» vcd_org

Provides a vCloud Director Org resource. This can be used to create and delete an organization. Requires system administrator privileges.

Supported in provider *v2.0+*

» Example Usage

```
provider "vcd" {
  user     = "${var.admin_user}"
  password = "${var.admin_password}"
  org      = "System"
  url      = "https://AcmeVcd/api"
}

resource "vcd_org" "my-org" {
  name             = "my-org"
  full_name        = "My organization"
  description      = "The pride of my work"
  is_enabled       = "true"
  delete_recursive = "true"
  delete_force     = "true"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Org name
- `full_name` - (Required) Org full name
- `delete_recursive` - (Required) - pass `delete_recursive`=true as query parameter to remove an organization or VDC and any objects it contains that are in a state that normally allows removal.
- `delete_force` - (Required) - pass `delete_force=true` and `delete_recursive=true` to remove an organization or VDC and any objects it contains, regardless of their state.
- `is_enabled` - (Optional) - True if this organization is enabled (allows login and all other operations). Default is `true`.
- `description` - (Optional) - Org description. Default is empty.
- `deployed_vm_quota` - (Optional) - Maximum number of virtual machines that can be deployed simultaneously by a member of this organization. Default is unlimited (-1)

- `stored_vm_quota` - (Optional) - Maximum number of virtual machines in vApps or vApp templates that can be stored in an undeployed state by a member of this organization. Default is unlimited (-1)
- `can_publish_catalogs` - (Optional) - True if this organization is allowed to share catalogs. Default is `true`.
- `delay_after_power_on_seconds` - (Optional) - Specifies this organization's default for virtual machine boot delay after power on. Default is `0`.

» Sources

- OrgType
- ReferenceType
- Org deletion

» vcd_catalog

Provides a vCloud Director catalog resource. This can be used to create and delete a catalog.

Supported in provider *v2.0+*

» Example Usage

```
resource "vcd_catalog" "myNewCatalog" {
  org = "my-org"

  name             = "my-catalog"
  description      = "catalog for files"
  delete_recursive = "true"
  delete_force     = "true"
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `name` - (Required) Catalog name
- `description` - (Optional) - Description of catalog

- `delete_recursive` - (Required) - When destroying use delete_recursive=True to remove the catalog and any objects it contains that are in a state that normally allows removal
- `delete_force` -(Required) - When destroying use delete_force=True with delete_recursive=True to remove a catalog and any objects it contains, regardless of their state

» vcd_catalog_item

Provides a vCloud Director catalog item resource. This can be used to upload OVA to catalog and delete it.

Supported in provider *v2.0+*

» Example Usage

```
resource "vcd_catalog_item" "myNewCatalogItem" {
  org     = "my-org"
  catalog = "my-catalog"

  name                = "my ova"
  description         = "new vapp template"
  ova_path            = "/home/user/file.ova"
  upload_piece_size   = 10
  show_upload_progress = true
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `catalog` - (Required) The name of the catalog where to upload OVA file
- `name` - (Required) Item name in catalog
- `description` - (Optional) - Description of item
- `ova_path` - (Required) - Absolute or relative path to file to upload
- `upload_piece_size` - (Optional) - Size in MB for splitting upload size. It can possibly impact upload performance. Default 1MB.
- `show_upload_progress` - (Optional) - Default false. Allows to see upload progress

» vcd_catalog_media

Provides a vCloud Director media resource. This can be used to upload media to catalog and delete it.

Supported in provider *v2.0+*

» Example Usage

```
resource "vcd_catalog_media" "myNewMedia" {
  org     = "my-org"
  catalog = "my-catalog"

  name                = "my iso"
  description         = "new os versions"
  media_path          = "/home/user/file.iso"
  upload_piece_size   = 10
  show_upload_progress = true
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `catalog` - (Required) The name of the catalog where to upload media file
- `name` - (Required) Media file name in catalog
- `description` - (Optional) - Description of media file
- `media_path` - (Required) - Absolute or relative path to file to upload
- `upload_piece_size` - (Optional) - size in MB for splitting upload size. It can possibly impact upload performance. Default 1MB.
- `show_upload_progress` - (Optional) - Default false. Allows to see upload progress

» vcd_dnat

Provides a vCloud Director DNAT resource. This can be used to create, modify, and delete destination NATs to map an external IP/port to an internal IP/port.

» Example Usage

```
resource "vcd_dnat" "web" {
  org = "my-org" # Optional
  vdc = "my-vdc" # Optional

  edge_gateway    = "Edge Gateway Name"
  external_ip     = "78.101.10.20"
  port            = 80
  internal_ip     = "10.10.0.5"
  translated_port = 8080
}

resource "vcd_dnat" "forIcmp" {
  org = "my-org" # Optional
  vdc = "my-vdc" # Optional

  edge_gateway  = "Edge Gateway Name"
  external_ip   = "78.101.10.20"
  port          = -1                    # "-1" == "any"
  internal_ip   = "10.10.0.5"
  protocol      = "ICMP"
  icmp_sub_type = "router-solicitation"
}
```

» Argument Reference

The following arguments are supported:

- `edge_gateway` - (Required) The name of the edge gateway on which to apply the DNAT
- `external_ip` - (Required) One of the external IPs available on your Edge Gateway
- `port` - (Required) The port number to map. -1 translates to "any"
- `translated_port` - (Optional) The port number to map
- `internal_ip` - (Required) The IP of the VM to map to
- `protocol` - (Optional; *v2.0+*) The protocol type. Possible values are TCP, UDP, TCPUDP, ICMP, ANY. TCP is default to be backward compatible with previous version
- `icmp_sub_type` - (Optional; *v2.0+*) The name of ICMP type. Possible values are address-mask-request, destination-unreachable, echo-request, echo-reply, parameter-problem, redirect, router-advertisement, router-solicitation, source-quench, time-exceeded, timestamp-request, timestamp-reply, any

- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level

» vcd_firewall_rules

Provides a vCloud Director Firewall resource. This can be used to create, modify, and delete firewall settings and rules.

» Example Usage

```
resource "vcd_firewall_rules" "fw" {
  edge_gateway   = "Edge Gateway Name"
  default_action = "drop"

  rule {
    description      = "drop-ftp-out"
    policy           = "drop"
    protocol         = "tcp"
    destination_port = "21"
    destination_ip   = "any"
    source_port      = "any"
    source_ip        = "10.10.0.0/24"
  }

  rule {
    description      = "allow-outbound"
    policy           = "allow"
    protocol         = "any"
    destination_port = "any"
    destination_ip   = "any"
    source_port      = "any"
    source_ip        = "10.10.0.0/24"
  }
}

resource "vcd_vapp" "web" {
  # ...
}

resource "vcd_firewall_rules" "fw-web" {
```

```
  edge_gateway   = "Edge Gateway Name"
  default_action = "drop"

  rule {
    description      = "allow-web"
    policy           = "allow"
    protocol         = "tcp"
    destination_port = "80"
    destination_ip   = "${vcd_vapp.web.ip}"
    source_port      = "any"
    source_ip        = "any"
  }
}
```

» Argument Reference

The following arguments are supported:

- `edge_gateway` - (Required) The name of the edge gateway on which to apply the Firewall Rules
- `default_action` - (Required) Either "allow" or "drop". Specifies what to do should none of the rules match
- `rule` - (Optional) Configures a firewall rule; see Rules below for details.
- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level

» Rules

Each firewall rule supports the following attributes:

- `description` - (Required) Description of the fireall rule
- `policy` - (Required) Specifies what to do when this rule is matched. Either "allow" or "drop"
- `protocol` - (Required) The protocol to match. One of "tcp", "udp", "icmp" or "any"
- `destination_port` - (Required) The destination port to match. Either a port number or "any"
- `destination_ip` - (Required) The destination IP to match. Either an IP address, IP range or "any"
- `source_port` - (Required) The source port to match. Either a port number or "any"

- `source_ip` - (Required) The source IP to match. Either an IP address, IP range or "any"

» vcd_independent_disk

Provides a vCloud Director independent disk resource. This can be used to create and delete independent disks.

Supported in provider *v2.1+*

» Example Usage

```
resource "vcd_independent_disk" "myNewIndependentDisk" {
  org             = "my-org"
  vdc             = "my-vcd"

  name            = "logDisk"
  size            = "33000"
  bus_type        = "SCSI"
  bus_sub_type    = "VirtualSCSI"
  storage_profile = "external"
}

resource "vcd_vapp_vm" "web2" {
  vapp_name     = "${vcd_vapp.web.name}"

...

  disk {
    name = "${vcd_independent_disk.myNewIndependentDisk.name}"
    bus_number = 1
    unit_number = 0
  }

  depends_on = ["vcd_independent_disk.myNewIndependentDisk"]
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different

organisations
- `vdc` - (Optional) The name of VDC to use, optional if defined at provider level
- `name` - (Required) Disk name
- `size` - (Required) - Size of disk in MB
- `bus_type` - (Optional) - Disk bus type. Values can be: IDE, SCSI, SATA
- `bus_sub_type` - (Optional) - Disk bus subtype. Values can be: "IDE" for IDE. buslogic, lsilogic, lsilogicsas, VirtualSCSI for SCSI and ahci for SATA
- `storage_profile` - (Optional) - The name of storage profile where disk will be created

» vcd_inserted_media

Provides a vCloud Director resource for inserting or ejecting media (ISO) file for the VM. Create this resource for inserting the media, and destroy it for ejecting.

Supported in provider *v2.0+*

» Example Usage

```
resource "vcd_inserted_media" "myInsertedMedia" {
  org     = "my-org"
  vdc     = "my-vcd"
  catalog = "my-catalog"
  name    = "my-iso"

  vapp_name = "my-vApp"
  vm_name   = "my-VM"

  eject_force = true
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level
- `catalog` - (Required) The name of the catalog where to find media file

- `name` - (Required) Media file name in catalog which will be inserted to VM
- `vapp_name` - (Required) - The name of vApp to find
- `vm_name` - (Required) - The name of VM to be used to insert media file
- `eject_force` - (Optional; *v2.1+*) Allows to pass answer to question in vCD "The guest operating system has locked the CD-ROM door and is probably using the CD-ROM. Disconnect anyway (and override the lock)?" when ejecting from a VM which is powered on. True means "Yes" as answer to question. Default is `true`

» vcd_network (Deprecated)

Provides a vCloud Director Org VDC Network. This can be used to create, modify, and delete internal networks for vApps to connect.

Deprecated in v2.0+ : this resource is deprecated and replaced by vcd-network-routed. It is also complemented by vcd-network-isolated and vcd-network-direct.

» Example Usage

```
resource "vcd_network" "net" {
  name         = "my-net"
  edge_gateway = "Edge Gateway Name"
  gateway      = "10.10.0.1"

  dhcp_pool {
    start_address = "10.10.0.2"
    end_address   = "10.10.0.100"
  }

  static_ip_pool {
    start_address = "10.10.0.152"
    end_address   = "10.10.0.254"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) A unique name for the network
- `edge_gateway` - (Required) The name of the edge gateway

- `netmask` - (Optional) The netmask for the new network. Defaults to `255.255.255.0`
- `gateway` (Required) The gateway for this network
- `dns1` - (Optional) First DNS server to use. Defaults to `8.8.8.8`
- `dns2` - (Optional) Second DNS server to use. Defaults to `8.8.4.4`
- `dns_suffix` - (Optional) A FQDN for the virtual machines on this network
- `shared` - (Optional) Defines if this network is shared between multiple vDCs in the vOrg. Defaults to `false`.
- `dhcp_pool` - (Optional) A range of IPs to issue to virtual machines that don't have a static IP; see IP Pools below for details.
- `static_ip_pool` - (Optional) A range of IPs permitted to be used as static IPs for virtual machines; see IP Pools below for details.

» IP Pools

Static IP Pools and DHCP Pools support the following attributes:

- `start_address` - (Required) The first address in the IP Range
- `end_address` - (Required) The final address in the IP Range

DHCP Pools additionally support the following attributes:

- `default_lease_time` - (Optional) The default DHCP lease time to use. Defaults to `3600`.
- `max_lease_time` - (Optional) The maximum DHCP lease time to use. Defaults to `7200`.

» vcd_network_routed

Provides a vCloud Director Org VDC routed Network. This can be used to create, modify, and delete internal networks for vApps to connect.

Supported in provider *v2.0+*

» Example Usage

```
resource "vcd_network_routed" "net" {
  org = "my-org" # Optional
  vdc = "my-vdc" # Optional

  name         = "my-net"
  edge_gateway = "Edge Gateway Name"
  gateway      = "10.10.0.1"
```

```
  dhcp_pool {
    start_address = "10.10.0.2"
    end_address   = "10.10.0.100"
  }

  static_ip_pool {
    start_address = "10.10.0.152"
    end_address   = "10.10.0.254"
  }
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level
- `name` - (Required) A unique name for the network
- `edge_gateway` - (Required) The name of the edge gateway
- `netmask` - (Optional) The netmask for the new network. Defaults to `255.255.255.0`
- `gateway` (Required) The gateway for this network
- `dns1` - (Optional) First DNS server to use. Defaults to `8.8.8.8`
- `dns2` - (Optional) Second DNS server to use. Defaults to `8.8.4.4`
- `dns_suffix` - (Optional) A FQDN for the virtual machines on this network
- `shared` - (Optional) Defines if this network is shared between multiple vDCs in the vOrg. Defaults to `false`.
- `dhcp_pool` - (Optional) A range of IPs to issue to virtual machines that don't have a static IP; see IP Pools below for details.
- `static_ip_pool` - (Optional) A range of IPs permitted to be used as static IPs for virtual machines; see IP Pools below for details.

» IP Pools

Static IP Pools and DHCP Pools support the following attributes:

- `start_address` - (Required) The first address in the IP Range
- `end_address` - (Required) The final address in the IP Range

DHCP Pools additionally support the following attributes:

- `default_lease_time` - (Optional) The default DHCP lease time to use. Defaults to `3600`.

- `max_lease_time` - (Optional) The maximum DHCP lease time to use. Defaults to `7200`.

» vcd_network_direct

Provides a vCloud Director Org VDC Network directly connected to an external network. This can be used to create, modify, and delete internal networks for vApps to connect.

Supported in provider *v2.0+*

Note: Only `System Administrator` can create an organization virtual datacenter network that connects directly to an external network. You must use `System Adminstrator` account in `provider` configuration and then provide `org` and `vdc` arguments for direct networks to work.

» Example Usage

```
resource "vcd_network_direct" "net" {
  org = "my-org" # Optional
  vdc = "my-vdc" # Optional

  name             = "my-net"
  external_network = "my-ext-net"
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level
- `name` - (Required) A unique name for the network
- `external_network` - (Required) The name of the external network.
- `shared` - (Optional) Defines if this network is shared between multiple vDCs in the vOrg. Defaults to `false`.

» vcd_network_isolated

Provides a vCloud Director Org VDC isolated Network. This can be used to create, modify, and delete internal networks for vApps to connect. This network is not attached to external networks or routers.

Supported in provider *v2.0+*

» Example Usage

```
resource "vcd_network_isolated" "net" {
  org = "my-org" # Optional
  vdc = "my-vdc" # Optional

  name    = "my-net"
  gateway = "192.168.2.1"
  dns1    = "192.168.2.1"

  dhcp_pool {
    start_address = "192.168.2.2"
    end_address   = "192.168.2.50"
  }

  static_ip_pool {
    start_address = "192.168.2.51"
    end_address   = "192.168.2.100"
  }
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level
- `name` - (Required) A unique name for the network
- `netmask` - (Optional) The netmask for the new network. Defaults to `255.255.255.0`
- `gateway` (Required) The gateway for this network
- `dns1` - (Optional) First DNS server to use. Defaults to `8.8.8.8`
- `dns2` - (Optional) Second DNS server to use. Defaults to `8.8.4.4`

- `dns_suffix` - (Optional) A FQDN for the virtual machines on this network
- `shared` - (Optional) Defines if this network is shared between multiple vDCs in the vOrg. Defaults to `false`.
- `dhcp_pool` - (Optional) A range of IPs to issue to virtual machines that don't have a static IP; see IP Pools below for details.
- `static_ip_pool` - (Optional) A range of IPs permitted to be used as static IPs for virtual machines; see IP Pools below for details.

» IP Pools

Static IP Pools and DHCP Pools support the following attributes:

- `start_address` - (Required) The first address in the IP Range
- `end_address` - (Required) The final address in the IP Range

DHCP Pools additionally support the following attributes:

- `default_lease_time` - (Optional) The default DHCP lease time to use. Defaults to `3600`.
- `max_lease_time` - (Optional) The maximum DHCP lease time to use. Defaults to `7200`.

» vcd_snat

Provides a vCloud Director SNAT resource. This can be used to create, modify, and delete source NATs to allow vApps to send external traffic.

» Example Usage

```
resource "vcd_snat" "outbound" {
  edge_gateway = "Edge Gateway Name"
  external_ip  = "78.101.10.20"
  internal_ip  = "10.10.0.0/24"
}
```

» Argument Reference

The following arguments are supported:

- `edge_gateway` - (Required) The name of the edge gateway on which to apply the SNAT
- `external_ip` - (Required) One of the external IPs available on your Edge Gateway

- `internal_ip` - (Required) The IP or IP Range of the VM(s) to map from
- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level

» vcd_edgegateway_vpn

Provides a vCloud Director IPsec VPN. This can be used to create, modify, and delete VPN settings and rules.

» Example Usage

```
resource "vcd_edgegateway_vpn" "vpn" {
  edge_gateway        = "Internet_01(nti0000bi2_123-456-2)"
  name                = "west-to-east"
  description         = "Description"
  encryption_protocol = "AES256"
  mtu                 = 1400
  peer_id             = "64.121.123.11"
  peer_ip_address     = "64.121.123.11"
  local_id            = "64.121.123.10"
  local_ip_address    = "64.121.123.10"
  shared_secret       = "**********************"

  peer_subnets {
    peer_subnet_name    = "DMZ_WEST"
    peer_subnet_gateway = "10.0.10.1"
    peer_subnet_mask    = "255.255.255.0"
  }

  peer_subnets {
    peer_subnet_name    = "WEB_WEST"
    peer_subnet_gateway = "10.0.20.1"
    peer_subnet_mask    = "255.255.255.0"
  }

  local_subnets {
    local_subnet_name    = "DMZ_EAST"
    local_subnet_gateway = "10.0.1.1"
    local_subnet_mask    = "255.255.255.0"
  }
```

```
  local_subnets {
    local_subnet_name    = "WEB_EAST"
    local_subnet_gateway = "10.0.22.1"
    local_subnet_mask    = "255.255.255.0"
  }
}
```

» Argument Reference

The following arguments are supported:

- `edge_gateway` - (Required) The name of the edge gateway on which to apply the Firewall Rules
- `name` - (Required) The name of the VPN
- `description` - (Required) A description for the VPN
- `encryption_protocol` - (Required) - E.g. `AES256`
- `local_ip_address` - (Required) - Local IP Address
- `local_id` - (Required) - Local ID
- `mtu` - (Required) - The MTU setting
- `peer_ip_address` - (Required) - Peer IP Address
- `peer_id` - (Required) - Peer ID
- `shared_secret` - (Required) - Shared Secret
- `local_subnets` - (Required) - List of Local Subnets see Local Subnets below for details.
- `peer_subnets` - (Required) - List of Peer Subnets see Peer Subnets below for details.
- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level

» Local Subnets

Each Local Subnet supports the following attributes:

- `local_subnet_name` - (Required) Name of the local subnet
- `local_subnet_gateway` - (Required) Gateway of the local subnet
- `local_subnet_mask` - (Required) Subnet mask of the local subnet

» Peer Subnets

Each Peer Subnet supports the following attributes:

- `peer_subnet_name` - (Required) Name of the peer subnet
- `peer_subnet_gateway` - (Required) Gateway of the peer subnet
- `peer_subnet_mask` - (Required) Subnet mask of the peer subnet

» vcd_vapp

Provides a vCloud Director vApp resource. This can be used to create, modify, and delete vApps.

» Example Usage

Example with more than one VM under a vApp.

```
resource "vcd_network_direct" "net" {
  name             = "net"
  external_network = "corp-network"
}

resource "vcd_vapp" "web" {
  name = "web"

  depends_on = ["vcd_network_direct.net"]
}

resource "vcd_vapp_vm" "web1" {
  vapp_name     = "${vcd_vapp.web.name}"
  name          = "web1"
  catalog_name  = "Boxes"
  template_name = "lampstack-1.10.1-ubuntu-10.04"
  memory        = 2048
  cpus          = 1

  network_name = "net"
  ip           = "10.10.104.161"

  depends_on = ["vcd_vapp.web"]
}

resource "vcd_vapp_vm" "web2" {
  vapp_name     = "${vcd_vapp.web.name}"
  name          = "web2"
  catalog_name  = "Boxes"
  template_name = "lampstack-1.10.1-ubuntu-10.04"
  memory        = 2048
```

```
  cpus          = 1

  network_name = "net"
  ip           = "10.10.104.162"

  depends_on = ["vcd_vapp.web"]
}
```

» Example of vApp with single VM

Not recommended in v2.0+ : in the earlier version of the provider it was possible to define a vApp with a single VM in one resource, but it is not recommended as of *v2.0+* provider. Please define vApp and VM in separate resources instead.

```
resource "vcd_network_routed" "net" {
  # ...
}

resource "vcd_vapp" "web" {
  name          = "web"
  catalog_name  = "Boxes"
  template_name = "lampstack-1.10.1-ubuntu-10.04"
  memory        = 2048
  cpus          = 1

  network_name = "${vcd_network.net.name}"
  ip           = "10.10.104.160"

  metadata {
    role    = "web"
    env     = "staging"
    version = "v1"
  }

  ovf {
    hostname = "web"
  }

  depends_on = ["vcd_network_routed.net"]
}
```

» Example of Empty vApp with no VMs

```
resource "vcd_network_routed" "net" {
  # ...
}

resource "vcd_vapp" "web" {
  name = "web"

  depends_on = ["vcd_network_routed.net"]
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) A unique name for the vApp
- `catalog_name` - (Optional) The catalog name in which to find the given vApp Template
- `template_name` - (Optional) The name of the vApp Template to use
- `memory` - (Optional) The amount of RAM (in MB) to allocate to the vApp
- `cpus` - (Optional) The number of virtual CPUs to allocate to the vApp
- `initscript` (Optional) A script to be run only on initial boot
- `network_name` - (Optional) Name of the network this vApp should join
- `network_href` - (Deprecated) The vCloud Director generated href of the network this vApp should join. If empty it will use the network name and query vCloud Director to discover this
- `ip` - (Optional) The IP to assign to this vApp. Must be an IP address or one of dhcp, allocated or none. If given the address must be within the `static_ip_pool` set for the network. If left blank, and the network has `dhcp_pool` set with at least one available IP then this will be set with DHCP.
- `metadata` - (Optional) Key value map of metadata to assign to this vApp
- `ovf` - (Optional) Key value map of ovf parameters to assign to VM product section
- `power_on` - (Optional) A boolean value stating if this vApp should be powered on. Default is `true`
- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level
- `accept_all_eulas` - (Optional; *v2.0+*) Automatically accept EULA if OVA has it. Default is `true`

» vcd_vapp_network

Provides a vCloud Director vApp isolated Network. This can be used to create and delete internal networks for vApps to connect. This network is not attached to external networks or routers.

Supported in provider *v2.1+*

» Example Usage

```
resource "vcd_vapp_network" "vappNet" {
  org = "my-org" #Optional
  vdc = "my-vdc" #Optional

  name               = "my-net"
  vapp_name          = "my-vapp"
  gateway            = "192.168.2.1"
  netmask            = "255.255.255.0"
  dns1               = "192.168.2.1"
  dns2               = "192.168.2.2"
  dns_suffix         = "mybiz.biz"
  guest_vlan_allowed = true

  static_ip_pool {
    start_address = "192.168.2.51"
    end_address   = "192.168.2.100"
  }

  dhcp_pool {
    start_address = "192.168.2.2"
    end_address   = "192.168.2.50"
  }
}
```

» Argument Reference

The following arguments are supported:

- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations.
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level.
- `name` - (Required) A unique name for the network.

- `vapp_name` - (Required) The vApp this VM should belong to.
- `netmask` - (Optional) The netmask for the new network. Default is `255.255.255.0`.
- `gateway` (Optional) The gateway for this network.
- `dns1` - (Optional) First DNS server to use. Default is `8.8.8.8`.
- `dns2` - (Optional) Second DNS server to use. Default is `8.8.4.4`.
- `dns_suffix` - (Optional) A FQDN for the virtual machines on this network.
- `guest_vlan_allowed` (Optional) True if Network allows guest VLAN tagging. This value supported from vCD version 9.0
- `static_ip_pool` - (Optional) A range of IPs permitted to be used as static IPs for virtual machines; see IP Pools below for details.
- `dhcp_pool` - (Optional) A range of IPs to issue to virtual machines that don't have a static IP; see IP Pools below for details.

» IP Pools

Static IP Pools and DHCP Pools support the following attributes:

- `start_address` - (Required) The first address in the IP Range.
- `end_address` - (Required) The final address in the IP Range.

DHCP Pools additionally support the following attributes:

- `default_lease_time` - (Optional) The default DHCP lease time to use. Defaults to `3600`.
- `max_lease_time` - (Optional) The maximum DHCP lease time to use. Defaults to `7200`.
- `enabled` - (Optional) Allows to enable or disable service. Default is true.

» vcd_vapp_vm

Provides a vCloud Director VM resource. This can be used to create, modify, and delete VMs within a vApp.

Note: To make sure resources are created in the right order and both plan apply and destroy succeeds, use the `depends_on` clause (see example below)

» Example Usage

```
resource "vcd_network_direct" "net" {
  name             = "net"
  external_network = "corp-network"
}
```

```
resource "vcd_vapp" "web" {
  name = "web"

  depends_on = ["vcd_network_direct.net"]
}

resource "vcd_vapp_vm" "web1" {
  vapp_name     = "${vcd_vapp.web.name}"
  name          = "web1"
  catalog_name  = "Boxes"
  template_name = "lampstack-1.10.1-ubuntu-10.04"
  memory        = 2048
  cpus          = 2
  cpu_cores     = 1

  network_name = "net"
  ip           = "10.10.104.161"

  depends_on = ["vcd_vapp.web"]
}

resource "vcd_vapp_vm" "web2" {
  vapp_name     = "${vcd_vapp.web.name}"
  name          = "web2"
  catalog_name  = "Boxes"
  template_name = "lampstack-1.10.1-ubuntu-10.04"
  memory        = 2048
  cpus          = 1

  network_name = "net"
  ip           = "10.10.104.162"

  disk {
    name = "logDisk1"
    bus_number = 1
    unit_number = 0
  }

  disk {
    name = "logDisk2"
    bus_number = 1
    unit_number = 1
  }

  depends_on = ["vcd_vapp.web"]
```

```
}
```

» Argument Reference

The following arguments are supported:

- `vapp_name` - (Required) The vApp this VM should belong to.
- `name` - (Required) A unique name for the VM
- `catalog_name` - (Required) The catalog name in which to find the given vApp Template
- `template_name` - (Required) The name of the vApp Template to use
- `memory` - (Optional) The amount of RAM (in MB) to allocate to the VM
- `cpus` - (Optional) The number of virtual CPUs to allocate to the VM. Socket count is a result of: virtual logical processors/cores per socket
- `cpu_cores` - (Optional; *v2.1+*) The number of cores per socket
- `initscript` (Optional) A script to be run only on initial boot
- `network_name` - (Optional) Name of the network this VM should connect to
- `vapp_network_name` - (Optional; *v2.1+*) Name of the vApp network this VM should connect to
- `ip` - (Optional) The IP to assign to this vApp. Must be an IP address or one of "dhcp", "allocated" or "none". If given the address must be within the `static_ip_pool` set for the network. If left blank, and the network has `dhcp_pool` set with at least one available IP then this will be set with DHCP.
- `power_on` - (Optional) A boolean value stating if this vApp should be powered on. Default is `true`
- `accept_all_eulas` - (Optional; *v2.0+*) Automatically accept EULA if OVA has it. Default is `true`
- `org` - (Optional; *v2.0+*) The name of organization to use, optional if defined at provider level. Useful when connected as sysadmin working across different organisations
- `vdc` - (Optional; *v2.0+*) The name of VDC to use, optional if defined at provider level
- `disk` - (Optional; *v2.1+*) Independent disk attachment configuration. Details below

Independent disk support the following attributes:

- `name` - (Required) Independent disk name
- `bus_number` - (Required) Bus number on which to place the disk controller
- `unit_number` - (Required) Unit number (slot) on the bus specified by BusNumber.