opc_compute_network_interface.foo.vnic}"
}
```

## » Argument Reference

- instance\_name is the name of the instance.
- instance\_id is the id of the instance.
- interface is the name of the attached interface. eth0, eth1, ... eth9.

#### » Attributes Reference

- dns Array of DNS servers for the interface.
- ip address IP Address assigned to the interface.
- ip\_network The IP Network assigned to the interface.
- is\_default\_gateway Whether or not the the interface is the default gateway.
- mac\_address The MAC address of the interface.
- model The model of the NIC card used.
- name\_servers Array of name servers for the interface.
- nat The IP Reservation (in IP Networks) associated with the interface.
- search\_domains The search domains that are sent through DHCP as option 119.
- sec\_lists The security lists the interface is added to.
- shared\_network Whether or not the interface is inside the Shared Network or an IP Network.
- vnic The name of the vNIC created for the IP Network.
- vnic\_sets The array of vNIC Sets the interface was added to.

# » opc\_compute\_ssh\_key

Use this data source to access the attributes of an SSH Key.

## » Example Usage

```
data "opc_compute_ssh_key" "test" {
   name = "/Compute-${var.domain}/${var.user}/test-key"
}

output "public_ssh_key" {
   value = "${data.opc_compute_ssh_key.test.key}"
}
```

## » Argument Reference

• name - (Required) The unique (within this identity domain) name of the SSH key.

### » Attributes Reference

- key The public SSH key.
- enabled Whether or not the key is enabled.

## » opc\_compute\_storage\_volume\_snapshot

Use this data source to access the configuration of a storage volume snapshot.

## » Example Usage

```
data "opc_compute_storage_volume_snapshot" "foo" {
  name = "my-storage-volume/my-storage-volume-snapshot-name"
}
```

## » Argument Reference

• name is the name of the storage volume snapshot.

### » Attributes Reference

- account Account of the snapshot.
- collocated Boolean specifying whether the snapshot is collocated or remote.

- description The description of the storage volume snapshot.
- machine\_image\_name The name of the machine image that's used in the boot volume from which this snapshot is taken.
- parent\_volume\_bootable Boolean specifying whether or not the snapshot's parent volume was bootable.
- property Where the snapshot is stored, whether collocated, or in the Oracle Storage Cloud Service instance.
- platform The OS platform this snapshot is compatible with
- size The size of the snapshot in GB.
- snapshot\_timestamp Timestamp of the storage snapshot, generated by storage server. The snapshot will contain data written to the original volume before this time.
- snapshot\_id The Oracle ID of the snapshot.
- start timestamp Timestamp when the snapshot was started.
- status Status of the snapshot.
- status\_detail Details about the latest state of the storage volume snapshot.
- status\_timestamp Indicates the time that the current view of the storage volume snapshot was generated.
- tags Comma-separated strings that tag the storage volume.
- uri Uniform Resource Identifier
- volume\_name The name of the storage volume that the snapshot was created from

# » opc\_compute\_vnic

Use this data source to access the configuration of a Virtual NIC.

## » Example Usage

```
data "opc_compute_vnic" "current" {
   name = "my_vnic_name"
}

output "mac_address" {
   value = "${data.opc_compute_vnic.current.mac_address}"
}
```

### » Argument Reference

• name is the name of the Virtual NIC.

## » Attributes Reference

- description is a description of the Virtual NIC.
- mac\_address is the MAC Address of the Virtual NIC.
- tags is a list of Tags associated with the Virtual NIC.
- transit\_flag is true if the Virtual NIC is of the type transit.
- uri is the Unique Resource Locator of the Virtual NIC.

## » opc\_compute\_acl

The opc\_compute\_acl resource creates and manages an ACL in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the ACL.
- enabled (Optional) Enables or disables the ACL. Set to true by default.
- description (Optional) A description of the ACL.
- tags (Optional) List of tags that may be applied to the ACL.

In addition to the above, the following values are exported:

• uri - The Uniform Resource Identifier for the ACL

## » Import

ACL's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_acl.acl1 example

## » opc\_compute\_image\_list

The opc\_compute\_image\_list resource creates and manages an Image List in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the Image List.
- description (Required) A description of the Image List.
- default (Required) The image list entry to be used, by default, when launching instances using this image list. Defaults to 1.

## » Import

Image List's can be imported using the resource name, e.g.

```
$ terraform import opc_compute_image_list.imagelist1 example
```

# » opc\_compute\_image\_list\_entry

The opc\_compute\_image\_list\_entry resource creates and manages an Image List Entry in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the Image List.
- machine\_images (Required) An array of machine images.
- version (Required) The unique version of the image list entry, as an integer.
- attributes (Optional) JSON String of optional data that will be passed to an instance of this machine image when it is launched.

### » Attributes Reference

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

• uri - The Unique Resource Identifier for the Image List Entry.

### » Import

Image List's can be imported using the Name of the Image List, along with the Version of the Image List Entry, delimited via the | character, e.g.

```
$ terraform import opc_compute_image_list_entry.entry1 my_image_list|2
```

# » opc\_compute\_instance

The opc\_compute\_instance resource creates and manages an instance in an Oracle Cloud Infrastructure Compute Classic identity domain.

Caution: The opc\_compute\_instance resource can completely delete your instance just as easily as it can create it. To avoid costly accidents, consider setting prevent\_destroy on your instance resources as an extra safety measure.

## » Example Usage

```
resource "opc_compute_ip_network" "test" {
                     = "internal-network"
                      = "Terraform Provisioned Internal Network"
 description
 ip_address_prefix = "10.0.1.0/24"
 public_napt_enabled = false
}
resource "opc_compute_storage_volume" "test" {
 name = "internal"
  size = 100
resource "opc_compute_instance" "test" {
            = "instance1"
            = "Terraform Provisioned Instance"
 label
  shape
            = "oc3"
  image_list = "/oracle/public/oel_6.7_apaas_16.4.5_1610211300"
 storage {
    volume = "${opc_compute_storage_volume.test.name}"
    index = 1
 networking_info {
    index
                   = ["ippool:/oracle/public/ippool"]
   nat
    shared_network = true
 }
}
```

## » Argument Reference

- name (Required) The name of the instance.
- shape (Required) The shape of the instance, e.g. oc4.

- instance\_attributes (Optional) A JSON string of custom attributes. See Attributes below for more information.
- boot\_order (Optional) The index number of the bootable storage volume, presented as a list, that should be used to boot the instance. The only valid value is [1]. If you set this attribute, you must also specify a bootable storage volume with index number 1 in the volume sub-parameter of storage\_attachments. When you specify boot\_order, you don't need to specify the imagelist attribute, because the instance is booted using the image on the specified bootable storage volume. If you specify both boot order and imagelist, the imagelist attribute is ignored.
- hostname (Optional) The host name assigned to the instance. On an
  Oracle Linux instance, this host name is displayed in response to the
  hostname command. Only relative DNS is supported. The domain name
  is suffixed to the host name that you specify. The host name must not end
  with a period. If you don't specify a host name, then a name is generated
  automatically.
- image\_list (Optional) The imageList of the instance, e.g. /oracle/public/oel\_6.4\_2GB\_v1.
- label (Optional) The label to apply to the instance.
- desired\_state (Optional) Set the desire state of the instance to running (default) or shutdown. You can use this request to shut down and restart individual instances which use a persistent bootable storage volume.
- networking\_info (Optional) Information pertaining to an individual network interface to be created and attached to the instance. If left unspecified, the instance will be created within the shared\_network. See Networking Info below for more information.
- storage (Optional) Information pertaining to an individual storage attachment to be created during instance creation. Please see Storage Attachments below for more information.
- reverse\_dns (Optional) If set to true (default), then reverse DNS records are created. If set to false, no reverse DNS records are created.
- ssh\_keys (Optional) A list of the names of the SSH Keys that can be used to log into the instance.
- tags (Optional) A list of strings that should be supplied to the instance as tags.

#### » Attributes

During instance creation, there are several custom attributes that a user may wish to make available to the instance during instance creation. These attributes can be specified via the instance\_attributes field, and must be presented as

a string in JSON format. The easiest way to populate this field is with a HEREDOC:

```
resource "opc_compute_instance" "foo" {
 name = "test"
  label = "test"
  shape = "oc3"
  imageList = "/oracle/public/oel_6.4_2GB_v1"
  instance attributes = << JSON
{
  "foo": "bar",
  "baz": 42,
  "my_obj": {
    "my_key": false,
    "another": true
 }
}
JSON
  sshKeys = ["${opc_compute_ssh_key.key1.name}"]
```

This allows the user to have full control over the attributes supplied to an instance during instance creation. There are, as well, some attributes that get populated during instance creation, and the full attributes map can be seen via the exported attributes attribute.

Warning: Due to how Terraform imports resources, the instance\_attributes field will only be populated when creating a new instance with terraform. This requires us to ignore any state diffs on changes to the instance\_attributes field. Thus, any configuration changes in the instance\_attributes field, will not register a diff during a plan or apply. If a user wishes to make a change solely to the supplied instance attributes, and recreate the instance resource, terraform taint is the best solution. You can read more about the taint command here

#### » Networking Info

Each networking\_info config manages a single network interface for the instance. The attributes are either required or optional depending on whether or not the interface is in the Shared Network, or an IP Network. Some attributes can only be used if the interface is in the Shared Network, and same for an interface in an IP Network.

**Note:** If networking\_info is left unspecified, the instance will be booted in the shared\_network.

The following attributes are supported:

- index (Required) The numerical index of the network interface. Specified as an integer to allow for use of count, but directly maps to ethX. ie: With index set to 0, the interface eth0 will be created. Can only be 0-9.
- dns (Optional, IP Network Only) List of DNS A record names for the instance. You can specify up to eight DNS A record names for each interface on an IP network. These names can be queried by instances on any IP network in the same IP network exchange.
- ip\_address (Optional, IP Network Only) IP Address assigned to the interface.
- ip\_network (Optional, IP Network Only) The IP Network assigned to the interface.
- mac\_address (Optional, IP Network Only) The MAC address of the interface.
- is\_default\_gateway (Optional, IP Network Only) Specify the interface is to be used as the default gateway for all traffic. Only one interface on an instance can be specified as the default gateway. If the instance has an interface on the shared network, that interface is always used as the default gateway.
- model (Optional, Shared Network Only) The model of the NIC card used.
   Must be set to e1000.
- name\_servers (Optional) Array of name servers for the interface.
- nat (Optional for IP Networks, Required for the Shared Network) The IP Reservations associated with the interface (IP Network). Indicates whether a temporary or permanent public IP address should be assigned to the instance (Shared Network).
- search\_domains (Optional) The search domains that are sent through DHCP as option 119.
- sec\_lists (Optional, Shared Network Only) The security lists the interface is added to.
- shared\_network (Required) Whether or not the interface is inside the Shared Network or an IP Network.
- vnic (Optional, IP Network Only) The name of the vNIC created for the IP Network.
- vnic\_sets (Optional, IP Network Only) The array of vNIC Sets the interface was added to.

## » Storage Attachments

Each Storage Attachment config manages a single storage attachment that is created during instance creation. This means that any storage attachments created during instance creation cannot be detached from the instance. Use the resource\_storage\_attachment resource to manage storage attachments for instances if you wish to detach the storage volumes at a later date.

The following attributes are supported:

- index (Required) The Index number of the volume attachment. 1 is the boot volume for the instance. Values 1-10 allowed.
- volume (Required) The name of the storage volume to attach to the instance.

In addition to the above attributes, the following attributes are exported for a storage volume

• name - Name of the storage volume attachment.

#### » Attributes Reference

In addition to the attributes listed above, the following attributes are exported:

- id The id of the instance.
- attributes The full attributes of the instance, as a JSON string.
- availability\_domain The availability domain the instance is in.
- domain The default domain to use for the hostname and for DNS lookups.
- entry Imagelist entry number.
- fingerprint SSH server fingerprint presented by the instance.
- fqdn The fully qualified domain name of the instance.
- image\_format The format of the image.
- ip\_address The IP Address of the instance.
- placement\_requirements The array of placement requirements for the instance.
- platform The OS Platform of the instance.
- priority The priority at which the instance was ran.
- quota\_reservation Reference to the QuotaReservation, to be destroyed with the instance.
- relationships The array of relationship specifications to be satisfied on instance placement.
- resolvers Array of resolvers to be used instead of the default resolvers.
- site The site the instance is running on.
- start\_time The launch time of the instance.
- state The instance's state.
- vcable\_id vCable ID for the instance.
- virtio Boolean that determines if the instance is a virtio device.
- vnc\_address The VNC address and port of the instance.

## » Import

Instances can be imported using the Instance's combined Name and ID with a / character separating them. If viewing an instance in the Oracle Web Console,

the instance's  ${\tt name}$  and  ${\tt id}$  are the last two fields in the instances fully qualified  ${\tt Name}$ 

For example, in the Web Console an instance's fully qualified name is: /Compute-<identify>/<user>@<account>/<instance\_name>/<instance\_id>

The instance can be imported as such:

\$ terraform import opc\_compute\_instance.instance1 instance\_name/instance\_id

### » Timeouts

opc\_compute\_instance provides the following Timeouts configuration options:

```
• create - (Default 20 minutes) Used for Creating Instances.
```

- update (Default 20 minutes) Used for updating Instances.
- delete (Default 20 minutes) Used for Deleting Instances.

## » opc compute ip address association

The opc\_compute\_ip\_address\_association resource creates and manages an IP address association between an IP address reservation and a virtual NIC in an Oracle Cloud Infrastructure Compute Classic identity domain, for an IP Network.

### » Example Usage

### » Argument Reference

- name (Required) The name of the ip address association.
- ip\_address\_reservation (Optional) The name of the NAT IP address reservation.
- vnic (Optional) The name of the virtual NIC associated with this NAT IP reservation.

- description (Optional) A description of the ip address association.
- tags (Optional) List of tags that may be applied to the ip address association.

In addition to the above, the following variables are exported:

uri - (Computed) The Uniform Resource Identifier of the ip address association.

## » Import

IP Address Associations can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_address\_association.default example

## » opc\_compute\_ip\_address\_prefix\_set

The opc\_compute\_ip\_address\_prefix\_set resource creates and manages an IP address prefix set in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the ip address prefix set.
- prefixes (Optional) List of CIDR IPv4 prefixes assigned in the virtual network.
- description (Optional) A description of the ip address prefix set.
- tags (Optional) List of tags that may be applied to the ip address prefix set.

In addition to the above, the following variables are exported:

• uri - (Computed) The Uniform Resource Identifier of the ip address prefix set.

### » Import

IP Address Prefix Set can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_address\_prefix\_set.default example

## » opc compute ip address reservation

The opc\_compute\_ip\_address\_reservation resource creates and manages an IP address reservation in an Oracle Cloud Infrastructure Compute Classic identity domain, for an IP Network.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the ip address reservation.
- ip\_address\_pool (Required) The IP address pool from which you want to reserve an IP address. Typically one of either public-ippool or cloud-ippool.
- description (Optional) A description of the ip address reservation.
- tags (Optional) List of tags that may be applied to the IP address reservation.

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

- ip\_address Reserved NAT IPv4 address from the IP address pool.
- uri The Uniform Resource Identifier of the ip address reservation

## » Import

IP Address Reservations can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_address\_reservation.default example

# » opc\_compute\_ip\_association

The opc\_compute\_ip\_association resource creates and manages an association between an IP address and an instance in an Oracle Cloud Infrastructure Compute Classic identity domain, for the Shared Network.

## » Example Usage

```
resource "opc_compute_ip_association" "instance1_reservation1" {
   vcable = "${opc_compute_instance.test_instance.vcable}"
   parent_pool = "ipreservation:${opc_compute_ip_reservation.reservation1.name}"
}
```

## » Argument Reference

The following arguments are supported:

- vcable (Required) The vcable of the instance to associate the IP address with.
- parent\_pool (Required) The pool from which to take an IP address. To associate a specific reserved IP address, use the prefix ipreservation: followed by the name of the IP reservation. To allocate an IP address from a pool, use the prefix ippool:, e.g. ippool:/oracle/public/ippool.

#### » Attributes Reference

The following attributes are exported:

• name The name of the IP Association

## » Import

IP Associations can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_association.association1 example

## » opc\_compute\_ip\_network

The opc\_compute\_ip\_network resource creates and manages an IP Network in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the IP Network. Changing this name forces a new resource to be created.
- ip\_address\_prefix (Required) The IPv4 address prefix, in CIDR format.
- description (Optional) The description of the IP Network.
- ip\_network\_exchange (Optional) Specify the IP Network exchange to which the IP Network belongs to.
- public\_napt\_enabled (Optional) If true, enable public internet access using NAPT for VNICs without any public IP Reservation. Defaults to false.

#### » Attributes Reference

The following attributes are exported:

- name The name of the IP Network
- ip\_address\_prefix The IPv4 address prefix, in CIDR format.
- description The description of the IP Network.
- ip\_network\_exchange The IP Network Exchange for the IP Network

- public\_napt\_enabled Whether public internet access using NAPT for VNICs without any public IP Reservation or not.
- uri Uniform Resource Identifier for the IP Network

## » Import

IP Networks can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_network.default example

# » opc\_compute\_ip\_network\_exchange

The opc\_compute\_ip\_network\_exchange resource creates and manages an IP network exchange in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

```
resource "opc_compute_ip_network_exchange" "default" {
  name = "NetworkExchange1"
}
```

## » Argument Reference

The following arguments are supported:

- name (Required) The name of the ip network exchange.
- description (Optional) A description of the ip network exchange.
- tags (Optional) List of tags that may be applied to the IP network exchange.

## » Import

IP Network Exchange's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_network\_exchange.exchange1 example

## » opc\_compute\_ip\_reservation

The opc\_compute\_ip\_reservation resource creates and manages an IP reservation in an Oracle Cloud Infrastructure Compute Classic identity domain for the Shared Network.

## » Example Usage

```
resource "opc_compute_ip_reservation" "reservation1" {
  parent_pool = "/oracle/public/ippool"
  permanent = true
  tags = [ "test" ]
}
```

## » Argument Reference

The following arguments are supported:

- permanent (Required) Whether the IP address remains reserved even when it is no longer associated with an instance (if true), or may be returned to the pool and replaced with a different IP address when an instance is restarted, or deleted and recreated (if false).
- parent\_pool (Optional) The pool from which to allocate the IP address. Defaults to /oracle/public/ippool, and is currently the only acceptable input.
- name (Optional) Name of the IP Reservation. Will be generated if unspecified.
- tags (Optional) List of tags that may be applied to the IP reservation.

### » Attributes Reference

- ip The Public IP address.
- used indicates that the IP reservation is associated with an instance.

#### » Import

IP Reservations can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ip\_reservations.reservation1 example

## » opc\_compute\_machine\_image

The opc\_compute\_machine\_image resource creates and manages a machine image template of a virtual hard disk of a specific size with an installed operating system.

Before performing this creating the Machine Image, you must upload your machine image file to Oracle Cloud Infrastructure Object Storage Classic compute\_images container

## » Example Usage

## » Argument Reference

The following arguments are supported:

- account (Required) The two part name of the compute object storage account in the format /Compute-{identity\_domain}/cloud\_storage
- name (Required) The name of the Machine Image.
- file (Required) The name of the Machine Image .tar.gz file in the compute\_images storage container.
- description (Optional) A description of the Machine Image.
- attributes (Optional) An optional JSON object of arbitrary attributes to be made available to the instance. These are user-defined tags. After defining attributes, you can view them from within an instance at http: //192.0.0.192/

In addition to the above, the following values are exported:

- error\_reason Description of the state of the machine image if there is an error.
- $\bullet$  hypervisor Dictionary of hypervisor-specific attributes.
- image\_format The format of the image.
- platform The OS platform of the image.

- state The state of the uploaded machine image.
- uri The Uniform Resource Identifier for the Machine Image.

## » Import

Machine Images can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_machine\_image.machine\_image1 example

## » opc compute orchestrated instance

The opc\_compute\_orchestrated\_instance resource creates and manages an orchestration containing a number of instances in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Example Usage with Multiple Instances

## » Example Usage with IP Networking

```
resource "opc_compute_ip_network" "default" {
                   = "default-ip-network"
 name
                   = "testing-ip-network-instance"
 ip_address_prefix = "10.1.12.0/24"
}
resource "opc_compute_orchestrated_instance" "default" {
              = "default_orchestration"
 desired_state = "active"
  instance {
             = "default-instance"
   name
             = "Default Instance"
   label
   shape = "oc3"
   image_list = "/oracle/public/OL_7.2_UEKR4_x86_64"
   networking_info {
     index
                  = "${opc_compute_ip_network.default.id}"
     ip_network
                    = "default-ip-network"
     vnic
     shared_network = false
   }
 }
}
```

## » Example Usage with Storage

```
resource "opc_compute_storage_volume" "foo" {
  name = "acc-test-orchestration-%d"
  size = 1
}
resource "opc_compute_storage_volume" "bar" {
```

```
name = "acc-test-orchestration-2-%d"
 size = 1
}
resource "opc_compute_orchestrated_instance" "default" {
                = "test_orchestration-%d"
  desired_state = "active"
  instance {
   name
              = "default-instance"
              = "Default Instance"
    label
              = "oc3"
    shape
    image_list = "/oracle/public/OL_7.2_UEKR4_x86_64"
    storage {
      volume = "${opc_compute_storage_volume.foo.name}"
      index = 1
    }
    storage {
      volume = "${opc_compute_storage_volume.bar.name}"
      index = 2
    }
 }
}
```

## » Argument Reference

- name (Required) The name of the orchestration.
- desired\_state (Required) The desired state of the orchestration. Permitted values are:
  - active: all resource (instances) declared in the orchestration are created
  - suspend: all resources (instances) declared in the orchestration are removed unless the instances has persistent = true
  - inactive: all resources (instances) declared in the orchestration are removed including the instances that have persistent = true
- instance (Required) The information pertaining to creating an instance through the orchestration API.
- description (Optional) The description of the orchestration.

#### » Instance

Instance supports the arguments found in opc\_compute\_instance and the following:

• persistent - (Optional) Determines whether the instance will persist when the orchestration is suspended. Defaults to false.

In addition to the above, the following values are exported:

- uri The Uniform Resource Identifier for the Orchestration
- version (Optional) The version of the orchestration.

## » opc\_compute\_route

The opc\_compute\_route resource creates and manages a route for an IP Network in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

- name (Required) The name of the route.
- description (Optional) The description of the route.
- admin\_distance (Optional) The route's administrative distance. Defaults to 0.
- ip\_address\_prefix (Required) The IPv4 address prefix, in CIDR format, of the external network from which to route traffic.
- next\_hop\_vnic\_set (Required) Name of the virtual NIC set to route matching packets to. Routed flows are load-balanced among all the virtual NICs in the virtual NIC set.

### » Attributes Reference

The following attributes are exported:

- name The name of the route
- description The description of the route.
- admin\_distance The route's administrative distance. Defaults to 0.
- ip\_address\_prefix The IPv4 address prefix, in CIDR format, of the external network from which to route traffic.
- next\_hop\_vnic\_set Name of the virtual NIC set to route matching packets to. Routed flows are load-balanced among all the virtual NICs in the virtual NIC set.

## » Import

Route's can be imported using the resource name, e.g.

```
$ terraform import opc_compute_route.route1 example
```

## » opc\_compute\_sec\_rule

The opc\_compute\_sec\_rule resource creates and manages a sec rule in an Oracle Cloud Infrastructure Compute Classic identity domain, which joins together a source security list (or security IP list), a destination security list (or security IP list), and a security application.

## » Example Usage

## » Argument Reference

- name (Required) The unique (within the identity domain) name of the security rule.
- description (Optional) A description for this security rule.
- source\_list (Required) The source security list (prefixed with seclist:), or security IP list (prefixed with seciplist:).
  - destination\_list (Required) The destination security list (prefixed with seclist:), or security IP list (prefixed with seciplist:).
- application (Required) The name of the application to which the rule applies.
- action (Required) Whether to permit, refuse or deny packets to which this rule applies. This will ordinarily be permit.
- disabled (Optional) Whether to disable this security rule. This is useful
  if you want to temporarily disable a rule without removing it outright from
  your Terraform resource definition. Defaults to false.

In addition to the above, the following values are exported:

• uri - The Uniform Resource Identifier of the sec rule.

## » Import

Sec Rule's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_sec\_rule.rule1 example

# » opc\_compute\_security\_application

The opc\_compute\_security\_application resource creates and manages a security application in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage (TCP)

```
resource "opc_compute_security_application" "tomcat" {
  name = "tomcat"
  protocol = "tcp"
  dport = "8080"
}
```

## » Example Usage (ICMP)

## » Argument Reference

The following arguments are supported:

- name (Required) The unique (within the identity domain) name of the application
- protocol (Required) The protocol to enable for this application. Must be one of tcp, udp, ah, esp, icmp, icmpv6, igmp, ipip, gre, mplsip, ospf, pim, rdp, sctp or all.
- dport (Required) The port, or range of ports, to enable for this application, e.g 8080, 6000-7000. This must be set if the protocol is set to tcp or udp.
- icmptype (Optional) The ICMP type to enable for this application, if the protocol is icmp. Must be one of echo, reply, ttl, traceroute, unreachable.
- icmpcode (Optional) The ICMP code to enable for this application, if the protocol is icmp. Must be one of admin, df, host, network, port or protocol.

#### » Import

Security Application's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_security\_application.application1 example

# » opc\_compute\_security\_association

The opc\_compute\_security\_association resource creates and manages an association between an instance and a security list in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

```
resource "opc_compute_security_association" "test_instance_sec_list_1" {
  name = "association1"
  vcable = "${opc_compute_instance.test_instance.vcable}"
  seclist = "${opc_compute_security_list.sec_list1.name}"
}
```

## » Argument Reference

The following arguments are supported:

- name (Optional) The Name for the Security Association. If not specified, one is created automatically. Changing this forces a new resource to be created.
- vcable (Required) The vcable of the instance to associate to the security list
- seclist (Required) The name of the security list to associate the instance to.

## » Import

Security Association's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_security\_association.association1 example

# » opc\_compute\_security\_ip\_list

The opc\_compute\_security\_ip\_list resource creates and manages a security IP list in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The unique (within the identity domain) name of the security IP list.
- ip\_entries (Required) The IP addresses to include in the list.
- description (Optional) The description of the security ip list.

## » Import

IP List's can be imported using the resource name, e.g.

```
$ terraform import opc_compute_ip_list.list1 example
```

## » opc\_compute\_security\_list

The opc\_compute\_security\_list resource creates and manages a security list in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

### » Argument Reference

- name (Required) The unique (within the identity domain) name of the security list.
- policy (Required) The policy to apply to instances associated with this list. Must be one of permit, reject (packets are dropped but a reply is sent) and deny (packets are dropped and no reply is sent).
- output\_cidr\_policy (Required) The policy for outbound traffic from the security list. Must be one of permit, reject (packets are dropped but a reply is sent) and deny (packets are dropped and no reply is sent).

## » Import

Security List's can be imported using the resource name, e.g.

```
$ terraform import opc_compute_security_list.list1 example
```

## » opc\_compute\_security\_protocol

The opc\_compute\_security\_protocol resource creates and manages a security protocol in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

- name (Required) The name of the security protocol.
- dst\_ports (Optional) Enter a list of port numbers or port range strings. Traffic is enabled by a security rule when a packet's destination port matches the ports specified here. For TCP, SCTP, and UDP, each port is a destination transport port, between 0 and 65535, inclusive. For ICMP, each port is an ICMP type, between 0 and 255, inclusive. If no destination ports are specified, all destination ports or ICMP types are allowed.
- src\_ports (Optional) Enter a list of port numbers or port range strings. Traffic is enabled by a security rule when a packet's source port matches the ports specified here. For TCP, SCTP, and UDP, each port is a source transport port, between 0 and 65535, inclusive. For ICMP, each port is an ICMP type, between 0 and 255, inclusive. If no source ports are specified, all source ports or ICMP types are allowed.
- ip\_protocol (Optional) The protocol used in the data portion of the IP datagram. Permitted values are: tcp, udp, icmp, igmp, ipip, rdp, esp, ah, gre, icmpv6, ospf, pim, sctp, mplsip, all. Traffic is enabled by a security rule when the protocol in the packet matches the protocol specified here. If no protocol is specified, all protocols are allowed.

- description (Optional) A description of the security protocol.
- tags (Optional) List of tags that may be applied to the security protocol.

In addition to the above, the following values are exported:

• uri - The Uniform Resource Identifier for the Security Protocol

## » Import

ACL's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_security\_protocol.default example

## » opc\_compute\_security\_rule

The opc\_compute\_security\_rule resource creates and manages a security rule in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

- name (Required) The name of the security rule.
- flow\_direction (Required) Specify the direction of flow of traffic, which is relative to the instances, for this security rule. Allowed values are ingress or egress.
- disabled (Optional) Whether to disable this security rule. This is useful if you want to temporarily disable a rule without removing it outright from your Terraform resource definition. Defaults to false.
- acl (Optional) Name of the ACL that contains this security rule.
- dst\_ip\_address\_prefixes (Optional) List of IP address prefix set names to match the packet's destination IP address.

- src\_ip\_address\_prefixes (Optional) List of names of IP address prefix set to match the packet's source IP address.
- dst\_vnic\_set (Optional) Name of virtual NIC set containing the packet's destination virtual NIC.
- src\_vnic\_set (Optional) Name of virtual NIC set containing the packet's source virtual NIC.
- security\_protocols (Optional) List of security protocol object names to match the packet's protocol and port.
- description (Optional) A description of the security rule.
- tags (Optional) List of tags that may be applied to the security rule.

### » Attributes Reference

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

• uri - The Uniform Resource Identifier of the security rule.

## » Import

Security Rule's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_security\_rule.rule1 example

# » opc\_compute\_ssh\_key

The opc\_compute\_ssh\_key resource creates and manages an SSH key in an Oracle Cloud Infrastructure Compute Classic identity domain.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- name (Required) The unique (within this identity domain) name of the SSH key.
- key (Required) The SSH key itself
- enabled (Optional) Whether or not the key is enabled. This is useful if you want to temporarily disable an SSH key, without removing it entirely from your Terraform resource definition. Defaults to true

## » Import

SSH Key's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_ssh\_key.key1 example

## » opc\_compute\_storage\_volume\_attachment

The opc\_compute\_storage\_volume\_attachment resource creates and manages a storage volume attachment in an Oracle Cloud Infrastructure Compute Classic identity domain.

### » Example Usage

```
resource "opc_compute_storage_volume" "default" {
   name = "storage-volume-1"
   size = 1
}

resource "opc_compute_instance" "default" {
   name = "instance-1"
   label = "instance-1"
   shape = "oc3"
   image_list = "/oracle/public/OL_7.2_UEKR4_x86_64"
}

resource "opc_compute_storage_attachment" "test" {
   instance = "${opc_compute_instance.default.name}"
   storage_volume = "${opc_compute_storage_volume.default.name}"
   index = 1
}
```

# » Argument Reference

The following arguments are supported:

- instance (Required) The name of the instance the volume will be attached to.
- storage\_volume (Required) The name of the storage volume that will be attached to the instance
- index (Required) The index on the instance that the storage volume will be attached to.

# » opc\_compute\_storage\_volume

The opc\_compute\_storage\_volume resource creates and manages a storage volume in an Oracle Cloud Infrastructure Compute Classic identity domain.

Caution: The opc\_compute\_storage\_volume resource can completely delete your storage volume just as easily as it can create it. To avoid costly accidents, consider setting prevent\_destroy on your storage volume resources as an extra safety measure.

## » Example Usage

## » Example Usage (Bootable Volume)

```
bootable = true
image_list = "${data.opc_compute_image_list_entry.test.image_list}"
image_list_entry = "${data.opc_compute_image_list_entry.test.version}"
}
```

# » Argument Reference

The following arguments are supported:

- name (Required) The name for the Storage Account.
- description (Optional) The description of the storage volume.
- size (Required) The size of this storage volume in GB. The allowed range is from 1 GB to 2 TB (2048 GB).
- storage\_type (Optional) The Type of Storage to provision. Defaults to /oracle/public/storage/default.
- bootable (Optional) Is the Volume Bootable? Defaults to false.
- image\_list (Optional) Defines an image list.
- image\_list\_entry (Optional) Defines an image list entry.
- snapshot (Optional) The name of the parent snapshot from which the storage volume is restored or cloned. See Snapshots, below for more information.
- snapshot\_id (Optional) The Id of the parent snapshot from which the storage volume is restored or cloned. See Snapshots, below for more information
- snapshot\_account (Optional) The Account of the parent snapshot from which the storage volume is restored. See Snapshots, below for more information.
- tags (Optional) Comma-separated strings that tag the storage volume.

### » Attributes Reference

The following attributes are exported:

- hypervisor The hypervisor that this volume is compatible with.
- machine\_image Name of the Machine Image available if the volume is a bootable storage volume.
- managed Is this a Managed Volume?
- platform The OS platform this volume is compatible with.
- readonly Can this Volume be attached as readonly?
- status The current state of the storage volume.
- storage\_pool The storage pool from which this volume is allocated.
- uri Unique Resource Identifier of the Storage Volume.

# » Import

Storage Volume's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_storage\_volume.volume1 example

### » Snapshots

Restoring a storage volume from a snapshot can happen via the use of the snapshot, snapshot\_id, and snapshot\_account attributes.

**Note**: There isn't a mechanism to restore a snapshot from a different domain, the snapshot\_account argument needs to reference the same domain.

There are two different ways to identify the snapshot in which to restore the storage volume:

- 1. Use the unique snapshot\_id argument.
- 2. Use a combination of snapshot\_account and snapshot arguments. snapshot\_account is in the format of: /Compute-mydomain/cloud\_storage, and snapshot is a concatenated name of the original storage volume name, and it's child snapshot name: mystorage/mysnapshot.

#### Example 1:

```
resource "opc_compute_storage_volume" "foo" {
   name = "from-snapshot"
   size = "10"
   snapshot_account = "/Compute-${var.domain}/cloud_storage"
   snapshot = "my-boot-volume/my-snapshot"
}

Example 2:
data "opc_compute_storage_volume_snapshot" "foo" {
   name = "my-boot-volume/my-snapshot"
}

resource "opc_compute_storage_volume" "foo" {
   name = "from-snapshot"
   snapshot_id = "${opc_compute_storage_volume_snapshot.foo.snapshot_id}"
   size = "${opc_compute_storage_volume_snapshot.foo.snapshot_id}"
}
```

#### » Colocated Snapshots

Colocated snapshots are stored in the same physical location as the original storage volume. While creating a storage volume from a colocated snapshot,

you must specify values for the following parameters:

- snapshot the fully qualified multipart name of the snapshot.
- size set to the size of the source snapshot volume.
- storage\_type same type as the parent storage volume of the snapshot.

If you are restoring a bootable storage volume from a snapshot, additionally you must specify the value for bootable as true. snapshot\_id and snapshot\_source are *not* used when creating a volume from a colocated snapshot.

#### Example:

```
data "opc_compute_storage_volume_snapshot" "snapshot1" {
   name = "my-bootable-storage-volume/my-colocated-snapshot"
}

resource "opc_compute_storage_volume" "volume1" {
   name = "volume-from-colocated-storage-snapshot"
   snapshot = "/Compute-${var.domain}/${var.user}/${data.opc_compute_storage_volume_snapshot.snapshot1.size}"
   size = "${data.opc_compute_storage_volume_snapshot.snapshot1.size}"
   storage_type = "/oracle/public/storage/default"
   bootable = "${data.opc_compute_storage_volume_snapshot.snapshot1.parent_volume_bootable}
}
```

#### » Timeouts

opc\_compute\_storage\_volume provides the following Timeouts configuration options:

- create (Default 30 minutes) Used for Creating Storage Volumes.
- update (Default 30 minutes) Used for Modifying Storage Volumes.
- delete (Default 30 minutes) Used for Deleting Storage Volumes.

# » opc\_compute\_storage\_volume\_snapshot

The opc\_compute\_storage\_volume\_snapshot resource creates and manages a storage volume snapshot in an Oracle Cloud Infrastructure Compute Classic identity domain.

### » Example Usage

```
tags = ["bar", "foo"]
collocated = true
volume_name = "${opc_compute_storage_volume.foo.name}"
}
```

# » Argument Reference

The following arguments are supported:

- volume\_name (Required) The name of the storage volume to create the snapshot from.
- description (Optional) The description of the storage volume snapshot.
- name (Optional) The name of the storage volume snapshot. Will be generated if unspecified.
- parent\_volume\_bootable (Optional) A string value of whether or not the parent volume is 'bootable' or not. Defaults to "false".
- collocated (Optional) Boolean specifying whether the snapshot is collocated or remote. Defaults to false.
- tags (Optional) Comma-separated strings that tag the storage volume.

### » Attributes Reference

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

- account Account to use for snapshots.
- machine\_image\_name The name of the machine image that's used in the boot volume from which this snapshot is taken.
- size The size of the snapshot in GB.
- property Where the snapshot is stored, whether collocated, or in the Oracle Storage Cloud Service instance.
- platform The OS platform this snapshot is compatible with
- snapshot\_timestamp Timestamp of the storage snapshot, generated by storage server. The snapshot will contain data written to the original volume before this time.
- snapshot\_id The Oracle ID of the snapshot.
- start\_timestamp Timestamp when the snapshot was started.
- status Status of the snapshot.
- status\_detail Details about the latest state of the storage volume snapshot.
- status\_timestamp Indicates the time that the current view of the storage volume snapshot was generated.
- uri Uniform Resource Identifier

## » Import

Storage Volume Snapshot's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_storage\_volume\_snapshot.volume1 example

#### » Timeouts

opc\_compute\_storage\_volume\_snapshot provides the following Timeouts configuration options:

- create (Default 30 minutes) Used for Creating Storage Volume Snapshots
- delete (Default 30 minutes) Used for Deleting Storage Volume Snapshots.

# » opc\_compute\_vnic\_set

The opc\_compute\_vnic\_set resource creates and manages a virtual NIC set in an Oracle Cloud Infrastructure Compute Classic identity domain.

# » Example Usage

# » Argument Reference

The following arguments are supported:

- name (Required) The unique (within this identity domain) name of the virtual nic set.
- description (Optional) A description of the virtual nic set.
- applied\_acls (Optional) A list of the ACLs to apply to the virtual nics in the set.

- virtual\_nics (Optional) List of virtual NICs associated with this virtual NIC set.
- tags (Optional) A list of tags to apply to the storage volume.

### » Import

VNIC Set's can be imported using the resource name, e.g.

\$ terraform import opc\_compute\_vnic\_set.set1 example

# » opc\_lbaas\_certificate

The opc\_lbaas\_certificate resource creates and manages an Load Balancer Classic TLS/SSL Digital Certificate.

Server certificates are used to secure the connection between clients and the load balancers. Trusted certificates are used to secure the connection between the load balancer and the origin servers in the server pool.

# » Example Usage

## » Argument Reference

- name (Required) The name of the Certificate.
- certificate\_body (Required) The Certificate data in PEM format.
- type (Required) Sets the Certificate Type. TRUSTED or SERVER.
- certificate\_chain (Optional) PEM encoded bodies of all certificates in the chain up to and including the CA certificate. This is not need when the certificate is self signed.
- private\_key (Optional) The private key data in PEM format. Only required for Server Certificates

### » Additional Attributes

In addition to the above, the following values are exported:

- state The State of the Digital Certificate resource.
- uri The Uniform Resource Identifier for the Certificate resource.

# » opc\_lbaas\_listener

The opc\_lbaas\_listener resource creates and manages a Load Balancer Classic Listener for a Load Balancer Classic instance.

# » Example Usage

```
resource "opc_lbaas_listener" "listener1" {
  load_balancer
                    = "${opc_lbaas_load_balancer.lb1.id}"
                    = "listener1"
 name
                    = 80
 port
  balancer_protocol = "HTTP"
  server_protocol
                    = "HTTP"
  server_pool
                    = "${opc_lbaas_server_pool.serverpool1.uri}"
                    = ["mywebapp.example.com"]
 virtual_hosts
 policies
                    = ["${opc_lbaas_policy.load_balancing_mechanism_policy.uri}"]
}
```

### » Argument Reference

- name (Required) The name of the Listener.
- load\_balancer (Required) The parent Load Balancer the Listener.
- balancer\_protocol (Required) transport protocol that will be accepted for all incoming requests to the selected load balancer listener. HTTP or HTTPS. If set to HTTPS then you must also set the server certificates.
- port (Required) The port on which the Load Balancer is listening.
- server\_protocol (Required) The protocol to be used for routing traffic to the origin servers in the server pool. HTTP or HTTPS. If set to HTTPS then you must include a Trusted Certificate Policy in the policies
- enabled (Optional) Boolean flag to enable or disable the Listener. Default is true (enabled).

- path\_prefixes (Optional) List of paths to configure the listener to accept only requests that are targeted to a specific path within the URI of the request.
- polices (Optional) List of the Load Balancer Policy URIs to apply to the listener.
- server\_pool (Optional) URI of the Server Pool resource to which the load balancer distributes requests.
- certificates (Optional) The URI of the server security certificate.
- tags (Optional) List of tags.
- virtual\_hosts (Optional) Configure the listener to only accept URI requests that include the host names listed in this field.

### » Additional Attributes

In addition to the above, the following values are exported:

- operational\_details Description of the operational state.
- parent\_listener The parent Listener.
- state State of the Origin Server Pool.
- uri The Uniform Resource Identifier for the Listner.

## » Import

Listeners can be imported using the a combinable of the resource region, load balancer name and policy name and in the format region/loadbalancer/name

\$ terraform import opc\_lbaas\_listener.listener1 uscom-central-1/lb1/example-listener1

# » opc\_lbaas\_load\_balancer

The opc\_lbaas\_load\_balancer resource creates and manages a Load Balancer Classic instance in an Oracle Cloud Infrastructure Classic Compute region. You must define server pools, create at least one listener, and optionally define the policies for the load balancer before it will be operational.

# » Example Usage

# » Argument Reference

- name (Required) The name of the Load Balancer.
- region (Required) The region in which to create the Load Balancer, e.g. uscom-central-1
- scheme (Required) Set to either INTERNET FACING or INTERNAL
  - INTERNET\_FACING Create an internet-facing load balancer in a given IP network.
  - INTERNAL Create an internal load balancer in a given IP network for sole consumption of other clients inside the same network.
- description (Optional) A short description for the load balancer. The description must not exceed 1000 characters.
- enabled (Optional) Boolean flag to enable or disable the Load Balancer. Default is true (enabled).
- ip\_network (Optional) Fully qualified three part name of the IP network to be associated with the load balancer.
- parent\_load\_balancer (Optional) Select a parent load balancer if you want to create a dependent load balancer.
- permitted\_clients (Optional) List of permitted client IP addresses or CIDR ranges which can connect to this load balancer on the configured Listener ports. If not set all connections are permitted.
- permitted\_methods (Optional) List of permitted HTTP methods. e.g. GET, POST, PUT, PATCH, DELETE, HEAD or you can also create your own custom methods. Requests with methods not listed in this field will result in a 403 (unauthorized access) response.
- tags (Optional) List of tags.

### » Additional Attributes

In addition to the above, the following values are exported:

- operational\_details Description of the operational state.
- state State of the Origin Server Pool.
- status Status of the Origin Server Pool.
- uri The Uniform Resource Identifier for the Load Balancer.

### » Import

Load Balancers can be imported using the a combinable of the resource region and name in the format region/name

\$ terraform import opc\_lbaas\_load\_balancer.lb1 uscom-central-1/example-lb1

# » opc\_lbaas\_policy

The opc\_lbaas\_policy resource creates and manages a Load Balancer Classic Policy for a Load Balancer Classic instance.

The Policy resource supports the definition of distinct Policy types:

- Application Cookie Stickiness Policy
- CloudGate Policy
- Load Balancer Cookie Stickiness Policy
- Load Balancing Mechanism Policy
- Rate Limiting Request Policy
- Redirect Policy
- Resource Access Control Policy
- Set Request Header Policy
- SSL Negotiation Policy
- Trusted Certificate Policy

## » Example Usage

```
resource "opc_lbaas_policy" "load_balancing_mechanism_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_load_balancing_mechanism_policy"

load_balancing_mechanism_policy {
  load_balancing_mechanism = "round_robin"
}
```

}

# » Argument Reference

- name (Required) The name of the Listener.
- load\_balancer (Required) The parent Load Balancer the Listener.

Include one, and only one, of:

- application\_cookie\_stickiness\_policy see Application Cookie Stickiness Policy
- cloudgate\_policy see CloudGate Policy
- load\_balancer\_cookie\_stickiness\_policy see Load Balancer Cookie Stickiness Policy
- load\_balancing\_mechanism\_policy see Load Balancing Mechanism Policy
- rate\_limiting\_request\_policy see Rate Limiting Request Policy
- redirect\_policy see Redirect Policy
- resource\_access\_control\_policy see Resource Access Control Policy
- set\_request\_header\_policy see Set Request Header Policy
- ssl\_negotiation\_policy see SSL Negotiation Policy
- trusted\_certificate\_policy see Trusted Certificate Policy

### » Application Cookie Stickiness Policy

Enable session stickiness (session affinity) for any request based on a given cookie name specified in the policy.

```
resource "opc_lbaas_policy" "application_cookie_stickiness_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_application_cookie_stickiness_policy"

  application_cookie_stickiness_policy {
    cookie_name = "MY_APP_COOKIE"
  }
}
```

#### » Attributes

• cookie\_name - (Required) Name of the application cookie used to control how long the load balancer will continue to route requests to the same origin server.

### » CloudGate Policy

protect resources/applications with the help of CloudGate module available in Load Balancer. These headers will enable CloudGate to lookup for the application and the policy present under the appropriate IDCS Tenant containing information for the protection mechanism to be enforced.

#### » Example

```
resource "opc_lbaas_policy" "cloudgate_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_cloudgate_policy"

  cloudgate_policy {
    virtual_hostname_for_policy_attribution = "host1.example.com"
  }
}
```

#### » Attributes

• virtual\_hostname\_for\_policy\_attribution - (Required) Host name needed by CloudGate to enforce OAuth policies.

#### » Load Balancer Cookie Stickiness Policy

Enables session stickiness (session affinity) for all requests for a given period of time specified in the policy.

```
resource "opc_lbaas_policy" "load_balancer_cookie_stickiness_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_load_balancer_cookie_stickiness_policy"

  load_balancer_cookie_stickiness_policy {
    cookie_expiration_period = 60
  }
}
```

### » Attributes

• cookie\_expiration\_period - (Required) The time period, in seconds, after which the cookie should be considered stale. If the value is zero or negative the stickiness session lasts for the duration of the browser session.

### » Load Balancing Mechanism Policy

Specify a load balancing mechanism for distributing client requests across multiple origin servers

#### » Example

```
resource "opc_lbaas_policy" "load_balancing_mechanism_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_load_balancing_mechanism_policy"

  load_balancing_mechanism_policy {
    load_balancing_mechanism = "round_robin"
  }
}
```

#### » Attributes

• load\_balancing\_mechanism - (Required) Supported options are round\_robin, least\_conn, and ip\_hash.

### » Rate Limiting Request Policy

Limits the number of requests that can be processed per second by the load balancer.

```
resource "opc_lbaas_policy" "rate_limiting_request_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_rate_limiting_request_policy"

rate_limiting_request_policy {
  requests_per_second = 1
  burst_size = 10
  delay_excessive_requests = true
  zone = "examplezone"
```

}

#### » Attributes

- burst\_size (Required) The number of requests that can be delayed until it exceeds the maximum number specified as burst size in which case the request is terminated.
- delay\_excessive\_requests (Required) delay excessive requests while requests are being limited.
- requests\_per\_second (Required) Maximum number of requests per second.
- zone (Required) Name of the shared memory zone.
- http\_error\_code (Optional) Status code to return in response to rejected requests. You can specify any status code between 405 to 599.
   Default is 503
- logging\_level (Optional) Logging level for cases when the server refuses to process requests due to rate exceeding, or delays request processing. Can be one of info, notice, warn, or error. Default is warn
- rate\_limiting\_criteria (Optional) Criteria based on which requests will be throttled. Default is server
  - server limit the requests processed by the virtual server
  - remote\_address limit the processing rate of requests coming from a single IP address.
  - host limit the processing rate of requests coming from a host.
- zone\_memory\_size (Optional) Size of the shared memory occupied by the zone. Default is 10

# » Redirect Policy

Redirects all requests to this load balancer to a specific URI.

```
resource "opc_lbaas_policy" "redirect_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_redirect_policy"

redirect_policy {
  redirect_uri = "https://redirect.example.com"
  response_code = 306
}
```

}

#### » Attributes

- redirect\_uri (Required) redirected requests to the specified URI.
- response\_code (Required) The exact 3xx response code to use when redirecting

#### » Resource Access Control Policy

Controls what clients have access to the load balancer, based on the IP address or the CIDR range of the incoming request.

#### » Example

```
resource "opc_lbaas_policy" "resource_access_control_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_resource_access_control_policy"

resource_access_control_policy {
  disposition = "DENY_ALL"
   permitted_clients = ["10.0.0.0/16"]
  }
}
```

### » Attributes

- disposition (Required) Default policy. DENY\_ALL or PERMIT\_ALL.
- denied\_clients (Optional) List of IP address or CIDR ranges identifying clients from which requests must be accepted by the Load Balancer
- permitted\_clients (Optional) IP address or CIDR ranges identifying clients from which requests must be denied by the Load Balancer.

### » Set Request Header Policy

Inserts additional information into the standard HTTP headers of requests forwarded to a server pool.

### » Example

```
resource "opc_lbaas_policy" "set_request_header_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_set_request_header_policy"

set_request_header_policy {
  header_name = "X-Custom-Header"
  value = "foo-bar"
  action_when_header_exists = "OVERWRITE"
  action_when_header_value_is = ["bar", "foo"]
  }
}
```

#### » Attributes

- header\_name (Required)
- action\_when\_header\_exists (Required) action to be taken when a header exists in the request. Options: NOOP, PREPEND, APPEND, OVERWRITE, CLEAR
- action\_when\_header\_value\_is (Optional) List if header values. Action is taken only when the header exists in the request and the header value matches one of the values provided.
- action\_when\_header\_value\_is\_not (Optional) List if header values. Action is taken only when the header exists in the request and the header value does not match any of the values provided.

#### » SSL Negotiation Policy

Define specific SSL protocols, ciphers, and server order preference for the secure connection  $\,$ 

```
resource "opc_lbaas_policy" "ssl_negotiation_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_ssl_negitiation_policy"

ssl_negotiation_policy {
  port = 8022
  server_order_preference = "ENABLED"
  ssl_protocol = ["SSLv3", "TLSv1.2"]
  ssl_ciphers = ["AES256-SHA"]
}
```

}

#### » Attributes

- ssl\_protocol (Required) Security protocols supported for incoming secure client connections to the associated listener. Supported options are SSLv2, SSLv3, TLSv1, TLSv1.1, TLSv1.2
- port (Optional) The load balancer port for the the SSL protocols and the SSL ciphers.
- server\_order\_preference (Optional) enable or disable the server order preference for secure connections to associated Listener. ENABLED or DISABLED.
- ssl\_ciphers (Optional) List of SSL ciphers supported for incoming secure client connections to the associated Listener.

#### » Trusted Certificate Policy

Identifies a trusted certificate, which the load balancer uses when making a secure connection to the compute instances in the server pool. If you are configuring a secure connection (HTTPS or SSL) between the load balancer and the origin servers, you must add this policy to the load balancer.

#### » Example

```
resource "opc_lbaas_policy" "trusted_certificate_policy" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "example_trusted_certificate_policy"

  trusted_certificate_policy {
    trusted_certificate = "${opc_lbaas_ssl_certificate.cert1.uri}"
  }
}
```

#### » Attributes

• trusted\_certificate - (Required) URI of the SSL Certificate

### » Additional Attributes

In addition to the above, the following values are exported:

• state - State of the Policy.

- type The Type of the Policy.
- uri The Uniform Resource Identifier for the Policy.

## » Import

Policies can be imported using the a combinable of the resource region, load balancer name and policy name and in the format region/loadbalancer/name

\$ terraform import opc\_lbaas\_policy.policy1 uscom-central-1/lb1/example-policy1

# » opc\_lbaas\_server\_pool

The opc\_lbaas\_server\_pool resource creates and manages a Load Balancer Classic Origin Server Pool for a Load Balancer Classic instance. The Server Pool defines one or more servers (referred to as origin servers) to which the load balancer can distribute requests.

# » Example Usage

```
resource "opc_lbaas_server_pool" "serverpool1" {
  load_balancer = "${opc_lbaas_load_balancer.lb1.id}"
  name = "serverpool1"

servers = ["129.150.169.179:8080", "129.150.170.162:8080"]

health_check {
  type = "http"
   path = "/healthcheck"
  }
}
```

### » Argument Reference

- name (Required) The name of the Server Pool.
- load\_balancer (Required) The parent Load Balancer the Origin Server Pool.
- servers (Required) List of servers in the Server Pool. To define the server in the server pool, provide IP address or DNS name of the compute instances, and port for load balancer to direct traffic to, in the format host:port

- enabled (Optional) Boolean flag to enable or disable the Server Pool. Default is true (enabled).
- health\_check (Optional) Enables Load Balancer health check, see Health Check Attributes
- tags (Optional) List of tags.
- vnic\_set (Optional) Fully qualified three part name of a vNICSet to be associated with the server pool vNIC. Load Balancer uses this vNICSet to set the right ACLs to allow egress traffic from the load balancer.

#### » Heath Check Attributes

The load balancer can perform regular health checks of the origin servers and route inbound traffic to the healthy origin servers.

- type (Optional) Health check mechanism to use to test the origin servers. Default is http
  - http sends an HTTP HEAD to the set path and checks response is in one of the accepted\_return\_codes
- path (Optional) The path to check. Set the '/' the check all paths. Default is '/'
- accepted\_return\_codes (Optional) List of HTTP response status codes that indicate the origin server is healthy. Accepted return codes can be one or more of the 2xx, 3xx, 4xx, or 5xx codes. Default is ["2xx", "3xx"].
- enabled (Optional) Boolean flag to enable or disable the Health Checks. Default is true (enabled).
- interval (Optional) The approximate interval, in seconds, that the load balancer will wait before sending the target request to each origin server, in the range 5 to 300 seconds. Default is 30.
- timeout (Optional) The amount of time, in seconds, that the load balancer will wait without a response before identifying the origin server as unavailable. The timeout value must be less than the interval value and it should range between 2 to 60. Default is 20.
- healthy\_threshold (Optional) The number of consecutive successful health checks required before moving the origin server to the healthy state. The value of healthy threshold ranges from 2 to 10. Default is 5.
- unhealthy\_threshold (Optional) The number of consecutive health check failures required before moving the origin server to the unhealthy state. The value of unhealthy threshold ranges from 2 to 10. Default is 7.

### » Additional Attributes

In addition to the above, the following values are exported:

- operational\_details Description of the operational state.
- state State of the Origin Server Pool.
- status Status of the Origin Server Pool.
- uri The Uniform Resource Identifier for the Server Pool.

### » Import

Origin Server Pools can be imported using the combination of the resource region, load balancer name, and policy name and in the format region/loadbalancer/name

\$ terraform import opc\_lbaas\_server\_pool.serverpool1 uscom-central-1/lb1/example-serverpool

# » opc storage container

Creates and manages a Container in the Oracle Cloud Infrastructure Storage Classic service. storage\_endpoint must be set in the provider or environment to manage these resources.

### » Example Usage

```
resource "opc_storage_container" "default" {
  name = "storage-container-1"
  read_acls = [ ".r:example.com", ".rlistings" ]
}
```

### » Argument Reference

The following arguments are supported:

- name (Required) The name of the Storage Container.
- read\_acls (Optional) The list of ACLs that grant read access. See Setting Container ACLs.
- write\_acls (Optional) The list of ACLs that grant write access. See Setting Container ACLs.

- primary\_key (Optional) The primary secret key value for temporary URLs
- secondary\_key (Optional) The secondary secret key value for temporary URLs.
- allowed\_origins (Optional) List of origins that are allowed to make cross-origin requests.
- exposed\_headers (Optional) List of headers exposed to the user agent (e.g. browser) in the actual request response
- max\_age (Optional) Maximum age in seconds for the origin to hold the preflight results.
- quota\_bytes (Optional) Maximum size of the container, in bytes
- quota\_count (Optional) Maximum object count of the container
- metadata (Optional) Additional object metadata headers. See Container Metadata below for more information.

## » Setting Container ACLs

The read\_acl consists of a list of roles or referrer designations. The write\_acls consists of a list of roles.

- roles can be built-in roles or custom roles. Custom roles are defined in the Users tab in the Oracle Cloud My Services console. For a role that was provisioned as part of another service instance, the format is domainName.serviceName.roleName. For a custom role, the format is domainName.roleName. Default Storage roles include:
  - \${var.domain}.Storage.Storage ReadOnlyGroup
  - \${var.domain}.Storage.Storage\_ReadWriteGroup
  - \${var.domain}.Storage.Storage\_Administrator
- referrer designation indicates the host (or hosts) for which read access to the container should be allowed or denied. When the server receives a request for the container, it compares the referrer designations specified in the Read ACL with the value of the Referer header in the request, and determines whether access should be allowed or denied. The syntax of the referrer designation is: .r:value

value indicates the host for which access to the container should be allowed. It can be a specific host name (example: .r:www.example.com), a domain (example: .r:.example.com), or an asterisk (.r:\*) to indicate all hosts. Note that if .r:\* is specified, objects in the container will be publicly readable without authentication.

A minus sign (-) before value (example: .r:-temp.example.com) indicates that the host specified in the value field must be denied access to the container.

By default, read access to a container does not include permission to list the objects in the container. To allow listing of objects as well, include the .rlistings directive in the ACL.

#### » Container Metadata

The metadata config defines a map of additional meta data header name value pairs. The additional meta data items are set as HTTP Headers on the container in the form X-Container-Meta-{name}: {value}, where {name} is the name of the metadata item {value} is the header content. For example:

```
metadata {
   "Foo-Bar" = "barfoo"
   "Tags" = "abc 123 xyz"
}
```

### » Import

Container's can be imported using the resource name, e.g.

\$ terraform import opc\_storage\_container.default example

# » opc storage object

Creates and manages a Object in an Oracle Cloud Infrastructure Storage Classic container. storage\_endpoint must be set in the provider or environment to manage these resources.

# » Example Usage

# » Argument Reference

The following arguments are supported:

- name (Required) The name of the Storage Object.
- container (Required) The name of Storage Container the store the object in.

Note: One of content, file, or copy\_from must be specified

- content (Optional) Raw content in string-form of the data.
- file (Optional) File path for the content to use for data.
- copy\_from (Optional) name of an existing object used to create the new object as a copy. The value is in form container/object. You must UTF-8-encode and then URL-encode the names of the container and object.
- content\_disposition (Optional) Set the HTTP Content-Disposition header to specify the override behaviour for the browser, e.g. inline or attachment.
- content\_encoding (Optional) set the HTTP Content-Encoding for the object.
- content\_type (Optional) set the MIME type for the object.
- delete\_at (Optional) The date and time in UNIX Epoch time stamp format when the system removes the object.
- etag (Optional) MD5 checksum value of the request body. Strongly Recommended.
- transfer\_encoding (Optional) Set to chunked to enable chunked transfer encoding.
- metadata (Optional) Additional object metadata headers. See Object Metadata below for more information.

#### » Attributes

In addition to the attributes listed above, the following attributes are exported:

- id The combined container and object name path of the object.
- accept\_ranges Type of ranges that the object accepts.
- content\_length Length of the object in bytes.
- last\_modified Date and Time that the object was created/modified in ISO 8601.
- object\_manifest The dynamic large-object manifest object.
- timestamp Date and Time in UNIX EPOCH when the account, container, or object was initially created at the current version.

• transaction\_id - Transaction ID of the request.

# » Object Metadata

The metadata config defines a map of additional meta data header name value pairs. The additional meta data items are set HTTP Headers on the object in the form X-Object-Meta-{name}: {value}, where {name} is the name of the metadata item {value} is the header content. For example:

```
metadata {
    "Foo-Bar" = "barfoo",
    "Sha256" = "e91ed4f93637379a7539cb5d8d0b5bca3972755de4f9371ab2e123e7b4c53680"
}
```

# » Import

Object's can be imported using the resource id, e.g.

\$ terraform import opc\_storage\_object.default container/example

Please note though, importing a Storage Object does *not* allow a user to modify the content, or attributes for the Storage Object. It is, however, possible to import a Storage Object, and replace the object with new content, or a copy of another Storage Object. It is also possible to import a Storage Object into Terraform in order to delete the object.