## » nsxt\_edge\_cluster

This data source provides information about Edge clusters configured in NSX. An Edge cluster is a collection of Edge nodes which can be deployed as either VM form-factor or bare-metal form-factor machines for connectivity between overlay logical switches and non-NSX underlay networking for north/south layer 2 or layer 3 connectivity. Each T0 router will be placed on one ore more Edge nodes in an Edge cluster therefore this data source is needed for the creation of T0 logical routers.

## » Example Usage

```
data "nsxt_edge_cluster" "edge_cluster1" {
  display_name = "edgecluster"
}
```

## » Argument Reference

- id (Optional) The ID of Edge Cluster to retrieve.
- display\_name (Optional) The Display Name prefix of the Edge Cluster to retrieve.

### » Attributes Reference

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

- description The description of the edge cluster.
- deployment\_type This field could show deployment\_type of members.
   It would return UNKNOWN if there is no members, and return VIRTUAL\_MACHINE|PHYSICAL\_MACHINE if all Edge members are VIRTUAL\_MACHINE|PHYSICAL\_MACHINE.
- member\_node\_type An Edge cluster is homogeneous collection of NSX transport nodes used for north/south connectivity between NSX logical networking and physical networking. Hence all transport nodes of the cluster must be of same type. This field shows the type of transport node,

# » nsxt\_ip\_pool

This data source provides information about a IP pool configured in NSX.

## » Example Usage

```
data "nsxt_ip_pool" "ip_pool" {
   display_name = "DefaultIpPool"
}
```

### » Argument Reference

- id (Optional) The ID of IP pool to retrieve
- display\_name (Optional) The Display Name of the IP pool to retrieve.

### » Attributes Reference

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

• description - The description of the IP pool.

## » nsxt\_logical\_tier0\_router

This data source provides information about logical Tier 0 routers configured in NSX. A Tier 0 router is used to connect NSX networking with traditional physical networking. Tier 0 routers are placed on an Edge cluster and will exist on one or more Edge node depending on deployment settings (i.e. active/active or active/passive). A Tier 0 router forwards layer 3 IP packets and typically peers with a traditional physical router using BGP or can use static routing.

## » Example Usage

```
data "nsxt_logical_tier0_router" "tier0_router" {
   display_name = "PLR1"
}
```

## » Argument Reference

- id (Optional) The ID of Logical Tier 0 Router to retrieve.
- display\_name (Optional) The Display Name prefix of the Logical Tier
   0 Router to retrieve.

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

- description The description of the logical Tier 0 router.
- edge\_cluster\_id The id of the Edge cluster where this logical router is placed.
- high\_availability\_mode The high availability mode of this logical router.

# » nsxt\_logical\_tier1\_router

This data source provides information about logical Tier 1 routers configured in NSX.

## » Example Usage

```
data "nsxt_logical_tier1_router" "tier1_router" {
   display_name = "router1"
}
```

## » Argument Reference

- id (Optional) The ID of Logical Tier 1 Router to retrieve.
- display\_name (Optional) The Display Name prefix of the Logical Tier 1 Router to retrieve.

### » Attributes Reference

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

- description The description of the logical Tier 0 router.
- edge\_cluster\_id The id of the Edge cluster where this logical router is placed.

## » nsxt\_ns\_group

This data source provides information about a network and security (NS) group in NSX. A NS group is used to group other objects into collections for application of other settings.

## » Example Usage

```
data "nsxt_ns_group" "ns_group_1" {
  display_name = "test group"
}
```

## » Argument Reference

- id (Optional) The ID of NS group to retrieve
- display\_name (Optional) The Display Name of the NS group to retrieve.

### » Attributes Reference

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

• description - The description of the NS group.

## » nsxt ns service

This data source provides information about a network and security (NS) service configured in NSX. NS services are either factory defined in NSX or can be defined by the NSX administrator. They provide a convenience name for a port/protocol pair that is often used in fire walling or load balancing.

```
data "nsxt_ns_service" "ns_service_dns" {
  display_name = "DNS"
}
```

- id (Optional) The ID of NS service to retrieve
- display\_name (Optional) The Display Name of the NS service to retrieve.

#### » Attributes Reference

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

• description - The description of the NS service.

## » nsxt\_mac\_pool

This data source provides information about a MAC pool configured in NSX.

## » Example Usage

```
data "nsxt_mac_pool" "mac_pool" {
   display_name = "DefaultMacPool"
}
```

## » Argument Reference

- id (Optional) The ID of MAC pool to retrieve
- display\_name (Optional) The Display Name of the MAC pool to retrieve.

### » Attributes Reference

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

• description - The description of the MAC pool.

# » nsxt\_switching\_profile

The switching profile data source provides information about switching profiles configured in NSX. A switching profile is a template that defines the settings of one or more logical switches. There can be both factory default and user

defined switching profiles. One example of a switching profile is a quality of service (QoS) profile which defines the QoS settings of all switches that use the defined switch profile.

## » Example Usage

```
data "nsxt_switching_profile" "qos_profile" {
  display_name = "qos-profile"
}
```

## » Argument Reference

- id (Optional) The ID of Switching Profile to retrieve.
- display\_name (Optional) The Display Name of the Switching Profile to retrieve.

#### » Attributes Reference

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

- resource\_type The resource type representing the specific type of this switching profile.
- description The description of the switching profile.

### » nsxt transport zone

This data source provides information about Transport Zones (TZ) configured in NSX. A Transport Zone defines the scope to which a network can extend in NSX. For example an overlay based Transport Zone is associated with both hypervisors and logical switches and defines which hypervisors will be able to serve the defined logical switch. Virtual machines on the hypervisor associated with a Transport Zone can be attached to logical switches in that same Transport Zone.

```
data "nsxt_transport_zone" "overlay_transport_zone" {
   display_name = "1-transportzone-87"
}
```

- id (Optional) The ID of Transport Zone to retrieve.
- display\_name (Optional) The Display Name prefix of the Transport Zone to retrieve.

#### » Attributes Reference

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

- description The description of the Transport Zone.
- host\_switch\_name The name of the N-VDS (host switch) on all Transport Nodes in this Transport Zone that will be used to run NSX network traffic.
- transport\_type The transport type of this transport zone (OVERLAY or VLAN).

## » nsxt\_transport\_zone

This data source provides information about various types of certificates imported into NSX trust management.

### » Example Usage

```
data "nsxt_certificate" "CA" {
  display_name = "ca-cert"
}
```

## » Argument Reference

- id (Optional) The ID of Certificate to retrieve.
- display\_name (Optional) The Display Name of the Certificate to retrieve.

## » Attributes Reference

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

• description - The description of the Certificate.

## » nsxt\_dhcp\_relay\_profile

This resource can be used to configure a NSX DHCP relay profile on the NSX manager. A DHCP relay profile is a type of template that can be used to define a remote DHCP server where DHCP packets can be relayed for DHCP requests of machines attached to NSX logical topologies. The DHCP relay profile can be used in a DHCP relay service and later consumed by a router downlink port. Currently the DHCP relay is not supported for logical routers link ports on Tier0 or Tier1.

```
resource "nsxt_dhcp_relay_profile" "dr_profile" {
  description = "DRP provisioned by Terraform"
  display_name = "DRP"
  tag {
   scope = "color"
         = "red"
    tag
  server_addresses = ["1.1.1.1"]
}
resource "nsxt_dhcp_relay_service" "dr_service" {
                        = "DRS"
  display_name
  dhcp_relay_profile_id = "${nsxt_dhcp_relay_profile.dr_profile.id}"
}
resource "nsxt_logical_router_downlink_port" "router_downlink" {
  display_name
                                = "logical_router_downlink_port"
  linked_logical_switch_port_id = "${nsxt_logical_port.port1.id}"
 logical_router_id
                               = "${nsxt_logical_tier1_router.rtr1.id}"
  subnet {
    ip addresses = ["8.0.0.1"]
   prefix_length = 24
  service_binding {
   target_id = "${nsxt_dhcp_relay_service.dr_service.id}"
    target_type = "LogicalService"
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this DHCP relay profile.
- server\_addresses (Required) IP addresses of the DHCP relay servers.
   Maximum allowed amount is 2.

#### » Attributes Reference

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

- id ID of the DHCP relay profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing DHCP Relay profile can be imported into this resource, via the following command:

```
terraform import nsxt_dhcp_relay_profile.dr_profile UUID
```

The above command imports the DHCP relay profile named dr\_profile with the NSX id UUID.

# » nsxt\_dhcp\_relay\_service

This resource provides a way to configure the DHCP relay service on the NSX manager. The DHCP relay service uses a DHCP relay profile and later consumed by a router downlink port to provide DHCP addresses to virtual machines connected to a logical switch. Currently the DHCP relay is not supported for logical routers link ports on Tier0 or Tier1.

```
resource "nsxt_dhcp_relay_profile" "dr_profile" {
  description = "DRP provisioned by Terraform"
  display_name = "DRP"
```

```
tag {
    scope = "color"
         = "red"
    tag
 server_addresses = ["1.1.1.1"]
}
resource "nsxt_dhcp_relay_service" "dr_service" {
                       = "DRS"
 display_name
  dhcp_relay_profile_id = "${nsxt_dhcp_relay_profile.dr_profile.id}"
}
resource "nsxt_logical_router_downlink_port" "router_downlink" {
                                = "logical router downlink port"
  display name
 linked_logical_switch_port_id = "${nsxt_logical_port.port1.id}"
 logical_router_id
                               = "${nsxt_logical_tier1_router.rtr1.id}"
  subnet {
    ip_addresses = ["8.0.0.1"]
    prefix_length = 24
  service_binding {
   target_id = "${nsxt_dhcp_relay_service.dr_service.id}"
   target_type = "LogicalService"
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this dhcp\_relay\_service.
- dhcp\_relay\_profile\_id (Required) DHCP relay profile referenced by the DHCP relay service.

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

- id ID of the DHCP relay service.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing DHCP Relay service can be imported into this resource, via the following command:

```
terraform import nsxt_dhcp_relay_service.dr_service UUID
```

The above command imports the DHCP relay service named dr\_service with the NSX id UUID.

## » nsxt\_dhcp\_server\_profile

Provides a resource to configure DHCP server profile on NSX-T manager

## » Example Usage

## » Argument Reference

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- edge\_cluster\_id (Required) Edge cluster uuid.
- edge\_cluster\_member\_indexes (Optional) Up to 2 edge nodes from the given cluster. If none is provided, the NSX will auto-select two edge-nodes from the given edge cluster. If user provides only one edge node, there will be no HA support.
- tag (Optional) A list of scope + tag pairs to associate with this DHCP profile.

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

- id ID of the DHCP server profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing DHCP profile can be imported into this resource, via the following command:

```
terraform import nsxt_dhcp_server_profile.dhcp_profile UUID
```

The above would import the DHCP server profile named dhcp\_profile with the nsx id UUID

# » nsxt\_firewall\_section

This resource provides a way to configure a firewall section on the NSX manager. A firewall section is a collection of firewall rules that are grouped together. Order of firewall sections can be controlled with 'insert' before' attribute.

```
resource "nsxt_firewall_section" "firewall_sect" {
  description = "FS provisioned by Terraform"
  display_name = "FS"

tag {
   scope = "color"
```

```
tag = "blue"
applied_to {
 target_type = "NSGroup"
 target_id = "${nsxt_ns_group.group1.id}"
section_type = "LAYER3"
stateful = true
insert_before = "${nsxt_firewall_section.bottom_line.id}"
rule {
                     = "out_rule"
 display_name
 description
                    = "Out going rule"
                     = "ALLOW"
 action
 logged
                      = true
                    = "IPV4"
 ip_protocol
                     = "OUT"
  direction
 destinations_excluded = "false"
  sources_excluded = "true"
  source {
   target_type = "LogicalSwitch"
   target_id = "${nsxt_logical_switch.switch1.id}"
  destination {
   target_type = "LogicalSwitch"
   target_id = "${nsxt_logical_switch.switch2.id}"
 }
}
rule {
  display_name = "in_rule"
  description = "In going rule"
 action = "DROP"
  logged = true
  ip_protocol = "IPV4"
  direction = "IN"
  service {
   target_type = "NSService"
   target_id = "e8d59e13-484b-4825-ae3b-4c11f83249d9"
  }
```

```
service {
   target_type = "NSService"
   target_id = "${nsxt_l4_port_set_ns_service.http.id}"
  }
}
```

- display\_name (Optional) The display name of this firewall section. Defaults to ID if not set.
- description (Optional) Description of this firewall section.
- tag (Optional) A list of scope + tag pairs to associate with this firewall section.
- applied\_to (Optional) List of objects where the rules in this section will be enforced. This will take precedence over rule level applied\_to. [Supported target types: "LogicalPort", "LogicalSwitch", "NSGroup", "LogicalRouter"]
- section\_type (Required) Type of the rules which a section can contain. Either LAYER2 or LAYER3. Only homogeneous sections are supported.
- stateful (Required) Stateful or Stateless nature of firewall section is enforced on all rules inside the section. Layer3 sections can be stateful or stateless. Layer2 sections can only be stateless.
- insert\_before (Optional) Firewall section id that should come immediately after this one. It is user responsibility to use this attribute in consistent manner (for example, if same value would be set in two separate sections, the outcome would depend on order of creation). Changing this attribute would force recreation of the firewall section.
- rule (Optional) A list of rules to be applied in this section. each rule has the following arguments:
  - display\_name (Optional) The display name of this rule. Defaults to ID if not set.
  - description (Optional) Description of this rule.
  - action (Required) Action enforced on the packets which matches the firewall rule. [Allowed values: "ALLOW", "DROP", "REJECT"]
  - applied\_to (Optional) List of objects where rule will be enforced.
     The section level field overrides this one. Null will be treated as any. [Supported target types: "LogicalPort", "LogicalSwitch", "NS-Group", "LogicalRouterPort"]
  - destination (Optional) List of the destinations. Null will be treated as any. [Allowed target types: "IPSet", "LogicalPort", "LogicalSwitch", "NSGroup", "MACSet" (depending on the section type)]
  - destinations excluded (Optional) When this boolean flag is set

- to true, the rule destinations will be negated.
- direction (Optional) Rule direction in case of stateless firewall rules. This will only considered if section level parameter is set to stateless. Default to IN\_OUT if not specified. [Allowed values: "IN", "OUT", "IN\_OUT"]
- disabled (Optional) Flag to disable rule. Disabled will only be persisted but never provisioned/realized.
- ip\_protocol (Optional) Type of IP packet that should be matched while enforcing the rule. [allowed values: "IPV4", "IPV6", "IPV4\_IPV6"]
- logged (Optional) Flag to enable packet logging. Default is disabled.
- notes (Optional) User notes specific to the rule.
- rule\_tag (Optional) User level field which will be printed in CLI and packet logs.
- service (Optional) List of the services. Null will be treated as any.
   [Allowed target types: "NSService", "NSServiceGroup"]
- source (Optional) List of sources. Null will be treated as any. [Allowed target types: "IPSet", "LogicalPort", "LogicalSwitch", "NSGroup", "MACSet" (depending on the section type)]
- sources\_excluded (Optional) When this boolean flag is set to true, the rule sources will be negated.

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

- id ID of the firewall section.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- is\_default A boolean flag which reflects whether a firewall section is default section or not. Each Layer 3 and Layer 2 section will have at least and at most one default section.

#### » Importing

An existing Firewall section can be imported into this resource, via the following command:

terraform import nsxt firewall section.firewall sect UUID

The above command imports the firewall section named firewall\_sect with the NSX id UUID.

## » nsxt\_ip\_block

Provides a resource to configure IP block on NSX-T manager

## » Example Usage

```
resource "nsxt_ip_block" "ip_block" {
  description = "ip_block provisioned by Terraform"
 display_name = "ip_block"
  cidr
              = "2.1.1.0/24"
 tag {
    scope = "color"
   tag = "red"
 }
}
resource "nsxt_ip_block_subnet" "ip_block_subnet" {
  description = "ip_block_subnet"
 block_id
             = "${nsxt_ip_block.ip_block.id}"
              = 16
  size
}
```

## » Argument Reference

The following arguments are supported:

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- cidr (Required) Represents network address and the prefix length which will be associated with a layer-2 broadcast domain. Changing this setting on existing block will re-create the block.
- tag (Optional) A list of scope + tag pairs to associate with this IP block.

## » Attributes Reference

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

- id ID of the IP block.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing IP block can be imported into this resource, via the following command:

```
terraform import nsxt_ip_block.ip_block UUID
```

The above would import the IP block named ip\_block with the nsx id UUID

## » nsxt\_ip\_block\_subnet

Provides a resource to configure IP block subnet on NSX-T manager

## » Example Usage

```
resource "nsxt_ip_block" "ip_block" {
  display_name = "block1"
              = "55.0.0.0/24"
  cidr
}
resource "nsxt_ip_block_subnet" "ip_block_subnet" {
  description = "ip_block_subnet provisioned by Terraform"
  display_name = "ip_block_subnet"
              = "${nsxt ip block.ip block.id}"
 block_id
               = 16
 size
 tag {
    scope = "color"
         = "red"
    tag
}
```

### » Argument Reference

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- block\_id (Required) Block id for which the subnet is created.
- size (Required) Represents the size or number of IP addresses in the subnet. Changing this setting on existing subnet will re-create the subnet.
- tag (Optional) A list of scope + tag pairs to associate with this IP block subnet.

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

- id ID of the IP block subnet.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- allocation\_range A collection of IPv4 IP ranges used for IP allocation.
- cidr Represents the size or number of IP addresses in the subnet. All subnets of the same block must have the same size, which must be a power of 2.

## » Importing

An existing IP block subnet can be imported into this resource, via the following command:

```
terraform import nsxt_ip_block_subnet.ip_block_subnet UUID
```

The above would import the IP block subnet named ip\_block\_subnet with the nsx id UUID

## » nsxt\_ip\_pool

Provides a resource to configure IP pool on NSX-T manager

```
resource "nsxt_ip_pool" "ip_pool" {
  description = "ip_pool provisioned by Terraform"
  display_name = "ip_pool"
  tag {
    scope = "color"
    tag = "red"
 }
  subnet {
    allocation_ranges = ["2.1.1.1-2.1.1.11", "2.1.1.21-2.1.1.100"]
                     = "2.1.1.0/24"
                     = "2.1.1.12"
   gateway_ip
                      = "abc"
    dns_suffix
    dns nameservers
                     = ["33.33.33.33"]
```

}

## » Argument Reference

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this IP pool.
- subnet (Optional) Subnets can be IPv4 or IPv6 and they should not overlap. The maximum number will not exceed 5 subnets. Each subnet has the following arguments:
  - allocation\_ranges (Required) A collection of IPv4 Pool Ranges
  - cidr (Required) Network address and the prefix length which will be associated with a layer-2 broadcast domainIPv4 Pool Ranges
  - dns\_nameservers (Optional) A collection of up to 3 DNS servers for the subnet
  - dns\_suffix (Optional) The DNS suffix for the DNS server
  - gateway\_ip (Optional) The default gateway address on a layer-3 router

### » Attributes Reference

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

- id ID of the IP pool.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing IP pool can be imported into this resource, via the following command:

 ${\tt terraform\ import\ nsxt\_ip\_pool.ip\_pool\ UUID}$ 

The above would import the IP pool named ip\_pool with the nsx id UUID

## » nsxt\_ip\_pool\_allocation\_ip\_address

Provides a resource to allocate an IP address from an IP pool on NSX-T manager

## » Example Usage

```
data "nsxt_ip_pool" "ip_pool" {
    display_name = "DefaultIpPool"
}

resource "nsxt_ip_pool_allocation_ip_address" "pool_ip_address" {
    ip_pool_id = "${data.nsxt_ip_pool.ip_pool.id}"
}
```

### » Argument Reference

The following arguments are supported:

• ip\_pool\_id - (Required) Ip Pool ID from which the IP address will be allocated.

### » Attributes Reference

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

- id ID of the IP pool allocation IP address (currently identical to allocation\_ip).
- allocation\_ip Allocation IP address.

## » nsxt\_ip\_set

This resources provides a way to configure an IP set in NSX. An IP set is a collection of IP addresses. It is often used in the configuration of the NSX firewall.

```
resource "nsxt_ip_set" "ip_set1" {
  description = "IS provisioned by Terraform"
  display_name = "IS"

tag {
    scope = "color"
    tag = "blue"
}
```

```
ip_addresses = ["1.1.1.1", "2.2.2.2"]
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this IP set.
- ip\_addresses (Optional) IP addresses.

#### » Attributes Reference

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

- id ID of the IP set.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing IP set can be imported into this resource, via the following com-

```
terraform import nsxt_ip_set.ip_set1 UUID
```

The above command imports the IP set named ip\_set1 with the NSX id UUID.

# » nsxt\_lb\_cookie\_persistence\_profile

Provides a resource to configure lb cookie persistence profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

```
cookie_fallback
                      = "false"
                      = "false"
  cookie_garble
  cookie mode
                      = "INSERT"
  insert_mode_params {
                        = ".example2.com"
    cookie_domain
                        = "/subfolder"
    cookie_path
    cookie_expiry_type = "SESSION_COOKIE_TIME"
                       = "1000"
    max_idle_time
    max_life_time
                        = "2000"
  tag {
    scope = "color"
    tag
          = "red"
}
```

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- cookie\_mode (Optional) The cookie persistence mode. Accepted values: PREFIX, REWRITE and INSERT which is the default.
- cookie name (Required) cookie name.
- persistence\_shared (Optional) A boolean flag which reflects whether the cookie persistence is private or shared. When false (which is the default value), the cookie persistence is private to each virtual server and is qualified by the pool. If set to true, in cookie insert mode, cookie persistence could be shared across multiple virtual servers that are bound to the same pools.
- cookie\_fallback (Optional) A boolean flag which reflects whether once the server points by this cookie is down, a new server is selected, or the requests will be rejected.
- cookie\_garble (Optional) A boolean flag which reflects whether the cookie value (server IP and port) would be encrypted or in plain text.
- insert\_mode\_params (Optional) Additional parameters for the INSERT cookie mode:
  - cookie\_domain (Optional) HTTP cookie domain (for INSERT mode only).
  - cookie\_path (Optional) HTTP cookie path (for INSERT mode only).

- cookie\_expiry\_type (Optional) Type of cookie expiration timing (for INSERT mode only). Accepted values: SES-SION\_COOKIE\_TIME for session cookie time setting and PERSISTENCE\_COOKIE\_TIME for persistence cookie time setting.
- max\_idle\_time (Required if cookie\_expiry\_type is set) Maximum interval the cookie is valid for from the last time it was seen in a request.
- max\_life\_time (Required for INSERT mode with SES-SION\_COOKIE\_TIME expiration) Maximum interval the cookie is valid for from the first time the cookie was seen in a request.
- tag (Optional) A list of scope + tag pairs to associate with this lb cookie persistence profile.

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

- id ID of the lb cookie persistence profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb cookie persistence profile can be imported into this resource, via the following command:

terraform import nsxt\_lb\_cookie\_persistence\_profile.lb\_cookie\_persistence\_profile UUID

The above would import the lb cookie persistence profile named lb\_cookie\_persistence\_profile with the nsx id UUID

# $\ \ \, {\bf >nsxt\_lb\_source\_ip\_persistence\_profile}$

Provides a resource to configure lb source ip persistence profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

#### » Example Usage

resource "nsxt\_lb\_source\_ip\_persistence\_profile" "lb\_source\_ip\_persistence\_profile" {
 description = "lb\_source\_ip\_persistence\_profile provisioned by Terraform"

```
display_name = "lb_source_ip_persistence_profile"
persistence_shared = "true"
ha_persistence_mirroring = "true"
purge_when_full = "true"
timeout = "100"

tag {
   scope = "color"
   tag = "red"
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb source ip persistence profile.
- persistence\_shared (Optional) A boolean flag which reflects whether the cookie persistence is private or shared.
- ha\_persistence\_mirroring (Optional) A boolean flag which reflects whether persistence entries will be synchronized to the HA peer.
- timeout (Optional) Persistence expiration time in seconds, counted from the time all the connections are completed. Defaults to 300 seconds.
- purge\_when\_full (Optional) A boolean flag which reflects whether entries will be purged when the persistence table is full. Defaults to true.

## » Attributes Reference

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

- id ID of the lb source ip persistence profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing lb source ip persistence profile can be imported into this resource, via the following command:

terraform import nsxt\_lb\_source\_ip\_persistence\_profile.lb\_source\_ip\_persistence\_profile UUII
The above would import the lb source ip persistence profile named
lb\_source\_ip\_persistence\_profile with the nsx id UUID

## » nsxt lb pool

Provides a resource to configure lb pool on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

```
resource "nsxt_lb_icmp_monitor" "lb_icmp_monitor" {
 display_name = "lb_icmp_monitor"
 fall_count = 3
 interval = 5
}
resource "nsxt_lb_passive_monitor" "lb_passive_monitor" {
 display_name = "lb_passive_monitor"
 max_fails = 3
 timeout
              = 10
}
resource "nsxt_lb_pool" "lb_pool" {
 description
                          = "lb_pool provisioned by Terraform"
                          = "lb_pool"
 display_name
 algorithm
                         = "WEIGHTED_ROUND_ROBIN"
 min_active_members
 tcp_multiplexing_enabled = false
 tcp_multiplexing_number = 3
 active_monitor_id
                        = "${nsxt_lb_icmp_monitor.lb_icmp_monitor.id}"
 passive_monitor_id
                          = "${nsxt_lb_passive_monitor.lb_passive_monitor.id}"
 member {
                              = "ENABLED"
   admin_state
   backup_member
                              = "false"
                              = "1st-member"
   display_name
   ip_address
                              = "1.1.1.1"
   max_concurrent_connections = "1"
   port
                              = "87"
                              = "1"
    weight
```

```
tag {
    scope = "color"
   tag = "red"
}
resource "nsxt_lb_pool" "lb_pool_with_dynamic_membership" {
                          = "lb_pool provisioned by Terraform"
  description
 display_name
                          = "dynamic_lb_pool"
  algorithm
                          = "LEAST_CONNECTION"
 min_active_members
 tcp_multiplexing_enabled = false
  tcp_multiplexing_number = 3
 active_monitor_id
                          = "${nsxt_lb_icmp_monitor.lb_icmp_monitor.id}"
                          = "${nsxt_lb_passive_monitor.lb_passive_monitor.id}"
 passive_monitor_id
  snat_translation {
           = "SNAT_IP_POOL"
   type
                 = "1.1.1.1"
    ip
 }
 member_group {
    ip_version_filter
                       = "IPV4"
   limit_ip_list_size = true
   max_ip_list_size
                       = "80"
   port
    grouping_object {
     target_type = "NSGroup"
      target_id = "${nsxt_ns_group.group1.id}"
      }
   }
 }
  tag {
   scope = "color"
         = "red"
    tag
}
```

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- active\_monitor\_id (Optional) Active health monitor Id. If one is not set, the active healthchecks will be disabled.
- algorithm (Optional) Load balancing algorithm controls how the incoming connections are distributed among the members. Supported algorithms are: ROUND\_ROBIN, WEIGHTED\_ROUND\_ROBIN, LEAST\_CONNECTION, WEIGHTED\_LEAST\_CONNECTION, IP HASH.
- member (Optional) Server pool consists of one or more pool members. Each pool member is identified, typically, by an IP address and a port. Each member has the following arguments:
  - admin\_state (Optional) Pool member admin state. Possible values:
     ENABLED, DISABLED and GRACEFUL DISABLED
  - backup\_member (Optional) A boolean flag which reflects whether this is a backup pool member. Backup servers are typically configured with a sorry page indicating to the user that the application is currently unavailable. While the pool is active (a specified minimum number of pool members are active) BACKUP members are skipped during server selection. When the pool is inactive, incoming connections are sent to only the BACKUP member(s).
  - display\_name (Optional) The display name of this resource. pool member name.
  - ip\_address (Required) Pool member IP address.
  - max\_concurrent\_connections (Optional) To ensure members are not overloaded, connections to a member can be capped by the load balancer. When a member reaches this limit, it is skipped during server selection. If it is not specified, it means that connections are unlimited.
  - port (Optional) If port is specified, all connections will be sent to this port. Only single port is supported. If unset, the same port the client connected to will be used, it could be overrode by default\_pool\_member\_port setting in virtual server. The port should not specified for port range case.
  - weight (Optional) Pool member weight is used for WEIGHTED\_ROUND\_ROBIN balancing algorithm. The weight value would be ignored in other algorithms.
- member\_group (Optional) Dynamic pool members for the loadbalancing pool. When member group is defined, members setting should not be specified. The member group has the following arguments:
  - grouping\_object (Required) Grouping object of type NSGroup which will be used as dynamic pool members. The IP list of the grouping object would be used as pool member IP setting.
  - ip\_version\_filter (Optional) Ip version filter is used to filter
     IPv4 or IPv6 addresses from the grouping object. If the filter is not

- specified, both IPv4 and IPv6 addresses would be used as server IPs. Supported filtering is "IPV4" and "IPV6" ("IPV4" is the default one)
- limit\_ip\_list\_size (Optional) Limits the max number of pool members. If false, allows the dynamic pool to grow up to the load balancer max pool member capacity.
- max\_ip\_list\_size (Optional) Should only be specified if limit\_ip\_list\_size is set to true. Limits the max number of pool members to the specified value.
- port (Optional) If port is specified, all connections will be sent to this port. If unset, the same port the client connected to will be used, it could be overridden by default\_pool\_member\_ports setting in virtual server. The port should not specified for multiple ports case.
- min\_active\_members (Optional) The minimum number of members for the pool to be considered active. This value is 1 by default.
- passive\_monitor\_id (Optional) Passive health monitor Id. If one is not set, the passive healthchecks will be disabled.
- 'snat\_translation (Optional) SNAT translation configuration for the pool.
  - type (Optional) Type of SNAT performed to ensure reverse traffic from the server can be received and processed by the loadbalancer.
     Supported types are: SNAT\_AUTO\_MAP, SNAT\_IP\_POOL and TRANSPARENT
  - ip (Required for snat\_translation of type SNAT\_IP\_POOL) Ip address or Ip range for SNAT of type SNAT IP POOL.
- tcp\_multiplexing\_enabled (Optional) TCP multiplexing allows the same TCP connection between load balancer and the backend server to be used for sending multiple client requests from different client TCP connections. Disabled by default.
- tcp\_multiplexing\_number (Optional) The maximum number of TCP connections per pool that are idly kept alive for sending future client requests. The default value for this is 6.
- tag (Optional) A list of scope + tag pairs to associate with this lb pool.

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

- id ID of the lb pool.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing lb pool can be imported into this resource, via the following command:

```
terraform import nsxt_lb_pool.lb_pool UUID
```

The above would import the lb pool named lb\_pool with the nsx id UUID

## » nsxt\_lb\_http\_virtual\_server

Provides a resource to configure lb http or https virtual server on NSX-T manager

```
resource "nsxt_lb_http_application_profile" "http_xff" {
  x_forwarded_for = "INSERT"
resource "nsxt_lb_cookie_persistence_profile" "session_persistence" {
  cookie_name = "SESSION"
resource "nsxt_lb_pool" "pool1" {
  algorithm = "LEAST_CONNECTION"
  member {
    ip_address = "3.0.0.1"
             = "443"
   port
  member {
    ip_address = "3.0.0.2"
             = "443"
    port
}
resource "nsxt_lb_pool" "sorry_pool" {
  member {
    ip_address = "3.0.0.15"
   port
             = "443"
}
resource "nsxt_lb_http_request_rewrite_rule" "redirect_post" {
```

```
match_strategy = "ALL"
 method_condition {
   method = "POST"
 uri_rewrite_action {
   uri = "/sorry_page.html"
 }
}
resource "nsxt_lb_client_ssl_profile" "ssl1" {
 prefer_server_ciphers = true
resource "nsxt_lb_server_ssl_profile" "ssl1" {
  session cache enabled = false
}
resource "nsxt_lb_http_virtual_server" "lb_virtual_server" {
  description
                            = "lb_virtual_server provisioned by terraform"
  display_name
                            = "virtual server 1"
  access_log_enabled
                           = true
  application_profile_id
                           = "${nsxt_lb_http_application_profile.http_xff.id}"
  enabled
                            = true
                            = "10.0.0.2"
  ip_address
 port
                            = "443"
                           = "8888"
  default_pool_member_port
 max_concurrent_connections = 50
 max_new_connection_rate
                          = 20
 persistence_profile_id
                           = "${nsxt_lb_cookie_persistence_profile.session_persistence.id}
 pool_id
                            = "${nsxt lb pool.pool1.id}"
                            = "${nsxt_lb_pool.sorry_pool.id}"
 sorry_pool_id
 rule_ids
                            = ["${nsxt_lb_http_request_rewrite_rule.redirect_post.id}"]
  client_ssl {
    client_ssl_profile_id = "${nsxt_lb_client_ssl_profile.ssl1.id}"
    default_certificate_id = "${data.nsxt_certificate.cert1.id}"
    certificate_chain_depth = 2
    client_auth
                           = true
    ca_ids
                           = ["${data.nsxt_certificate.ca.id}"]
                           = ["fa27d79e-13cd-4dd1-a088-4f2fb2cc91f9"]
   crl_ids
   sni_certificate_ids = ["${data.nsxt_certificate.sni.id}"]
  server_ssl {
    server_ssl_profile_id
                          = "${nsxt_lb_server_ssl_profile.ssl1.id}"
```

```
client_certificate_id = "${data.nsxt_certificate.client.id}"
  certificate_chain_depth = 2
  server_auth = true
  ca_ids = ["${data.nsxt_certificate.server_ca.id}"]
  crl_ids = ["fa27d79e-13cd-4dd1-a088-4f2fb2cc91f9"]
}

tag {
  scope = "color"
  tag = "green"
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- enabled (Optional) Whether the virtual server is enabled. Default is true.
- ip\_address (Required) Virtual server IP address.
- port (Required) Virtual server port.
- tag (Optional) A list of scope + tag pairs to associate with this lb http virtual server.
- access\_log\_enabled (Optional) Whether access log is enabled. Default is false.
- application\_profile\_id (Required) The application profile defines the application protocol characteristics.
- default\_pool\_member\_port (Optional) Default pool member port.
- max\_concurrent\_connections (Optional) To ensure one virtual server
  does not over consume resources, affecting other applications hosted on
  the same LBS, connections to a virtual server can be capped. If it is not
  specified, it means that connections are unlimited.
- max\_new\_connection\_rate (Optional) To ensure one virtual server does not over consume resources, connections to a member can be rate limited. If it is not specified, it means that connection rate is unlimited.
- persistence\_profile\_id (Optional) Persistence profile is used to allow related client connections to be sent to the same backend server.

- pool\_id (Optional) Pool of backend servers. Server pool consists of one or more servers, also referred to as pool members, that are similarly configured and are running the same application.
- sorry\_pool\_id (Optional) When load balancer can not select a backend server to serve the request in default pool or pool in rules, the request would be served by sorry server pool.
- rule\_ids (Optional) List of load balancer rules that provide customization of load balancing behavior using match/action rules.
- client ssl (Optional) Client side SSL customization.
  - client\_ssl\_profile\_id (Required) Id of client SSL profile that defines reusable properties.
  - default\_certificate\_id (Required) Id of certificate that will be used if the server does not host multiple hostnames on the same IP address or if the client does not support SNI extension.
  - certificate\_chain\_depth (Optional) Allowed depth of certificate chain. Default is 3.
  - client\_auth (Optional) Whether client authentication is mandatory. Default is false.
  - ca\_ids (Optional) List of CA certificate ids for client authentication.
  - crl\_ids (Optional) List of CRL ids for client authentication.
  - sni\_certificate\_ids (Optional) List of certificates to serve different hostnames.
- server ssl (Optional) Server side SSL customization.
  - server\_ssl\_profile\_id (Required) Id of server SSL profile that defines reusable properties.
  - server\_auth (Optional) Whether server authentication is needed.
     Default is False. If true, ca ids should be provided.
  - certificate\_chain\_depth (Optional) Allowed depth of certificate chain. Default is 3.
  - client\_certificate\_id (Optional) Whether server authentication is required. Default is false.
  - ca\_ids (Optional) List of CA certificate ids for server authentication
  - crl\_ids (Optional) List of CRL certificate ids for server authentication.

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

• id - ID of the lb http virtual server.

• revision - Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb http virtual server can be imported into this resource, via the following command:

terraform import nsxt\_lb\_http\_virtual\_server.lb\_http\_virtual\_server UUID

The above would import the lb http virtual server named lb\_http\_virtual\_server with the nsx id UUID

## » nsxt\_lb\_tcp\_virtual\_server

Provides a resource to configure lb tcp virtual server on NSX-T manager **NOTE:** This resource requires NSX version 2.3 or higher.

```
resource "nsxt_lb_fast_tcp_application_profile" "timeout_60" {
  close_timeout = 60
  idle_timeout = 60
}
resource "nsxt_lb_source_ip_persistence_profile" "ip_profile" {
 display_name = "source1"
}
resource "nsxt_lb_pool" "pool1" {
  algorithm = "LEAST_CONNECTION"
 member {
   ip_address = "3.0.0.1"
   port
              = "443"
 }
 member {
    ip_address = "3.0.0.2"
   port
            = "443"
 }
}
resource "nsxt_lb_pool" "sorry_pool" {
 member {
```

```
ip_address = "3.0.0.15"
              = "443"
   port
 }
}
resource "nsxt_lb_tcp_virtual_server" "lb_virtual_server" {
                             = "lb_virtual_server provisioned by terraform"
  description
                             = "virtual server 1"
  display_name
  access_log_enabled
                             = "${nsxt_lb_fast_tcp_application_profile.timeout_60.id}"
  application_profile_id
  enabled
                             = true
  ip_address
                             = "10.0.0.2"
                             = ["443"]
 ports
  default_pool_member_ports = ["8888"]
 max_concurrent_connections = 50
 max new connection rate
 persistence_profile_id
                             = "${nsxt_lb_source_ip_persistence_profile.ip_profile.id}"
                             = "${nsxt_lb_pool.pool1.id}"
 pool_id
                             = "${nsxt_lb_pool.sorry_pool.id}"
  sorry_pool_id
  tag {
    scope = "color"
          = "green"
    tag
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- enabled (Optional) Whether the virtual server is enabled. Default is true.
- ip\_address (Required) Virtual server IP address.
- ports (Required) List of virtual server ports.
- tag (Optional) A list of scope + tag pairs to associate with this lb tcp virtual server.
- access\_log\_enabled (Optional) Whether access log is enabled. Default is false.
- application\_profile\_id (Required) The application profile defines the application protocol characteristics.
- default\_pool\_member\_ports (Optional) List of default pool member ports.

- max\_concurrent\_connections (Optional) To ensure one virtual server does not over consume resources, affecting other applications hosted on the same LBS, connections to a virtual server can be capped. If it is not specified, it means that connections are unlimited.
- max\_new\_connection\_rate (Optional) To ensure one virtual server does not over consume resources, connections to a member can be rate limited. If it is not specified, it means that connection rate is unlimited.
- persistence\_profile\_id (Optional) Persistence profile is used to allow related client connections to be sent to the same backend server. Only source ip persistance profile is accepted.
- pool\_id (Optional) Pool of backend servers. Server pool consists of one or more servers, also referred to as pool members, that are similarly configured and are running the same application.
- sorry\_pool\_id (Optional) When load balancer can not select a backend server to serve the request in default pool or pool in rules, the request would be served by sorry server pool.

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

- id ID of the lb tcp virtual server.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb tcp virtual server can be imported into this resource, via the following command:

terraform import nsxt\_lb\_tcp\_virtual\_server.lb\_tcp\_virtual\_server UUID

The above would import the lb tcp virtual server named lb\_tcp\_virtual\_server with the nsx id UUID

# » nsxt\_lb\_udp\_virtual\_server

Provides a resource to configure lb udp virtual server on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

### » Example Usage

resource "nsxt\_lb\_fast\_udp\_application\_profile" "timeout\_60" {

```
idle_timeout = 60
resource "nsxt_lb_source_ip_persistence_profile" "ip_profile" {
 display_name = "source1"
}
resource "nsxt_lb_pool" "pool1" {
  algorithm = "LEAST_CONNECTION"
 member {
    ip_address = "3.0.0.1"
             = "443"
 member {
    ip_address = "3.0.0.2"
   port
            = "443"
 }
}
resource "nsxt_lb_pool" "sorry_pool" {
 member {
    ip_address = "3.0.0.15"
              = "443"
   port
 }
}
resource "nsxt_lb_udp_virtual_server" "lb_virtual_server" {
                            = "lb_virtual_server provisioned by terraform"
  description
                             = "virtual server 1"
  display_name
  access_log_enabled
                             = true
  application_profile_id
                             = "${nsxt_lb_fast_udp_application_profile.timeout_60.id}"
  enabled
                             = true
                             = "10.0.0.2"
  ip_address
                             = ["443"]
 ports
  default_pool_member_ports = ["8888"]
 max\_concurrent\_connections = 50
 max_new_connection_rate
                             = "${nsxt_lb_source_ip_persistence_profile.ip_profile.id}"
 persistence_profile_id
 pool_id
                             = "${nsxt_lb_pool.pool1.id}"
                             = "${nsxt_lb_pool.sorry_pool.id}"
  sorry_pool_id
 tag {
    scope = "color"
    tag = "green"
 }
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- enabled (Optional) Whether the virtual server is enabled. Default is
- ip\_address (Required) Virtual server IP address.
- ports (Required) List of virtual server port.
- tag (Optional) A list of scope + tag pairs to associate with this lb udp virtual server.
- access\_log\_enabled (Optional) Whether access log is enabled. Default
  is false.
- application\_profile\_id (Required) The application profile defines the application protocol characteristics.
- default\_pool\_member\_ports (Optional) List of default pool member ports.
- max\_concurrent\_connections (Optional) To ensure one virtual server does not over consume resources, affecting other applications hosted on the same LBS, connections to a virtual server can be capped. If it is not specified, it means that connections are unlimited.
- max\_new\_connection\_rate (Optional) To ensure one virtual server does not over consume resources, connections to a member can be rate limited. If it is not specified, it means that connection rate is unlimited.
- persistence\_profile\_id (Optional) Persistence profile is used to allow related client connections to be sent to the same backend server. Only source ip persistence profile is accepted.
- pool\_id (Optional) Pool of backend servers. Server pool consists of one or more servers, also referred to as pool members, that are similarly configured and are running the same application.
- sorry\_pool\_id (Optional) When load balancer can not select a backend server to serve the request in default pool or pool in rules, the request would be served by sorry server pool.

#### » Attributes Reference

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

- id ID of the lb udp virtual server.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing lb udp virtual server can be imported into this resource, via the following command:

```
terraform import nsxt_lb_udp_virtual_server.lb_udp_virtual_server UUID
```

The above would import the lb udp virtual server named  $\verb|lb_udp_virtual_server|$  with the nsx id  $\verb|UUID|$ 

## » nsxt\_lb\_service

Provides a resource to configure lb service on NSX-T manager. Note that lb service needs to be attached to Tier-1 router that satisfies following preconditions: \* It needs to reside on edge cluster \* It needs to be condigured with either uplink port or centralized service port

In order to enforce correct order of create/delete, it is recommended to add depends on clause to lb service.

**NOTE:** This resource requires NSX version 2.3 or higher.

## » Example Usage

```
data "nsxt_edge_cluster" "EC" {
  display_name = "%s"
}
data "nsxt_logical_tier0_router" "test" {
  display_name = "%s"
resource "nsxt_logical_router_link_port_on_tier0" "test" {
  display_name
                 = "port_on_tier0"
  logical_router_id = "${data.nsxt_logical_tier0_router.test.id}"
}
resource "nsxt_logical_tier1_router" "test" {
  display_name = "test"
  edge_cluster_id = "${data.nsxt_edge_cluster.EC.id}"
}
resource "nsxt_logical_router_link_port_on_tier1" "test" {
  logical router id
                               = "${nsxt_logical_tier1_router.test.id}"
  linked_logical_router_port_id = "${nsxt_logical_router_link_port_on_tier0.test.id}"
```

```
}
resource "nsxt_lb_service" "lb_service" {
  description = "lb_service provisioned by Terraform"
  display_name = "lb_service"
  tag {
    scope = "color"
         = "red"
    tag
  }
  enabled
                    = true
 logical_router_id = "${nsxt_logical_tier1_router.test.id}"
  error_log_level = "INFO"
  size
                    = "MEDIUM"
  depends_on
                    = ["nsxt_logical_router_link_port_on_tier1.test"]
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb service.
- logical\_router\_id (Required) Tier1 logical router this service is attached to. Note that this router needs to have edge cluster configured, and have an uplink port or CSP (centralized service port).
- enabled (Optional) whether the load balancer service is enabled.
- error\_log\_level (Optional) Load balancer engine writes information about encountered issues of different severity levels to the error log. This setting is used to define the severity level of the error log.
- size (Required) Size of load balancer service. Accepted values are SMALL/MEDIUM/LARGE.
- virtual\_server\_ids (Optional) Virtual servers associated with this Load Balancer.

## » Attributes Reference

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

• id - ID of the lb service.

• revision - Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb service can be imported into this resource, via the following command:

```
terraform import nsxt_lb_service.lb_service UUID
```

The above would import the lb service named lb\_service with the nsx id UUID

## » nsxt\_lb\_http\_forwarding\_rule

Provides a resource to configure lb http forwarding rule on NSX-T manager. This rule will be executed when HTTP request message is forwarded by load balancer.

**NOTE:** This resource requires NSX version 2.3 or higher.

## » Example Usages

This example represents a superset of all possible action and conditions (and thus doesn't make much sense). More specific examples are provided below.

```
resource "nsxt_lb_http_forwarding_rule" "lb_rule" {
 description = "lb_rule provisioned by Terraform"
 display_name = "lb_rule"
 match_strategy = "ANY"
 tag {
   scope = "color"
   tag = "red"
 body_condition {
                  = "XXX"
   value
                = "CONTAINS"
   match_type
   case_sensitive = false
 header_condition {
             = "header1"
   name
              = "bad"
   value
```

```
match_type = "EQUALS"
  inverse = true
}
cookie_condition {
  name = "name"
 value = "cookie1"
match_type = "STARTS_WITH"
 case_sensitive = true
}
cookie_condition {
 name = "name"
 value = "cookie2"
match_type = "STARTS_WITH"
 case_sensitive = true
method_condition {
  method = "HEAD"
version_condition {
  version = "HTTP_VERSION_1_0"
  inverse = true
uri_condition {
 uri = "/index.html"
 match_type = "EQUALS"
}
ip_condition {
  source_address = "1.1.1.1"
tcp_condition {
  source_port = 7887
http_reject_action {
 reply_status = "500"
 reply_message = "rejected"
}
http_redirect_action {
```

```
redirect_status = "200"
   redirect_url
                 = "/abc.com"
  select_pool_action {
   pool_id = "${nsxt_lb_pool.pool.id}"
}
The following rule will match if header X-FORWARDED-FOR does not start
with "192.168", request method is GET and URI contains "books":
resource "nsxt_lb_http_forwarding_rule" "lb_rule1" {
 match_strategy = "ALL"
 header_condition {
   name
           = "X-FORWARDED-FOR"
   value
              = "192.168"
   match_type = "STARTS_WITH"
   inverse
              = true
 }
 method_condition {
   method = "GET"
 uri_condition {
         = "books"
   uri
   match_type = "CONTAINS"
 }
 http_reject_action {
   reply_status = "500"
   reply_message = "rejected"
 }
}
The following rule will match if header X-TEST contains "apples" or "pears",
regardless of the case:
resource "nsxt_lb_http_forwarding_rule" "lb_rule1" {
 match_strategy = "ANY"
 header_condition {
   name = "X-TEST"
                 = "apples"
   value
   match_type = "CONTAINS"
    case_sensitive = false
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb rule.
- match\_strategy (Required) Strategy to define how load balancer rule is considered a match when multiple match conditions are specified in one rule. If set to ALL, then load balancer rule is considered a match only if all the conditions match. If set to ANY, then load balancer rule is considered a match if any one of the conditions match.
- body\_condition (Optional) Set of match conditions used to match http request body:
  - value (Required) The value to look for in the body.
  - match\_type (Required) Defines how value field is used to match the body of HTTP requests. Accepted values are STARTS\_WITH, ENDS WITH, CONTAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- header\_condition (Optional) Set of match conditions used to match http request header:
  - name (Required) The name of HTTP header to match.
  - value (Required) The value of HTTP header to match.

- match\_type (Required) Defines how value field is used to match the header value of HTTP requests. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX. Header name field does not support match types.
- case\_sensitive (Optional) If true, case is significant in the match.
   Default is true.
- inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- cookie\_condition (Optional) Set of match conditions used to match http request cookie:
  - name (Required) The name of cookie to match.
  - value (Required) The value of cookie to match.
  - match\_type (Required) Defines how value field is used to match the cookie. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- method\_condition (Optional) Set of match conditions used to match http request method:
  - method (Required) One of GET, HEAD, POST, PUT, OPTIONS.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- version\_condition (Optional) Match condition used to match http version of the request:
  - version (Required) One of HTTP\_VERSION\_1\_0, HTTP\_VERSION\_1\_1.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- ip\_condition (Optional) Set of match conditions used to match IP header values of HTTP request:
  - source\_address (Required) The value source IP address to match.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- uri\_condition (Optional) Set of match conditions used to match http request URI:
  - uri (Required) The value of URI to match.
  - match\_type (Required) Defines how value field is used to match the URI. Accepted values are STARTS\_WITH, ENDS\_WITH, CON-TAINS, EQUALS, REGEX.

- case\_sensitive (Optional) If true, case is significant in the match.
   Default is true.
- inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- http\_reject\_action (At least one action is required) Set of http reject actions to be executed when load balancer rule matches:
  - reply\_status (Required) The HTTP reply status.
  - reply\_message (Required) The HTTP reply message.
- http\_redirect\_action (At least one action is required) Set of http redirect actions to be executed when load balancer rule matches:
  - redirect\_status (Required) The HTTP reply status.
  - redirect\_url (Required) The URL to redirect to.
- select\_pool\_action (At least one action is required) Set of pool selection actions to be executed when load balancer rule matches:
  - pool\_id (Required) The loadbalancer pool the request will be forwarded to.

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

- id ID of the lb rule.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

#### » Importing

An existing lb rule can be imported into this resource, via the following command: } }

terraform import nsxt\_lb\_http\_forwarding\_rule.lb\_rule UUID

The above would import the lb rule named lb\_rule with the nsx id UUID

## » nsxt\_lb\_http\_request\_rewrite\_rule

Provides a resource to configure lb http request rewrite rule on NSX-T manager. This rule will be executed when HTTP request message is received by load balancer.

**NOTE:** This resource requires NSX version 2.3 or higher.

## » Example Usages

This example represents a superset of all possible action and conditions (and thus doesn't make much sense). More specific examples are provided below.

```
resource "nsxt_lb_http_request_rewrite_rule" "lb_rule" {
 description = "lb_rule provisioned by Terraform"
 display_name = "lb_rule"
 match_strategy = "ANY"
 tag {
   scope = "color"
   tag = "red"
 }
 body_condition {
   value = "XXX"
   match_type = "CONTAINS"
   case_sensitive = false
 }
 header_condition {
          = "header1"
   name
   value
            = "bad"
   match_type = "EQUALS"
   inverse = true
  cookie_condition {
          = "name"
   name
                = "cookie1"
   value
   match_type = "STARTS_WITH"
   case_sensitive = true
 cookie_condition {
   name = "name"
                = "cookie2"
   value
   match_type = "STARTS_WITH"
   case_sensitive = true
 method_condition {
   method = "HEAD"
```

```
version_condition {
   version = "HTTP_VERSION_1_0"
   inverse = true
 }
 uri_condition {
        = "/index.html"
   match_type = "EQUALS"
 uri_arguments_condition {
   uri_arguments = "delete"
   match_type = "CONTAINS"
   inverse
               = true
 }
 ip_condition {
   source_address = "1.1.1.1"
 tcp_condition {
   source_port = 7887
 header_rewrite_action {
   name = "header1"
   value = "value2"
 uri_rewrite_action {
   uri = "new.html"
   uri_arguments = "redirect=true"
 }
}
The following rule will match if header X-FORWARDED-FOR does not start
with "192.168", request method is GET and URI contains "books":
resource "nsxt_lb_http_request_rewrite_rule" "lb_rule1" {
 match_strategy = "ALL"
 header_condition {
         = "X-FORWARDED-FOR"
   name
            = "192.168"
   match_type = "STARTS_WITH"
   inverse
             = true
 }
```

```
method_condition {
    method = "GET"
  uri_condition {
         = "books"
    uri
    match_type = "CONTAINS"
  header_rewrite_action {
   name = "header1"
    value = "value2"
  }
}
The following rule will match if header X-TEST contains "apples" or "pears",
regardless of the case:
resource "nsxt_lb_http_request_rewrite_rule" "lb_rule1" {
  match_strategy = "ANY"
  header_condition {
                  = "X-TEST"
    name
    value
                  = "apples"
                 = "CONTAINS"
    match_type
    case_sensitive = false
  header_condition {
                  = "X-TEST"
    name
                  = "pears"
    value
   match_type
                  = "CONTAINS"
    case_sensitive = false
  header_rewrite_action {
    name = "header1"
    value = "value2"
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb rule.
- match\_strategy (Required) Strategy to define how load balancer rule is considered a match when multiple match conditions are specified in one rule. If set to ALL, then load balancer rule is considered a match only if all the conditions match. If set to ANY, then load balancer rule is considered a match if any one of the conditions match.
- body\_condition (Optional) Set of match conditions used to match http request body:
  - value (Required) The value to look for in the body.
  - match\_type (Required) Defines how value field is used to match the body of HTTP requests. Accepted values are STARTS\_WITH, ENDS WITH, CONTAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- header\_condition (Optional) Set of match conditions used to match http request header:
  - name (Required) The name of HTTP header to match.
  - value (Required) The value of HTTP header to match.
  - match\_type (Required) Defines how value field is used to match the header value of HTTP requests. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX. Header name field does not support match types.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- cookie\_condition (Optional) Set of match conditions used to match http request cookie:
  - name (Required) The name of cookie to match.
  - value (Required) The value of cookie to match.
  - match\_type (Required) Defines how value field is used to match the cookie. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.

- inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- method\_condition (Optional) Set of match conditions used to match http request method:
  - method (Required) One of GET, HEAD, POST, PUT, OPTIONS.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- version\_condition (Optional) Match condition used to match http version of the request:
  - version (Required) One of HTTP\_VERSION\_1\_0, HTTP\_VERSION\_1\_1.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- uri\_condition (Optional) Set of match conditions used to match http request URI:
  - uri (Required) The value of URI to match.
  - match\_type (Required) Defines how value field is used to match the URI. Accepted values are STARTS\_WITH, ENDS\_WITH, CON-TAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- uri\_arguments\_condition (Optional) Set of match conditions used to match http request URI arguments (query string):
  - uri\_arguments (Required) Query string of URI, typically contains key value pairs.
  - match\_type (Required) Defines how value field is used to match the URI. Accepted values are STARTS\_WITH, ENDS\_WITH, CON-TAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- ip\_condition (Optional) Set of match conditions used to match IP header values of HTTP request:
  - source\_address (Required) The value source IP address to match.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- header\_rewrite\_action (At least one action is required) Set of header rewrite actions to be executed when load balancer rule matches:

- name (Required) The name of HTTP header to be rewritten.
- value (Required) The new value of HTTP header.
- uri\_rewrite\_action (At least one action is required) Set of URI rewrite actions to be executed when load balancer rule matches:
  - uri (Required) The new URI for the HTTP request.
  - uri\_arguments (Required) The new URI arguments(query string) for the HTTP request.

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

- id ID of the lb rule.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb rule can be imported into this resource, via the following command: } }

 ${\tt terraform\ import\ nsxt\_lb\_http\_request\_rewrite\_rule.lb\_rule\ UUID}$ 

The above would import the lb rule named lb\_rule with the nsx id UUID

# » nsxt\_lb\_http\_response\_rewrite\_rule

Provides a resource to configure lb http response rewrite rule on NSX-T manager. This rule will be executed when HTTP response message is received by load balancer.

**NOTE:** This resource requires NSX version 2.3 or higher.

### » Example Usages

This example represents a superset of all possible conditions (and thus doesn't make much sense). More specific examples are provided below.

```
resource "nsxt_lb_http_response_rewrite_rule" "lb_rule" {
  description = "lb_rule provisioned by Terraform"
  display_name = "lb_rule"
  match_strategy = "ALL"
```

```
tag {
 scope = "color"
 tag = "blue"
}
request_header_condition {
          = "header1"
 name
           = "bad"
 value
 match_type = "EQUALS"
 inverse = true
response_header_condition {
 name = "header1"
 value = "good"
 match_type = "EQUALS"
 inverse = false
cookie_condition {
               = "name1"
 name
              = "cookie1"
  value
            = "STARTS_WITH"
 match_type
 case_sensitive = true
cookie_condition {
 name = "name2"
              = "cookie2"
 value
 match_type = "STARTS_WITH"
 case_sensitive = true
method_condition {
 method = "HEAD"
}
version_condition {
 version = "HTTP_VERSION_1_1"
  inverse = true
uri_condition {
      = "/index.html"
 match_type = "EQUALS"
}
```

```
uri_arguments_condition {
    uri_arguments = "delete"
                 = "CONTAINS"
   match_type
    inverse
                  = true
 }
  ip_condition {
    source_address = "1.1.1.1"
 tcp_condition {
   source_port = 7887
 header_rewrite_action {
   name = "header1"
    value = "even better"
 }
}
The following rule will match if request header X-FORWARDED-FOR does not
start with "192.168", request method is GET and response content is json:
resource "nsxt_lb_http_response_rewrite_rule" "lb_rule1" {
 match_strategy = "ALL"
 request_header_condition {
   name = "X-FORWARDED-FOR"
    value = "192.168"
   match_type = "STARTS_WITH"
    inverse
              = true
 response_header_condition {
              = "Content-Type"
              = "/json"
    value
   match_type = "CONTAINS"
              = false
    inverse
 method_condition {
   method = "GET"
 header_rewrite_action {
   name = "header1"
```

```
value = "value2"
 }
}
The following rule will match if response header X-TEST contains "apples" or
"pears", regardless of the case:
resource "nsxt_lb_http_response_rewrite_rule" "lb_rule1" {
 match_strategy = "ANY"
 response_header_condition {
                   = "X-TEST"
    name
                   = "apples"
    value
    match_type
                   = "CONTAINS"
    case sensitive = false
 }
 response_header_condition {
                   = "X-TEST"
                   = "pears"
    value
                   = "CONTAINS"
    match_type
    case_sensitive = false
 }
 header_rewrite_action {
    name = "header1"
    value = "value2"
 }
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb rule.
- match\_strategy (Required) Strategy to define how load balancer rule is considered a match when multiple match conditions are specified in one rule. If set to ALL, then load balancer rule is considered a match only if all the conditions match. If set to ANY, then load balancer rule is considered a match if any one of the conditions match.

- request\_header\_condition (Optional) Set of match conditions used to match http request header:
  - name (Required) The name of HTTP header to match.
  - value (Required) The value of HTTP header to match.
  - match\_type (Required) Defines how value field is used to match the header value of HTTP request. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX. Header name field does not support match types.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- response\_header\_condition (Optional) Set of match conditions used to match http response header:
  - name (Required) The name of HTTP header to match.
  - value (Required) The value of HTTP header to match.
  - match\_type (Required) Defines how value field is used to match the header value of HTTP response. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX. Header name field does not support match types.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- cookie\_condition (Optional) Set of match conditions used to match http request cookie:
  - name (Required) The name of cookie to match.
  - value (Required) The value of cookie to match.
  - match\_type (Required) Defines how value field is used to match the cookie. Accepted values are STARTS\_WITH, ENDS\_WITH, CONTAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- method\_condition (Optional) Set of match conditions used to match http request method:
  - method (Required) One of GET, HEAD, POST, PUT, OPTIONS.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- version\_condition (Optional) Match condition used to match http version of the request:

- $-\ {\tt version-} (Required)\ One\ of\ HTTP\_VERSION\_1\_0,\ HTTP\_VERSION\_1\_1.$
- inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- uri\_condition (Optional) Set of match conditions used to match http request URI:
  - uri (Required) The value of URI to match.
  - match\_type (Required) Defines how value field is used to match the URI. Accepted values are STARTS\_WITH, ENDS\_WITH, CON-TAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- uri\_arguments\_condition (Optional) Set of match conditions used to match http request URI arguments (query string):
  - uri\_arguments (Required) Query string of URI, typically contains key value pairs.
  - match\_type (Required) Defines how value field is used to match the URI. Accepted values are STARTS\_WITH, ENDS\_WITH, CON-TAINS, EQUALS, REGEX.
  - case\_sensitive (Optional) If true, case is significant in the match.
     Default is true.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- ip\_condition (Optional) Set of match conditions used to match IP header values of HTTP message:
  - source\_address (Required) The value source IP address to match.
  - inverse (Optional) A flag to indicate whether reverse the match result of this condition. Default is false.
- header\_rewrite\_action (Required) Set of header rewrite actions to be executed on the outgoing response when load balancer rule matches:
  - name (Required) The name of HTTP header to be rewritten.
  - value (Required) The new value of HTTP header.

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

- id ID of the lb rule.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

```
An existing lb rule can be imported into this resource, via the following command: } }
```

```
terraform import nsxt_lb_http_response_rewrite_rule.lb_rule UUID
```

The above would import the lb rule named lb\_rule with the nsx id UUID

## » nsxt\_lb\_client\_ssl\_profile

Provides a resource to configure lb client ssl profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

### » Example Usage

```
resource "nsxt_lb_client_ssl_profile" "lb_client_ssl_profile" {
  description
                        = "lb_client_ssl_profile provisioned by Terraform"
  display_name
                        = "lb_client_ssl_profile"
 protocols
                        = ["TLS_V1_2"]
                        = ["TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256", "TLS_ECDHE_RSA_WITH_AES_
  ciphers
 prefer_server_ciphers = true
  session_cache_enabled = true
  session_cache_timeout = 200
  tag {
    scope = "color"
          = "red"
    tag
```

### » Argument Reference

}

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb client ssl profile.
- prefer\_server\_ciphers (Optional) During SSL handshake as part of the SSL client Hello client sends an ordered list of ciphers that it can support (or prefers) and typically server selects the first one from the top

- of that list it can also support. For Perfect Forward Secrecy(PFS), server could override the client's preference. Defaults to false.
- ciphers (Optional) supported SSL cipher list to client side. The supported ciphers can contain: TLS ECDHE RSA WITH AES 128 GCM SHA256, TLS ECDHE RSA WITH AES 256 GCM SHA384, TLS ECDHE RSA WITH AES 256 CB TLS ECDHE ECDSA WITH AES 256 CBC SHA, TLS ECDH ECDSA WITH AES 256 CBC WITH TLS ECDH RSA WITH AES 256 CBC SHA, TLS RSA WITH AES 256 CBC SHA, TLS RSA WITH AES 128 CBC SHA, TLS RSA WITH 3DES EDE CBC SHA, TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_SHA, TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_S TLS\_ECDHE\_RSA\_WITH\_AES\_256\_CBC\_SHA384, TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256 TLS\_RSA\_WITH\_AES\_128\_GCM\_SHA256, TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA256, TLS\_RSA\_WITH\_AES\_256\_GCM\_SHA384, TLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_SH. TLS ECDHE ECDSA WITH AES 256 CBC SHA384, TLS ECDHE ECDSA WITH AES 250 TLS ECDH ECDSA WITH AES 128 CBC SHA, TLS ECDH ECDSA WITH AES 128 CBC TLS ECDH ECDSA WITH AES 128 GCM SHA256, TLS ECDH ECDSA WITH AES 256 TLS\_ECDH\_ECDSA\_WITH\_AES\_256\_GCM\_SHA384, TLS\_ECDH\_RSA\_WITH\_AES\_128\_CB TLS ECDH RSA WITH AES 128 CBC SHA256, TLS ECDH RSA WITH AES 128 GCM TLS\_ECDH\_RSA\_WITH\_AES\_256\_CBC\_SHA384, TLS\_ECDH\_RSA\_WITH\_AES\_256\_GCM\_
- prefer\_server\_ciphers (Optional) During SSL handshake as part of the SSL client Hello client sends an ordered list of ciphers that it can support (or prefers) and typically server selects the first one from the top of that list it can also support. For Perfect Forward Secrecy(PFS), server could override the client's preference. Defaults to false.
- protocols (Optional) SSL versions TLS\_V1\_1 and TLS\_V1\_2 are supported and enabled by default. SSL\_V2, SSL\_V3, and TLS\_V1 are supported, but disabled by default.
- session\_cache\_enabled (Optional) SSL session caching allows SSL client and server to reuse previously negotiated security parameters avoiding the expensive public key operation during handshake. Defaults to true.
- session\_cache\_timeout (Optional) Session cache timeout specifies how long the SSL session parameters are held on to and can be reused. Default value is 300.

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

- id ID of the lb client ssl profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- is\_secure This flag is set to true when all the ciphers and protocols are secure. It is set to false when one of the ciphers or protocols is insecure.

## » Importing

An existing lb client ssl profile can be imported into this resource, via the following command:

```
terraform import nsxt_lb_client_ssl_profile.lb_client_ssl_profile UUID
```

The above would import the lb client ssl profile named lb\_client\_ssl\_profile with the nsx id UUID

## » nsxt\_lb\_server\_ssl\_profile

Provides a resource to configure lb server ssl profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

## » Example Usage

### » Argument Reference

}

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb server ssl profile.
- ciphers (Optional) supported SSL cipher list to client side. The supported ciphers can contain: TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256, TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384, TLS\_ECDHE\_RSA\_WITH\_AES\_256\_CBTLS\_ECDHE\_ECDSA\_WITH\_AES\_256\_CBC\_SHA, TLS\_ECDH\_ECDSA\_WITH\_AES\_256\_CBC\_SHA, TLS\_ECDH\_ECDSA\_WITH\_AES\_2

TLS\_ECDH\_RSA\_WITH\_AES\_256\_CBC\_SHA, TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA, TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA, TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA, TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_SHA, TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_STLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_STLS\_RSA\_WITH\_AES\_128\_CBC\_STLS\_RSA\_WITH\_AES\_128\_CBC\_STLS\_RSA\_WITH\_AES\_128\_CBC\_STLS\_RSA\_WITH\_AES\_128\_CBC\_STLS\_RSA\_WITH\_AES\_128\_CBC\_STLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_STLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_STLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_STLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_STLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_STLS\_ECDH\_ECDSA\_WITH\_AES\_128\_CBC\_STLS

- prefer\_server\_ciphers (Optional) During SSL handshake as part of the SSL client Hello client sends an ordered list of ciphers that it can support (or prefers) and typically server selects the first one from the top of that list it can also support. For Perfect Forward Secrecy(PFS), server could override the client's preference. Defaults to false.
- protocols (Optional) SSL versions TLS\_V1\_1 and TLS\_V1\_2 are supported and enabled by default. SSL\_V2, SSL\_V3, and TLS\_V1 are supported, but disabled by default.
- session\_cache\_enabled (Optional) SSL session caching allows SSL server and server to reuse previously negotiated security parameters avoiding the expensive public key operation during handshake. Defaults to true.

### » Attributes Reference

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

- id ID of the lb server ssl profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- is\_secure This flag is set to true when all the ciphers and protocols are secure. It is set to false when one of the ciphers or protocols is insecure.

#### » Importing

An existing lb server ssl profile can be imported into this resource, via the following command:

terraform import nsxt\_lb\_server\_ssl\_profile.lb\_server\_ssl\_profile UUID

The above would import the lb server ssl profile named  ${\tt lb\_server\_ssl\_profile}$  with the nsx id UUID

## » nsxt\_lb\_fast\_tcp\_application\_profile

Provides a resource to configure LB fast TCP application profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

## » Example Usage

## » Argument Reference

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- close\_timeout (Optional) Timeout in seconds to specify how long a closed TCP connection should be kept for this application before cleaning up the connection. Value can range between 1-60, with a default of 8 seconds.
- idle\_timeout (Optional) Timeout in seconds to specify how long an idle TCP connection in ESTABLISHED state should be kept for this application before cleaning up. The default value will be 1800 seconds
- ha\_flow\_mirroring (Optional) A boolean flag which reflects whether flow mirroring is enabled, and all the flows to the bounded virtual server are mirrored to the standby node. By default this is disabled.
- tag (Optional) A list of scope + tag pairs to associate with this lb fast tcp profile.

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

- id ID of the lb fast tcp profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing lb fast tcp profile can be imported into this resource, via the following command:

```
terraform import nsxt_lb_fast_tcp_application_profile.lb_fast_tcp_profile UUID
The above would import the LB fast TCP application profile named
lb_fast_tcp_profile with the nsx id UUID
```

## » nsxt\_lb\_fast\_udp\_application\_profile

Provides a resource to configure LB fast UDP application profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

### » Example Usage

### » Argument Reference

The following arguments are supported:

• description - (Optional) Description of this resource.

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- idle\_timeout (Optional) Timeout in seconds to specify how long an idle UDP connection in ESTABLISHED state should be kept for this application before cleaning up. The default value will be 300 seconds
- ha\_flow\_mirroring (Optional) A boolean flag which reflects whether flow mirroring is enabled, and all the flows to the bounded virtual server are mirrored to the standby node. By default this is disabled.
- tag (Optional) A list of scope + tag pairs to associate with this lb fast udp profile.

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

• id - ID of the lb fast udp profile.

1b fast udp profile with the nsx id UUID

• revision - Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb fast udp profile can be imported into this resource, via the following command:

```
terraform import nsxt_lb_fast_udp_application_profile.lb_fast_udp_profile UUID
The above would import the LB fast UDP application profile named
```

## » nsxt\_lb\_http\_application\_profile

Provides a resource to configure LB HTTP application profile on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

### » Example Usage

```
= "15"
  idle_timeout
 request_body_size
                          = "100"
 request header size
                          = "1024"
 response_timeout
                          = "60"
  x_forwarded_for
                          = "INSERT"
                          = "true"
 ntlm
  tag {
    scope = "color"
         = "red"
    tag
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- http\_redirect\_to (Optional) A URL that incoming requests for that virtual server can be temporarily redirected to, If a website is temporarily down or has moved. When set, http\_redirect\_to\_https should be false.
- http\_redirect\_to\_https (Optional) A boolean flag which reflects whether the client will automatically be redirected to use SSL. When true, the http\_redirect\_to should not be specified.
- idle\_timeout (Optional) Timeout in seconds to specify how long an HTTP application can remain idle. Defaults to 15 seconds.
- ntlm (Optional) A boolean flag which reflects whether NTLM challenge/response methodology will be used over HTTP. Can be set to true only if http\_redirect\_to\_https is false.
- request\_body\_size (Optional) Maximum request body size in bytes. If it is not specified, it means that request body size is unlimited.
- request\_header\_size (Optional) Maximum request header size in bytes. Requests with larger header size will be processed as best effort whereas a request with header below this specified size is guaranteed to be processed. Defaults to 1024 bytes.
- response\_timeout (Optional) Number of seconds waiting for the server response before the connection is closed. Defaults to 60 seconds.
- x\_forwarded\_for (Optional) When this value is set, the x\_forwarded\_for header in the incoming request will be inserted or replaced. Supported values are "INSERT" and "REPLACE".
- tag (Optional) A list of scope + tag pairs to associate with this lb http profile.

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

- id ID of the lb http application profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb http profile can be imported into this resource, via the following command:

terraform import nsxt\_lb\_http\_application\_profile.lb\_http\_application\_profile UUID The above would import the LB HTTP application profile named lb\_http\_application\_profile with the nsx id UUID

## » nsxt\_logical\_dhcp\_server

Provides a resource to configure logical DHCP server on NSX-T manager

### » Example Usage

```
data "nsxt_edge_cluster" "edgecluster" {
  display_name = "edgecluster1"
resource "nsxt_dhcp_server_profile" "serverprofile" {
  edge_cluster_id = "${data.nsxt_edge_cluster.edgecluster.id}"
resource "nsxt_logical_dhcp_server" "logical_dhcp_server" {
  display_name = "logical_dhcp_server"
  description
                 = "logical_dhcp_server provisioned by Terraform"
  dhcp_profile_id = "${nsxt_dhcp_server_profile.PRF.id}"
  dhcp_server_ip = "1.1.1.10/24"
                  = "1.1.1.20"
  gateway_ip
                  = "abc.com"
 domain_name
  dns_name_servers = ["5.5.5.5"]
  dhcp_option_121 {
   network = "6.6.6.0/24"
   next hop = "1.1.1.21"
```

```
}
dhcp_generic_option {
   code = "119"
   values = ["abc"]
}
tag {
   scope = "color"
   tag = "red"
}
```

The following arguments are supported:

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- dhcp\_profile\_id (Required) DHCP profile uuid.
- dhcp\_server\_ip (Required) DHCP server IP in cidr format.
- gateway\_ip (Required) Gateway IP.
- domain\_name (Optional) Domain name.
- dns\_name\_servers (Optional) DNS IPs.
- dhcp\_option\_121 (Optional) DHCP classless static routes.
  - network (Required) Destination in cidr format.
  - next\_hop (Required) IP address of next hop.
- dhcp generic option (Optional) Generic DHCP options.
  - code (Required) DHCP option code. Valid values are from 0 to  $^{255}$
  - values (Required) List of DHCP option values.
- tag (Optional) A list of scope + tag pairs to associate with this logical DHCP server.

#### » Attributes Reference

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

- id ID of the logical DHCP server.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- attached\_logical\_port\_id ID of the attached logical port.

## » Importing

An existing logical DHCP server can be imported into this resource, via the following command:

terraform import nsxt\_logical\_dhcp\_server.logical\_dhcp\_server UUID

The above would import the logical DHCP server named  $logical\_dhcp\_server$  with the nsx id UUID

## » nsxt\_dhcp\_server\_ip\_pool

Provides a resource to configure IP Pool for logical DHCP server on NSX-T manager

## » Example Usage

```
data "nsxt_edge_cluster" "edgecluster" {
 display_name = "edgecluster1"
resource "nsxt_dhcp_server_profile" "serverprofile" {
  edge_cluster_id = "${data.nsxt_edge_cluster.edgecluster.id}"
}
resource "nsxt_logical_dhcp_server" "logical_dhcp_server" {
 display_name = "logical_dhcp_server"
 dhcp_profile_id = "${nsxt_dhcp_server_profile.PRF.id}"
 dhcp_server_ip = "1.1.1.10/24"
                 = "1.1.1.20"
 gateway_ip
}
resource "nsxt_dhcp_server_ip_pool" "dhcp_ip_pool" {
 display_name
                       = "ip pool"
                       = "ip pool"
 description
 logical_dhcp_server_id = "${nsxt_logical_dhcp_server.logical_dhcp_server.id}"
                       = "1.1.1.21"
 gateway_ip
 lease_time
                       = 1296000
 error_threshold
                       = 98
 warning_threshold = 70
 ip_range {
   start = "1.1.1.40"
    end = "1.1.1.60"
```

```
dhcp_option_121 {
    network = "5.5.5.0/24"
    next_hop = "1.1.1.21"
}

dhcp_generic_option {
    code = "119"
    values = ["abc"]
}

tag {
    scope = "color"
    tag = "red"
}
```

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- description (Optional) Description of this resource.
- logical\_dhcp\_server\_id (Required) DHCP server uuid. Changing this would force new pool to be created.
- gateway\_ip (Optional) Gateway IP.
- ip range (Required) IP Ranges to be used within this pool.
  - start (Required) IP address that indicates range start.
  - end (Required) IP address that indicates range end.
- lease\_time (Optional) Lease time in seconds. Default is 86400.
- error\_threshold (Optional) Error threshold in percent. Valid values are from 80 to 100, default is 100.
- warning\_threshold (Optional) Warning threshold in percent. Valid values are from 50 to 80, default is 80.
- dhcp\_option\_121 (Optional) DHCP classless static routes. If specified, overrides DHCP server settings.
  - network (Required) Destination in cidr format.
  - next\_hop (Required) IP address of next hop.
- dhcp\_generic\_option (Optional) Generic DHCP options. If specified, overrides DHCP server settings.
  - code (Required) DHCP option code. Valid values are from 0 to 255.

- values (Required) List of DHCP option values.
- tag (Optional) A list of scope + tag pairs to associate with this logical DHCP server.

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

- id ID of the DHCP server IP pool.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing DHCP server IP Pool can be imported into this resource, via the following command:

terraform import nsxt\_dhcp\_server\_ip\_pool.ip\_pool DHCP\_SERVER\_UUID POOL\_UUID

The above would import the IP pool named ip pool for dhcp server with nsx ID DHCP\_SERVER\_UUID and pool nsx id POOL\_UUID

## » nsxt\_logical\_dhcp\_port

This resource provides a resource to configure a logical port on a logical switch, and attach it to a DHCP server.

### » Example Usage

```
admin_state = "UP"
description = "LP1 provisioned by Terraform"
display_name = "LP1"
logical_switch_id = "${nsxt_logical_switch.switch.id}"
dhcp_server_id = "${nsxt_logical_dhcp_server.logical_dhcp_server.id}"

tag {
   scope = "color"
   tag = "blue"
}
```

The following arguments are supported:

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of this resource.
- logical\_switch\_id (Required) Logical switch ID for the logical port.
- dhcp\_server\_id (Required) Logical DHCP server ID for the logical port.
- admin\_state (Optional) Admin state for the logical port. Accepted values 'UP' or 'DOWN'. The default value is 'UP'.
- tag (Optional) A list of scope + tag pairs to associate with this logical port.

#### » Attributes Reference

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

- id ID of the logical DHCP port.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing DHCP Logical Port can be imported into this resource, via the following command:

```
terraform import nsxt_logical_dhcp_port.dhcp_port UUID
```

The above command imports the logical DHCP port named dhcp\_port with the NSX id UUID.

## » nsxt\_logical\_port

This resource provides a resource to configure a logical port on a logical switch in the NSX system. Like physical switches a logical switch can have one or more ports which can be connected to virtual machines or logical routers.

### » Example Usage

### » Argument Reference

The following arguments are supported:

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of this resource.
- logical\_switch\_id (Required) Logical switch ID for the logical port.
- admin\_state (Optional) Admin state for the logical port. Accepted values 'UP' or 'DOWN'. The default value is 'UP'.
- switching\_profile\_id (Optional) List of IDs of switching profiles (of various types) to be associated with this switch. Default switching profiles will be used if not specified.
- tag (Optional) A list of scope + tag pairs to associate with this logical port.

### » Attributes Reference

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

- id ID of the logical port.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing Logical Port can be imported into this resource, via the following command:

```
terraform import nsxt_logical_port.logical_port UUID
```

The above command imports the logical port named logical\_port with the NSX id UUID.

# $\verb| *nsxt_logical_router_centralized_service_port|\\$

This resource provides a means to define a centralized service port on a logical router to connect a logical tier0 or tier1 router to a logical switch. This allows the router to be used for E-W load balancing

**NOTE:** This resource requires NSX version 2.3 or higher.

### » Example Usage

## » Argument Reference

The following arguments are supported:

• logical\_router\_id - (Required) Identifier for logical Tier-0 or Tier-1 router on which this port is created

- linked\_logical\_switch\_port\_id (Required) Identifier for port on logical switch to connect to
- ip\_address (Required) Logical router port subnet (ip\_address / prefix length)
- urpf\_mode (Optional) Unicast Reverse Path Forwarding mode. Accepted values are "NONE" and "STRICT" which is the default value.
- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- tag (Optional) A list of scope + tag pairs to associate with this port.

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

- id ID of the logical router centralized service port.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing logical router centralized service port can be imported into this resource, via the following command:

```
terraform import nsxt_logical_router_centralized_service_port.cs_port UUID
```

The above command imports the logical router centralized service port named cs\_port with the NSX id UUID.

# » nsxt\_logical\_router\_downlink\_port

This resource provides a means to define a downlink port on a logical router to connect a logical tier1 router to a logical switch. The result of this is to provide a default gateway to virtual machines running on the logical switch.

```
service_binding {
   target_id = "${nsxt_dhcp_relay_service.dr_service.id}"
   target_type = "LogicalService"
}

tag {
   scope = "color"
   tag = "blue"
}
```

The following arguments are supported:

- logical\_router\_id (Required) Identifier for logical Tier-1 router on which this port is created
- linked\_logical\_switch\_port\_id (Required) Identifier for port on logical switch to connect to
- ip\_address (Required) Logical router port subnet (ip\_address / prefix length)
- urpf\_mode (Optional) Unicast Reverse Path Forwarding mode. Accepted values are "NONE" and "STRICT" which is the default value.
- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- tag (Optional) A list of scope + tag pairs to associate with this port.
- service\_binding (Optional) A list of services for this port. Currently only "LogicalService" is supported as a target\_type, and a DHCP relay service ID as target\_id

#### » Attributes Reference

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

- id ID of the logical router downlink port.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- mac\_address The MAC address assigned to this port

### » Importing

An existing logical router downlink port can be imported into this resource, via the following command: terraform import nsxt\_logical\_router\_downlink\_port.downlink\_port UUID The above command imports the logical router downlink port named downlink\_port with the NSX id UUID.

# » nsxt\_logical\_router\_link\_port\_on\_tier0

This resource provides the ability to configure a logical router link port on a tier 0 logical router. This port can then be used to connect the tier 0 logical router to another logical router.

# » Example Usage

## » Argument Reference

The following arguments are supported:

- logical\_router\_id (Required) Identifier for logical Tier0 router on which this port is created.
- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- tag (Optional) A list of scope + tag pairs to associate with this port.

### » Attributes Reference

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

- id ID of the logical router link port.
- linked\_logical\_switch\_port\_id Identifier for port on logical router to connect to.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing logical router link port on Tier-0 can be imported into this resource, via the following command:

```
terraform import nsxt_logical_router_link_port_on_tier0.link_port_tier0 UUID
```

The above command imports the logical router link port on the tier 0 logical router named link port tier0 with the NSX id UUID.

# » nsxt\_logical\_router\_link\_port\_on\_tier1

This resource provides the ability to configure a logical router link port on a tier 1 logical router. This port can then be used to connect the tier 1 logical router to another logical router.

## » Example Usage

### » Argument Reference

}

- logical\_router\_id (Required) Identifier for logical tier-1 router on which this port is created.
- linked\_logical\_switch\_port\_id (Required) Identifier for port on logical Tier-0 router to connect to.
- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- tag (Optional) A list of scope + tag pairs to associate with this port.

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

- id ID of the logical router link port.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing logical router link port on Tier-1 can be imported into this resource, via the following command:

```
terraform import nsxt_logical_router_link_port_on_tier1.link_port_tier1 UUID
```

The above command imports the logical router link port on the tier 1 router named link\_port\_tier1 with the NSX id UUID.

# » nsxt\_logical\_switch

This resource provides a method to create overlay logical switch in NSX. Virtual machines can then be connected to the appropriate logical switch for the desired topology and network connectivity.

```
resource "nsxt_logical_switch" "switch1" {
 admin_state = "UP"
                   = "LS1 provisioned by Terraform"
 description
                 = "LS1"
 display_name
 transport_zone_id = "${data.nsxt_transport_zone.transport_zone.id}"
 replication_mode = "MTEP"
 tag {
   scope = "color"
    tag
         = "blue"
 address_binding {
   ip address = "2.2.2.2"
   mac_address = "00:11:22:33:44:55"
 switching_profile_id {
```

```
key = "${data.nsxt_switching_profile.qos_profiles.resource_type}"
value = "${data.nsxt_switching_profile.qos_profiles.id}"
}

switching_profile_id {
  key = "MacManagementSwitchingProfile"
  value = "${nsxt_mac_management_switching_profile.allow.id}"
}
```

- transport zone id (Required) Transport Zone ID for the logical switch.
- admin\_state (Optional) Admin state for the logical switch. Accepted values 'UP' or 'DOWN'. The default value is 'UP'.
- replication\_mode (Optional) Replication mode of the Logical Switch. Accepted values 'MTEP' (Hierarchical Two-Tier replication) and 'SOURCE' (Head Replication), with 'MTEP' being the default value. Applies to overlay logical switches.
- switching\_profile\_id (Optional) List of IDs of switching profiles (of various types) to be associated with this switch. Default switching profiles will be used if not specified.
  - key (Required) Type of profile, one of SwitchSecuritySwitchingProfile,
     SpoofGuardSwitchingProfile,
     MacManagementSwitchingProfile,
     PortMirroringSwitchingProfile,
     QosSwitchingProfile.
  - value (Required) NSX ID of the profile.
- display name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- ip\_pool\_id (Optional) Ip Pool ID to be associated with the logical switch.
- mac\_pool\_id (Optional) Mac Pool ID to be associated with the logical switch.
- address\_binding (Optional) A list address bindings for this logical switch
  - ip\_address (Required) IP Address
  - mac\_address (Required) MAC Address
  - vlan (Optional) Vlan
- vlan (Deprecated, Optional) Vlan for vlan logical switch. This attribute is deprecated, please use nsxt\_vlan\_logical\_switch resource to manage vlan logical switches.
- vni (Optional, Readonly) Vni for the logical switch.
- address binding (Optional) List of Address Bindings for the logical

switch. This setting allows to provide bindings between IP address, mac Address and vlan.

 tag - (Optional) A list of scope + tag pairs to associate with this logical switch.

#### » Attributes Reference

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

- id ID of the logical switch.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing X can be imported into this resource, via the following command:

 ${\tt terraform\ import\ nsxt\_logical\_switch.switch1\ UUID}$ 

The above command imports the logical switch named switch1 with the NSX id UUID.

# » nsxt\_vlan\_logical\_switch

This resource provides a method to create vlan logical switch in NSX. Virtual machines can then be connected to the appropriate logical switch for the desired topology and network connectivity.

```
key = "${data.nsxt_switching_profile.qos_profiles.resource_type}"
value = "${data.nsxt_switching_profile.qos_profiles.id}"
}

switching_profile_id {
  key = "MacManagementSwitchingProfile"
  value = "${nsxt_mac_management_switching_profile.allow.id}"
}
```

The following arguments are supported:

- transport zone id (Required) Transport Zone ID for the logical switch.
- admin\_state (Optional) Admin state for the logical switch. Accepted values 'UP' or 'DOWN'. The default value is 'UP'.
- vlan (Required) Vlan for the logical switch.
- switching\_profile\_id (Optional) List of IDs of switching profiles (of various types) to be associated with this switch. Default switching profiles will be used if not specified.
  - key (Required) Type of profile, one of SwitchSecuritySwitchingProfile,
     SpoofGuardSwitchingProfile,
     MacManagementSwitchingProfile,
     PortMirroringSwitchingProfile,
     QosSwitchingProfile.
  - value (Required) NSX ID of the profile.
- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- ip\_pool\_id (Optional) Ip Pool ID to be associated with the logical switch.
- mac\_pool\_id (Optional) Mac Pool ID to be associated with the logical switch.
- address\_binding (Optional) List of Address Bindings for the logical switch. This setting allows to provide bindings between IP address, mac Address and vlan.
- tag (Optional) A list of scope + tag pairs to associate with this logical switch.

## » Attributes Reference

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

- id ID of the logical switch.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing X can be imported into this resource, via the following command:

```
terraform import nsxt_vlan_logical_switch.switch1 UUID
```

The above command imports the logical switch named switch1 with the NSX id UUID.

# » nsxt\_logical\_tier0\_router

This resource provides a method for the management of a tier 0 logical router.

## » Example Usage

## » Argument Reference

- display name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- edge\_cluster\_id (Required) Edge Cluster ID for the logical Tier0 router. Changing this setting on existing router will re-create the router.
- failover\_mode (Optional) Failover mode which determines whether the preferred service router instance for given logical router will preempt the peer. Accepted values are PREEMPTIVE/NON\_PREEMPTIVE. This setting is relevant only for ACTIVE\_STANDBY high availability mode.
- tag (Optional) A list of scope + tag pairs to associate with this logical Tier0 router.
- high\_availability\_mode (Optional) High availability mode "ACTIVE\_ACTIVE"/"ACTIVE\_STANDBY". Changing this setting on existing router will re-create the router.

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

- id ID of the logical Tier0 router.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- firewall\_sections (Optional) The list of firewall sections for this router

## » Importing

An existing logical tier0 router can be imported into this resource, via the following command:

```
terraform import nsxt_logical_tier0_router.tier0_router UUID
```

The above command imports the logical tier 0 router named tier0\_router with the NSX id UUID.

# » nsxt\_logical\_tier1\_router

This resource provides a method for the management of a tier 1 logical router. A tier 1 logical router is often used for tenants, users and applications. There can be many tier 1 logical routers connected to a common tier 0 provider router.

```
resource "nsxt_logical_tier1_router" "tier1_router" {
  description
                              = "RTR1 provisioned by Terraform"
                              = "RTR1"
  display_name
                              = "PREEMPTIVE"
  failover_mode
                              = "${data.nsxt_edge_cluster.edge_cluster.id}"
  edge_cluster_id
  enable_router_advertisement = true
  advertise_connected_routes = false
  advertise_static_routes
                              = true
  advertise_nat_routes
                              = true
  advertise_lb_vip_routes
                              = true
  advertise_lb_snat_ip_routes = false
  tag {
    scope = "color"
   tag = "blue"
 }
}
```

The following arguments are supported:

- edge\_cluster\_id (Optional) Edge Cluster ID for the logical Tier1 router. Changing this setting on existing router will re-create the router.
- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of the resource.
- tag (Optional) A list of scope + tag pairs to associate with this logical Tier1 router.
- failover\_mode (Optional) This failover mode determines, whether the preferred service router instance for given logical router will preempt the peer. Note It can be specified if and only if logical router is ACTIVE\_STANDBY and NON\_PREEMPTIVE mode is supported only for a Tier1 logical router. For ACTIVE\_ACTIVE logical routers, this field must not be populated
- enable\_router\_advertisement (Optional) Enable the router advertisement
- advertise\_connected\_routes (Optional) Enable the router advertisement for all NSX connected routes
- advertise\_static\_routes (Optional) Enable the router advertisement for static routes
- advertise\_nat\_routes (Optional) Enable the router advertisement for NAT routes
- advertise\_lb\_vip\_routes (Optional) Enable the router advertisement for LB VIP routes
- advertise\_lb\_snat\_ip\_routes (Optional) Enable the router advertisement for LB SNAT IP routes

# » Attributes Reference

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

- id ID of the logical Tier1 router.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- advertise\_config\_revision Indicates current revision number of the advertisement configuration object as seen by NSX-T API server. This attribute can be useful for debugging.
- firewall\_sections (Optional) The list of firewall sections for this router

#### » Importing

An existing logical tier1 router can be imported into this resource, via the following command:

terraform import nsxt\_logical\_tier1\_router.tier1\_router UUID

The above command imports the logical tier 1 router named tier1\_router with the NSX id UUID.

# » nsxt nat rule

This resource provides a means to configure a NAT rule in NSX. NAT provides network address translation between one IP address space and another IP address space. NAT rules can be destination NAT or source NAT rules.

# » Example Usage

```
resource "nsxt_nat_rule" "rule1" {
                           = "${nsxt_logical_tier1_router.rtr1.id}"
 logical_router_id
 description
                           = "NR provisioned by Terraform"
                           = "NR"
 display_name
                           = "SNAT"
 action
  enabled
                           = true
 logging
                           = true
                           = false
 nat_pass
                       = "4.4.0.0/24"
 translated_network
 match_destination_network = "3.3.3.0/24"
 match_source_network
                          = "5.5.5.0/24"
 tag {
   scope = "color"
         = "blue"
   tag
```

### » Argument Reference

- logical\_router\_id (Required) ID of the logical router.
- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this NAT rule.
- action (Required) NAT rule action type. Valid actions are: SNAT, DNAT, NO\_NAT and REFLEXIVE. All rules in a logical router are either

stateless or stateful. Mix is not supported. SNAT and DNAT are stateful, and can NOT be supported when the logical router is running at active-active HA mode. The REFLEXIVE action is stateless. The NO\_NAT action has no translated fields, only match fields.

- enabled (Optional) enable/disable the rule.
- logging (Optional) enable/disable the logging of rule.
- match\_destination\_network (Required for action=DNAT, not allowed for action=REFLEXIVE) IP Address | CIDR. Omitting this field implies Any.
- match\_source\_network (Required for action=NO\_NAT or REFLEX-IVE, Optional for the other actions) IP Address | CIDR. Omitting this field implies Any.
- nat\_pass (Optional) Enable/disable to bypass following firewall stage. The default is true, meaning that the following firewall stage will be skipped. Please note, if action is NO\_NAT, then nat\_pass must be set to true or omitted.
- translated\_network (Required for action=DNAT or SNAT) IP Address | IP Range | CIDR.
- translated\_ports (Optional) port number or port range. Allowed only when action=DNAT.
- rule\_priority The priority of the rule which is ascending, valid range [0-2147483647]. If multiple rules have the same priority, evaluation sequence is undefined.

#### » Attributes Reference

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

- id ID of the NAT rule.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing NAT rule can be imported into this resource, via the following command:

terraform import nsxt\_nat\_rule.rule1 logical-router-uuid/nat-rule-num

The above command imports the NAT rule named rule1 with the number id nat-rule-num that belongs to the tier 1 logical router with the NSX id logical-router-unid.

# » nsxt\_ns\_group

This resource provides a method to create and manage a network and security (NS) group in NSX. A NS group is used to group other objects into collections for application of other settings.

## » Example Usage

```
resource "nsxt_ns_group" "group2" {
 description = "NG provisioned by Terraform"
 display_name = "NG"
 member {
   target_type = "NSGroup"
            = "${nsxt_ns_group.group1.id}"
   value
 membership_criteria {
    target_type = "LogicalPort"
              = "XXX"
    scope
               = "YYY"
    tag
    scope = "color"
         = "blue"
    tag
}
```

# » Argument Reference

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this NS group.
- member (Optional) Reference to the direct/static members of the NS-Group. Can be ID based expressions only. VirtualMachine cannot be added as a static member.
  - target\_type (Required) Static member type, one of: NSGroup,
     IPSet, LogicalPort, LogicalSwitch, MACSet
  - value (Required) Member ID

- membership\_criteria (Optional) List of tag or ID expressions which define the membership criteria for this NSGroup. An object must satisfy at least one of these expressions to qualify as a member of this group.
  - target\_type (Required) Dynamic member type, one of: Logical-Port, LogicalSwitch, VirtualMachine.
  - scope (Optional) Tag scope for matching dynamic members.
  - tag (Optional) Tag value for matching dynamic members.

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

- id ID of the NS group.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing networking and security group can be imported into this resource, via the following command:

```
terraform import nsxt_ns_group.group2 UUID
```

The above command imports the networking and security group named group2 with the NSX id UUID.

# » nsxt static route

This resource provides a means to configure static routes in NSX to determine where IP traffic is routed.

```
}
tag {
    scope = "color"
    tag = "blue"
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this static route.
- logical\_router\_id (Required) Logical router id.
- network (Required) CIDR.
- next\_hop (Required) List of Next Hops, each with those arguments:
  - administrative\_distance (Optional) Administrative Distance for the next hop IP.
  - ip\_address (Optional) Next Hop IP.
  - logical\_router\_port\_id (Optional) Reference of logical router port to be used for next hop.

### » Attributes Reference

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

- id ID of the static route.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- next\_hop additional arguments:
  - bfd\_enabled Status of bfd for this next hop where bfd\_enabled
     true indicate bfd is enabled for this next hop and bfd\_enabled =
     false indicate bfd peer is disabled or not configured for this next hop.
  - blackhole\_action Action to be taken on matching packets for NULL routes.

### » Importing

An existing static route can be imported into this resource, via the following command:

terraform import nsxt\_static\_route.static\_route logical-router-uuid/static-route-num

The above command imports the static route named static\_route with the number static-route-num that belongs to the tier 1 logical router with the NSX id logical-router-uuid.

# » nsxt\_vm\_tags

This resource provides a means to configure tags that are applied to objects such as virtual machines. A virtual machine is not directly managed by NSX however, NSX allows attachment of tags to a virtual machine. This tagging enables tag based grouping of objects. Deletion of nsxt\_vm\_tags resource will remove all tags from the virtual machine and is equivalent to update operation with empty tag set.

# » Example Usage

```
resource "nsxt_vm_tags" "vm1_tags" {
  instance_id = "${vsphere_virtual_machine.vm1.id}"

tag {
  scope = "color"
  tag = "blue"
  }

logical_port_tag {
  scope = "color"
  tag = "blue"
  }
}
```

### » Argument Reference

- instance\_id (Required) BIOS Id of the Virtual Machine.
- tag (Optional) A list of scope + tag pairs to associate with this VM.
- logical\_port\_tag (Optional) A list of scope + tag pairs to associate with logical port that is automatically created for this VM.

# » Importing

An existing Tags collection can be imported into this resource, via the following command:

```
terraform import nsxt_vm_tags.vm1_tags id
```

The above would import NSX virtual machine tags as a resource named vm1\_tags with the NSX id id, where id is external ID (not the BIOS id) of the virtual machine.

# » nsxt\_algorithm\_type\_ns\_service

This resource provides a way to configure a networking and security service which can be used with the NSX firewall. A networking and security service is an object that contains the TCP/UDP algorithm, source ports and destination ports in a single entity.

## » Example Usage

### » Argument Reference

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description.
- destination\_port (Required) a single destination port.
- source\_ports (Optional) Set of source ports/ranges.
- algorithm (Required) Algorithm one of "ORACLE\_TNS", "FTP", "SUN\_RPC\_TCP", "SUN\_RPC\_UDP", "MS\_RPC\_TCP", "MS\_RPC\_UDP", "NBNS\_BROADCAST", "NBDG\_BROADCAST", "TFTP"

• tag - (Optional) A list of scope + tag pairs to associate with this service.

### » Attributes Reference

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

- id ID of the NS service.
- default\_service The default NSServices are created in the system by default. These NSServices can't be modified/deleted.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing Algorithm type NS service can be imported into this resource, via the following command:

```
terraform import nsxt_algorithm_type_ns_service.ns_service_alg UUID
```

The above command imports the algorithm based networking and security service named ns\_service\_alg with the NSX id UUID.

# » nsxt\_ether\_type\_ns\_service

This resource provides a way to configure a networking and security service which can be used within NSX. This specific service is for the layer 2 Ethernet protocol.

```
resource "nsxt_ether_type_ns_service" "etns" {
  description = "S1 provisioned by Terraform"
  display_name = "S1"
  ether_type = "1536"

tag {
    scope = "color"
    tag = "blue"
  }
}
```

The following arguments are supported:

- display name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description.
- ether\_type (Required) Type of the encapsulated protocol.
- tag (Optional) A list of scope + tag pairs to associate with this service.

#### » Attributes Reference

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

- id ID of the NS service.
- default\_service The default NSServices are created in the system by default. These NSServices can't be modified/deleted.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing Ethernet type NS service can be imported into this resource, via the following command:

```
terraform import nsxt_ether_type_ns_service.etns UUID
```

The above command imports the ethernet type networking and security service named etns with the NSX id UUID.

# » nsxt\_icmp\_type\_ns\_service

This resource provides a way to configure a networking and security service which can be used within NSX. This specific service is for the ICMP protocol.

```
resource "nsxt_icmp_type_ns_service" "ns_service_icmp" {
  description = "S1 provisioned by Terraform"
  display_name = "S1"
  protocol = "ICMPv4"
  icmp_type = "5"
  icmp_code = "1"
```

```
tag {
    scope = "color"
    tag = "blue"
}
```

The following arguments are supported:

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description.
- protocol (Required) Version of ICMP protocol ICMPv4 or ICMPv6.
- icmp\_type (Optional) ICMP message type.
- icmp\_code (Optional) ICMP message code
- tag (Optional) A list of scope + tag pairs to associate with this service.

#### » Attributes Reference

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

- id ID of the NS service.
- default\_service The default NSServices are created in the system by default. These NSServices can't be modified/deleted.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing ICMP type NS Service can be imported into this resource, via the following command:

```
terraform import nsxt_icmp_type_ns_service.x id
```

The above service imports the ICMP type network and security service named x with the NSX id id.

# $\begin{tabular}{ll} \begin{tabular}{ll} \beg$

This resource provides a way to configure a networking and security service which can be used within NSX. This specific service is for the IGMP protocol.

# » Example Usage

```
resource "nsxt_igmp_type_ns_service" "ns_service_igmp" {
  description = "S1 provisioned by Terraform"
  display_name = "S1"

  tag {
    scope = "color"
    tag = "blue"
  }
}
```

## » Argument Reference

The following arguments are supported:

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description.
- tag (Optional) A list of scope + tag pairs to associate with this service.

#### » Attributes Reference

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

- id ID of the NS service.
- default\_service The default NSServices are created in the system by default. These NSServices can't be modified/deleted.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing IGMP type NS Service can be imported into this resource, via the following command:

```
terraform import nsxt_igmp_type_ns_service.ns_service_igmp_UUID
```

The above command imports the IGMP based networking and security service named ns\_service\_igmp with the NSX id UUID.

# » nsxt\_ip\_protocol\_ns\_service

This resource provides a way to configure a networking and security service which can be used within NSX. This specific service is for the IP protocol.

# » Example Usage

```
resource "nsxt_ip_protocol_ns_service" "ns_service_ip" {
  description = "S1 provisioned by Terraform"
  display_name = "S1"
  protocol = "10"

tag {
    scope = "color"
    tag = "blue"
  }
}
```

# » Argument Reference

The following arguments are supported:

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description.
- protocol (Required) IP protocol number (0-255)
- tag (Optional) A list of scope + tag pairs to associate with this service.

#### » Attributes Reference

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

- id ID of the NS service.
- default\_service The default NSServices are created in the system by default. These NSServices can't be modified/deleted.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing IP protocol NS service can be imported into this resource, via the following command:

```
terraform import nsxt_ip_protocol_ns_service.ns_service_ip UUID
```

The above command imports the IP protocol based networking and security service named ns\_service\_ip with the NSX id UUID.

# » nsxt\_l4\_port\_set\_ns\_service

This resource provides a way to configure a networking and security service which can be used within NSX. This specific service is for configuration of layer 4 ports.

## » Example Usage

## » Argument Reference

The following arguments are supported:

- display\_name (Optional) Display name, defaults to ID if not set.
- description (Optional) Description of this resource.
- destination\_ports (Optional) Set of destination ports.
- source\_ports (Optional) Set of source ports.
- protocol (Required) L4 protocol. Accepted values 'TCP' or 'UDP'.
- tag (Optional) A list of scope + tag pairs to associate with this service.

#### » Attributes Reference

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

- id ID of the NS service.
- default\_service The default NSServices are created in the system by default. These NSServices can't be modified/deleted.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing L4 port set NS service can be imported into this resource, via the following command:

```
terraform import nsxt_14_port_set_ns_service.ns_service_14 UUID
```

The above command imports the layer 4 port based networking and security service named ns service 14 with the NSX id UUID.

# » nsxt\_ns\_service\_group

data "nsxt\_ns\_service" "dns" {

Provides a resource to configure NS service group on NSX-T manager

# » Example Usage

```
display_name = "DNS"
}

resource "nsxt_ip_protocol_ns_service" "prot17" {
    display_name = "ip_prot"
    protocol = "17"
}

resource "nsxt_ns_service_group" "ns_service_group" {
    description = "ns_service_group provisioned by Terraform"
    display_name = "ns_service_group"
    members = ["${nsxt_ip_protocol_ns_service.prot17.id}", "${data.nsxt_ns_service.dns.id}

tag {
    scope = "color"
    tag = "red"
```

# » Argument Reference

}

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.

- tag (Optional) A list of scope + tag pairs to associate with this NS service group.
- members (Required) List of NSServices IDs that can be added as members to an NSServiceGroup. All members should be of the same L2 type: Ethernet, or Non Ethernet.

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

- id ID of the NS service group.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing ns service group can be imported into this resource, via the following command:

```
terraform import nsxt_ns_service_group.ns_service_group UUID
```

The above would import the NS service group named ns\_service\_group with the nsx id UUID

# » nsxt\_lb\_icmp\_monitor

Provides a resource to configure lb icmp monitor on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

```
resource "nsxt_lb_icmp_monitor" "lb_icmp_monitor" {
  description = "lb_icmp_monitor provisioned by Terraform"
  display_name = "lb_icmp_monitor"
  fall_count = 3
  interval = 5
  monitor_port = 7887
  rise_count = 3
  timeout = 10
  data_length = 56
```

```
scope = "color"
tag = "red"
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb icmp monitor.
- fall\_count (Optional) Number of consecutive checks must fail before marking it down.
- interval (Optional) The frequency at which the system issues the monitor check (in seconds).
- monitor\_port (Optional) If the monitor port is specified, it would override pool member port setting for healthcheck. Port range is not supported.
- rise\_count (Optional) Number of consecutive checks must pass before marking it up.
- timeout (Optional) Number of seconds the target has in which to respond to the monitor request.
- data\_length (Optional) The data size (in bytes) of the ICMP healthcheck packet.

#### » Attributes Reference

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

- id ID of the lb\_icmp\_monitor.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb icmp monitor can be imported into this resource, via the following command:

```
terraform import nsxt_lb_icmp_monitor.lb_icmp_monitor UUID
```

The above would import the lb icmp monitor named lb\_icmp\_monitor with the nsx id UUID

# » nsxt\_lb\_tcp\_monitor

Provides a resource to configure lb tcp monitor on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

# » Example Usage

```
resource "nsxt_lb_tcp_monitor" "lb_tcp_monitor" {
  description = "lb_tcp_monitor provisioned by Terraform"
 display_name = "lb_tcp_monitor"
 fall_count
              = 3
  interval
 monitor_port = 7887
 rise_count
              = 3
 timeout
               = 10
  tag {
    scope = "color"
   tag = "red"
 }
}
```

# » Argument Reference

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb tcp monitor.
- fall\_count (Optional) Number of consecutive checks must fail before marking it down.
- interval (Optional) The frequency at which the system issues the monitor check (in seconds).
- monitor\_port (Optional) If the monitor port is specified, it would override pool member port setting for healthcheck. Port range is not supported.
- rise\_count (Optional) Number of consecutive checks must pass before marking it up.
- timeout (Optional) Number of seconds the target has in which to respond to the monitor request.
- receive (Optional) Expected data, if specified, can be anywhere in the response and it has to be a string, regular expressions are not supported.

• send - (Optional) Payload to send out to the monitored server. If both send and receive are not specified, then just a TCP connection is established (3-way handshake) to validate server is healthy, no data is sent.

### » Attributes Reference

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

- id ID of the lb\_tcp\_monitor.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing lb tcp monitor can be imported into this resource, via the following command:

```
terraform import nsxt_lb_tcp_monitor.lb_tcp_monitor UUID
```

The above would import the lb tcp monitor named lb\_tcp\_monitor with the nsx id UUID

# $\ \ \, {\bf "nsxt\_lb\_udp\_monitor"}$

Provides a resource to configure lb udp monitor on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

```
resource "nsxt_lb_udp_monitor" "lb_udp_monitor" {
 description = "lb_udp_monitor provisioned by Terraform"
 display name = "lb udp monitor"
 fall_count
             = 3
  interval
 monitor_port = 7887
 rise_count = 3
              = 10
 timeout
              = "hi"
  send
              = "hello"
 receive
  tag {
    scope = "color"
```

```
tag = "red"
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb udp monitor.
- fall\_count (Optional) Number of consecutive checks must fail before marking it down.
- interval (Optional) The frequency at which the system issues the monitor check (in seconds).
- monitor\_port (Optional) If the monitor port is specified, it would override pool member port setting for healthcheck. Port range is not supported.
- rise\_count (Optional) Number of consecutive checks must pass before marking it up.
- timeout (Optional) Number of seconds the target has in which to respond to the monitor request.
- receive (Required) Expected data, if specified, can be anywhere in the response and it has to be a string, regular expressions are not supported.
- send (Required) Payload to send out to the monitored server.

#### » Attributes Reference

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

- id ID of the lb\_udp\_monitor.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing lb udp monitor can be imported into this resource, via the following command:

```
terraform import nsxt_lb_udp_monitor.lb_udp_monitor UUID
```

The above would import the lb udp monitor named lb\_udp\_monitor with the nsx id UUID

# » nsxt\_lb\_http\_monitor

Provides a resource to configure lb http monitor on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

## » Example Usage

```
resource "nsxt_lb_http_monitor" "lb_http_monitor" {
                       = "lb_http_monitor provisioned by Terraform"
 description
                       = "lb_http_monitor"
 display_name
 fall_count
                       = 2
 interval
                       = 5
 monitor_port
                       = 8080
 rise_count
                       = 5
 timeout
                       = 10
                       = "ping"
 request_body
                       = "HEAD"
 request_method
                       = "/index.html"
 request_url
                       = "HTTP_VERSION_1_1"
 request_version
 response_body
                       = "pong"
 response_status_codes = [200, 304]
 tag {
   scope = "color"
   tag = "red"
 request_header {
   name = "X-healthcheck"
   value = "NSX"
}
```

# » Argument Reference

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb http monitor.
- fall\_count (Optional) Number of consecutive checks that must fail before marking it down.

- interval (Optional) The frequency at which the system issues the monitor check (in seconds).
- monitor\_port (Optional) If the monitor port is specified, it would override pool member port setting for healthcheck. A port range is not supported.
- rise\_count (Optional) Number of consecutive checks that must pass before marking it up.
- timeout (Optional) Number of seconds the target has to respond to the monitor request.
- request\_body (Optional) String to send as HTTP health check request body. Valid only for certain HTTP methods like POST.
- request\_header (Optional) HTTP request headers.
- request\_method (Optional) Health check method for HTTP monitor type. Valid values are GET, HEAD, PUT, POST and OPTIONS.
- request\_url (Optional) URL used for HTTP monitor.
- request\_version (Optional) HTTP request version. Valid values are HTTP\_VERSION\_1\_0 and HTTP\_VERSION\_1\_1.
- response\_body (Optional) If response body is specified, healthcheck HTTP response body is matched against the specified string and server is considered healthy only if there is a match (regular expressions not supported). If response body string is not specified, HTTP healthcheck is considered successful if the HTTP response status code is among configured values.
- response\_status\_codes (Optional) HTTP response status code should be a valid HTTP status code.

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

- id ID of the lb\_http\_monitor.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

#### » Importing

An existing lb http monitor can be imported into this resource, via the following command:

terraform import nsxt lb http monitor.lb http monitor UUID

The above would import the lb http monitor named lb\_http\_monitor with the nsx id UUID

# » nsxt\_lb\_https\_monitor

Provides a resource to configure lb https monitor on NSX-T manager

```
data "nsxt_certificate" "client" {
 display_name = "client-1"
data "nsxt_certificate" "CA" {
 display_name = "ca-1"
resource "nsxt_lb_https_monitor" "lb_https_monitor" {
                = "lb_https_monitor provisioned by Terraform"
 description
                        = "lb_https_monitor"
 display_name
 fall_count
 interval
                        = 5
                       = 8080
 monitor_port
 rise_count
                        = 5
                        = 10
 timeout
 certificate_chain_depth = 2
                        = ["TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256", "TLS_ECDHE_RSA_WITH_AI
 ciphers
 client_certificate_id = "${data.nsxt_certificate.client.id}"
                      = ["TLS_V1_2"]
 protocols
 request_body
                       = "ping"
 request_method
                       = "HEAD"
                        = "/index.html"
 request_url
                       = "HTTP_VERSION_1_1"
 request_version
 response_body
                       = "pong"
 response_status_codes = [200, 304]
 server_auth
                      = "REQUIRED"
 server_auth_ca_ids = ["${data.nsxt_certificate.CA.id}"]
 server_auth_crl_ids = ["78ba3814-bfe1-45e5-89d3-46862bed7896"]
 request_header {
   name = "X-healthcheck"
   value = "NSX"
 tag {
   scope = "color"
   tag = "red"
```

```
}
}
```

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb https monitor.
- fall\_count (Optional) Number of consecutive checks that must fail before marking it down.
- interval (Optional) The frequency at which the system issues the monitor check (in seconds).
- monitor\_port (Optional) If the monitor port is specified, it would override pool member port setting for healthcheck. A port range is not supported.
- rise\_count (Optional) Number of consecutive checks that must pass before marking it up.
- timeout (Optional) Number of seconds the target has to respond to the monitor request.
- certificate\_chain\_depth (Optional) Authentication depth is used to set the verification depth in the server certificates chain.
- ciphers (Optional) List of supported SSL ciphers.
- client\_certificate\_id (Optional) Client certificate can be specified to support client authentication.
- protocols (Optional) SSL versions TLS1.1 and TLS1.2 are supported and enabled by default. SSLv2, SSLv3, and TLS1.0 are supported, but disabled by default.
- request\_body (Optional) String to send as HTTP health check request body. Valid only for certain HTTP methods like POST.
- request\_header (Optional) HTTP request headers.
- request\_method (Optional) Health check method for HTTP monitor type. Valid values are GET, HEAD, PUT, POST and OPTIONS.
- request\_url (Optional) URL used for HTTP monitor.
- request\_version (Optional) HTTP request version. Valid values are HTTP\_VERSION\_1\_0 and HTTP\_VERSION\_1\_1.
- response\_body (Optional) If response body is specified, healthcheck HTTP response body is matched against the specified string and server is considered healthy only if there is a match (regular expressions not supported). If response body string is not specified, HTTP healthcheck is considered successful if the HTTP response status code is among configured values.

- response\_status\_codes (Optional) HTTP response status code should be a valid HTTP status code.
- server\_auth (Optional) Server authentication mode REQUIRED or IGNORE.
- server\_auth\_ca\_ids (Optional) If server auth type is REQUIRED, server certificate must be signed by one of the trusted Certificate Authorities (CAs), also referred to as root CAs, whose self signed certificates are specified.
- server\_auth\_crl\_ids (Optional) A Certificate Revocation List (CRL)
  can be specified in the server-side SSL profile binding to disallow compromised server certificates.

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

- id ID of the lb https monitor.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.
- is\_secure This flag is set to true when all the ciphers and protocols are secure. It is set to false when one of the ciphers or protocols is insecure.

### » Importing

An existing lb https monitor can be imported into this resource, via the following command:

```
terraform import nsxt_lb_https_monitor.lb_https_monitor UUID
```

The above would import the lb https monitor named  ${\tt lb\_https\_monitor}$  with the nsx id  ${\tt UUID}$ 

# » nsxt\_lb\_passive\_monitor

Provides a resource to configure lb passive monitor on NSX-T manager

**NOTE:** This resource requires NSX version 2.3 or higher.

```
resource "nsxt_lb_passive_monitor" "lb_passive_monitor" {
  description = "lb_passive_monitor provisioned by Terraform"
  display_name = "lb_passive_monitor"
```

```
max_fails = 3
timeout = 10

tag {
    scope = "color"
    tag = "red"
}
```

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this lb passive monitor.
- max\_fails (Optional) When consecutive failures reach this value, the member is considered temporarily unavailable for a configurable period.
- timeout (Optional) After this timeout period, the member is probed again.

#### » Attributes Reference

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

- id ID of the lb\_passive\_monitor.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

### » Importing

An existing lb passive monitor can be imported into this resource, via the following command:

terraform import nsxt\_lb\_passive\_monitor.lb\_passive\_monitor UUID

The above would import the lb passive monitor named lb\_passive\_monitor with the nsx id UUID

# » nsxt\_ip\_discovery\_switching\_profile

Provides a resource to configure IP discovery switching profile on NSX-T manager

## » Example Usage

# » Argument Reference

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this IP discovery switching profile.
- arp\_snooping\_enabled (Optional) A boolean flag iIndicates whether ARP snooping is enabled.
- vm\_tools\_enabled (Optional) A boolean flag iIndicates whether VM tools will be enabled. This option is only supported on ESX where vmtools is installed.
- dhcp\_snooping\_enabled (Optional) A boolean flag iIndicates whether DHCP snooping is enabled.
- arp\_bindings\_limit (Optional) Limit for the amount of ARP bindings.

#### » Attributes Reference

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

• id - ID of the IP discovery switching profile.

• revision - Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing IP discovery switching profile can be imported into this resource, via the following command:

terraform import nsxt\_ip\_discovery\_switching\_profile.ip\_discovery\_switching\_profile UUID
The above would import the IP discovery switching profile named
ip\_discovery\_switching\_profile with the nsx id UUID

# » nsxt\_mac\_management\_switching\_profile

Provides a resource to configure MAC management switching profile on NSX-T manager

# » Example Usage

```
resource "nsxt_mac_management_switching_profile" "mac_management_switching_profile" {
                    = "mac_management_switching_profile provisioned by Terraform"
  description
 display_name
                    = "mac_management_switching_profile"
 mac_change_allowed = "true"
 mac_learning {
    enabled
                             = "true"
                            = "4096"
    limit
   limit_policy
                             = "ALLOW"
    unicast_flooding_allowed = "false"
 tag {
    scope = "color"
   tag = "red"
}
```

## » Argument Reference

The following arguments are supported:

• description - (Optional) Description of this resource.

- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this MAC management switching profile.
- mac\_change\_allowed (Optional) A boolean flag indicating allowing source MAC address change.
- mac\_learning (Optional) Mac learning configuration:
  - enabled (Optional) A boolean flag indicating allowing source MAC address learning.
  - unicast\_flooding\_allowed (Optional) A boolean flag indicating allowing flooding for unlearned MAC for ingress traffic. Can be True only if mac\_learning is enabled.
  - limit (Optional) The maximum number of MAC addresses that can be learned on this port.
  - limit\_policy (Optional) The policy after MAC Limit is exceeded: ALLOW/DROP.

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

- id ID of the MAC management switching profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing MAC management switching profile can be imported into this resource, via the following command:

terraform import nsxt\_mac\_management\_switching\_profile.mac\_management\_switching\_profile UUII
The above would import the MAC management switching profile named
mac\_management\_switching\_profile with the nsx id UUID

# » nsxt\_spoofguard\_switching\_profile

Provides a resource to configure spoofguard switching profile on NSX-T manager

The following arguments are supported:

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this spoof-guard switching profile.
- address\_binding\_whitelist\_enabled (Optional) A boolean flag indicating whether this profile overrides the default system wide settings for Spoof Guard when assigned to ports.

### » Attributes Reference

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

- id ID of the spoofguard switching profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

## » Importing

An existing spoofguard switching profile can be imported into this resource, via the following command:

terraform import nsxt\_spoofguard\_switching\_profile.spoofguard\_switching\_profile UUID

The above would import the spoofguard switching profile named  ${\tt spoofguard\_switching\_profile}$  with the nsx id UUID

# » nsxt\_qos\_switching\_profile

Provides a resource to configure Qos switching profile on NSX-T manager

# » Example Usage

```
resource "nsxt_qos_switching_profile" "qos_switching_profile" {
 description
                  = "qos_switching_profile provisioned by Terraform"
 display_name
                  = "qos_switching_profile"
 class_of_service = "5"
                  = "true"
 dscp_trusted
                  = "53"
 dscp_priority
 ingress_rate_shaper {
                 = "true"
   enabled
                   = "800"
   peak_bw_mbps
                   = "200"
   burst_size
   average_bw_mbps = "100"
 }
 egress_rate_shaper {
   enabled
                   = "true"
                   = "800"
   peak_bw_mbps
   burst size
                   = "200"
   average_bw_mbps = "100"
 ingress_broadcast_rate_shaper {
   enabled
            = "true"
   average_bw_kbps = "111"
                   = "222"
   burst_size
                   = "500"
   peak_bw_kbps
 }
 tag {
   scope = "color"
   tag = "red"
}
```

# » Argument Reference

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this qos switching profile.

- class\_of\_service (Optional) Class of service.
- dscp\_trusted (Optional) Trust mode for DSCP (False by default)
- dscp priority (Optional) DSCP Priority (0-63)
- ingress\_rate\_shaper (Optional) Ingress rate shaper configuration:
  - enabled (Optional) Whether this rate shaper is enabled.
  - average\_bw\_mbps (Optional) Average Bandwidth in MBPS.
  - peak\_bw\_mbps (Optional) Peak Bandwidth in MBPS.
  - burst\_size (Optional) Burst size in bytes.
- egress\_rate\_shaper (Optional) Egress rate shaper configuration:
  - enabled (Optional) Whether this rate shaper is enabled.
  - average\_bw\_mbps (Optional) Average Bandwidth in MBPS.
  - peak\_bw\_mbps (Optional) Peak Bandwidth in MBPS.
  - burst\_size (Optional) Burst size in bytes.
- ingress\_broadcast\_rate\_shaper (Optional) Ingress rate shaper configuration:
  - enabled (Optional) Whether this rate shaper is enabled.
  - average\_bw\_kbps (Optional) Average Bandwidth in KBPS.
  - peak\_bw\_kbps (Optional) Peak Bandwidth in KBPS.
  - burst\_size (Optional) Burst size in bytes.

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

- id ID of the QoS switching profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

#### » Importing

An existing qos switching profile can be imported into this resource, via the following command:

terraform import nsxt\_qos\_switching\_profile.qos\_switching\_profile UUID

The above would import the Qos switching profile named  ${\tt qos\_switching\_profile}$  with the nsx id UUID

# » nsxt\_switch\_security\_switching\_profile

Provides a resource to configure switch security switching profile on NSX-T manager

# » Example Usage

```
resource "nsxt_switch_security_switching_profile" "switch_security_switching_profile" {
  description
                        = "switch_security_switching_profile provisioned by Terraform"
 display_name
                        = "switch_security_switching_profile"
 block_non_ip
                        = true
 block_client_dhcp
                        = false
 block server dhcp
                        = false
                       = true
 bpdu_filter_enabled
 bpdu_filter_whitelist = ["01:80:c2:00:00:01"]
 rate_limits {
    enabled
                 = true
    rx broadcast = 32
   rx_multicast = 32
   tx_broadcast = 32
    tx_multicast = 32
  tag {
    scope = "color"
    tag
          = "red"
}
```

# » Argument Reference

- description (Optional) Description of this resource.
- display\_name (Optional) The display name of this resource. Defaults to ID if not set.
- tag (Optional) A list of scope + tag pairs to associate with this qos switching profile.
- block\_non\_ip (Optional) Indicates whether blocking of all traffic except IP/(G)ARP/BPDU is enabled.
- block\_client\_dhcp (Optional) Indicates whether DHCP client blocking is enabled
- block\_server\_dhcp (Optional) Indicates whether DHCP server blocking is enabled
- bpdu\_filter\_enabled (Optional) Indicates whether BPDU filter is enabled
- bpdu\_filter\_whitelist (Optional) Set of allowed MAC addresses to be excluded from BPDU filtering, if enabled.

- rate\_limits (Optional) Rate limit definitions for broadcast and multicast traffic.
  - enabled (Optional) Whether rate limiting is enabled.
  - rx\_broadcast (Optional) Incoming broadcast traffic limit in packets per second.
  - rx\_multicast (Optional) Incoming multicast traffic limit in packets per second.
  - tx\_broadcast (Optional) Outgoing broadcast traffic limit in packets per second.
  - tx\_multicast (Optional) Outgoing multicast traffic limit in packets per second.

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

- id ID of the switch security switching profile.
- revision Indicates current revision number of the object as seen by NSX-T API server. This attribute can be useful for debugging.

# » Importing

An existing switch security switching profile can be imported into this resource, via the following command:

terraform import nsxt\_switch\_security\_switching\_profile.switch\_security\_switching\_profile U

The above would import switching profile named switch\_security\_switching\_profile with the nsx id UUID