

Dell EMC VxRail™

API User Guide

4.5.x, 4.7.x, and 7.0.x

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Introduction

About this guide

This document describes the API for the VxRail, including VxRail software versions 4.5.x, 4.7.x, and 7.0.x.

This document incorporates and supercedes information from previous VxRail API guides, including the *VxRail 4.5 API Guide* and the *VxRail 4.5.2xx API Guide*.

Note that in VxRail software versions 4.7.300 and later, API documentation is included onboard the VxRail and can be accessed from your host. See [VxRail onboard API documentation](#) for more information.

Revision history

Revision Number	Date	Description
20	November 4, 2021	Updated for VxRail Software 7.0.300.
19	August 8, 2021	Updated for VxRail Software 7.0.240.
18	July 13, 2021	Updated for VxRail Software 7.0.210.
17	May 5, 2021	Updated for VxRail Software 7.0.200.
16	February 10, 2021	Minor correction to POST <code>/v1/system/initialize</code> .
15	January 28, 2021	Updated for VxRail Software 7.0.130.
14	November 16, 2020	Minor correction to POST <code>/v3/lcm/upgrade</code> .
13	October 30, 2020	Updated for VxRail Software 7.0.100.
12	August 28, 2020	Updated for VxRail Software 7.0.010.
11	May 28, 2020	Updated for VxRail Software 4.7.510 and updated publishing formats.
10	April 28, 2020	Updated for VxRail Software 7.0.000.
09	February 19, 2020	Updated descriptions for POST <code>/v1/system/validate-credential</code> and POST <code>/v1/system/update-credential</code> plus minor updates and corrections.
08	December 17, 2019	Updated for VxRail Software 4.7.410.
07	October 31, 2019	Added minor content updates and corrections.
06	October 15, 2019	Updated document structure plus minor content updates and corrections.
05	September 18, 2019	Updated for VxRail Software 4.7.300.
04	July 31, 2019	Added upgrade note for POST <code>/lcm/upgrade</code> .
03	June 27, 2019	Updated for VxRail software 4.7.200 plus minor updates and corrections.
02	January 22, 2019	Updated for VxRail software 4.7.100 and minor corrections.
01	December 14, 2018	Initial release.

VxRail API documentation on the Dell Technologies Developer Portal

The [Dell Technologies Developer Portal](#) is a single location for sharing and disseminating developer-focused documentation in an easily consumable and consistent format. Using the Developer Portal, developers can discover, explore, and test Dell APIs needed to integrate with other solutions and create custom automations. In addition to consolidating consistent content within a single portal, Dell enterprise products enable the 'build once/re-use many' mindset for faster implementation and easier automation of Dell's portfolio.

The API documentation for VxRail is available on the Developer Portal along with all available Dell APIs.

Currently, API document is published on the [Developer Portal](#) as HTML and on the Support site as PDF. Update any bookmarks you may have to point to [Developer Portal](#).

VxRail documentation

The following tables list available documents about VxRail Manager and VxRail models.

For the most up-to-date list of VxRail documentation, see the [VxRail Documentation Quick Reference List](#).

Getting Started

VxRail API base URL

The base URL for the VxRail API is: `https://<VxM_IP>/rest/vxm/`.

<VxM_IP> is the network IP address or domain name of the VxRail Manager virtual machine that manages a specific VxRail cluster. The base URL is for a single VxRail cluster only.

Authentication

The VxRail API uses the VMware vCenter or Platform Services Controller (PSC) single sign on (SSO) for authentication.

Use your vCenter username and password to log into the VxRail API. The API passes the credentials to the vCenter/PSC for authentication.

HTTP Basic authentication is the authorization method that is configured for the VxRail REST API.

VxRail Manager and the VxRail API do not provide management of vCenter user accounts. Manage your credentials using vSphere.

VxRail onboard API documentation

VxRail RESTful API documentation is available onboard your VxRail Manager virtual machine in software versions 4.7.300 and later.

To access onboard API documentation, enter the following address in a web browser on your host:

`https://<VxM_IP>/rest/vxm/api-doc.html`

<VxM_IP> is the network IP address or domain name of the VxRail Manager virtual machine.

VxRail initial installation and configuration

These VxRail API support the initial configuration and deployment of a VxRail cluster including initial installation, status checks, and network configuration.

POST /v1/network/vxrail-manager

Configures VxRail Manager with a static IP address for remote access.

URL

```
192.168.10.200/rest/vxm/v1/network/vxrail-manager
```

This endpoint uses the default static IP address (192.168.10.200) and can only be run before the initial configuration and deployment.

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization Not required

Body parameter `StaticIPSettingsSpec`: (Required) The parameters that are required for setting the VxRail Manager static IP address.

Parameter	Type	Description
ip	string	(Required) The static IP address to be set for VxRail Manager
gateway	string	(Required) The network gateway address to be used for VxRail Manager
netmask	string	(Required) The subnet mask to be used for VxRail Manager
vlan_id	string	(Required) The VLAN ID to be used for VxRail Manager

Example:

```
{
  "ip": "192.168.102.254",
```

```
"gateway": "192.168.102.4",
"netmask": "255.255.255.0",
"vlan_id": 200
}
```

Response

- 202** The request has been accepted for processing, but the processing has not been completed.
- 400** Invalid request parameters.
- 500** The request for operation status failed with errors.

POST /v1/system/initialize

Configures and deploys a new VxRail cluster.

URL

```
<VxRail IP address>/rest/vxm/v1/system/initialize
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

- Authorization** Not required
- Query parameter** `dryrun`: (Optional) Performs a validation of the initial input configuration. Set `true` to cause a dry run and `false` to configure and deploy a new cluster. The default value is `false`.
- Body parameter** `SystemInitSpec`: (Required) The parameters required for the initial configuration and deployment of a new cluster.

Parameter	Type	Description
<code>version</code>	<code>string</code>	VxRail Manager version to be deployed
<code>global</code>	<code>object</code>	(Required) Global configuration settings for the VxRail cluster See the <code>global</code> object table below for object properties.
<code>hosts</code>	<code>[object]</code>	(Required) Configuration settings for each of the VxRail hosts See the <code>hosts</code> object table below for object properties.
<code>vcenter</code>	<code>object</code>	(Required) Configuration settings for the vCenter server See the <code>vcenter</code> object table below for object properties.

Parameter	Type	Description
witness_node	object	Configuration settings for a witness node. Only available when <code>cluster_type</code> is set to <code>VSAN2NODE</code> . See the <code>witness_node</code> object table below for object properties.
vxrail_manager	object	(Required) Configuration setting for VxRail Manager See the <code>vxrail_manager</code> object table below for object properties.
network	object	(Required) Configuration settings for the network <ul style="list-style-type: none"> For VxRail software 7.0.101 and earlier versions, see the <code>network</code> (version 2) object table below for object properties. For VxRail software 7.0.130 and later versions, see the <code>network</code> (version 3) object table.
storage	object	<p>(Optional) The current storage configuration</p> <p>NOTE: The <code>storage</code> object is supported in VxRail software 7.0.210 and later.</p> <p>The <code>disk_group_type</code> and <code>primary_storage_type</code> properties are mutually exclusive. Use <code>disk_group_type</code> for vSAN clusters only. Use <code>primary_storage_type</code> for dynamic node clusters only.</p> <p>The <code>storage</code> object contains:</p> <ul style="list-style-type: none"> <code>disk_group_type</code> (string): The disk group configuration for the appliance. The property is used only for vSAN clusters. <ul style="list-style-type: none"> For the VxRail E660/F, P670F, and V670F appliances, <code>disk_group_type</code> uses the default configuration unless this property is specified. For all other appliance models, <code>disk_group_type</code> is not supported. <p>The first two digits in <code>disk_group_type</code> represent the number of disk slots in the appliance. The second two digits represent the disk group configuration. For example, 1001 represents an E660/F with 10 disk slots using the disk group 1 (DG1) configuration (1 cache disk and up to 7 capacity disks).</p> <p>Supported values include:</p> <ul style="list-style-type: none"> VxRail E660/F appliance: 1001 (default), 1002 VxRail P670F appliance: 2804 (default) VxRail V670F appliance: 2404 (default), 2403 <code>primary_storage_type</code> (string): The primary storage configuration for the appliance. This property is used only for dynamic node clusters. <p>NOTE: The <code>primary_storage_type</code> property is supported in VxRail software 7.0.240 and later.</p> <p>Supported values include <code>VMFS_ON_FC</code> and <code>EXTERNAL</code>.</p>

Example:

```
{
  "version": "7.0.240",
  "global": {
```

```

    "ntp_servers": [
        "10.0.0.1",
        "10.0.0.2"
    ],
    "dns_servers": [
        "172.23.1.167"
    ],
    "syslog_servers": [
        "172.23.1.189"
    ],
    "top_level_domain": "vvlarge.local",
    "cluster_type": "STANDARD",
    "cluster_management_netmask": "255.255.0.0",
    "cluster_management_gateway": "172.23.1.167",
    "cluster_vsan_netmask": "255.255.0.0",
    "cluster_vmotion_netmask": "255.255.0.0"
},
"hosts": [
    {
        "host_psnt": "V08170100000000",
        "hostname": "vcluster817-esx01",
        "accounts": {
            "root": {
                "username": "root",
                "password": "password"
            },
            "management": {
                "username": "mystic",
                "password": "password"
            }
        },
        "network": [
            {
                "type": "MANAGEMENT",
                "ip": "172.23.26.101"
            },
            {
                "type": "VSAN",
                "ip": "172.23.26.136"
            },
            {
                "type": "VMOTION",
                "ip": "172.23.26.211"
            }
        ],
        "storage": {
            "slot_claims": [
                {
                    "usage": "non-vSAN",
                    "values": [
                        {
                            "slots": "3,6,7-8"
                        }
                    ]
                }
            ]
        },
        "geo_location": {
            "rack-name": "",
            "position": 1
        }
    },
    {
        "host_psnt": "V08170200000000",
        "hostname": "vcluster817-esx02",
        "accounts": {
            "root": {
                "username": "root",
                "password": "password"
            },
            "management": {

```

```

        "username": "mystic",
        "password": "password"
    },
    },
    "network": [
        {
            "type": "MANAGEMENT",
            "ip": "172.23.26.102"
        },
        {
            "type": "VSAN",
            "ip": "172.23.26.137"
        },
        {
            "type": "vmotion",
            "ip": "172.23.26.212"
        }
    ],
    "geo_location": {
        "rack_name": "",
        "position": 2
    }
},
{
    "host_psnt": "V08170300000000",
    "hostname": "vcluster817-esx03",
    "accounts": {
        "root": {
            "username": "root",
            "password": "password"
        },
        "management": {
            "username": "mystic",
            "password": "password"
        }
    },
    "network": [
        {
            "type": "MANAGEMENT",
            "ip": "172.23.26.103"
        },
        {
            "type": "VSAN",
            "ip": "172.23.26.138"
        },
        {
            "type": "VMOTION",
            "ip": "172.23.26.213"
        }
    ],
    "geo_location": {
        "rack_name": "",
        "position": 3
    }
}
],
"vcenter": {
    "customer_supplied": true,
    "customer_supplied_vc_name": "vcsa.vvlarge.local",
    "datacenter_name": "VxRail-Datacenter",
    "cluster_name": "VxRail-Cluster",
    "accounts": {
        "administrator": {
            "username": "administrator@vsphere.local"
        },
        "management": {
            "username": ""
        }
    },
    "auto_accept_vc_cert": true
},


```

```

"vxrail_manager": {
  "name": "vcluster817-vmx",
  "ip": "172.23.26.200",
  "accounts": {
    "root": {
      "username": "root"
    },
    "service": {
      "username": "mystic"
    }
  }
},
"network": {
  "nic_profile": "FOUR_HIGH_SPEED",
  "systemvm_portgroup_binding_type": "STATIC_BINDING",
  "management_portgroup_binding_type": "STATIC_BINDING",
  "vds": {
    "mtu": 9000,
    "portgroups": [
      {
        "type": "VSAN",
        "vlan_id": 0,
        "vmk_mtu": 9000
      },
      {
        "type": "MANAGEMENT",
        "vlan_id": 0,
        "vmk_mtu": 1500
      },
      {
        "type": "VMOTION",
        "vlan_id": 0,
        "vmk_mtu": 9000
      },
      {
        "type": "VXRAILDISCOVERY",
        "vlan_id": 3939,
        "vmk_mtu": 1500
      }
    ]
  }
},
"storage": {
  "disk_group_type": "2404"
}
}

```

global object properties:

Property	Type	Description
ntp_servers	[string]	Array of IP addresses for the NTP servers
is_internal_dns	boolean	Whether the DNS server is internal. Supported values are true and false.
dns_servers	[string]	Array of IP addresses for the DNS servers
syslog_servers	[string]	Array of IP addresses for the Syslog servers
cluster_type	string	Type of cluster. Supported values are STANDARD (3 or more hosts), VSAN2NODE (2 hosts only), and COMPUTE  NOTE: COMPUTE is supported in VxRail software 7.0.130 and later.
cluster_management_netmask	string	Subnet mask for cluster management nodes
cluster_management_gateway	string	Gateway address for cluster management nodes
cluster_vsan_netmask	string	Subnet mask for the vSAN cluster

Property	Type	Description
cluster_vmotion_netmask	string	Subnet mask for the vSphere vMotion cluster
cluster_witness_netmask	string	Subnet mask for the witness nodes
cluster_witness_gateway	string	Gateway address for the witness nodes
top_level_domain	string	Top-level domain name

[hosts] object properties:

Property	Type	Description
host_psnt	string	PSNT of the host i NOTE: The <code>host_psnt</code> and <code>customer_supplied</code> properties are mutually exclusive.
hostname	string	Hostname of the host
customer_supplied	object	Host information that is user-specified. i NOTE: The <code>customer_supplied</code> property is supported in VxRail software 7.0.130 and later. The <code>customer_supplied</code> object contains: <ul style="list-style-type: none"> • <code>management_ip</code> (string): The user-specified management IP address of the host • <code>current_root_password</code> (string): The user-specified host root account password. The default ESXi host root password is set if this parameter is not provided
accounts	object	Credentials for the host accounts The <code>accounts</code> object contains: <ul style="list-style-type: none"> • <code>root</code> object: <ul style="list-style-type: none"> ◦ <code>username</code> (string) ◦ <code>password</code> (string) • <code>management</code> object: <ul style="list-style-type: none"> ◦ <code>username</code> (string) ◦ <code>password</code> (string)
network	[object]	An array of network information for the host components The <code>network</code> object contains: <ul style="list-style-type: none"> • <code>type</code> (string): The type of component. Supported values include MANAGEMENT, VSAN, WITNESS, and VMOTION. • <code>ip</code> (string): The IP address of component
storage	object	Information about which disk slots are claimed as vSAN storage and which slots are non-vSAN storage. You must submit a request for product qualification (RPQ) to reserve slots for non-vSAN disks. i NOTE: The <code>storage</code> property is supported in VxRail software 7.0.130 and later. The <code>storage</code> object contains: <ul style="list-style-type: none"> • <code>[slot_claims]</code> (object):

Property	Type	Description
		<ul style="list-style-type: none"> usage (string): The type of usage the slot values are claimed as. Supported values are vSAN and non-vSAN. [values] (string): <ul style="list-style-type: none"> slots (string): A list of disk slots that are claimed as the type of usage defined in usage. Example values include 3, 6, 7-8
geo_location	object	<p>Geographic location information for the host</p> <p>The geo_location object contains:</p> <ul style="list-style-type: none"> rack_name (string): The name of the rack that houses the host position (integer): The position of the node in the rack

vcenter object properties:

Property	Type	Description
customer_supplied	boolean	Whether the vCenter server is customer supplied (external) or VxRail integrated (internal). Supported values are true for customer supplied and false for integrated.
customer_supplied_vc_name	string	The FQDN of the vCenter server. This property is only provided if the vCenter server is customer supplied.
vxrail_supplied_vc_ip	string	The IP address of the VxRail integrated vCenter server. This property is only provided if the vCenter server is VxRail integrated.
vxrail_supplied_vc_name	string	The hostname of the VxRail integrated vCenter server. This property is only provided if the vCenter server is VxRail integrated.
datacenter_name	string	The name of the datacenter. This property is only provided if the vCenter server is customer supplied.
cluster_name	string	The name of the cluster. This property is only provided if the vCenter server is customer supplied.
auto_accept_vc_cert	boolean	<p>Whether to automatically download the vCenter root certificate. This property is supported in VxRail 7.0.240 software and later.</p> <p>True means VxRail Manager will download the vCenter root certificate automatically. False means users should provide the vCenter root certificate manually.</p>
accounts	object	<p>Credentials for the vCenter accounts</p> <p>The accounts object contains:</p> <ul style="list-style-type: none"> root object: <ul style="list-style-type: none"> username (string) password (string) NOTE: The root account for vCenter is only available in a customer supplied (external) vCenter. administrator object: <ul style="list-style-type: none"> username (string)

Property	Type	Description
		<ul style="list-style-type: none"> ◦ password (string) • management object: <ul style="list-style-type: none"> ◦ username (string) ◦ password (string)
sso_domain	object	<p>Network and sign on information for the SSO domain. This property is only provided if the vCenter server is VxRail supplied.</p> <p>The sso_domain object contains:</p> <ul style="list-style-type: none"> • server (string): The IP address of the SSO domain • port (integer): The port of the SSO domain • username (string) • password (string) • auto_accept_sso_vc_cert (boolean): Whether to automatically download the SSO vCenter root certificate. This property is supported in VxRail 7.0.240 software and later. <p>True means VxRail Manager will download the target SSO vCenter root certificate automatically. False means users should provide the target SSO vCenter root certificate manually.</p>

witness_node object properties:

Property	Type	Description
management_ip	string	Management IP address for the witness node
witness_ip	string	Witness traffic IP address for the witness node
gateway	string	Gateway address for the witness node
netmask	string	Subnet mask for the witness node
username	string	Username for the witness node
password	string	Password for the witness node

vxrail_manager object properties:

Property	Type	Description
name	string	Hostname for VxRail Manager
ip	string	IP address for VxRail Manager
accounts	object	<p>Credentials for VxRail Manager</p> <p>The accounts object contains:</p> <ul style="list-style-type: none"> • root object: <ul style="list-style-type: none"> ◦ username (string) ◦ password (string) • service object: <ul style="list-style-type: none"> ◦ username (string) ◦ password (string)

network (version 3) object properties for VxRail software 7.0.130 and later versions:

Property	Type	Description
sfs	object	<p>Information about SmartFabric Services. This property only applies to SmartFabric users.</p> <p>The <code>sfs</code> object contains:</p> <ul style="list-style-type: none"> • <code>REST_USER_password</code> (string): User password • <code>sfs_disabled</code> (boolean): SmartFabric disable flag. <p>Set <code>sfs_disabled</code> to <code>true</code> to indicate SmartFabric is not used. Set <code>sfs_disabled</code> to <code>false</code> to indicate SmartFabric Services are enabled. The default is <code>false</code> (enabled).</p>
nic_profile	[string]	<p>The NIC profile configuration.</p> <p>Supported values are <code>FOUR_HIGH_SPEED</code>, <code>TWO_HIGH_SPEED</code>, <code>FOUR_LOW_SPEED</code>, <code>TWO_LOW_TWO_HIGH_SPEED</code>, <code>FOUR_EXTREME_SPEED</code>, <code>ADVANCED_VXRAIL_SUPPLIED_VDS</code>, <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code>.</p>
management_portgroup_binding_type	string	<p>The type of port group binding for the management server.</p> <p>Supported values include <code>STATIC_BINDING</code> and <code>EPHEMERAL</code>.</p>
systemvm_portgroup_binding_type	string	<p>The type of port group binding for the system VMs.</p> <p>Supported values include <code>STATIC_BINDING</code> and <code>EPHEMERAL</code>.</p>
vds	[object]	<p>Information about network vSwitches</p> <p>The <code>vds</code> object contains:</p> <ul style="list-style-type: none"> • <code>name</code> (string): Name of the defined vSphere Distributed Switch. <p><code>name</code> is only used when <code>nic_profile</code> is set to <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code>.</p> <ul style="list-style-type: none"> • <code>mtu</code> (integer): MTU of the defined vSphere Distributed Switch. This property is supported in VxRail 7.0.240 software and later. <p>The MTU value must be in the [1500, 9000] range. This property is only supported for the following port group types: <code>MANAGEMENT</code>, <code>DISCOVERY</code>, <code>VSAN</code>, <code>VMOTION</code>, <code>WITNESS</code>.</p> <ul style="list-style-type: none"> • <code>load_balance_policy</code> (string): The load balance policy for port group. This property is supported in VxRail 7.0.240 software and later. <p>This property supports the following load balance policies: <code>FAILOVER_EXPLICIT</code>, <code>LOADBALANCE_SRCMAC</code>, <code>LOADBALANCE_SRCID</code>, <code>LOADBALANCE_LOADBASED</code>.</p> <ul style="list-style-type: none"> • <code>[portgroups]</code> object: <ul style="list-style-type: none"> ◦ <code>name</code> (string): Name of the port group. <p><code>name</code> is only supplied when <code>nic_profile</code> is <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code>.</p>

Property	Type	Description
		<ul style="list-style-type: none"> ◦ <code>type</code> (string): The type of port group Supported values are VSAN, VMOTION, MANAGEMENT, WITNESS, VXRAILSYSTEMVM, CUSTOMERVM, VXRAILDISCOVERY. i NOTE: The VXRAILDISCOVERY option is only supported when <code>nic_profile</code> is set to <code>ADVANCED_VXRAIL_SUPPLIED_VDS</code> or <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code>. ◦ <code>vmk_mtu</code> (integer): MTU of the VMkernel on selected traffic type. This property is supported in VxRail 7.0.240 software and later. The MTU value must be in the [1500, 9000] range. This property is only supported in V-VDS or Multi-VDS scenarios. This property is not supported for customer-supplied VDS or vSAN 2-Node clusters. ◦ <code>vlan_id</code> (string): The VLAN ID of the port group. i NOTE: Set the <code>vlan_id</code> for the port group type to 3939 when the <code>nic_profile</code> is <code>ADVANCED_VXRAIL_SUPPLIED_VDS</code> or <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code> and <code>sfs_disabled</code> is false. ◦ <code>failover_order</code> object is only supplied when the <code>nic_profile</code> is <code>ADVANCED_VXRAIL_SUPPLIED_VDS</code>: <ul style="list-style-type: none"> ▪ <code>[active]</code> (string): A list of active uplinks ▪ <code>[standby]</code> (string): A list of standby uplinks ◦ <code>uplinks</code> [string]: A list of uplinks. This property is only supplied when the <code>nic_profile</code> is <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code> and <code>sfs_disabled</code> is false. ◦ <code>lags</code> [string]: A list of link aggregation groups (LAG). This property is only supplied when the <code>nic_profile</code> is <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code> when LAG is used on the port group. • <code>[nic_mappings]</code> object: <ul style="list-style-type: none"> i NOTE: This property is used when the <code>nic_profile</code> is set to <code>ADVANCED_VXRAIL_SUPPLIED_VDS</code> or <code>ADVANCED_CUSTOMER_SUPPLIED_VDS</code>. ◦ <code>[uplinks]</code> object: <ul style="list-style-type: none"> ▪ <code>name</code> (string) ▪ <code>physical_nic</code> (string) ◦ <code>[lags]</code> object: <ul style="list-style-type: none"> ▪ <code>name</code> (string) ▪ <code>[physical_nics]</code> (string): A list of physical NICs

network (version 2) object properties for VxRail software 7.0.101 and earlier versions:

Property	Type	Description
sfs	object	<p>Information about SmartFabric Services</p> <p>The <code>sfs</code> object contains:</p> <ul style="list-style-type: none">• <code>REST_USER_password</code> (string): User password• <code>sfs_disabled</code> (boolean): SmartFabric disable flag. <p>Set <code>sfs_disabled</code> to <code>true</code> to indicate SmartFabric is not used. Set <code>sfs_disabled</code> to <code>false</code> to indicate SmartFabric Services are enabled. The default is <code>false</code> (enabled). This property is supported for VxRail software 7.0.100 and later.</p>
vds	object	<p>Information about network vSwitches</p> <p>The <code>vds</code> object contains:</p> <ul style="list-style-type: none">• <code>nic_profile</code> (string): Supported values include <code>FOUR_HIGH_SPEED</code>, <code>TWO_HIGH_SPEED</code>, <code>FOUR_LOW_SPEED</code>, <code>TWO_LOW_TWO_HIGH_SPEED</code>• <code>systemvm_portgroup_binding_type</code> (string): Supported values include <code>STATIC_BINDING</code>, <code>DYNAMIC_BINDING</code>, <code>EPHEMERAL</code>• <code>[portgroups]</code> object:<ul style="list-style-type: none">◦ <code>type</code> (string): The type of port group◦ <code>vlan_id</code> (string): The VLAN ID of the port group
customer_supplied_vds	object	<p>Information about customer supplied network vSwitches</p> <p>The <code>customer_supplied_vds</code> object contains:</p> <ul style="list-style-type: none">• <code>name</code> (string): Name of the vSwitch• <code>[portgroups]</code> object:<ul style="list-style-type: none">◦ <code>type</code> (string): The type of port group◦ <code>vlan_id</code> (string): The VLAN ID of the port group◦ <code>[uplinks]</code> (string): If an SFS environment is used, <code>uplinks</code> should be Mandatory in every portgroup.• <code>[nic_mappings]</code> object:<ul style="list-style-type: none">◦ <code>[uplinks]</code> object:<ul style="list-style-type: none">▪ <code>name</code> (string)▪ <code>physical_nic</code> (string)

Response

202 The request has been accepted for processing, but the processing has not been completed. A `request_id` is returned.

To check the processing status, use [GET /v1/system/initialize/status](#).

400 Invalid request parameters.

500 The request for operation status failed with errors.

GET /v1/system/initialize/status

Retrieves VxRail cluster configuration and deployment status information.

URL

```
<VxRail IP address>/rest/vxm/v1/system/initialize/status
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization Not required

Response

200 Successful operation.

Parameter	Type	Description
id	string	The returned <code>request_id</code> from a running cluster configuration and deployment. See <code>POST /v1/system/initialize</code> .
owner	string	The owner of the request, which is typically the user who issued the original request
state	string	The current state of the execution Supported values include STARTED, FAILED, COMPLETED.
step	string	The current step being run
progress	integer	The progress of the current execution, ranging 0–100
start_time	integer	The start time of the current execution
end_time	integer	The end time of the current execution
extension	object	Application-specific status information See the <code>extension</code> object table below the example for a list of object properties.

Example:

```
{
  "id": "47a45dac-67b8-4932-8703-960c5df8e494",
  "state": "STARTED",
  "step": "VxM populate configuration data",
  "owner": "Day1BringUp",
  "progress": 0,
```

```

"start_time": 1584679007,
"end_time": 1584699007,
"extension": {
  "validation": {
    "cursory": {
      "errors": {
        "fields": [
          {
            "path": "vcenter.accounts.administrator.password",
            "messages": "password too short"
          }
        ],
        "generals": [
          {
            "title": "General Error",
            "messages": ["unknown error"]
          }
        ]
      },
      "warnings": {
        "fields": [
          {
            "path": "vcenter.accounts.administrator.password",
            "messages": "password too short"
          }
        ],
        "generals": [
          {
            "title": "General Error",
            "messages": ["unknown error"]
          }
        ]
      }
    },
    "thorough": {
      "errors": {
        "fields": [
          {
            "path": "vcenter.accounts.administrator.password",
            "messages": "password too short"
          }
        ],
        "generals": [
          {
            "title": "General Error",
            "messages": ["unknown error"]
          }
        ]
      },
      "warnings": {
        "fields": [
          {
            "path": "vcenter.accounts.administrator.password",
            "messages": "password too short"
          }
        ],
        "generals": [
          {
            "title": "General Error",
            "messages": ["unknown error"]
          }
        ]
      }
    }
  },
  "steps": [
    {
      "id": "vxm_set_dns",
      "name": "VxM set DNS server",
      "path":
"sub_workflow1.sub_workflow2.vxm_config_dns.external.vxm_set_dns",

```

```

        "state": "STARTED",
        "steps": [
            null
        ],
        "start_time": 0,
        "end_time": 0
    }
}
}

```

extention object properties:

Property	Type	Description
validation	object	<p>Validation status for the initial cluster configuration referenced by id</p> <p>The validation object contains:</p> <ul style="list-style-type: none"> • cursory object: <ul style="list-style-type: none"> ◦ errors object: <ul style="list-style-type: none"> ▪ [fields] object: <ul style="list-style-type: none"> - path (string): Parameter path for the error result in the JSON file - [messages] (string): Error or warning messages ▪ [generals] object: <ul style="list-style-type: none"> - title (string): Title of the warning result - [messages] (string): Error or warning messages ◦ warnings object: <ul style="list-style-type: none"> ▪ [fields] object: <ul style="list-style-type: none"> - path (string): Parameter path for the error result in the JSON file - [messages] (string): Error or warning messages ▪ [generals] object: <ul style="list-style-type: none"> - title (string): Title of the warning result - [messages] (string): Error or warning messages • thorough object: <ul style="list-style-type: none"> ◦ errors object: <ul style="list-style-type: none"> ▪ [fields] object: <ul style="list-style-type: none"> - path (string): Parameter path for the error result in the JSON file - [messages] (string): Error or warning messages ▪ [generals] object: <ul style="list-style-type: none"> - title (string): Title of the warning result - [messages] (string): Error or warning messages ◦ warnings object: <ul style="list-style-type: none"> ▪ [fields] object: <ul style="list-style-type: none"> - path (string): Parameter path for the error result in the JSON file - [messages] (string): Error or warning messages ▪ [generals] object:

Property	Type	Description
		<ul style="list-style-type: none"> - <code>title</code> (string): Title of the warning result - <code>[messages]</code> (string): Error or warning messages
<code>steps</code>	[object]	<p>An array of status results for each configuration step</p> <p>The <code>steps</code> object contains:</p> <ul style="list-style-type: none"> • <code>id</code> (string): The identification string for the step • <code>name</code> (string): The name of the step • <code>path</code> (string): The full path for the step including parent steps • <code>state</code> (string): The status state of the step. Supported values include STARTED, FAILED, COMPLETED • <code>[steps]</code> (string): An array of any steps running in parallel • <code>start_time</code> (string): The timestamp for the start of the step • <code>end_time</code> (string): The timestamp for the end of the step

404 The request resource was not found.

500 Unexpected internal server error.

GET /v1/system/initialize/disk-slot-mappings

Retrieves disk slots and usage mappings from the initial configuration for a set of hosts.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/initialize/disk-slot-mappings
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Body parameters `HostDiskSlotMappingRequest`: (Required) Information needed to retrieve disk slot usage for a host.

Parameter	Type	Description
<code>host_serial_number</code>	string	(Required) Serial number of the host. This property is mandatory if the <code>customer_supplied</code> property is not supplied.

Parameter	Type	Description
diskgroup_type	string	<p>The disk group configuration for the appliance. This property is supported in VxRail 7.0.240 software and later.</p> <ul style="list-style-type: none"> For the VxRail E660/F, P670F, and V670F appliances, <code>disk_group_type</code> uses the default configuration unless this property is specified. For all other appliance models, <code>disk_group_type</code> is not supported. <p>The first two digits in <code>disk_group_type</code> represent the number of disk slots in the appliance. The second two digits represent the disk group configuration. For example, 1001 represents an E660/F with 10 disk slots using the disk group 1 (DG1) configuration (1 cache disk and up to 7 capacity disks).</p> <p>Supported values include:</p> <ul style="list-style-type: none"> VxRail E660/F appliance: 1001 (default), 1002 VxRail P670F appliance: 2804 (default) VxRail V670F appliance: 2404 (default), 2403
customer_supplied	object	<p>(Required) Information about the management server. This property is mandatory if the <code>host_serial_number</code> property is not supplied.</p> <p>The <code>customer_supplied</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>management_ip</code> (string): (Required) Management IP address <code>current_root_password</code> (string): (Required) Root password

Example:

```
{
  "hosts": [
    {
      "host_serial_number": "969WVL2"
    },
    {
      "customer_supplied": {
        "management_ip": "10.20.201.11",
        "current_root_password": "Password"
      }
    }
  ]
}
```

Response

200

Successfully retrieved all slot mappings for hosts.

[HostDiskSlotMappingsResponse]: An array of VxRail hosts and the associated disk usage mappings for each host

Parameter	Type	Description
host	string	If <code>host_serial_number</code> is supplied in the request object, this property returns the host serial number; otherwise, the property returns the host ID address

Parameter	Type	Description
all_slots	[object]	<p>Information about slot positions for all disk drives</p> <p>The <code>all_slots</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>bay_info</code> object provides information about the bay slots and contains the following properties: <ul style="list-style-type: none"> ◦ <code>bay_id</code> object provides information about the bay IDs and contains the following properties: <ul style="list-style-type: none"> ▪ <code>slots</code> ([integer]): A list of all slot positions where a disk drive is installed
vsan_slots	[object]	<p>A list of all slot positions where a disk drive is claimed for vSAN usage</p> <p>The <code>vsan_slots</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>capacity</code> ([object]): The <code>capacity</code> object contains information about slot drives claimed for capacity usage. • <code>cache</code> ([object]): The <code>cache</code> object contains information about slot drives claimed for cache usage. <p>Both the <code>capacity</code> object and the <code>cache</code> object contain the following properties:</p> <ul style="list-style-type: none"> • ◦ <code>bay_info_with_dg</code> (object): The <code>bay_info_with_dg</code> object contains the following properties: <ul style="list-style-type: none"> ◦ <code>slots</code> ([object]): Provides a list of all slot and disk groups and contains the following properties: <ul style="list-style-type: none"> ▪ <code>slot</code> (integer): Slot number ▪ <code>diskgroup</code> (integer): Disk group ID

Example:

```
{
  "hosts": [
    {
      "host": "969WVL2 or 10.12.128.1",
      "all_slots": [
        {"bay0": {"slots": [1,2,3,4]}},
        {"bay1": {"slots": [1,2,3,4]}}
      ],
      "vsan_slots": {
        "capacity": [
          {"bay0": {"slots": [{"slot":1, "diskgroup":1}, {"slot":2,
"diskgroup":2}]}},
          {"bay1": {"slots": [{"slot":1, "diskgroup":1}, {"slot":2,
"diskgroup":2}]}},
        ],
        "cache": [
          {"bay0": {"slots": [{"slot":8, "diskgroup":1}]}},
          {"bay1": {"slots": [{"slot":10, "diskgroup":2}]}},
        ]
      }
    }
  ]
}
```

207

Retrieved a partial list of slot mappings for hosts.

[HostDiskSlotMappingsResponse]: An array of VxRail hosts and the associated disk usage mappings for each host

Parameter	Type	Description
host	string	If <code>host_serial_number</code> is supplied in the request object, this property returns the host serial number; otherwise, the property returns the host ID address
all_slots	[object]	Information about slot positions for all disk drives The <code>all_slots</code> object contains the following properties: <ul style="list-style-type: none"> • <code>bay_info</code> object provides information about the bay slots and contains the following properties: <ul style="list-style-type: none"> ◦ <code>bay_id</code> object provides information about the bay IDs and contains the following properties: <ul style="list-style-type: none"> ▪ <code>slots</code> ([integer]): A list of all slot positions where a disk drive is installed
vsan_slots	[object]	A list of all slot positions where a disk drive is claimed for vSAN usage The <code>vsan_slots</code> object contains the following properties: <ul style="list-style-type: none"> • <code>capacity</code> ([object]): The <code>capacity</code> object contains information about slot drives claimed for capacity usage. • <code>cache</code> ([object]): The <code>cache</code> object contains information about slot drives claimed for cache usage. Both the <code>capacity</code> object and the <code>cache</code> object contain the following properties: <ul style="list-style-type: none"> • <code>bay_info_with_dg</code> (object): The <code>bay_info_with_dg</code> object contains the following properties: • <code>slots</code> ([object]): Provides a list of all slot and disk groups and contains the following properties: <ul style="list-style-type: none"> ◦ <code>slot</code> (integer): Slot number ◦ <code>diskgroup</code> (integer): Disk group ID

400 Bad request.

500 Internal server error.

GET /v1/system/initialize/nodes

Retrieves nodes discovered during auto-discovery.

URL

```
<VxRail IP address>/rest/vxm/v1/system/initialize/nodes
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported

VxRail Software	Supported versions
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.200 and later

Request

Authorization Not required

Response

200 Successful operation. Returns a list of discovered nodes and associated information.

Parameter	Type	Description
id	object	Identity information about the discovered node. The id object contains: <ul style="list-style-type: none"> • <code>appliance_id</code> (string): The PSNT of the node • <code>position</code> (integer): The node position in the chassis. <ul style="list-style-type: none"> ◦ For G Series appliances, this parameter indicates the position of the node in the chassis. A G Series appliance can fit up to 4 nodes in a chassis. ◦ For all other appliance models, the <code>position</code> value is 1. • <code>total_supported_nodes</code> (integer): Total number of supported nodes
esxi_version	string	The ESXi version of the node
vxm_system_version	string	The VxRail system version
evo_uuid	string	The UUID of the VxRail Manager VM
primary_ip	string	The IPv6 address of the first virtual NIC (vmk0) of the node (with a ":%eth1" suffix)
fallback_ip	string	Null. (For internal use only)
idrac_ip	string	The iDRAC IP address for the node
prerecoded_ip	string	Null. (For internal use only)
ip	string	The IPv4 address of the node
asset_tag	string	The asset tag of the node
serial_number	string	The serial number of the node
primary	boolean	Whether the node is the primary node
cluster_affinity	string	Null. (For internal use only)
rsa_public_key	string	RSA public key of the node
ssl_thumbprint	string	SSL thumbprint of the node

Parameter	Type	Description
ssh_thumbprint	string	SSH thumbprint of the node
uuid	object	<p>UUID information about the discovered node.</p> <p>The uuid object contains:</p> <ul style="list-style-type: none"> • host (string): The UUID of the node
hardware_profile	object	<p>Hardware profile of the discovered node, including the NIC profile, CPU configuration, and memory configuration</p> <p>The hardware_profile object contains:</p> <ul style="list-style-type: none"> • cpu (object): Information about the CPU <ul style="list-style-type: none"> ◦ cores (integer): Number of CPU cores in the host ◦ speed (number): CPU speed in MHz • memory (object): Information about the memory <ul style="list-style-type: none"> ◦ size (number): RAM size • nics (object): Information about the NICs <ul style="list-style-type: none"> ◦ name (string): Device name of the NIC ◦ speed (number): NIC speed in Mbps ◦ port_info (string): Physical port information for the NIC ◦ product_name (string): Manufacturer product name for the NIC • disks (object): Information about the disk drives <ul style="list-style-type: none"> ◦ ssd (boolean): Whether the disk drive is an SSD ◦ blocks (number): Block count of the disk drive ◦ block_size (number): Block size
discovered_date	integer	Null. (For internal use only)
configuration_state	string	<p>The configuration state of the node</p> <p>Supported values include UNCONFIGURED, CONFIGURING, CONFIGURED.</p>
model	string	Model number of the node
ip_set	object	Null. (For internal use only)
node_version_info	object	Null. (For internal use only)
vsan_repair_timeout_value	integer	The amount of time vSAN waits before rebuilding a disk object after a node is either in a failed state or in Maintenance Mode
violations	[string]	Messages about hardware profile violations
hw_filtering_skipped	boolean	For internal use only

Example:

```
[
  {
    "esxi_version": "7.0.1-16850804",
    "primary_ip": "",
    "fallback_ip": "",
    "idrac_ip": "20.11.216.13",
    "ip": "20.11.216.15",
    "asset_tag": "4VSLJ23-01-01",
```

```

    "serial_number": "4VSLJ23",
    "primary": true,
    "model": "VxRail D560F",
    "id": {
        "appliance_id": "4VSLJ230000000",
        "position": 1,
        "total_supported_nodes": 1
    },
    "uuid": {
        "host": "4c4c4544-0056-5310-804c-b4c04f4a3233"
    },
    "ssl_thumbprint":
"EA:F4:32:B0:54:41:35:71:C5:3B:E6:05:E3:D8:A2:2B:7E:43:D8:70",
    "ssh_thumbprint": "bVb1RoKb+lT69fvYxJAEvlvPYgeNzFnYpJNJHuXU/X8",
    "configuration_state": "UNCONFIGURED",
    "hardware_profile": {
        "nics": [
            {
                "name": "vmnic0",
                "speed": 1000,
                "port_info": "Slot: 1, Port: 1",
                "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
            },
            {
                "name": "vmnic1",
                "speed": 1000,
                "port_info": "Slot: 1, Port: 2",
                "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
            }
        ],
        "disks": [
            {
                "ssd": true,
                "blocks": 1562824368,
                "block_size": 512
            },
            {
                "ssd": true,
                "blocks": 3750748848,
                "block_size": 512
            }
        ],
        "cpu": {
            "cores": 22,
            "speed": 2095
        },
        "memory": {
            "size": 261758
        }
    }
}
]

```

404 The request resource was not found.

500 Unexpected internal server error.

GET /v2/system/initialize/nodes

Retrieves nodes discovered during auto-discovery (v2).

The V2 version of this API provides new `disk_group_config` and `storage_types` objects in the return schema.

URL

```
<VxRail IP address>/rest/vxm/v2/system/initialize/nodes
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization Not required

Response

200 Successful operation. Returns a list of the discovered nodes.

Parameter	Type	Description
version	string	Response version of the discovered nodes
nodes	[object]	Array of discovered nodes See the DiscoveredNodeInfoV4 table below for property descriptions

The nodes object uses the DiscoveredNodeInfoV4 schema described in the following table:

Parameter	Type	Description
id	object	Identity information about the discovered node The id object contains: <ul style="list-style-type: none">• <code>appliance_id</code> (string): The PSNT of the node• <code>position</code> (integer): The node position in the chassis.<ul style="list-style-type: none">◦ For G Series appliances, this parameter indicates the position of the node in the chassis. A G Series appliance can fit up to 4 nodes in a chassis.◦ For all other appliance models, the <code>position</code> value is 1.• <code>total_supported_nodes</code> (integer): Total number of supported nodes
<code>esxi_version</code>	string	The ESXi version of the node
<code>vxm_system_version</code>	string	The VxRail system version
<code>evo_uuid</code>	string	The UUID of the VxRail Manager VM
<code>primary_ip</code>	string	The IPv6 address of the first virtual NIC (vmk0) of the node (with a <code>":"eth1</code> suffix)
<code>idrac_ip</code>	string	The iDRAC IP address for the node

Parameter	Type	Description
ip	string	The IPv4 address of the node
asset_tag	string	The asset tag of the node
serial_number	string	The serial number of the node
primary	boolean	Whether the node is the primary node
rsa_public_key	string	RSA public key of the node
ssl_thumbprint	string	SSL thumbprint of the node
ssh_thumbprint	string	SSH thumbprint of the node
uuid	object	<p>UUID information about the discovered node.</p> <p>The uuid object contains:</p> <ul style="list-style-type: none"> • host (string): The UUID of the node
hardware_profile	object	<p>Hardware profile of the discovered node, including the NIC profile, CPU configuration, and memory configuration</p> <p>The hardware_profile object contains:</p> <ul style="list-style-type: none"> • cpu (object): Information about the CPU <ul style="list-style-type: none"> ◦ cores (integer): Number of CPU cores in the host ◦ speed (number): CPU speed in MHz • memory (object): Information about the memory <ul style="list-style-type: none"> ◦ size (number): RAM size • nics (object): Information about the NICs <ul style="list-style-type: none"> ◦ name (string): Device name of the NIC ◦ speed (number): NIC speed in Mbps ◦ port_info (string): Physical port information for the NIC ◦ product_name (string): Manufacturer product name for the NIC • disks (object): Information about the disk drives <ul style="list-style-type: none"> ◦ ssd (boolean): Whether the disk drive is an SSD ◦ blocks (number): Block count of the disk drive ◦ block_size (number): Block size
disk_group_config	object	<p>Configuration information for the disk group, including recommendations and options. This object is only returned for VxRail with 3rd Gen Intel Xeon Scalable processors.</p> <p>The disk_group_config object contains:</p> <ul style="list-style-type: none"> • recommendation (object): Information about the disk group type and description <ul style="list-style-type: none"> ◦ type (string): The type of disk group configuration ◦ description (string): Description of the disk group type • options ([object]): Array of disk group options <ul style="list-style-type: none"> ◦ type (string): The type of disk group configuration ◦ description (string): Description of the disk group type
storage_types	[string]	<p>Storage type of the node</p> <p>Supported values include Local, External, None, Unknown.</p>

Parameter	Type	Description
configuration_state	string	The configuration state of the node Supported values include UNCONFIGURED, CONFIGURING, CONFIGURED.
model	string	Model number of the node
violations	[string]	Messages about hardware profile violations

Example:

```
[
{
  "version": "1.0",
  "nodes": [
    {
      "esxi_version": "7.0.1-16850804",
      "vxm_system_version": "7.0.200-26924297",
      "evo_uuid": "564dd4b8-e64f-0148-1126-4af44484e134",
      "primary_ip": "",
      "idrac_ip": "20.11.216.13",
      "ip": "20.11.216.15",
      "asset_tag": "4VSLJ23-01-01",
      "serial_number": "4VSLJ23",
      "primary": true,
      "model": "VxRail D560F",
      "id": {
        "appliance_id": "4VSLJ2300000000",
        "position": 1,
        "total_supported_nodes": 1
      },
      "uuid": {
        "host": "4c4c4544-0056-5310-804c-b4c04f4a3233"
      },
      "ssl_thumbprint":
"EA:F4:32:B0:54:41:35:71:C5:3B:E6:05:E3:D8:A2:2B:7E:43:D8:70",
      "ssh_thumbprint": "bVblRoKb+lT69fvYxJAEvlvPYgeNzFnYpJNJHuXU/X8",
      "configuration_state": "UNCONFIGURED",
      "storage_types": [
        "Local"
      ],
      "hardware_profile": {
        "nics": [
          {
            "name": "vmnic0",
            "speed": 1000,
            "port_info": "Slot: 1, Port: 1",
            "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
          },
          {
            "name": "vmnic1",
            "speed": 1000,
            "port_info": "Slot: 1, Port: 2",
            "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
          },
          {
            "name": "vmnic2",
            "speed": 10000,
            "port_info": "Slot: 1, Port: 3",
            "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
          },
          {
            "name": "vmnic3",
            "speed": 10000,
            "port_info": "Slot: 1, Port: 4",
            "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
          }
        ]
      }
    }
  ]
}
```

```

        "disks": [
          {
            "ssd": true,
            "blocks": 1562824368,
            "block_size": 512
          },
          {
            "ssd": true,
            "blocks": 3750748848,
            "block_size": 512
          },
          {
            "ssd": true,
            "blocks": 3750748848,
            "block_size": 512
          },
          {
            "ssd": true,
            "blocks": 3750748848,
            "block_size": 512
          }
        ],
        "cpu": {
          "cores": 22,
          "speed": 2095
        },
        "memory": {
          "size": 261758
        }
      }
    ]
  }
]

```

404 The request resource was not found.

500 Unexpected internal server error.

POST /v1/system/initialize/customer-supplied-hosts

Retrieves a set of customer-supplied nodes from the management IP address and ESXi root password.

URL

```
<VxRail IP address>/rest/vxm/v1/system/initialize/customer-supplied-hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.200 and later

Request

Authorization Not required

Body parameters [CustomerSuppliedHostInfo]: (Required) Information needed to retrieve customer-supplied hosts.

Parameter	Type	Description
management_ip	string	(Required) User-specified management IP address of the host
current_root_password	string	(Optional) User-specified root account password for the host. The default ESXi host root password is set if this parameter is not provided.

Example:

```
[
  {
    "management_ip": "10.20.201.11",
    "current_root_password": "Password"
  }
]
```

Response

200

Successful operation. Returns a list of customer-supplied hosts and associated information.

Parameter	Type	Description
id	object	Identity information about the discovered node. The id object contains: <ul style="list-style-type: none">• appliance_id (string): The PSNT of the node• position (integer): The node position in the chassis.<ul style="list-style-type: none">◦ For G Series appliances, this parameter indicates the position of the node in the chassis. A G Series appliance can fit up to 4 nodes in a chassis.◦ For all other appliance models, the position value is 1.• total_supported_nodes (integer): Total number of supported nodes
esxi_version	string	The ESXi version of the node
vxm_system_version	string	The VxRail system version
evo_uuid	string	The UUID of the VxRail Manager VM
primary_ip	string	The IPv6 address of the first virtual NIC (vmk0) of the node (with a ":%eth1" suffix)
fallback_ip	string	Null. (For internal use only)
idrac_ip	string	The iDRAC IP address for the node
prerecoded_ip	string	Null. (For internal use only)
ip	string	The IPv4 address of the node
asset_tag	string	The asset tag of the node
serial_number	string	The serial number of the node
primary	boolean	Whether the node is the primary node

Parameter	Type	Description
cluster_affinity	string	Null. (For internal use only)
rsa_public_key	string	RSA public key of the node
ssl_thumbprint	string	SSL thumbprint of the node
ssh_thumbprint	string	SSH thumbprint of the node
uuid	object	<p>UUID information about the discovered node.</p> <p>The uuid object contains:</p> <ul style="list-style-type: none"> host (string): The UUID of the node
hardware_profile	object	<p>Hardware profile of the discovered node, including the NIC profile, CPU configuration, and memory configuration</p> <p>The hardware_profile object contains:</p> <ul style="list-style-type: none"> cpu (object): Information about the CPU <ul style="list-style-type: none"> cores (integer): Number of CPU cores in the host speed (number): CPU speed in MHz memory (object): Information about the memory <ul style="list-style-type: none"> size (number): RAM size nics (object): Information about the NICs <ul style="list-style-type: none"> name (string): Device name of the NIC speed (number): NIC speed in Mbps port_info (string): Physical port information for the NIC product_name (string): Manufacturer product name for the NIC disks (object): Information about the disk drives <ul style="list-style-type: none"> ssd (boolean): Whether the disk drive is an SSD blocks (number): Block count of the disk drive block_size (number): Block size
discovered_date	integer	Null. (For internal use only)
configuration_state	string	<p>The configuration state of the node</p> <p>Supported values include UNCONFIGURED, CONFIGURING, CONFIGURED.</p>
model	string	Model number of the node
ip_set	object	Null. (For internal use only)
node_version_info	object	Null. (For internal use only)
vsan_repair_timeout_value	integer	The amount of time vSAN waits before rebuilding a disk object after a node is either in a failed state or in Maintenance Mode
violations	[string]	Messages about hardware profile violations
hw_filtering_skipped	boolean	For internal use only

Example:

```
[
  {
    "esxi_version": "7.0.1-16850804",
    "primary_ip": "",
    "fallback_ip": "",
    "idrac_ip": "20.11.216.13",
    "ip": "20.11.216.15",
    "asset_tag": "4VSLJ23-01-01",
    "serial_number": "4VSLJ23",
    "primary": true,
    "model": "VxRail D560F",
    "id": {
      "appliance_id": "4VSLJ230000000",
      "position": 1,
      "total_supported_nodes": 1
    },
    "uuid": {
      "host": "4c4c4544-0056-5310-804c-b4c04f4a3233"
    },
    "ssl_thumbprint":
    "EA:F4:32:B0:54:41:35:71:C5:3B:E6:05:E3:D8:A2:2B:7E:43:D8:70",
    "ssh_thumbprint": "bVb1RoKb+lT69fvYxJAEvlvPYgeNzFnYpJNJHuXU/X8",
    "configuration_state": "UNCONFIGURED",
    "hardware_profile": {
      "nics": [
        {
          "name": "vmnic0",
          "speed": 1000,
          "port_info": "Slot: 1, Port: 1",
          "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
        },
        {
          "name": "vmnic1",
          "speed": 1000,
          "port_info": "Slot: 1, Port: 2",
          "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
        }
      ],
      "disks": [
        {
          "ssd": true,
          "blocks": 1562824368,
          "block_size": 512
        },
        {
          "ssd": true,
          "blocks": 3750748848,
          "block_size": 512
        }
      ],
      "cpu": {
        "cores": 22,
        "speed": 2095
      },
      "memory": {
        "size": 261758
      }
    }
  }
]
```

400 The request could not be understood by the server due to malformed syntax.

500 Unexpected internal server error.

POST /v2/system/initialize/customer-supplied-hosts

Retrieves a set of customer-supplied nodes from the management IP address and ESXi root password (v2).

URL

```
<VxRail IP address>/rest/vxm/v2/system/initialize/customer-supplied-hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization Not required

Body parameters [CustomerSuppliedHostInfo]: (Required) Information needed to retrieve customer-supplied hosts.

Parameter	Type	Description
management_ip	string	(Required) User-specified management IP address of the host
current_root_password	string	(Optional) User-specified root account password for the host. The default ESXi host root password is set if this parameter is not provided.

Example:

```
[
  {
    "management_ip": "10.20.201.11",
    "current_root_password": "Password"
  }
]
```

Response

200 Successful operation. Returns a list of customer-supplied hosts and associated information.

Parameter	Type	Description
version	string	Response version of the discovered nodes
nodes	[object]	Array of discovered nodes See the DiscoveredNodeInfoV4 table below for property descriptions

The nodes object uses the `DiscoveredNodeInfoV4` schema described in the following table:

Parameter	Type	Description
id	object	<p>Identity information about the discovered node</p> <p>The <code>id</code> object contains:</p> <ul style="list-style-type: none"> • <code>appliance_id</code> (string): The PSNT of the node • <code>position</code> (integer): The node position in the chassis. <ul style="list-style-type: none"> ◦ For G Series appliances, this parameter indicates the position of the node in the chassis. A G Series appliance can fit up to 4 nodes in a chassis. ◦ For all other appliance models, the <code>position</code> value is 1. • <code>total_supported_nodes</code> (integer): Total number of supported nodes
esxi_version	string	The ESXi version of the node
vxm_system_version	string	The VxRail system version
evo_uuid	string	The UUID of the VxRail Manager VM
primary_ip	string	The IPv6 address of the first virtual NIC (vmk0) of the node (with a ":%eth1" suffix)
idrac_ip	string	The iDRAC IP address for the node
ip	string	The IPv4 address of the node
asset_tag	string	The asset tag of the node
serial_number	string	The serial number of the node
primary	boolean	Whether the node is the primary node
rsa_public_key	string	RSA public key of the node
ssl_thumbprint	string	SSL thumbprint of the node
ssh_thumbprint	string	SSH thumbprint of the node
uuid	object	<p>UUID information about the discovered node.</p> <p>The <code>uuid</code> object contains:</p> <ul style="list-style-type: none"> • <code>host</code> (string): The UUID of the node
hardware_profile	object	<p>Hardware profile of the discovered node, including the NIC profile, CPU configuration, and memory configuration</p> <p>The <code>hardware_profile</code> object contains:</p> <ul style="list-style-type: none"> • <code>cpu</code> (object): Information about the CPU <ul style="list-style-type: none"> ◦ <code>cores</code> (integer): Number of CPU cores in the host ◦ <code>speed</code> (number): CPU speed in MHz • <code>memory</code> (object): Information about the memory <ul style="list-style-type: none"> ◦ <code>size</code> (number): RAM size • <code>nics</code> (object): Information about the NICs <ul style="list-style-type: none"> ◦ <code>name</code> (string): Device name of the NIC ◦ <code>speed</code> (number): NIC speed in Mbps ◦ <code>port_info</code> (string): Physical port information for the NIC ◦ <code>product_name</code> (string): Manufacturer product name for the NIC

Parameter	Type	Description
		<ul style="list-style-type: none"> disks (object): Information about the disk drives <ul style="list-style-type: none"> ssd (boolean): Whether the disk drive is an SSD blocks (number): Block count of the disk drive block_size (number): Block size
disk_group_config	object	<p>Configuration information for the disk group, including recommendations and options. This object is only returned for VxRail with 3rd Gen Intel Xeon Scalable processors.</p> <p>The disk_group_config object contains:</p> <ul style="list-style-type: none"> recommendation (object): Information about the disk group type and description <ul style="list-style-type: none"> type (string): The type of disk group configuration description (string): Description of the disk group type options ([object]): Array of disk group options <ul style="list-style-type: none"> type (string): The type of disk group configuration description (string): Description of the disk group type
storage_types	[string]	<p>Storage type of the node</p> <p>Supported values include Local, External, None, Unknown.</p>
configuration_state	string	<p>The configuration state of the node</p> <p>Supported values include UNCONFIGURED, CONFIGURING, CONFIGURED.</p>
model	string	Model number of the node
violations	[string]	Messages about hardware profile violations

Example:

```
{
  "version": "1.0",
  "nodes": [
    {
      "esxi_version": "7.0.1-16850804",
      "vxm_system_version": "7.0.200-26924297",
      "evo_uuid": "564dd4b8-e64f-0148-1126-4af44484e134",
      "primary_ip": "",
      "idrac_ip": "20.11.216.13",
      "ip": "20.11.216.15",
      "asset_tag": "4VSLJ23-01-01",
      "serial_number": "4VSLJ23",
      "primary": true,
      "model": "VxRail D560F",
      "id": {
        "appliance_id": "4VSLJ230000000",
        "position": 1,
        "total_supported_nodes": 1
      },
      "uuid": {
        "host": "4c4c4544-0056-5310-804c-b4c04f4a3233"
      },
      "ssl_thumbprint":
        "EA:F4:32:B0:54:41:35:71:C5:3B:E6:05:E3:D8:A2:2B:7E:43:D8:70",
      "ssh_thumbprint": "bVb1RoKb+lT69fvYxJAEvlvPYgeNzFnYpJNJHuXU/X8",
      "configuration_state": "UNCONFIGURED",
      "storage_types": [
        "Local"
      ],
      "hardware_profile": {
        "nics": [
          {

```



```

        "name": "vmnic0",
        "speed": 1000,
        "port_info": "Slot: 1, Port: 1",
        "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
    },
    {
        "name": "vmnic1",
        "speed": 1000,
        "port_info": "Slot: 1, Port: 2",
        "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
    },
    {
        "name": "vmnic2",
        "speed": 10000,
        "port_info": "Slot: 1, Port: 3",
        "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
    },
    {
        "name": "vmnic3",
        "speed": 10000,
        "port_info": "Slot: 1, Port: 4",
        "product_name": "Intel(R) Ethernet 10G 4P X550 rNDC"
    }
],
"disks": [
    {
        "ssd": true,
        "blocks": 1562824368,
        "block_size": 512
    },
    {
        "ssd": true,
        "blocks": 3750748848,
        "block_size": 512
    },
    {
        "ssd": true,
        "blocks": 3750748848,
        "block_size": 512
    },
    {
        "ssd": true,
        "blocks": 3750748848,
        "block_size": 512
    }
],
"cpu": {
    "cores": 22,
    "speed": 2095
},
"memory": {
    "size": 261758
}
}
]
}

```

400 The request could not be understood by the server due to malformed syntax.

500 Unexpected internal server error.

VxRail system status

The VxRail API supports checking the system status including health, heartbeat, available nodes, and job status.

GET /v1/system

Retrieves VxRail system information.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
 Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Successful operation.

Parameter	Type	Description
description	string	Description of the VxRail system
version	string	Software version of the VxRail
installed_time	integer	Time that the VxRail software was installed
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
network_connected	boolean	Whether the host is connected to the internet
vc_connected	boolean	Whether the vCenter is connected
upgrade_status	string	The upgrade status of the VxRail software

Parameter	Type	Description
		Supported values are <ul style="list-style-type: none"> LATEST, HAS_NEWER, DOWNLOADING, UPLOADING, CANCELLED, DOWNLOADED, ERR_DOWNLOAD, ERR_UPLOAD, UPLOADED, PROFILE_PRECHECKED, ERR_PROFILE_PRECHECKER, UPGRADE_PRECHECKING, ERR_UPGRADE_PRECHECKER, UPGRADING, UPGRADED, and ERR_UPGRADED.
installed_components	[object]	Information about software components installed in the VxRail system The <code>installed_components</code> object contains the following properties: <ul style="list-style-type: none"> <code>component</code> (string): Type of the installed software component <code>name</code> (string): Installed component name <code>description</code> (string): Installed component description <code>current_version</code> (string): Installed component version <code>upgrade_status</code> (string): Description of the upgrade status of the installed software component <code>baseline</code> (integer): Software version of the component at the time that the component was initially installed <code>installed_time</code> (string): The time that the software component was initially installed (in milliseconds) <code>[incompatibilities]</code> (string): A list of other software components that the installed component is incompatible with <code>multiple_version</code> (boolean): Whether the software component has different versions installed in other nodes in the cluster <code>baseline_drifted</code> (boolean): Whether the current configuration of the installed software component is different than the initial configuration <code>supported</code> (boolean): Whether the current version of the installed software component is supported
cluster_type	string	Cluster configuration of the VxRail system
number_of_host	integer	Number of hosts in the cluster
is_external_vc	boolean	Whether the vCenter is an external vCenter
logical_view_status	boolean	Whether the VxRail Manager logical view is enabled

Example:

```
{
  "description": "A hyper-converged infrastructure appliance that combines VMware compute, networking and storage into one single system for ease of deployment and management.",
  "version": "4.7.000-5969304",
  "installed_time": 1528275533,
  "health": "Critical",
  "network_connected": true,
  "vc_connected": true,
```

```

"upgrade_status": "LATEST",
"installed_components": [
  {
    "name": "Dell PTAgent",
    "description": "Dell PTAgent installed on ESXi",
    "current_version": "1.0-0",
    "upgrade_status": "LATEST",
    "baseline": "1.0-0",
    "installed_time": 1528275533,
    "incompatibilities": []
  },
  {
    "name": "VMware ESXi",
    "description": "VMware ESXi is the industry-leading, purpose-built bare-metal hypervisor. ESXi installs directly onto your physical server enabling it to be partitioned into multiple logical servers referred to as virtual machines.",
    "current_version": "6.5.0-5969303",
    "upgrade_status": "LATEST",
    "baseline": "6.5.0-5969303",
    "installed_time": 1528275533,
    "incompatibilities": [
      "VMware vCenter Server 4.0.0-7434890"
    ]
  },
  {
    "name": "VxRail Manager",
    "description": "The management component that orchestrates the deployment and management of VxRail system.",
    "current_version": "4.7.000-5969303",
    "upgrade_status": "LATEST",
    "baseline": "4.7.000-5969303",
    "installed_time": 1528275533,
    "incompatibilities": []
  },
  {
    "name": "VMware vCenter Server Appliance",
    "description": "Centralized visibility, proactive management and extensibility for VMware vSphere from a single console VMware vCenter Server provides a centralized platform for managing your VMware vSphere environments, so you can automate and deliver a virtual infrastructure with confidence.",
    "current_version": "6.5.0-5973321",
    "upgrade_status": "LATEST",
    "baseline": "6.5.0-5973321",
    "installed_time": 1528275533,
    "incompatibilities": []
  },
  {
    "name": "VxRail Manager VIB",
    "description": "VxRail Manager agent installed on ESXi.",
    "current_version": "4.5.0-5018707",
    "upgrade_status": "LATEST",
    "baseline": "4.5.0-5018707",
    "installed_time": 1528275533,
    "incompatibilities": []
  }
]
}

```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 404** The VxRail Manager system info is not found.
- 500** Unexpected internal server error.

GET /v2/system

Retrieves VxRail system information (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/system
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Successful operation.

Parameter	Type	Description
description	string	Description of the VxRail system
version	string	Software version of the VxRail
installed_time	integer	Time that the VxRail software was installed
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
network_connected	boolean	Whether the host is connected to the internet
vc_connected	boolean	Whether the vCenter is connected
upgrade_status	string	The upgrade status of the VxRail software Supported values are <ul style="list-style-type: none">LATEST, HAS_NEWER, DOWNLOADING, UPLOADING, CANCELLED, DOWNLOADED, ERR_DOWNLOAD, ERR_UPLOAD, UPLOADED, PROFILE_PRECHECKED, ERR_PROFILE_PRECHECKER, UPGRADE_PRECHECKING, ERR_UPGRADE_PRECHECKER, UPGRADING, UPGRADED, and ERR_UPGRADED.
installed_components	[object]	Information about software components installed in the VxRail system

Parameter	Type	Description
		<p>The <code>installed_components</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>component</code> (string): Type of the installed software component <code>name</code> (string): Installed component name <code>description</code> (string): Installed component description <code>current_version</code> (string): Installed component version <code>upgrade_status</code> (string): Description of the upgrade status of the installed software component <code>baseline</code> (integer): Software version of the component at the time that the component was initially installed <code>installed_time</code> (string): The time that the software component was initially installed (in milliseconds) <code>[incompatibilities]</code> (string): A list of other software components that the installed component is incompatible with <code>multiple_version</code> (boolean): Whether the software component has different versions installed in other nodes in the cluster <code>baseline_drifted</code> (boolean): Whether the current configuration of the installed software component is different than the initial configuration <code>supported</code> (boolean): Whether the current version of the installed software component is supported
<code>deployment_type</code>	[string]	Information about the deployment type of the VxRail system. Supported values include STANDARD, VSAN_2_NODE, STRETCHED_CLUSTER, DIMENSION, VCF, VVD.
<code>number_of_host</code>	integer	Number of hosts in the cluster
<code>is_external_vc</code>	boolean	Whether the vCenter is a customer supplied vCenter (external)
<code>logical_view_status</code>	boolean	Whether the VxRail Manager logical view is enabled

Example:

```
{
  "description": "A hyperconverged infrastructure appliance that
combines VMware compute, networking and storage into one single system
for ease of deployment and management.",
  "version": "4.7.000-5969304",
  "installed_time": 1528275533,
  "health": "Critical",
  "network_connected": true,
  "vc_connected": true,
  "upgrade_status": "LATEST",
  "deployment_type": [
    "STANDARD",
    "VCF"
  ],
  "number_of_host": 2,
  "is_external_vc": true,
  "logical_view_status": true,
  "installed_components": [
```

```

{
  "component": "DellPTAgent",
  "name": "Dell PTAgent",
  "description": "Dell PTAgent installed on ESXi",
  "current_version": "1.0-0",
  "upgrade_status": "LATEST",
  "baseline": "1.0-0",
  "installed_time": 1528275533,
  "incompatibilities": [],
  "multiple_version": true,
  "baseline_drifted": true,
  "supported": true
},
{
  "component": "Esx",
  "name": "VMware ESXi",
  "description": "VMware ESXi is the industry-leading, purpose-built bare-metal hypervisor. ESXi installs directly onto your physical server enabling it to be partitioned into multiple logical servers referred to as virtual machines.",
  "current_version": "6.5.0-5969303",
  "upgrade_status": "LATEST",
  "baseline": "6.5.0-5969303",
  "installed_time": 1528275533,
  "incompatibilities": [
    "VMware vCenter Server 4.0.0-7434890"
  ],
  "multiple_version": false,
  "baseline_drifted": true,
  "supported": true
},
{
  "component": "VxRail",
  "name": "VxRail Manager",
  "description": "The management component that orchestrates the deployment and management of VxRail system.",
  "current_version": "4.7.000-5969303",
  "upgrade_status": "LATEST",
  "baseline": "4.7.000-5969303",
  "installed_time": 1528275533,
  "multiple_version": false,
  "baseline_drifted": true,
  "incompatibilities": []
},
{
  "component": "Vcenter",
  "name": "VMware vCenter Server Appliance",
  "description": "Centralized visibility, proactive management and extensibility for VMware vSphere from a single console VMware vCenter Server provides a centralized platform for managing your VMware vSphere environments, so you can automate and deliver a virtual infrastructure with confidence.",
  "current_version": "6.5.0-5973321",
  "upgrade_status": "LATEST",
  "baseline": "6.5.0-5973321",
  "installed_time": 1528275533,
  "multiple_version": false,
  "baseline_drifted": true,
  "incompatibilities": []
},
{
  "component": "VxRailVib",
  "name": "VxRail Manager VIB",
  "description": "VxRail Manager agent installed on ESXi.",
  "current_version": "4.5.0-5018707",
  "upgrade_status": "LATEST",
  "baseline": "4.5.0-5018707",
  "installed_time": 1528275533,
  "incompatibilities": [],
  "multiple_version": false,
  "baseline_drifted": true,
  "supported": true
}

```

```
}  
]  
}
```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 404** The VxRail Manager system info is not found.
- 500** Unexpected internal server error.

GET /v3/system

Retrieves VxRail system information (version 3).

URL

```
https://<VxRail IP address>/rest/vxm/v3/system
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmGVuIHNLc2FtZQ==**

Response

- 200** Successful operation.

Parameter	Type	Description
description	string	Description of the VxRail system
version	string	Software version of the VxRail
installed_time	integer	Time that the VxRail software was installed
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
network_connected	boolean	Whether the host is connected to the internet
vc_connected	boolean	Whether the vCenter is connected

Parameter	Type	Description
upgrade_status	string	<p>The upgrade status of the VxRail software</p> <p>Supported values are</p> <ul style="list-style-type: none"> LATEST, HAS_NEWER, DOWNLOADING, UPLOADING, CANCELLED, DOWNLOADED, ERR_DOWNLOAD, ERR_UPLOAD, UPLOADED, PROFILE_PRECHECKED, ERR_PROFILE_PRECHECKER, UPGRADE_PRECHECKING, ERR_UPGRADE_PRECHECKER, UPGRADING, UPGRADED, and ERR_UPGRADED.
installed_components	[object]	<p>Information about software components installed in the VxRail system</p> <p>The installed_components object contains the following properties:</p> <ul style="list-style-type: none"> component (string): Type of the installed software component name (string): Installed component name description (string): Installed component description current_version (string): Installed component version upgrade_status (string): Description of the upgrade status of the installed software component baseline (integer): Software version of the component at the time that the component was initially installed installed_time (string): The time that the software component was initially installed (in milliseconds) [incompatibilities] (string): A list of other software components that the installed component is incompatible with multiple_version (boolean): Whether the software component has different versions installed in other nodes in the cluster baseline_drifted (boolean): Whether the current configuration of the installed software component is different than the initial configuration supported (boolean): Whether the current version of the installed software component is supported
deployment_type	[string]	Information about the deployment type of the VxRail system. Supported values include STANDARD, VSAN_2_NODE, STRETCHED_CLUSTER, DIMENSION, VCF, VVD.
number_of_host	integer	Number of hosts in the cluster
is_external_vc	boolean	Whether the vCenter is a customer supplied vCenter (external)
logical_view_status	boolean	Whether the VxRail Manager logical view is enabled
shared_storage	[object]	<p>Information about shared storage in the VxRail cluster</p> <p>The installed_components object contains the following properties:</p> <ul style="list-style-type: none"> name (string): The shared datastore name

Parameter	Type	Description
		<ul style="list-style-type: none"> datastore_id (string): The shared datastore ID. This property is supported in VxRail 7.0.240 software and later. type (string): The shared datastore type. Supported values include VSAN, VMFS, NFS, and VVOL. protocol (string): The storage protocol used by the host. Supported values include FC, SCSI, NFS, VSAN, and OTHER. is_primary (boolean): Whether the datastore is the primary datastore where VxRail Manager is deployed on it

Example:

```
{
  "description": "A hyperconverged infrastructure appliance that
combines VMware compute, networking and storage into one single system
for ease of deployment and management.",
  "version": "7.0.120-26639202",
  "installed_time": 1599014694234,
  "health": "Healthy",
  "network_connected": true,
  "vc_connected": true,
  "deployment_type": [
    "COMPUTE",
    "VCF"
  ],
  "number_of_host": 3,
  "is_external_vc": true,
  "logical_view_status": true,
  "installed_components": [
    {
      "component": "DellPTAgent",
      "name": "Dell PTAgent",
      "description": "Dell PTAgent installed on ESXi",
      "current_version": "1.0-0",
      "installed_time": 1598955454464,
      "multiple_version": true,
      "baseline_drifted": true,
      "supported": true
    },
    {
      "component": "Esx",
      "name": "VMware ESXi",
      "description": "VMware ESXi is the industry-leading, purpose-built
bare-metal hypervisor. ESXi installs directly onto your physical server
enabling it to be partitioned into multiple logical servers referred to
as virtual machines.",
      "current_version": "7.0.1-16555998",
      "installed_time": 1598955061248,
      "multiple_version": false,
      "baseline_drifted": true,
      "supported": true
    },
    {
      "component": "VxRail",
      "name": "VxRail Manager",
      "description": "The management component that orchestrates the
deployment and management of VxRail system.",
      "current_version": "7.0.120-26639202",
      "installed_time": 1528275533,
      "multiple_version": false,
      "baseline_drifted": true
    }
  ]
}
```

```

        "component": "Vcenter",
        "name": "VMware vCenter Server Appliance",
        "description": "Centralized visibility, proactive management and
extensibility for VMware vSphere from a single console VMware vCenter
Server provides a centralized platform for managing your VMware vSphere
environments, so you can automate and deliver a virtual infrastructure
with confidence.",
        "current_version": "7.0.1-16556018",
        "installed_time": 1598955323392,
        "multiple_version": false,
        "baseline_drifted": true
    },
    {
        "component": "VxRailVib",
        "name": "VxRail Manager VIB",
        "description": "VxRail Manager agent installed on ESXi.",
        "current_version": "7.0.120-16708660",
        "installed_time": 1598955323392,
        "multiple_version": false,
        "baseline_drifted": true,
        "supported": true
    }
],
"shared_storage": [
    {
        "name": "fc-storage",
        "datastore_id": "datastore-25",
        "type": "VMFS",
        "protocol": "FC",
        "is_primary": true
    },
    {
        "name": "vvol-iscsi-storage",
        "datastore_id": "datastore-26",
        "type": "VVOL",
        "protocol": "SCSI",
        "is_primary": false
    },
    {
        "name": "vvol-nfs-storage",
        "datastore_id": "datastore-27",
        "type": "VVOL",
        "protocol": "NFS",
        "is_primary": false
    },
    {
        "name": "VxRail-Virtual-SAN-
Cluster-4e23856c-5a0e-4692-8ac4-447f8e219bcd",
        "datastore_id": "datastore-28",
        "type": "VSAN",
        "protocol": "VSAN",
        "is_primary": false
    }
]
}

```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 404** The VxRail Manager system info is not found.
- 500** Unexpected internal server error.

GET /v4/system

Retrieves VxRail system information (version 4).

URL

```
https://<VxRail IP address>/rest/vxm/v4/system
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Successful operation.

Parameter	Type	Description
description	string	Description of the VxRail system
version	string	Software version of the VxRail
installed_time	integer	Time that the VxRail software was installed
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
network_connected	boolean	Whether the host is connected to the internet
vc_connected	boolean	Whether the vCenter is connected
upgrade_status	string	The upgrade status of the VxRail software Supported values are: <ul style="list-style-type: none">CANCELLED, DOWNLOADING, DOWNLOADED, ERR_DOWNLOAD, ERR_PROFILE_PRECHECKER, ERR_UPGRADED, ERR_UPGRADE_PRECHECKER, ERR_UPLOAD, HAS_NEWER, LATEST, PROFILE_PRECHECKED, UPGRADED, UPGRADE_PRECHECKING, UPGRADING, UPLOADED and UPLOADING.
installed_components	[object]	Information about software components installed in the VxRail system

Parameter	Type	Description
		<p>The <code>installed_components</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>component</code> (string): Type of the installed software component <code>name</code> (string): Installed component name <code>description</code> (string): Installed component description <code>current_version</code> (string): Installed component version <code>upgrade_status</code> (string): Description of the upgrade status of the installed software component <code>baseline</code> (integer): Software version of the component at the time that the component was initially installed <code>installed_time</code> (string): The time that the software component was initially installed (in milliseconds) <code>[incompatibilities]</code> (string): A list of other software components that the installed component is incompatible with <code>multiple_version</code> (boolean): Whether the software component has different versions installed in other nodes in the cluster <code>baseline_drifted</code> (boolean): Whether the current configuration of the installed software component is different than the initial configuration <code>supported</code> (boolean): Whether the current version of the installed software component is supported
<code>deployment_type</code>	[string]	Information about the deployment type of the VxRail system. Supported values include STANDARD, VSAN_2_NODE, STRETCHED_CLUSTER, DIMENSION, VCF, VVD.
<code>cluster_host_count</code>	integer	Number of hosts in the cluster
<code>satellite_host_count</code>	integer	Number of VxRail managed satellite nodes in the cluster
<code>is_external_vc</code>	boolean	Whether the vCenter is a customer supplied vCenter (external)
<code>logical_view_status</code>	boolean	Whether the VxRail Manager logical view is enabled
<code>shared_storage</code>	[object]	<p>Information about shared storage in the VxRail cluster</p> <p>The <code>installed_components</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>name</code> (string): The shared datastore name <code>datastore_id</code> (string): The shared datastore ID. This property is supported in VxRail 7.0.240 software and later. <code>type</code> (string): The shared datastore type. Supported values include VSAN, VMFS, NFS, and VVOL. <code>protocol</code> (string): The storage protocol used by the host. Supported values include FC, SCSI, NFS, VSAN, and OTHER.

Parameter	Type	Description
		<ul style="list-style-type: none"> is_primary (boolean): Whether the datastore is the primary datastore where VxRail Manager is deployed on it

Example:

```
{
  "description": "A hyperconverged infrastructure appliance that
combines VMware compute, networking and storage into one single system
for ease of deployment and management.",
  "version": "7.0.120-26639202",
  "installed_time": 1599014694234,
  "health": "Healthy",
  "network_connected": true,
  "vc_connected": true,
  "deployment_type": [
    "COMPUTE",
    "VCF"
  ],
  "number_of_host": 3,
  "is_external_vc": true,
  "logical_view_status": true,
  "installed_components": [
    {
      "component": "DellPTAgent",
      "name": "Dell PTAgent",
      "description": "Dell PTAgent installed on ESXi",
      "current_version": "1.0-0",
      "installed_time": 1598955454464,
      "multiple_version": true,
      "baseline_drifted": true,
      "supported": true
    },
    {
      "component": "Esx",
      "name": "VMware ESXi",
      "description": "VMware ESXi is the industry-leading, purpose-built
bare-metal hypervisor. ESXi installs directly onto your physical server
enabling it to be partitioned into multiple logical servers referred to
as virtual machines.",
      "current_version": "7.0.1-16555998",
      "installed_time": 1598955061248,
      "multiple_version": false,
      "baseline_drifted": true,
      "supported": true
    },
    {
      "component": "VxRail",
      "name": "VxRail Manager",
      "description": "The management component that orchestrates the
deployment and management of VxRail system.",
      "current_version": "7.0.120-26639202",
      "installed_time": 1528275533,
      "multiple_version": false,
      "baseline_drifted": true
    },
    {
      "component": "Vcenter",
      "name": "VMware vCenter Server Appliance",
      "description": "Centralized visibility, proactive management and
extensibility for VMware vSphere from a single console VMware vCenter
Server provides a centralized platform for managing your VMware vSphere
environments, so you can automate and deliver a virtual infrastructure
with confidence.",
      "current_version": "7.0.1-16556018",
      "installed_time": 1598955323392,
      "multiple_version": false,
    }
  ]
}
```

```

        "baseline_drifted": true
    },
    {
        "component": "VxRailVib",
        "name": "VxRail Manager VIB",
        "description": "VxRail Manager agent installed on ESXi.",
        "current_version": "7.0.120-16708660",
        "installed_time": 1598955323392,
        "multiple_version": false,
        "baseline_drifted": true,
        "supported": true
    }
],
"shared_storage": [
    {
        "name": "fc-storage",
        "datastore_id": "datastore-25",
        "type": "VMFS",
        "protocol": "FC",
        "is_primary": true
    },
    {
        "name": "vvol-iscsi-storage",
        "datastore_id": "datastore-26",
        "type": "VVOL",
        "protocol": "SCSI",
        "is_primary": false
    },
    {
        "name": "vvol-nfs-storage",
        "datastore_id": "datastore-27",
        "type": "VVOL",
        "protocol": "NFS",
        "is_primary": false
    },
    {
        "name": "VxRail-Virtual-SAN-Cluster-4e23856c-5a0e-4692-8ac4-447f8e219bcd",
        "datastore_id": "datastore-28",
        "type": "VSAN",
        "protocol": "VSAN",
        "is_primary": false
    }
]
}

```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 404** The VxRail Manager system info is not found.
- 500** Unexpected internal server error.

GET /v1/system-health (DEPRECATED)

Get the system health of the cluster.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system-health
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx Deprecated in 4.5.3xx and later
VxRail Software 4.7.x	Deprecated in all 4.7.x versions
VxRail Software 7.0.x	Deprecated in all 7.0.x versions

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 The system health has been successfully returned.

```
{  
  "string": "Healthy"  
}
```

The possible responses include "Healthy", "Critical", "Error", and "Warning".

401 Username or password is not recognized.

403 The user is not allowed due to insufficient privilege.

404 No system health information is found.

500 Failed with internal errors.

GET /v1/support/heartbeat

Retrieves the last heartbeat status and system configuration.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/heartbeat
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Heartbeat status and data successfully returned.
Example:

```
{
  "id": "1,",
  "status": "SUCCESS,",
  "target": "Appliance-EMCVB150600013,",
  "beginTime": "2017-11-17T05:18:33.039Z,",
  "endTime": "2017-11-17T05:18:33.098Z,",
  "message": "OK,",
  "data": "the content of heartbeat syr configuration"
}
```

401 Username or password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Unexpected internal server error.
DarksiteForbidden:

This feature may be unavailable because VxRail Manager is disconnected from the Internet.

GET /v1/callhome/mode

Retrieves the call home mode.

URL

`https://<VxRail IP address>/rest/vxm/v1/callhome/mode`

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Successful operation.

Parameter	Type	Description
is_muted	boolean	Whether call home mode is muted or unmuted Supported values are true and false. True indicates that call home is muted.

401 Username or password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Failed with internal errors.

PUT /v1/callhome/mode

Changes the call home mode status.

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/mode
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameter CallhomeSettingsSpec: (Required) Sets whether call home mode is muted or unmuted.

Parameter	Type	Description
is_muted	boolean	(Required) Whether call home mode is muted or unmuted Supported values are true and false. True indicates that call home is muted.

Example:

```
{
  "is_muted": false
}
```

Response

200	Operation successful.
400	The call home parameters are not valid.
401	Username/password is not recognized.
403	The user is not allowed due to insufficient privilege.
500	Failed with internal errors.

GET /v1/callhome/info

Retrieves information about the call home servers (version 1).

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/info
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx through 4.7.3xx Deprecated in 4.7.410 and later
VxRail Software 7.0.x	Not supported

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Call home operation status successfully returned.

Parameter	Type	Description
status	string	Status of the SRS server

Parameter	Type	Description
		Supported values are deploying, deployed, registering, and registered.
integrated	boolean	Whether the SRS server is integrated (internal) or external
ip_list	[IP] objects	Provides a list of SRS addresses with associated information. IP objects contain the following: <ul style="list-style-type: none"> ip (string): IP address of the SRS server primary (boolean): Whether the SRS server is primary or not version (string): SRS version upgradeRequestId (string): Request ID, used for internal SRS upgrades only
site_id	string	Site ID for the SRS server

Example:

```
{
  "status": "registered",
  "integrated": true,
  "site_id": "11145366",
  "ip_list": [
    {
      "ip": "10.62.81.111",
      "primary": true,
      "version": "3.36.00.10"
    }
  ]
}
```

401 Unauthorized request.

403 Forbidden request.

404 Resource not found.
CallhomeNotFound:

```
{
  "errorCode": 4,
  "message": "No callhome information found. Callhome may not be registered."
}
```

500 Failed with internal errors.

GET /v2/callhome/info

Retrieves information about the call home servers (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/callhome/info
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.410 and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Operation successful.

Parameter	Type	Description
status	string	Status of the SRS server Supported values are deploying, deployed, registering, and registered.
integrated	boolean	Whether the SRS server is integrated (internal) or external
address_list	[Address] objects	Provides a list of SRS addresses with associated information. Address objects contain the following: <ul style="list-style-type: none">• address (string): IP address or FQDN of the SRS server• primary (boolean): Whether the SRS server is primary or not• version (string): SRS version• upgradeRequestId (string): Request ID, used for internal SRS upgrades only
site_id	string	Site ID for the SRS server

Example:

```
{
  "status": "registered",
  "integrated": true,
  "site_id": "11145366",
  "address_list": [
    {
      "address": "esrs.testdomain",
      "primary": true,
      "version": "3.36.00.10"
    }
  ]
}
```

401 Unauthorized request.

403 Forbidden request.

404 Resource not found.

CallhomeNotFound:

```
{
  "errorCode": 4,
  "message": "No callhome information found. Callhome may not be
registered."
}
```

500 Failed with internal errors.

POST /v1/callhome/deployment

Deploys an internal call home server (version 1).

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/deployment
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx through 4.7.3xx Deprecated in 4.7.410 and later
VxRail Software 7.0.x	Not supported

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body parameter CallHomeDeploySpec: (Required) Information about the SRS to be deployed

Parameter	Type	Description
admin_pwd	string	(Required) Administrator password for accessing the SRS server
company	string	(Required) Company name
email	string	(Required) Email address of the support account
first_name	string	First name of the support administrator
ip	string	(Required) IP address of the SRS server
last_name	string	(Required) Last name of the support administrator
phone	string	(Required) Phone number of the support administrator
root_pwd	string	(Required) Root password for accessing the SRS server
site_id	string	(Required) Site ID for the SRS server

Example:

```
{
  "admin_pwd": "Testvxrail123!",
  "company": "EMC CORP-PARTNER",
  "email": "vxrail.test@emconlinesupport.com",
  "first_name": "VxRail",
  "ip": "10.62.83.114",
  "last_name": "emc",
  "phone": "1508435-1000",
  "root_pwd": "password123!",
  "site_id": 11145366
}
```

Response

202

The request has been accepted for processing.

AcceptedRequestInfo:

```
{
  description:      Accepted request.
  request_id       string
                   example: 5ffe7062-a590-45b8-a172-8d2cf119562e
                   The detail message about the accepted request.
}
```

Example:

```
{
  "request_id": "5ffe7062-a590-45b8-a172-8d2cf119562e"
}
```

400

Bad request.

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Unexpected internal error.

InvalidAdminPassword:

```
{
  "errorCode": 11,
  "message": "Invalid admin account's password. Please refer to SRS
password specification and try again."
}
```

AlreadyRegistered:

```
{
  "errorCode": 16,
  "message": "There was an external SRS registered already."
}
```

IpFormatError:

```
{
  "errorCode": 6,
  "message": "IP format is not valid."
}
```

IpNetworkAddress:

```
{
  "errorCode": 9,
  "message": "Network IP address is not supported."
}
```

IpBroadcastAddress:

```
{
  "errorCode": 10,
  "message": "Broadcast IP address is not supported."
}
```

IpPingableError:

```
{
  "errorCode": 8,
  "message": "This IP is not available, please try another one."
}
```

MandatoryAttrsMissing:

```
{
  "errorCode": 17,
  "message": "Mandatory attributes missing. Please check if the
mandatory attributes of the request provided."
}
```


POST /v2/callhome/deployment

Deploys an internal call home server (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/callhome/deployment
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.410 and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body paramters CallHomeDeploySpec: (Required) Information about the SRS to be deployed

Parameter	Type	Description
address	string	(Required) IP address or FQDN of the SRS server
admin_pwd	string	(Required) Administrator password for accessing the SRS server
company	string	(Required) Company name
email	string	(Required) Email address of the support account
first_name	string	First name of the support administrator
last_name	string	(Required) Last name of the support administrator
phone	string	(Required) Phone number of the support administrator
root_pwd	string	(Required) Root password for accessing the SRS server
site_id	string	(Required) Site ID for the SRS server

Example:

```
{
  "address": "10.62.83.114",
  "site_id": 12345678,
  "first_name": "VxRail",
  "last_name": "emc",
  "email": "vxrail.test@emconlinesupport.com",
  "phone": 12345678,
  "company": "EMC",
  "root_pwd": "testpassword",
  "admin_pwd": "testpassword"
}
```

Response

202

The request has been accepted for processing.

Parameter	Type	Description
request_id	string	ID message about the accepted request

Example:

```
{
  "request_id": "5ffe7062-a590-45b8-a172-8d2cf119562e"
}
```

400

The request could not be understood by the server due to malformed syntax.

Parameter	Type	Description
error_code	integer(\$int32)	Associated error code
message	string	Detailed message about the error

401

The request requires user authentication.

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

The server understood the request, but is refusing to fulfill it.

Example:

```
{
  "message": "Access Denied."
}
```

500

Unexpected internal error.

InvalidAdminPassword:

```
{
  "errorCode": 11,
  "message": "Invalid admin account's password. Please refer to SRS password specification and try again."
}
```

AlreadyRegistered:

```
{
  "errorCode": 16,
  "message": "There was an external SRS registered already."
}
```

IpFormatError:

```
{
  "errorCode": 6,
  "message": "IP format is not valid."
}
```

IpNetworkAddress:

```
{
  "errorCode": 9,
  "message": "Network IP address is not supported."
}
```

IpBroadcastAddress:

```
{
  "errorCode": 10,
  "message": "Broadcast IP address is not supported."
}
```

IpPingableError:

```
{
  "errorCode": 8,
  "message": "This IP is not available, please try another one."
}
```

MandatoryAttrsMissing:

```
{
  "errorCode": 17,
  "message": "Mandatory attributes missing. Please check if the
mandatory attributes of the request provided."
}
```

POST /v1/callhome/access-code

Generates an access code to activate the internal call home server.

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/access-code
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization

(Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

 **NOTE:** After this API completes successfully, an access code is emailed to the address specified for your support account.

Response

200 Operation successful.

401 Unauthorized request.

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403 Forbidden request.

Example:

```
{
  "message": "Access Denied."
}
```

500 Unexpected internal error.

CallhomeNotActivated

```
{
  "errorCode": 2,
  "message": "Could not generate access code, please deploy an ESRS VE
and wait for activation start."
}
```

POST /v1/callhome/internal/register

Activates and registers an internal call home server.

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/internal/register
```

Version support


VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcmGVuIHNLc2FtZQ==**

Body parameters AccessCodeSpec: (Required) Access code for activating an internal call home server

 **NOTE:** To generate a new access code, see `POST /v1/callhome/access-code`.

Parameter	Type	Description
access_code	string	(Required) Access code to activate an internal call home server

Example:

```
{
  "access_code": 11145366
}
```

Response

202

The request has been accepted for processing, but the processing has not been completed.

```
{
  "request_id": "SBI_11"
}
```

400

Bad request.

401

Unauthorized request.

403

Forbidden request.

500

Unexpected internal error.

CallhomeNotDeployed:

```
{
  "errorCode": 12,
  "message": "Could not register internal callhome at this time.
Callhome not deployed yet, please deploy internal first."
}
```

POST /v1/callhome/external/register

Registers the external call home servers (version 1).

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/external/register
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx through 4.7.3xx Deprecated in 4.7.410 and later
VxRail Software 7.0.x	Not supported

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters ExternalCallhomeRegisterSpec: (Required) Information about each of the external call home servers to be registered

Parameter	Type	Description
site_id	string	(Required) Site ID for the SRS server
ip_list	[string]	(Required) Array of IP addresses for each of the SRS servers
support_username	string	Username for the support account If the support account is not logged in, providing the support username is required.
support_pwd	string	Password for the support account If the support account is not logged in, providing the support password is required.

Response

200 Operation successful.

Parameter	Type	Description
ip_list	[IP] objects	Provides a list of SRS addresses with associated information. IP objects contain the following: <ul style="list-style-type: none">ip (string): IP address of the SRS serverprimary (boolean): Whether the SRS server is primary or notsuccess (boolean): Whether the registration was successful
site_id	string	Site ID for the SRS server

Example:

```
{
  "site_id": "11145366",
  "ip_list": [
    {
      "ip": "10.62.81.111",
      "success": true,
      "primary": true
    },
    {
      "ip": "10.62.81.112",
      "success": true,
      "primary": false
    }
  ]
}
```

400 Bad request

401 Unauthorized request.
403 Forbidden request.
500 Unexpected internal error.

SupportNotLogIn:

```
{
  "errorCode": 3,
  "message": "Support account not log in."
}
```

AlreadyRegistered:

```
{
  "errorCode": 15,
  "message": "There is an internal ESRS registered already."
}
```

IpFormatError:

```
{
  "errorCode": 6,
  "message": "IP format is not valid."
}
```

IpNotPingable:

```
{
  "errorCode": 7,
  "message": "External ESRS 10.62.85.1 cannot be connected. Please check if the ESRS VE is powered on or if there is any network problem."
}
```

SiteIdError:

```
{
  "errorCode": 13,
  "message": "The Site ID is not in the accepted range."
}
```

DeviceNotSupport:

```
{
  "errorCode": 14,
  "message": "Failed to register VxRail to ESRS. Please check that VxRail is in the support list."
}
```

POST /v2/callhome/external/register

Registers external call home servers (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/callhome/external/register
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.410 and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body parameters ExternalCallhomeRegisterSpec: (Required) Information about each of the external call home servers to be registered

Parameter	Type	Description
site_id	string	(Required) Site ID for the SRS server
address_list	[string]	(Required) Array of IP address or FQDN for each of the SRS servers
support_username	string	Username for the support account If the support account is not logged in, providing the support username is required.
support_pwd	string	Password for the support account If the support account is not logged in, providing the support password is required.

Example:

```
{
  "site_id": "11145366",
  "address_list": [
    "192.168.106.121",
    "esrs.testdomain"
  ],
  "support_username": "vxrail.test@emconlinesupport.com",
  "support_pwd": "password"
}
```

Response

200 Operation successful

Parameter	Type	Description
address_list	[Address] objects	Provides a list of SRS addresses with associated information Address objects contain the following: <ul style="list-style-type: none">• address (string): IP address or FQDN of the SRS server• primary (boolean): Whether the SRS server is primary or not• success (boolean): Whether the registration was successful

Parameter	Type	Description
site_id	string	Site ID for the SRS server

Example:

```
{
  "site_id": "11145366",
  "address_list": [
    {
      "address": "10.62.81.111",
      "success": true,
      "primary": true
    },
    {
      "address": "esrs.testdomain",
      "success": true,
      "primary": false
    }
  ]
}
```

400

The request could not be understood by the server due to malformed syntax.

Parameter	Type	Description
error_code	integer	Provides associated error code
message	string	Provides a detailed message about the error

401

The request requires user authentication.

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

The server understood the request, but is refusing to fulfill it.

Example:

```
{
  "message": "Access Denied."
}
```

500

Unexpected internal error.

SupportNotLogIn:

```
{
  "errorCode": 3,
  "message": "Support account not log in."
}
```

AlreadyRegistered:

```
{
  "errorCode": 15,
  "message": "There is an internal SRS registered already."
}
```

IpFormatError:

```
{
  "errorCode": 6,
  "message": "IP format is not valid."
}
```

IpNotPingable:

```
{
  "errorCode": 7,
  "message": "External ESRS 10.62.85.1 cannot be connected. Please check if the SRS VE is powered on or if there is any network problem."
}
```

SiteIdError:

```
{
  "errorCode": 13,
  "message": "The Site ID is not in the accepted range."
}
```

DeviceNotSupport:

```
{
  "errorCode": 14,
  "message": "Failed to register VxRail to SRS. Please check that VxRail is in the support list."
}
```

POST /v1/callhome/internal/upgrade

Upgrades the internal SRS software.

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/internal/upgrade
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.510 and later
VxRail Software 7.0.x	Not supported

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters SRSUpgradeSpec: (Required) Parameters for activating a software upgrade on the internal SRS server

Parameter	Type	Description
admin_pwd	string	(Required) Administrator password for accessing the internal SRS server
root_pwd	string	(Required) Root password for accessing the internal SRS server

Example:

```
{
  "admin_pwd": "TestSrs123!",
  "root_pwd": "TestSrs123!"
}
```

Response

202

The request has been accepted for processing.

Parameter	Type	Description
request_id	string	ID message about the accepted request

Example:

```
{
  "request_id": "SRS_request_001"
}
```

400

The request could not be understood by the server due to malformed syntax.

Parameter	Type	Description
error_code	integer	Associated error code
message	string	Detailed message about the error

401

The request requires user authentication.

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

The server understood the request, but is refusing to fulfill it.

Example:

```
{
  "message": "Access Denied."
}
```

409

Conflict request.

Example:

```
{
  "errorCode": 22,
  "message": "SRS upgrade is already running."
}
```

Unexpected internal error.

InvalidAdminPassword:

```
{
  "errorCode": 11,
  "message": "Invalid admin account's password. Please refer to ESRS
password specification and try again."
}
```

AlreadyRegistered:

```
{
  "errorCode": 16,
  "message": "There was an external ESRS registered already."
}
```

IpFormatError:

```
{
  "errorCode": 6,
  "message": "IP format is not valid."
}
```

IpNetworkAddress:

```
{
  "errorCode": 9,
  "message": "Network IP address is not supported."
}
```

IpBroadcastAddress:

```
{
  "errorCode": 10,
  "message": "Broadcast IP address is not supported."
}
```

IpPingableError:

```
{
  "errorCode": 8,
  "message": "This IP is not available, please try another one."
}
```

MandatoryAttrsMissing:

```
{
  "errorCode": 17,
  "message": "Mandatory attributes missing. Please check if the
mandatory attributes of the request provided."
}
```

DELETE /v1/callhome/disable

Unregisters the call home servers and deletes the SRS VE virtual machine if it exists.

URL

```
https://<VxRail IP address>/rest/vxm/v1/callhome/disable
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

- 200

Operation successful.
- 401

Unauthorized request.
UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```
- 403

Forbidden request.
ForbiddenRequestInfo

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```
- 500

Internal server error.

GET /v1/telemetry/tier

Retrieves the currently set telemetry tier.

URL

```
https://<VxRail IP address>/rest/vxm/v1/telemetry/tier
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Successful operation.
TelemetryTierConfigResponseBean

```
{
  description:      Successful operation.
  level             string
                   example: BASIC
                   Enum: LIGHT, BASIC, ADVANCED, NONE
}
```

Example:

```
{
  "level": "BASIC"
}
```

400 Bad request.

401 Unauthorized request.
UnauthorizedRequestInfo

```
{
  description:      Unauthorized request.
  message           string
                   example: The provided vCenter credentials are not valid.
                           The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

POST /v1/telemetry/tier

Sets the telemetry tier.

URL

```
https://<VxRail IP address>/rest/vxm/v1/telemetry/tier
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHhlc2FtZQ==**

Body parameters TelemetryTierConfigRequest: (Required) The telemetry tier level to be set.

```
{
  description:      telemetry level to be set.
  level            string
                  telemetry level to be set.
                  Enum: LIGHT, BASIC, ADVANCED, NONE
}
```

Example:

```
{
  "level": "LIGHT"
}
```

Response

200 Successful operation.

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403 Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/requests

Queries all of the requests.

URL

```
https://<VxRail IP address>/rest/vxm/v1/requests
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Query parameter \$filter: Optional query conditions for requests.
The following operators are supported: equal (eq), in (in), not equal (ne), greater than (gt), less than (lt), greater or equal to (ge), less or equal to (le) on the following fields: id, state, owner, target, step.
Example:

```
$filter=owner eq 'LOG_BUNDLE' and state in ('COMPLETED','IN_PROGRESS')
```

Response

200 Successful operation.

Parameter	Type	Description
id	string	Asynchronous (long-running) requests return a <code>request_id</code> which can be used to retrieve the status of execution.
owner	string	The owner of the request, which is typically the user who issued the original request
state	string	The current state of the execution Supported values include IN_PROGRESS, COMPLETED, and FAILED.
error	string	The error message if the execution state is ERROR
progress	integer	The progress of the current execution, ranging 0–100
start_time	integer	The start time of the current execution
end_time	integer	The end time of the current execution
target	string	The target of the current execution
step	string	The current step if the original request has been separated into multiple steps
detail	string	The detailed status of a specific application
extension	string	Application-specific status information

Example:

```
{
  "id": "string",
  "owner": "string",
  "state": "IN_PROGRESS",
  "error": "string",
  "progress": 0,
  "start_time": 0,
  "end_time": 0,
  "target": "string",
  "step": "string",
  "detail": "string",
  "extension": "string"
}
```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 500** Unexpected internal server error.

GET /v1/requests/<requestID>

Retrieves the operation status and progress report of the specified request.

URL

```
https://<VxRail IP address>/rest/vxm/v1/requests/<requestID>
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

- Authorization** (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**
- Path parameter** requestID: (Required) The request ID of any long running operation.

Response

- 200** Successful operation.

Parameter	Type	Description
id	string	Asynchronous (long-running) requests return a <code>request_id</code> which can be used to retrieve the status of execution.
owner	string	The owner of the request, which is typically the user who issued the original request
state	string	The current state of the execution Supported values include IN_PROGRESS, COMPLETED, and FAILED.
error	string	The error message if the execution state is ERROR
progress	integer	The progress of the current execution, ranging 0–100
start_time	integer	The start time of the current execution
end_time	integer	The end time of the current execution
target	string	The target of the current execution
step	string	The current step if the original request has been separated into multiple steps
detail	string	The detailed status of a specific application
extension	string	Application-specific status information

Example:

```
{
  "id": "string",
  "owner": "string",
  "state": "IN_PROGRESS",
  "error": "string",
  "progress": 0,
  "start_time": 0,
  "end_time": 0,
  "target": "string",
  "step": "string",
  "detail": "string",
  "extension": "string",
}
```

```
"extension": "string"
}
```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 404** The provided ID was not found.
- 500** Unexpected internal server error.

GET /v1/system/internet-mode

Retrieves VxRail Manager system network status.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/internet-mode
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwYVUHNlc2FtZQ==**

Response

- 200** Successful operation.

Parameter	Type	Description
is_dark_site	boolean	Whether the system network is a dark site

Example:

```
{
  "is_dark_site": false
}
```

- 401** Username or password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 500** Unexpected internal server error.

PUT /v1/system/internet-mode

Updates the VxRail Manager system network parameters.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/internet-mode
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters DarkSiteSettingsSpec: (Required) Whether the system network is a dark site or not.

Parameter	Type	Description
is_dark_site	boolean	Whether the system network is a dark site

Example:

```
{
  "is_dark_site": false
}
```

Response

200	Successful operation.
400	Invalid request parameters.
401	Username or password is not recognized.
403	The user is not allowed due to insufficient privilege.
500	Unexpected internal server error.

GET /v1/system/proxy

Retrieves the VxRail Manager system proxy settings.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/proxy
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Successful operation.

Parameter	Type	Description
server	string	IP address or host name of the proxy server
port	integer	Port of the proxy server
username	string	Username for the proxy server
type	string	Type of proxy server Supported types are HTTP and SOCKS
socks_version	integer	Version of the Socks proxy server. This parameter is provided if the proxy type is SOCKS.

Example:

```
{
  "server": "192.168.106.108",
  "port": 3128,
  "username": "",
  "type": "SOCKS",
  "socks_version": 5
}
```

401 Username or password is not recognized.

404 Resource not found.

```
{
  "message": "Could not find proxy settings."
}
```

403 The user is not allowed due to insufficient privilege.

500 Unexpected internal server error.

NetworkTimeout:

```
Network connection timed out.
```

General Description:

```
Unexpected internal server error.
```

POST /v1/system/proxy

Enables VxRail Manager system proxy settings.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/proxy
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters ProxySettingsSpec: (Required) Configurable parameters for the proxy server.

Parameter	Type	Description
esrs_pwd	string	Password for the Secure Remote Services If internal SRS is enabled, the password is required.
proxy_spec	object	Settings for the proxy server proxy_spec objects contain the following: <ul style="list-style-type: none">server (string): IP address or hostname of the proxy server (Required)port (integer): Port of the proxy server (Required)

Parameter	Type	Description
		<ul style="list-style-type: none"> type (string): Type of proxy server (Required) Supported types are HTTP and SOCKS socks_version (integer): Version of the Socks proxy server. This parameter is required if the proxy type is SOCKS. username (string): Username of the proxy server pwd (string): Password of the proxy server

Example:

```
{
  "esrs_pwd": "string",
  "proxy_spec": {
    "port": 3128,
    "pwd": "string",
    "server": "192.168.106.108",
    "socks_version": 5,
    "type": "SOCKS",
    "username": "string"
  }
}
```

Response

200 Successful operation.

400 Invalid request parameters.

IncorrectProxyFormat :

```
{
  "message": "Proxy settings are not correct. Proxy server and port are mandatory and username and password are optional."
}
```

401 Username or password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Unexpected internal server error.

NetworkTimeout :

```
Network connection timed out.
```

General Description :

```
Unexpected internal server error.
```

ServerCannotConnect :

```
{
  "message": "The proxy server provided cannot be connected to."
}
```


Socks4NotSupportDNS:

```
{
  "message": "Proxy SOCKS4 does not support DNS resolving, please
configure your upstream DNS server."
}
```

ProxyCannotSetWithEnabledProxy :

```
{
  "message": "Set proxy failed. There is already enabled proxy, please
use update instead."
}
```

PATCH /v1/system/proxy

Updates VxRail Manager system proxy settings.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/proxy
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Body parameters ProxySettingsSpec: (Required) Configurable parameters for the proxy server.

Parameter	Type	Description
esrs_pwd	string	Password for the Secure Remote Services If internal SRS is enabled, the password is required.
proxy_spec	object	Settings for the proxy server proxy_spec objects contain the following: <ul style="list-style-type: none">server (string): IP address or hostname of the proxy server (Required)port (integer): Port of the proxy server (Required)type (string): Type of proxy server (Required) Supported types are HTTP and SOCKS

Parameter	Type	Description
		<ul style="list-style-type: none"> socks_version (integer): Version of the Socks proxy server. This parameter is required if the proxy type is SOCKS. username (string): Username of the proxy server pwd (string): Password of the proxy server

Example:

```
{
  "esrs_pwd": "string",
  "proxy_spec": {
    "port": 3128,
    "pwd": "string",
    "server": "192.168.106.108",
    "socks_version": 5,
    "type": "SOCKS",
    "username": "string"
  }
}
```

Response

- 200** Successful operation.
- 400** Invalid request parameters.
- 401** Username/password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 500** Unexpected internal server error.

NetworkTimeout :

```
Network connection timed out.
```

General Description:

```
Unexpected internal server error.
```

ServerCannotConnect :

```
{
  "message": "The proxy server provided cannot be connected to."
}
```

Socks4NotSupportDNS:

```
{
  "message": "Proxy SOCKS4 does not support DNS resolving, please
configure your upstream DNS server."
}
```

ProxyCannotSetWithEnabledProxy :

```
{
  "message": "Set proxy failed. There is already enabled proxy, please
use update instead."
}
```

DELETE /v1/system/proxy

Disables VxRail Manager system proxy settings.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/proxy
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body parameters EsrsPasswordSpec: The password for the SRS

Parameter	Type	Description
esrs_pwd	string	Password for the Secure Remote Services

Example:

```
{
  "esrs_pwd": "string"
}
```

Response

- 200** Successful operation.
- 401** Username/password is not recognized.
- 403** The user is not allowed due to insufficient privilege.
- 500** Unexpected internal server error.

NetworkTimeout :

```
Network connection timed out.
```

General Description:

```
Unexpected internal server error.
```

POST /v1/system/validate-credential

Validates the supplied user credentials.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/validate-credential
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body parameters credentialSpec: (Required) Credentials input for validation.

Parameter	Type	Description
vcenter	object	Information regarding credentials for vCenter See vxcenter VcenterSpec description below.
hosts	[object]	Information regarding credentials and serial numbers for a list of ESXi hosts See hosts EsxiHostCredentialSpec description below.

Example:

```
{
  "hosts": [
    {
      "root_user": {
        "password": "string",
        "username": "string"
      },
      "sn": "string"
    }
  ],
  "vcenter": {
    "psc_root_user": {
      "password": "string",
      "username": "string"
    },
    "vc_admin_user": {
      "password": "string",
      "username": "string"
    },
    "vcsa_root_user": {
      "password": "string",
```

```

    "username": "string"
  }
}

```

vcenter VcenterCredentialSpec object: The access information for vCenter.

Property	Type	Description
vc_admin_user	ApplianceUser object	Credentials for the vCenter administrator ApplianceUser contains user account credentials: <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)
vcsa_root_user	ApplianceUser object	Credentials for the vCenter Server Appliance (VCSA) root user ApplianceUser contains user account credentials: <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)
psc_root_user	ApplianceUser object	Credentials for the Platform Services Controller (PSC) root user ApplianceUser contains user account credentials: <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)

[hosts] EsxiHostCredentialSpec object: The access information for the ESXi hosts.

Property	Type	Description
root_user	ApplianceUser object	(Required) Credentials for the ESXi host ApplianceUser contains user account credentials: <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)
sn	string	(Required) Serial number of the ESXi host

Response

200	Operation successful.
400	Invalid request parameters.
401	Unauthorized request.
403	Forbidden request.
500	Unexpected internal server error.

Example:

```

[
  {
    "errorCode": 1016,
    "message": "Invalid credential for vc root account."
  },
  {
    "errorCode": 1048,

```

```

    "message": "VCSA root credential verification not supported for
external vCenter."
  },
  {
    "errorCode": 1049,
    "message": "VCSA PSC root credential verification not supported for
external vCenter."
  },
  {
    "errorCode": 1050,
    "message": "Not implemented"
  }
]

```

POST /v1/system/update-credential

Updates the vCenter and ESXi hosts management user passwords that are stored in VxRail Manager.

URL

`https://<VxRail IP address>/rest/vxm/v1/system/update-credential`

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.4xx and later
VxRail Software 4.7.x	Supported in 4.7.2xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
 Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Body parameters AccountCredentialSpec: (Required) [AccountCredentialSpec]: An array of management account specifications for updating passwords (body)

Property	Type	Description
component	string	Name of the component to be updated Supported components are psc and esxi
hostname	string	Hostname of the component
username	string	Username for the component
password	string	Password for the component

Example:

```

[
  {
    "component": "psc",

```

```
[
  {
    "hostname": "exvc113.externalvc.com",
    "username": "string",
    "password": "string"
  }
]
```

Response

200	Operation successful.
400	Invalid request parameters.
401	Unauthorized request.
403	Forbidden request.
500	Unexpected internal server error.

Example:

```
[
  {
    "component": "psc",
    "hostname": "exvc113.externalvc.com",
    "status": "Success"
  },
  {
    "component": "esxi",
    "hostname": "dellb08237-01.externalvc.com",
    "status": "Failed",
    "message": "Failed to update the password in VxRail Manager database."
  }
]
```

POST /v2/system/update-credential

Updates the vCenter and ESXi hosts management user passwords that are stored in VxRail Manager (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/system/update-credential
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters AccountCredentialSpec: (Required) [AccountCredentialSpec]: An array of management account specifications for updating passwords (body)

Property	Type	Description
component	string	Name of the component to be updated Supported components are vc and esxi
hostname	string	Hostname of the component
username	string	Username for the component
password	string	Password for the component

Example:

```
[
  {
    "component": "vc",
    "hostname": "exvc113.externalvc.com",
    "username": "string",
    "password": "string"
  }
]
```

Response

- 200** Operation successful.
- 400** Invalid request parameters.
- 401** Unauthorized request.
- 403** Forbidden request.
- 500** Unexpected internal server error.

Example:

```
[
  {
    "component": "vc",
    "hostname": "exvc113.externalvc.com",
    "status": "Success"
  },
  {
    "component": "esxi",
    "hostname": "dellb08237-01.externalvc.com",
    "status": "Failed",
    "message": "Failed to update the password in VxRail Manager database."
  }
]
```


GET /v1/system/available-hosts

Retrieves information about hosts in the VxRail cluster discovered via IPv6 multicast (loudmouth) but not configured into the cluster yet.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/available-hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmGVuIHNIc2FtZQ==**

Query parameters \$filter: Query conditions for searching for the host.
Supported fields:

- id
- appliance_id
- slot
- model
- is_primary_node
- bios_uuid
- cluster_affinity

Supported operators:

- eq: equal
- ne: not equal

Example:

```
$filter=id eq VXRailVIP470F2-01-01 and slot ne 2
```

Response

200 Operation successful.
Example:

```
[
  {
    "id": "VXRailVIP470F2-01-01",
    "appliance_id": "VXRailVIP470F2",
    "slot": 1,
    "model": "VxRail P470F",
```

```

    "is_primary_node": false,
    "ip_set": {},
    "discovered_date": 1533460206,
    "cluster_affinity": false,
    "bios_uuid": "420e8b96-4602-9d96-35b9-906808c40985"
  },
  {
    "id": "VXRailVIP470F1-01-01",
    "appliance_id": "VXRailVIP470F3",
    "slot": 1,
    "model": "VxRail P470F",
    "is_primary_node": true,
    "ip_set": {},
    "discovered_date": 1533460206,
    "cluster_affinity": false,
    "bios_uuid": "420ecd88-86ef-f775-f4d8-a101540bb5c4"
  }
]

```

- 401** Unauthorized request.
- 403** Forbidden request.
- 404** Host not found.
- 500** Unexpected internal server error.

GET /v1/system/cluster-hosts

Retrieves information on configured hosts in the VxRail cluster.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/cluster-hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
 Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Query parameters \$filter: Query conditions for searching for the host
 Supported fields:

- id
- host_name
- appliance_id

- slot
- model
- is_primary_node
- bios_uuid
- cluster_affinity

Supported operators:

- eq: equal
- ne: not equal

Example:

```
$filter=id eq VXRAILVIP470F2-01-01 and slot ne 2
```

Response

200

Operation successful.

Parameter	Type	Description
appliance_id	string	Appliance ID of the VxRail host
bios_uuid	string	UUID number of the VxRail host
cluster_affinity	boolean	Whether the host is installed in the current cluster
discovered_date	integer	The time that the host was discovered by VxRail Manager
health	string	Health status of the VxRail host Supported values are Critical, Error, Warning, and Healthy.
host_name	string	Hostname of the VxRail host NOTE: The return value for <code>host_name</code> is always all lowercase, regardless of the capitalization used when the parameter was originally set.
id	string	A concatenation of the <code>appliance_id</code> , number of nodes, and node position. <code>id=appliance_id + number of total supported nodes in a chassis + node position</code>
ip_set	[object]	Information about IP addresses on the VxRail host The <code>ip_set</code> object contains the following properties: <ul style="list-style-type: none"> • <code>management_ip</code> (string): Management IP address of the host • <code>vmotion_ip</code> (string): vMotion IP address of the host • <code>vsan_ip</code> (string): vSAN IP address of the host
is_primary_node	boolean	Whether the host is the primary node
led_status	string	State of the chassis LED indicator for the host
manufacturer	string	Manufacturer of the host
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
model	string	Model number of the host

Parameter	Type	Description
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
psnt	string	Product serial number tag (PSNT) of the host
serial_number	string	Serial number of the host
slot	integer	Rack slot position where the VxRail host appliance is installed
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host

Example:

```
[
  {
    "id": "VXRAILVIP470F2-01-01",
    "serial_number": "9HHNHL2",
    "psnt": "9HHNHL20000000",
    "host_name": "delle09156-01.localdomain.local",
    "appliance_id": "VXRAILVIP470F2",
    "slot": 1,
    "manufacturer": "Dell Inc.",
    "model": "VxRail P470F",
    "operational_status": "powering_off",
    "health": "Error",
    "power_status": "on",
    "led_status": "Blue:On",
    "tpm_present": false,
    "is_primary_node": true,
    "missing": false,
    "ip_set": {
      "management_ip": "192.168.106.182",
      "vsan_ip": "192.168.113.182",
      "vmotion_ip": "192.168.123.182"
    },
    "discovered_date": 1533460206,
    "cluster_affinity": true,
    "bios_uuid": "420e8b96-4602-9d96-35b9-906808c40985"
  },
  {
    "id": "VXRAILVIP470F1-01-01",
    "serial_number": "9HHNHL3",
    "psnt": "9HHNHL30000000",
    "host_name": "delle09156-02.localdomain.local",
    "appliance_id": "VXRAILVIP470F3",
    "slot": 1,
    "manufacturer": "Dell Inc.",
    "model": "VxRail P470F",
    "operational_status": "powering_off",
    "health": "Error",
    "power_status": "on",
    "led_status": "Blue:On",
    "tpm_present": false,
    "is_primary_node": true,
    "missing": false,
    "ip_set": {
      "management_ip": "192.168.106.183",
      "vsan_ip": "192.168.113.183",
      "vmotion_ip": "192.168.123.183"
    },
    "discovered_date": 1533460206,
    "cluster_affinity": true,
    "bios_uuid": "420ecd88-86ef-f775-f4d8-a101540bb5c4"
  }
]
```

401	Unauthorized request.
403	Forbidden request.
404	Host not found.
500	Unexpected internal server error.

POST /v1/system/primary-storage

Provisions and finalizes a dynamic node cluster, such as moving VxRail Manager virtual machine to the target shared storage, enabling high availability (HA) and distributed resource scheduler (DRS) service on the cluster, and enabling post-installation functions.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/primary-storage
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters PrimaryStorageSpec: (Required) Information to provision a dynamic node cluster.

Parameter	Type	Description
primary_storage_type	string	(Optional) Primary storage type that is mounted on the dynamic node cluster Supported values are VSAN_HCI_MESH and EXTERNAL.
primary_storage_name	string	(Required) Name of primary storage device to where VxRail Manager will be migrated
storage_policy_profile_name	string	The storage policy that will be applied to VxRail Manager

Example:

```
{
  "primary_storage_type": "VSAN_HCI_MESH", "EXTERNAL"
  "primary_storage_name": "string",
  "storage_policy_profile_name": "string"
}
```

Response

200	Operation successful.
400	Invalid request parameters.
401	Unauthorized request.
403	Forbidden request.
500	Unexpected internal server error.

GET /v1/system/prechecks/precheck-service-version

Gets the current version of the pre-check service in the VxRail system.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/prechecks/precheck-service-version
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Operation successful. Returns the pre-check version.

Parameter	Type	Description
version	string	Pre-check version

Example:

```
{
  "version": "1.0.600"
}
```

401 Unauthorized request.
403 Forbidden request.

500 Failed with internal errors.

GET /v1/system/prechecks/profiles

Gets a list of available pre-check profiles. Each profile represents a different type of pre-check that you can perform.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/prechecks/profiles
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Operation successful. Returns the list of pre-check profiles.

Parameter	Type	Description
profile	string	Type of profile Supported values include PRE_UPGRADE, PROACTIVE_HEALTH, NODE_EXPANSION
description	string	Description of the profile usage

Example:

```
[
  {
    "profile": "PRE_UPGRADE",
    "description": "This is used to check pre-upgrade issues before
performing a VxRail System upgrade."
  }
]
```

401 Unauthorized request.

403 Forbidden request.

500 Failed with internal errors.

POST /v1/system/precheck

Perform a system pre-check.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/precheck
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Body parameters DNSInfoSpec: (Required) Information to set the DNS servers for the cluster.

The list of required properties is dependent on which type of pre-check you are performing:

- PROACTIVE_HEALTH:
 - Only requires the profile: PROACTIVE_HEALTH property.
- NODE_EXPANSION:
 - Requires the profile and node_list properties.
- PRE_UPGRADE:
 - Requires the profile, vxm_root_user, vc_admin_user, and vc_root_user properties.
 - Requires witness_spec only if you need to upgrade a witness node.
 - Requires migration_spec only if you are checking a major vCenter upgrade.

Property	Type	Description
profile	string	(Required) Profile name, which defines what type of pre-check you are performing Supported values include PROACTIVE_HEALTH, NODE_EXPANSION, or PRE_UPGRADE.
vxm_root_user	object	(Required) Credentials for the user account. Only used for a PRE_UPGRADE pre-check. The UserSpec object contains: <ul style="list-style-type: none">• username (string): Username of the account• password (string): Password of the account
vc_admin_user	object	Credentials for vCenter Admin user. Only used for a PRE_UPGRADE pre-check. The UserSpec object contains: <ul style="list-style-type: none">• username (string)

Property	Type	Description
		<ul style="list-style-type: none"> password (string)
vc_root_user	object	<p>Credentials for vCenter Server Appliance root user. Required if the upgrade bundle contains vCenter component.</p> <p>Only used for a PRE_UPGRADE pre-check.</p> <p>The UserSpec object contains:</p> <ul style="list-style-type: none"> username (string) password (string)
witness_spec	object	<p>Information regarding the witness node for a stretched cluster, including a vSAN 2-node cluster.</p> <p>Optionally used for a PRE_UPGRADE pre-check.</p> <p>The witness_spec object contains the following properties:</p> <ul style="list-style-type: none"> auto_witness_upgrade (boolean): Automatically upgrade the witness node witness_root_user (object) <ul style="list-style-type: none"> username (string) password (string)
migration_spec	object	<p>Information for vCenter migration-based upgrades.</p> <p>Optionally used for a PRE_UPGRADE pre-check.</p> <ul style="list-style-type: none"> For major vCenter upgrades, this property must be provided. For minor vCenter upgrades (for example v7.0 U1 to v7.0 U2), this property must be null. <p>temporary_ip_setting: object contains temporary IP settings for the vCenter upgrade (Required):</p> <ul style="list-style-type: none"> vc_temporary_ip (string): Temporary IP to be used during the vCenter upgrade vc_temporary_gateway (string): Gateway to be used during the vCenter upgrade vc_temporary_netmask (string): Netmask to be used during the vCenter upgrade
node_list	[object]	<p>Information about the new node to be added.</p> <p>Only used for a NODE_EXPANSION pre-check.</p> <p>The node_list object contains the following properties:</p> <ul style="list-style-type: none"> sn (string): Serial number of the node version (string): Installation version of the node ip (string): IP address for the node root_user (string): Root username root_password (string): Root password

Example:

```
{
  "profile": "PRE_UPGRADE",
  "vxm_root_user": {
    "username": "string",
    "password": "string"
  },
  "vc_admin_user": {
```

```

    "username": "string",
    "password": "string"
  },
  "vc_root_user": {
    "username": "string",
    "password": "string"
  },
  "witness_spec": {
    "auto_witness_upgrade": true,
    "witness_root_user": {
      "username": "string",
      "password": "string"
    }
  },
  "migration_spec": {
    "temporary_ip_setting": {
      "vc_temporary_ip": "string",
      "vc_temporary_gateway": "string",
      "vc_temporary_netmask": "string"
    }
  },
  "node_list": [
    {
      "sn": "string",
      "version": "string",
      "ip": "string",
      "root_user": "root",
      "root_password": "string"
    }
  ]
}

```

Response

202	The request has been accepted for processing, but the processing has not been completed. A request_id will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	Unauthorized request.
403	Forbidden request.
500	Unexpected internal server error.

GET /v1/system/prechecks/results

Gets a list of pre-check reports, which include the current running status and historical results.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/prechecks/results
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported

VxRail Software	Supported versions
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcmGVuIHNLc2FtZQ==**

Response

200 Operation successful. Returns the list of pre-check reports, [report_list].

Parameter	Type	Description
id	string	Request ID (request_id) from the pre-check operation
profile	string	Type of profile Supported values include PRE_UPGRADE, PROACTIVE_HEALTH, NODE_EXPANSION
status	string	Pre-check status Supported values include IN-PROGRESS, COMPLETED
progress	string	Pre-check progress, provided as a percentage
total_severity	string	Severity level of the pre-check status Supported values include OK, WARN, ERROR, or CRITICAL
complete_check_count	integer	Number of pre-check tasks completed
total_success_count	integer	Number of pre-check tasks successfully completed
total_warn_count	integer	Number of pre-check tasks completed with warnings
total_error_count	integer	Number of pre-check tasks completed with errors
results	object	This object provides result information See the table containing PrecheckReportItem schema after the example for property descriptions

Example:

```
{
  "report_list": [
    {
      "id": "ba8901c1-913b-4a2b-9b62-d358bcc2ed47",
      "profile": "string",
      "status": "IN-PROGRESS [IN-PROGRESS,COMPLETED]",
      "progress": "50%",
      "total_severity": "OK [OK, WARN, ERROR, CRITICAL]",
      "complete_check_count": 25,
      "total_success_count": 22,
      "total_warn_count": 0,

```

```

"total_error_count": 3,
"results": {
  "host_checks": [
    {
      "host_id": "c2-esx01",
      "checks": [
        {
          "status": "COMPLETED",
          "check_id": "vcsa_state_check",
          "start_time": "string",
          "end_time": "string",
          "plugin_name": "string",
          "plugin_version": "1.0.100",
          "result": {
            "severity": "OK [OK, WARN, ERROR, CRITICAL]",
            "messages": [
              {
                "kb": "string",
                "action": "Ensure there are not critical alarms
existing on VCSA.",
                "alphaid": "check_script_failed",
                "symptom": "There are critical alarms existing on
VCSA.",
                "severity": "Error [Ok, Warn, Error, Critical]"
              }
            ]
          }
        }
      ]
    }
  ],
  "general_checks": [
    {
      "status": "COMPLETED",
      "check_id": "vcsa_state_check",
      "start_time": "string",
      "end_time": "string",
      "plugin_name": "string",
      "plugin_version": "1.0.100",
      "result": {
        "severity": "OK [OK, WARN, ERROR, CRITICAL]",
        "messages": [
          {
            "kb": "string",
            "action": "Ensure there are not critical alarms
existing on VCSA.",
            "alphaid": "check_script_failed",
            "symptom": "There are critical alarms existing on
VCSA.",
            "severity": "Error [Ok, Warn, Error, Critical]"
          }
        ]
      }
    }
  ]
}

```

The PrecheckReportItem schema includes the following properties:

Parameter	Type	Description
host_checks	[object]	<p>A list of pre-check results for the host.</p> <p>The host_checks object contains the following properties:</p> <ul style="list-style-type: none"> host_id (string): ESXi host name checks ([object]): The checks object contains the following properties:

Parameter	Type	Description
		<ul style="list-style-type: none"> ○ <code>status</code> (string): Execution status of the plugin check ○ <code>check_id</code> (string): ID value for the check ○ <code>start_time</code> (string): Start time of the plugin task ○ <code>end_time</code> (string): End time of the plugin task ○ <code>plugin_name</code> (string): Name of the plugin task ○ <code>plugin_version</code> (string): Version of the plugin check ○ <code>result</code> (object): The <code>result</code> object contains the following properties <ul style="list-style-type: none"> ▪ <code>severity</code> (string): Severity of the message ▪ <code>messages</code> ([object]): The <code>messages</code> object contains the following properties <ul style="list-style-type: none"> - <code>kb</code> (string): Number of the knowledge base article that provides more information - <code>action</code> (string): Suggested action to take - <code>alphaid</code> (string): Alphaid - <code>symptom</code> (string): Description of the response symptom - <code>severity</code> (string): Severity of the response. Supported values include <code>Ok</code>, <code>Warn</code>, <code>Error</code>, <code>Critical</code>
<code>general_checks</code>	[object]	<p>A list of general pre-check results.</p> <p>The <code>general_checks</code> object contains the following properties:</p> <ul style="list-style-type: none"> ● <code>status</code> (string): Execution status of the plugin check ● <code>check_id</code> (string): ID value for the check ● <code>start_time</code> (string): Start time of the plugin task ● <code>end_time</code> (string): End time of the plugin task ● <code>plugin_name</code> (string): Name of the plugin task ● <code>plugin_version</code> (string): Version of the plugin check ● <code>result</code> (object): The <code>result</code> object contains the following properties <ul style="list-style-type: none"> ○ <code>severity</code> (string): Severity of the message ○ <code>messages</code> ([object]): The <code>messages</code> object contains the following properties <ul style="list-style-type: none"> ▪ <code>kb</code> (string): Number of the knowledge base article that provides more information ▪ <code>action</code> (string): Suggested action to take ▪ <code>alphaid</code> (string): Alphaid ▪ <code>symptom</code> (string): Description of the response symptom ▪ <code>severity</code> (string): Severity of the response. Supported values include <code>Ok</code>, <code>Warn</code>, <code>Error</code>, <code>Critical</code>

401 Unauthorized request.

403 Forbidden request.

500 Failed with internal errors.

GET /v1/system/prechecks/{id}/result

Gets a pre-check result using a specified request ID. Available reports include a status report from a currently running pre-check process or a report from previously run pre-check.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/prechecks/{id}/result
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Path parameters id: (Required) The `request_id` of the pre-check status that you want to query.

Parameter	Type	Description
id	string	The <code>request_id</code> of the pre-check status that you want to query

Example:

```
ba8901c1-913b-4a2b-9b62-d358bcc2ed47
```

Query parameters verbose: (boolean) Whether to return a full or simplified report. The default is `true`.
Set to `true` to return a full pre-check result report. Set to `false` for a simplified report.
Example:

```
$verbose=false
```

Response

200 Operation successful. Returns the `report_list` object, which provides the results of the pre-check.

Parameter	Type	Description
id	string	Request ID (<code>request_id</code>) from the pre-check operation
profile	string	Type of profile Supported values include <code>PRE_UPGRADE</code> , <code>PROACTIVE_HEALTH</code> , <code>NODE_EXPANSION</code>

Parameter	Type	Description
status	string	Pre-check status Supported values include IN-PROGRESS, COMPLETED
progress	string	Pre-check progress, provided as a percentage
total_severity	string	Severity level of the pre-check status Supported values include OK, WARN, ERROR, or CRITICAL
complete_check_count	integer	Number of pre-check tasks completed
total_success_count	integer	Number of pre-check tasks successfully completed
total_warn_count	integer	Number of pre-check tasks completed with warnings
total_error_count	integer	Number of pre-check tasks completed with errors
results	object	This object provides result information See the table containing PrecheckReportItem schema after the example for property descriptions

Example:

```
{
  "report_list": [
    {
      "id": "ba8901c1-913b-4a2b-9b62-d358bcc2ed47",
      "profile": "string",
      "status": "IN-PROGRESS [IN-PROGRESS,COMPLETED]",
      "progress": "50%",
      "total_severity": "OK [OK, WARN, ERROR, CRITICAL]",
      "complete_check_count": 25,
      "total_success_count": 22,
      "total_warn_count": 0,
      "total_error_count": 3,
      "results": {
        "host_checks": [
          {
            "host_id": "c2-esx01",
            "checks": [
              {
                "status": "COMPLETED",
                "check_id": "vcsa_state_check",
                "start_time": "string",
                "end_time": "string",
                "plugin_name": "string",
                "plugin_version": "1.0.100",
                "result": {
                  "severity": "OK [OK, WARN, ERROR, CRITICAL]",
                  "messages": [
                    {
                      "kb": "string",
                      "action": "Ensure there are not critical alarms
existing on VCSA.",
                      "alphanid": "check_script_failed",
                      "symptom": "There are critical alarms existing on
VCSA.",
                      "severity": "Error [Ok, Warn, Error, Critical]"
                    }
                  ]
                }
              }
            ]
          }
        ]
      }
    }
  ]
}
```

```

    ]
  },
  ],
  "general_checks": [
    {
      "status": "COMPLETED",
      "check_id": "vcsa_state_check",
      "start_time": "string",
      "end_time": "string",
      "plugin_name": "string",
      "plugin_version": "1.0.100",
      "result": {
        "severity": "OK [OK, WARN, ERROR, CRITICAL]",
        "messages": [
          {
            "kb": "string",
            "action": "Ensure there are not critical alarms
existing on VCSA.",
            "alphaid": "check_script_failed",
            "symptom": "There are critical alarms existing on
VCSA.",
            "severity": "Error [Ok, Warn, Error, Critical]"
          }
        ]
      }
    }
  ]
}

```

The PrecheckReportItem schema includes the following properties:

Parameter	Type	Description
host_checks	[object]	<p>A list of pre-check results for the host.</p> <p>The host_checks object contains the following properties:</p> <ul style="list-style-type: none"> • host_id (string): ESXi host name • checks ([object]): The checks object contains the following properties: <ul style="list-style-type: none"> ◦ status (string): Execution status of the plugin check ◦ check_id (string): ID value for the check ◦ start_time (string): Start time of the plugin task ◦ end_time (string): End time of the plugin task ◦ plugin_name (string): Name of the plugin task ◦ plugin_version (string): Version of the plugin check ◦ result (object): The result object contains the following properties <ul style="list-style-type: none"> ▪ severity (string): Severity of the message ▪ messages ([object]): The messages object contains the following properties <ul style="list-style-type: none"> - kb (string): Number of the knowledge base article that provides more information - action (string): Suggested action to take - alphaid (string): Alphaid - symptom (string): Description of the response symptom - severity (string): Severity of the response. Supported values include Ok, Warn, Error, Critical
general_checks	[object]	A list of general pre-check results.

Parameter	Type	Description
		<p>The <code>general_checks</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>status</code> (string): Execution status of the plugin check • <code>check_id</code> (string): ID value for the check • <code>start_time</code> (string): Start time of the plugin task • <code>end_time</code> (string): End time of the plugin task • <code>plugin_name</code> (string): Name of the plugin task • <code>plugin_version</code> (string): Version of the plugin check • <code>result</code> (object): The <code>result</code> object contains the following properties <ul style="list-style-type: none"> ◦ <code>severity</code> (string): Severity of the message ◦ <code>messages</code> ([object]): The <code>messages</code> object contains the following properties <ul style="list-style-type: none"> ▪ <code>kb</code> (string): Number of the knowledge base article that provides more information ▪ <code>action</code> (string): Suggested action to take ▪ <code>alphaid</code> (string): Alphaid ▪ <code>symptom</code> (string): Description of the response symptom ▪ <code>severity</code> (string): Severity of the response. Supported values include <code>Ok</code>, <code>Warn</code>, <code>Error</code>, <code>Critical</code>

- 401** Unauthorized request.
- 403** Forbidden request.
- 500** Failed with internal errors.

GET /v1/system/dns

Retrieves information about the DNS servers for the cluster.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/dns
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.200 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200

Operation successful. Returns a list of DNS servers for the cluster

Parameter	Type	Description
servers	[string]	A list of IP addresses for the DNS servers
is_internal	boolean	Whether the DNS server is integrated (internal) or external. If <code>is_internal</code> is true, only one IP address (the IP address for VxRail Manager) is returned for the <code>servers</code> parameter.

Example:

```
{
  "servers": [
    "192.168.10.222",
    "8.8.8.8"
  ],
  "is_internal": false
}
```

401

Unauthorized request.

403

Forbidden request.

500

Failed with internal errors.

POST /v1/system/dns

Sets the DNS servers for the cluster.

URL

`https://<VxRail IP address>/rest/vxm/v1/system/dns`

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.200 and later

Request

Authorization

(Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters DNSInfoSpec: (Required) Information to set the DNS servers for the cluster.

Parameter	Type	Description
components	string	Indicates if the new DNS servers are set for VxRail Manager or all. Supported values are ALL and vxm: <ul style="list-style-type: none">• The default is ALL. If ALL is set, all DNS servers in the cluster are replaced.• If vxm is set, only the DNS server for VxRail Manager is replaced.
vcenter	object	(Required) Credentials for the vCenter Server. NOTE: If components is set to ALL, you must provide the vCenter username and password. vcenter contains user account credentials: <ul style="list-style-type: none">• username (string) (Required)• password (string) (Required)
servers	[string]	A list of IP addresses for the DNS servers
is_internal	boolean	Whether the DNS server is integrated (internal) or external If is_internal is true, the servers parameter must be one IP address (the IP address for VxRail Manager).

Response

200 Operation successful. Retrieves the list of DNS servers in the cluster.

Parameter	Type	Description
servers	[string]	A list of IP addresses for the DNS servers
is_internal	boolean	Whether the DNS server is integrated (internal) or external If is_internal is true, the servers parameter returns one IP address (the IP address for VxRail Manager).

400 Invalid request parameters.

401 Unauthorized request.

403 Forbidden request.

500 Unexpected internal server error.

GET /v1/system/ntp

Retrieves information about the NTP servers for the cluster.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/ntp
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.200 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Operation successful. Returns a list of NTP servers for the cluster.

Parameter	Type	Description
servers	[string]	A list of IP addresses for the NTP servers

Example:

```
{
  "servers": [
    "172.16.1.167"
  ]
}
```

401 Unauthorized request.

403 Forbidden request.

500 Failed with internal errors.

POST /v1/system/ntp

Sets the NTP servers for the cluster.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/ntp
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.200 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters DNSInfoSpec: (Required) Information to set the NTP servers for the cluster.

Parameter	Type	Description
components	string	Indicates if the new NTP servers are set for VxRail Manager or all. Supported values are ALL and vxm: <ul style="list-style-type: none">• The default is ALL. If ALL is set, all NTP servers in the cluster are replaced.• If vxm is set, only the NTP server for VxRail Manager is replaced.
vcenter	object	(Required) Credentials for the vCenter Server. NOTE: If components is set to ALL, you must provide the vCenter username and password. vcenter contains user account credentials: <ul style="list-style-type: none">• username (string) (Required)• password (string) (Required)
servers	[string]	A list of IP addresses for the NTP servers

Response

200 Operation successful. Retrieves the list of NTP servers in the cluster.

Parameter	Type	Description
servers	[string]	A list of IP addresses for the NTP servers

400 Invalid request parameters.

401 Unauthorized request.

403 Forbidden request.

500 Unexpected internal server error.

POST /v1/certificates/import-vxm

Updates the VxRail Manager certificate.

URL

```
https://<VxRail IP address>/rest/vxm/v1/certificates/import-vxm
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpwcmVudHluc2FtZQ==**

Body parameters VxMCertificate: (Required) The VxRail Manager certificate parameters to update

Parameter	Type	Description
cert	string	(Required) The content of the new certificate in PEM format
primary_key	string	(Required) The contents of the private key in PEM format. Only an RSA private key is allowed
root_cert_chain	string	(Required) The contents of the certificate chain in PEM format. The root CA certificate comes first followed by the intermediate CA certificates if any
password	string	(Required) The password for the new .pfx file

Example:

```
{
  "cert": "-----BEGIN CERTIFICATE-----...",
  "primary_key": "-----BEGIN ENCRYPTED PRIVATE KEY-----...",
  "root_cert_chain": "-----BEGIN CERTIFICATE-----...",
  "password": "testPassword"
}
```

Response

200 Successful operation.

400 Bad request

BadRequestInfo:

```
{
  description:    Bad request.
  errorCode      integer($int32)
                 example: 40007
                 The sub-errorcode to indicate the bad request.

  message        string
                 example: request parameters invalid.
                 The detail error message about the bad request.
}
```

Example:

```
{
  "errorCode": 40007,
  "message": "request parameters invalid."
}
```

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:    Unauthorized request.
  message        string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo

```
{
  description:    Forbidden request.
  message        string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

VxRail eServices

The VxRail API supports using eServices including accessing the knowledge base, accessing the community, opening service requests, and using support chat.

GET /v1/support/kb

Retrieves the VxRail Support Knowledge Base (KB) Home URL.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/kb
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
 Example value: **Basic QWxhZGRpbjpvYGVuIHNIc2FtZQ==**

Response

200 Operation successful.

```
{
  "homeURL": "https://support.emc.com/products/39970_VxRail-Appliance",
  "articlesLink": "/rest/vxm/v1/support/kb/articles"
}
```

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

GET /v1/support/kb/articles

Queries articles from the VxRail Support knowledge base.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/kb/articles
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization

(Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Query parameters

searchText: The content the user wants to search for.

limit: The number of articles the user wants to query.

- Type: integer
- Default: 3

Examples:

```
/support/kb/articles?searchText="VxRail"&limit=2
```

Response

200

Operation successful.

```
[
  {
    "id": "ka1f1000000GBiEAAW",
    "title": "Some useful PSQL commands for the VxRail",
    "url": "https://support.emc.com/kb/479126",
    "author": null,
    "date": "19/11/2017",
    "products": "VxRail Appliance Series,VxRail Appliance Family",
    "audience": "Level 40 = Employees and Partners"
  },
  {
    "id": "ka2f1000000GBiEAAW",
    "title": "How to manually import vCenter SSL certificate into VxRail",
    "url": "https://support.emc.com/kb/479127",
    "author": "Someone",
    "date": "20/11/2017",
    "products": "VxRail Appliance Series,VxRail Appliance Family",
    "audience": "Level 40 = Employees and Partners"
  }
]
```

400

The size of the limit is less than 1.

InvalidLimit:

```
Invalid limit {0}.
```

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Failed with internal errors.

IncorrectSupportAccount:

```
{  
  "message": "Invalid support account."  
}
```

InvalidKBData:

```
{  
  "message": "Unable to fetch or parse the articles data from  
support.emc.com."  
}
```

NetworkIssue:

```
{  
  "message": "Network issue."  
}
```

DarksiteForbidden:

```
This feature may be unavailable because VxRail Manager is disconnected  
from the Internet.
```

GET /v1/support/community

Retrieves the VxRail community home URL

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/community
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpwVGluIHNlc2FtZQ==**

Response

200 Operation successful.

```
{
  "homeURL": "https://community.emc.com/community/products/vxrail",
  "messagesLink": "/rest/vxm/v1/support/community/messages"
}
```

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

GET /v1/support/community/messages

Retrieves VxRail community messages.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/community/messages
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwVGluIHNlc2FtZQ==**

Query parameters
limit: The number of messages the user wants to query.

- Type: integer
- Default: 3

Example:

```
/v1/support/community/messages?limit=3
```

Response

200

Operation successful.

```
[
  {
    "id": 242813,
    "type": "discussion",
    "title": "VxRail 3.5 Installation Question",
    "url": "https://community.emc.com/thread/242813",
    "author": "benoitbernard-de",
    "date": "2017-11-27T14:03:07.659+0000",
    "tags": [
      "vxrail"
    ],
    "status": "published",
    "viewCount": 78,
    "replyCount": 1,
    "resolved": "open"
  },
  {
    "id": 242814,
    "type": "discussion",
    "title": "VxRail 3.5 Installation Question",
    "url": "https://community.emc.com/thread/242813",
    "author": "benoitbernard-de",
    "date": "2017-11-27T14:03:07.659+0000",
    "tags": [
      "vxrail"
    ],
    "status": "published",
    "viewCount": 78,
    "replyCount": 1,
    "resolved": "open"
  }
]
```

400

The size of the limit is more than the number of the existing messages or less than 1.

InvalidLimit:

```
Invalid limit {0}.
```

401

Username/password is not recognized.

403

The user is not allowed due to insufficient privilege.

500

Failed with internal errors.

InvalidMessageData:

```
Unable to fetch or parse the messages data from community.emc.com
```

DarksiteForbidden:

```
This feature may be unavailable because VxRail Manager is disconnected
from the Internet.
```

General Description:

```
Unexpected internal server error.
```

GET /v1/support/service-requests

Retrieves links for opening Service Requests (SRs). One link per node.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/service-requests
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Response

200 Operation successful.

```
[
  {
    "url": "http://uemconnect.emc.com/servicecenter/createsr.htm?
serialNo=VXRAILVIP470F601&type=Support",
    "appliance_psnt": "VXRAILVIP470F601"
  },
  {
    "url": "http://uemconnect.emc.com/servicecenter/createsr.htm?
serialNo=VXRAILVIP470F602&type=Support",
    "appliance_psnt": "VXRAILVIP470F602"
  },
  {
    "url": "http://uemconnect.emc.com/servicecenter/createsr.htm?
serialNo=VXRAILVIP470F603&type=Support",
    "appliance_psnt": "VXRAILVIP470F603"
  }
]
```

401 Username or password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Unexpected internal server error.

GET /v1/support/chat-url

Get a link for online chat with Support.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/chat-url
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Operation successful.

```
{ "url": "http://uemconnect.emc.com/servicecenter/liveChat.htm?serialNo=EMCVB150600013&type=Support" }
```

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Unexpected internal server error.

VxRail support

The VxRail API supports features related to support, including setting the support account and generating and retrieving logs.

GET /v1/support/account

Retrieve the current Support account set in VxRail.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/account
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Operation successful.

```
{
  "username": "vxrail.test@emconlinesupport.com"
}
```

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

404 The support account was not found.

500 Failed with internal errors.

NetworkTimeout:

```
Network connection timed out.
```

POST /v1/support/account

Add a support account to VxRail Manager.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/account
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmVudHluc2FtZQ==**

Body parameters SupportAccountSpec: (Required) The username and password of the support account.

Property	Type	Description
username	string	(Required) Username of the support account
password	string	(Required) Password of the support account

Example:

```
{
  "username": "string",
  "password": "string"
}
```

Response

200 Operation successful.

400 The provided support account credentials are not valid.

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

500 Failed with internal errors.

NetworkTimeout:

```
Network connection timed out.
```


General Description:

Unexpected internal server error.

DarksiteForbidden:

This feature may be unavailable because VxRail Manager is disconnected from the Internet.

PUT /v1/support/account

Change the Support account in VxRail.

URL

`https://<VxRail IP address>/rest/vxm/v1/support/account`

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body parameters SupportAccountSpec: (Required) The username and password of the support account.

Property	Type	Description
username	string	(Required) Username of the support account
password	string	(Required) Password of the support account

Example:

```
{
  "username": "string",
  "password": "string"
}
```

Response

200 Operation successful.

400 The provided support account credentials are not valid.

401	Username/password is not recognized.
403	The user is not allowed due to insufficient privilege.
404	The support account was not found.
500	Failed with internal errors. NetworkTimeout: <div>Network connection timed out.</div> General Description: <div>Unexpected internal server error.</div> DarksiteForbidden: <div>This feature may be unavailable because VxRail Manager is disconnected from the Internet.</div>

DELETE /v1/support/account

Remove a support account from VxRail Manger.

URL

https://<VxRail IP address>/rest/vxm/v1/support/account

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Response

200	Operation successful.
401	Username/password is not recognized.
403	The user is not allowed due to insufficient privilege.
500	Failed with internal errors.

NetworkTimeout:

Network connection timed out.

General Description:

Unexpected internal server error.

DarksiteForbidden:

This feature may be unavailable because VxRail Manager is disconnected from the Internet.

GET /v1/support/contact

Retrieves the support contact information.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/contact
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Response

200

Successful operation.

SupportContactInfo:

```
{
  company      string
               example: EMC CORP - PARTNER
  email        string
               example: vxrailtest@emconlinesupport.com
  first_name   string
               example: VxRail
  last_name    string
               example: Emc
  phone        string
               example: 1508435-1000
  site_id      [string]
```

```

        example: ["12728283"]
    }

```

Example:

```

{
  "company": "EMC CORP - PARTNER",
  "email": "vxrailtest@emconlinesupport.com",
  "first_name": "VxRail",
  "last_name": "Emc",
  "phone": "1508435-1000",
  "site_id": ["12728783"]
}

```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403

Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

500

Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

GET /v1/support/logs

Queries all of the support logs.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/logs
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Query parameters \$filter: The conditions for the query.
See the following table for supported conditions for each release version:

VxRail Software	Supported conditions and fields
VxRail Software 4.5.x	Conditions: equal (eq) and not equal (ne) For fields: id, path, types, nodes
	Conditions: equal (eq), not equal (ne), in (in), greater than (gt), less than (lt), greater or equal to (ge) and less or equal to (le) For fields: creation_time, size
VxRail Software 4.7.x	Conditions: equal (eq) and not equal (ne) For fields: id, path, types, nodes
	Conditions: equal (eq), not equal (ne), in (in), greater than (gt), less than (lt), greater or equal to (ge) and less or equal to (le) For fields: creation_time, size
VxRail Software 7.0.x	Conditions: equal (eq) and not equal (ne) For fields: id, path, types, nodes

Example:

```
$filter=nodes eq ' node1, node2, node3 ' and creation_time gt 10000
```

Response

- 200

The operation finished successfully.

```
[
  {
    "id": "string",
    "types": ["vxm", "idrac"],
    "nodes": [
      "JHN3S62",
      "JHN1H62",
      "JHN1BC2"
    ],
    "creation_time": 0,
    "path": "string",
    "size": 0,
    "details": [
      "Failed to generate idrac log bundle on JHN3S62 due to the node is not idrac log supported.",
      "Failed to generate esxi log bundle on JHN1BC2 due to the node is disconnected."
    ]
  }
]
```
- 401

Username/password is not recognized.
- 403

The user is not allowed due to insufficient privilege.

POST /v1/support/logs

Collect the support log with the specified types.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/logs
```

Version support


VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

- Authorization

(Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**
- Body parameters

LogSpec: (Required) The types and nodes for log bundle collection.

Property	Type	Description
types	[string]	(Required) An array the types of components to collect log bundles for Supported log types include vxm, vcenter, esxi, idrac, ptagent, and witness.  NOTE: Setting types=idrac is not supported in VxRail 4.7.500, VxRail 4.7.510, and VxRail 7.0 software.
nodes	[string]	An array of serial numbers for the nodes to include in the log
autoclean	boolean	Whether to auto clean log bundles if VxRail Manager is at capacity

Example:

```
{
  types: ["vxm", "vcenter", "esxi"],
  nodes: ["JHN3S62", "JHN1H62", "JHN1BC2"],
  autoclean: true
}
```

Response

202

The request has been accepted for processing, but the processing has not been completed.

```
{
  "request_id": "9c50511f-9119-4351-83e0-38ce0a93c73e"
}
```

400

Invalid request parameters.

401

Username/password is not recognized.

403

The user is not allowed due to insufficient privilege.

409

The log collection is running. Please wait for a while and then retry.

500

Failed with internal errors.

GeneralDescription:

```
{
  "message": "Unexpected internal server error."
}
```

InsufficientCapacity:

```
{
  "message": "Insufficient storage capacity."
}
```

GET /v1/support/logs/<logID>

Queries the log by log ID.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/logs/<logID>
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.2xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Path parameters logID: (Required) The specific log that you want to query.

Response

200 Successful operation. The log information is returned with the response.
Example:

```
{
  "id": "string",
  "types": ["vxm", "idrac"],
  "nodes": [
    "JHN3S62",
    "JHN1H62",
    "JHN1BC2"
  ],
  "creation_time": 0,
  "path": "string",
  "size": 0,
  "details": [
    "Failed to generate idrac log bundle on JHN3S62 due to the node is not idrac log supported.",
    "Failed to generate esxi log bundle on JHN1BC2 due to the node is disconnected."
  ]
}
```

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

404 The log is not found.

500 Failed with internal errors.

GET /v1/support/logs/<logID>/download

Download the binary stream of a log.

URL

```
https://<VxRail IP address>/rest/vxm/v1/support/logs/<logID>/download
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Path parameters logID: (Required) The specific log that you want to download.

Response

200 Successful operation. The log information is returned with the response.

401 Username/password is not recognized.

403 The user is not allowed due to insufficient privilege.

404 The log ID is invalid.

VxRail lifecycle management (LCM)

The VxRail API supports a full upgrade of the VxRail including profile and upgrade pre-check, upgrade process, and post-check.

POST /v1/lcm/precheck

Performs a separate health pre-check for the VxRail system.

URL

```
<VxRail IP address>/rest/vxm/v1/lcm/precheck
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Body parameter UpgradeSpec_v3: (Required) The parameters required for the pre-check.

Parameter	Type	Description
bundle_file_locator	string	(Required) The full path of the single upgrade bundle or the first package of a multiple part upgrade bundle. Multiple part upgrade bundles must follow the naming conventions outlined below: <ul style="list-style-type: none"> The first file (the installer file) must contain the string <code>installer</code> in the filename. Each file in the multipart bundle must keep its original name: Do not rename any files.
health_precheck_type	string	(Required) The type of health pre-check to be run Supported values are LCM_PRECHECK.
vxrail	object	(Required) Information regarding the VxRail Manager See the <code>VxRailManagerSpec</code> object description below.
vcenter	object	(Required) Information regarding the vCenter

Parameter	Type	Description
		See the VcenterEmbeddedPSCSpec object description below.
witness	object	(Optional) Information regarding the witness for stretched clusters including 2-node vSAN clusters. See the WitnessSpec object description below.
upgrade_sequence	object	(Optional) Information regarding a stretched cluster upgrade sequence selection. Do not specify for standard clusters or vSAN 2-node clusters. For a stretched cluster, this option is optional. The UpgradeSequence object contains the following property: <ul style="list-style-type: none"> preferred_fault_domain_first (boolean): Set true to upgrade preferred fault domain hosts first. (Required)

Example:

```
{
  "bundle_file_locator":"/data/store2/
VXRAIL_COMPOSITE-4.7.320-10688414 for 4.7.x_Min.zip",
  "health_precheck_type": "LCM_PRECHECK",
  "vxrail":{
    "vxm_root_user":{"
      "username":"root",
      "password":"foo"
    }
  },
  "vcenter":{
    "vc_admin_user":{"
      "username":"administrator@vsphere.local",
      "password":"foo"
    },
    "vcsa_root_user":{"
      "username":"root",
      "password":"foo"
    },
    "migration_spec":{
      "source_vcsa_host":{
        "name":"vxrail34-esx-02.local",
        "user":{
          "username":"root",
          "password":"foo"
        }
      },
      "target_vcsa_host":{
        "name":"vxrail34-esx-01.local",
        "user":{
          "username":"root",
          "password":"foo"
        }
      },
      "temporary_ip_setting":{
        "temporary_ip":"10.10.199.80",
        "gateway":"10.10.198.253",
        "netmask":"255.255.255.0"
      }
    }
  }
}
```

`vxrail VxRailManagerSpec` object: (Required) Information regarding the VxRail Manager.

Property	Type	Description
<code>vxm_root_user</code>	object	(Required) Credentials for the user account. The <code>UserSpec</code> object contains: <ul style="list-style-type: none"> <code>username (string)</code>: Username of the account <code>password (string)</code>: Password of the account

`vcenter VcenterEmbeddedPSCSpec` object: (Required) Information regarding the vCenter.

Property	Type	Description
<code>vc_admin_user</code>	object	(Required) Credentials for vCenter Admin user. The <code>UserSpec</code> object contains: <ul style="list-style-type: none"> <code>username (string)</code> <code>password (string)</code>
<code>vcsa_root_user</code>	object	Credentials for VCSA Root user. Required if the upgrade bundle contains vCenter component. The <code>UserSpec</code> object contains: <ul style="list-style-type: none"> <code>username (string)</code> <code>password (string)</code>
<code>migration_spec</code>	object	Information for vCenter migration-based upgrades. The <code>VcenterEmbeddedPSCMigrationSpec</code> object contains: <ul style="list-style-type: none"> <code>source_vcsa_host</code>: object contains VxRail host information of the host which VCSA VM is currently on (Required): <ul style="list-style-type: none"> <code>name (string)</code>: Hostname of the ESXi host <code>user (UserSpec object)</code>: <ul style="list-style-type: none"> <code>username (string)</code> <code>password (string)</code> <code>target_vcsa_host</code>: object contains VxRail host information of the host which VCSA VM is to be deployed on (Required): <ul style="list-style-type: none"> <code>name (string)</code>: Hostname of the ESXi host <code>user (UserSpec object)</code>: <ul style="list-style-type: none"> <code>username (string)</code> <code>password (string)</code> <code>temporary_ip_setting</code>: object contains temporary IP settings for the vCenter upgrade (Required): <ul style="list-style-type: none"> <code>temporary_ip (string)</code>: Temporary IP to be used during the vCenter upgrade (Required) <code>gateway (string)</code>: Gateway to be used during the vCenter upgrade (Required) <code>netmask (string)</code>: Netmask to be used during the vCenter upgrade (Required)

`witness WitnessSpec` object: Information about the witness for a stretched cluster including vSAN 2-node clusters

Property	Type	Description
<code>witness_user</code>	object	Credentials for the user account. <code>UserSpec</code> contains:

Property	Type	Description
		<ul style="list-style-type: none"> username (string) password (string)
auto_witness_upgrade	boolean	(Required) Enter true to enable auto witness upgrades

Response

202	The request has been accepted for processing, but the processing has not been completed. A request_id will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
403	The server understood the request but is refusing to fulfill it.
409	The request is rejected because the resource is busy. Possible scenarios include there's already an upgrade in progress, or some hardware operation is in progress.
500	The request for operation status failed with errors.

POST /v1/lcm/upgrade (4.5.0xx, 4.5.1xx, 4.5.2xx)

Upgrades all VxRail software and hardware.

NOTE: This version of the POST /lcm/upgrade API endpoint applies to VxRail software versions 4.5.0xx, 4.5.1xx, and 4.5.2xx. It does not support a direct upgrade to VxRail 4.7.x releases. Customers must first upgrade to VxRail 4.5.3xx, and can then upgrade to VxRail 4.7.x.

URL

```
<VxRail IP address>/rest/vxm/v1/lcm/upgrade
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.0xx, 4.5.1xx, and 4.5.2xx only
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Not supported

Request

Headers	Content Type	(Required) Value: application/json.
	Accept	This header must be empty.
	Authorization	(Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body Properties upgradeParams: (Required) The parameters required for upgrade.

```
[
  { /*Required*/
    "name": "lcm.composite.bundle",
    "value": <upgrade-bundle-file-name>
  },
  { /*Optional. The default value is 'root'.*/
    "name": "lcm.vxrail.root.username",
    "value": "root"
  },
  { /*Required*/
    "name": "lcm.vxrail.root.password",
    "value": <root password>
  },
  { /*Required*/
    "name": "lcm.vc.admin.username",
    "value": "<admin username>"
  },
  { /*Required*/
    "name": "lcm.vc.admin.password",
    "value": <admin password>
  },
  { /* Optional */ (Only needed for vCenter upgrade)
    "name": "lcm.psc.root.username",
    "value": "<root username>"
  },
  { /* Optional */ (Only needed for vCenter upgrade)
    "name": "lcm.psc.root.password",
    "value": <root password>
  },
  { /* Optional */ (Only needed for vCenter upgrade)
    "name": "lcm.vcsa.root.username",
    "value": "<root username>"
  },
  { /* Optional */ (Only needed for vCenter upgrade)
    "name": "lcm.vcsa.root.password",
    "value": <root password>
  }
]
```

Response

- | | |
|------------|---|
| 200 | The request has been accepted for processing, but the processing has not been completed. A request_id will be returned. |
| 401 | The provided vCenter credentials are not valid. |
| 403 | Access to the requested resource is forbidden. |
| 500 | The request for operation status failed with errors. |

POST /v1/lcm/upgrade (4.5.3xx+, 4.7.x, 7.0.x)

Upgrades all VxRail software and hardware (version 1).

i NOTE: When upgrading from VxRail 4.7.515 or earlier to VxRail 7.0.200 or later, you must upload the upgrade bundle to a folder that is not part of the root file system. If you are performing a multipart upgrade, upload all parts of the multipart bundle to the same folder before starting the upgrade.

URL

```
<VxRail IP address>/rest/vxm/v1/lcm/upgrade
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Headers

Content Type	(Required) Value: application/json.
Accept	This header must be empty.
Authorization	(Required) Username and password encoded with Base64 Example value: Basic QWxhZGRpbjpvYVUyIHNLc2FtZQ==

Body Properties upgradeSpecs: (Required) The parameters required for upgrade.

```
required:
  - bundleFileLocator
  - vxRail
  - vcenter
bundle_file_locator:
  description: Full path of the single upgrade bundle or
               first package of the multiple part upgrade bundle.
               Multiple part upgrade bundles must follow the
               naming conventions outlined below:
               - The first file (the installer file) must contain
                 the string installer in the filename.
               - Each file in the multipart bundle must keep its
                 original name: Do not rename any files.
  type: string
vxrail:
  description: Information regarding the VxRail Manager.
  type: object
  $ref: '#/parameters/VxRailManagerSpec'
vcenter:
  description: Define the access information of vCenter.
  type: object
  $ref: '#/parameters/VcenterSpec'
```

Example:

```
{
  "bundle_file_locator": "/data/store2/
  VXRAIL_COMPOSITE-4.7.320-10688414_for_4.7.x_Min.zip",
  "vxrail": {
    "vxm_root_user": {
      "username": "root",
      "password": "foo"
    }
  },
  "vcenter": {
    "vc_admin_user": {
      "username": "administrator@vsphere.local",
```

```

        "password": "foo"
      },
      "vcsa_root_user": {
        "username": "root",
        "password": "foo"
      },
      "psc_root_user": {
        "username": "root",
        "password": "foo"
      },
      "migration_spec": {
        "source_vcsa_host": {
          "name": "vxrail34-esx-02.local",
          "user": {
            "username": "root",
            "password": "foo"
          }
        },
        "source_psc_host": {
          "name": "vxrail34-esx-02.local",
          "user": {
            "username": "root",
            "password": "foo"
          }
        },
        "target_vcsa_host": {
          "name": "vxrail34-esx-01.local",
          "user": {
            "username": "root",
            "password": "foo"
          }
        },
        "temporary_ip_setting": {
          "temporary_ip": "10.10.199.80",
          "gateway": "10.10.198.253",
          "netmask": "255.255.255.0"
        }
      }
    }
  }
}

```

VxRailManagerSpec object: Information regarding the VxRail Manager

```

required:
  - vxmRootUser
properties:
  vxm_root_user:
    description: username and password of VxRail Manager root user
    type: object
    $ref: './common-model.yaml#/parameters/UserSpec'

```

VcenterSpec object: Information regarding the vCenter.

```

required:
  - vcAdminUser
properties:
  vc_admin_user:
    description: credential for vCenter Admin user
    type: object
    $ref: './common-model.yaml#/parameters/UserSpec'
  vcsa_root_user:
    description: credentials for VCSA Root user. Required if the
upgrade bundle contains vcenter component
    type: object
    $ref: './common-model.yaml#/parameters/UserSpec'
  psc_root_user:
    description: credentials for PSC Root user. Required if the
upgrade bundle contains vcenter component
    type: object
    $ref: './common-model.yaml#/parameters/UserSpec'

```



```

migration_spec:
  description: Contains information required for migration based
vcenter upgrade
  type: object
  $ref: '#/parameters/VcenterMigrationSpec'

```

VcenterMigrationSpec object: Information for vCenter migration based upgrade.

NOTE:

- For major vCenter upgrades (for example v6.5 to v6.7), this property must be provided.
- For minor vCenter upgrades (for example v6.5 U1 to v6.5 U2), this property must be null.

```

required:
  - sourceVcsaHost
  - sourcePscHost
  - targetVcsaHost
  - temporaryIpSetting
properties:
  source_vcsa_host:
    description: VxRail host information of the host on which VCSA
VM is currently on
    type: object
    $ref: '#/parameters/EsxiHostSpec'
  source_psc_host:
    description: VxRail host information of the host on which PSC VM
is currently on
    type: object
    $ref: '#/parameters/EsxiHostSpec'
  target_vcsa_host:
    description: VxRail host information of the host on which
VCSA/PSC VM is to be deployed on
    type: object
    $ref: '#/parameters/EsxiHostSpec'
  temporary_ip_setting:
    description: Temporary IP settings for the upgrade
    type: object
    $ref: '#/parameters/TemporaryIpSettingSpec'

```

TemporaryIpSettingSpec object: Temporary IP settings for the vcenter upgrade.

```

required:
  - temporaryIp
  - gateway
  - netmask
properties:
  temporary_ip:
    description: Temporary IP to be used during the vcenter upgrade
    type: string
  gateway:
    description: Gateway to be used during the vcenter upgrade
    type: string
  netmask:
    description: Netmask to be used during the vcenter upgrade
    type: string

```

EsxiHostSpec object: ESXi host information.

```

properties:
  name:
    description: hostname of the ESXi host.
    type: string
  user:
    description: User account credentials for ESXi host
    type: object
    $ref: '../common-model.yaml#/parameters/UserSpec'

```

Response

202	The request has been accepted for processing, but the processing has not been completed. A <code>request_id</code> will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
409	The request is rejected because the resource is busy. Possible scenarios include there's already an upgrade in progress, or some hardware operation is in progress.
500	The request for operation status failed with errors.

POST /v2/lcm/upgrade (4.7.410+, 7.0.x)

Upgrades all VxRail software and hardware (version 2).

NOTE: When upgrading from VxRail 4.7.515 or earlier to VxRail 7.0.200 or later, you must upload the upgrade bundle to a folder that is not part of the root file system. If you are performing a multipart upgrade, upload all parts of the multipart bundle to the same folder before starting the upgrade.

URL

```
<VxRail IP address>/rest/vxm/v2/lcm/upgrade
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.410 and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: `Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==`

Body parameter `upgradeSpecs`: (Required) The parameters required for an upgrade.

Parameter	Type	Description
<code>bundle_file_locator</code>	string	(Required) The full path of the single upgrade bundle or first package of a multiple part upgrade bundle. Multiple part upgrade bundles must follow the naming conventions outlined below: <ul style="list-style-type: none">• The first file (the installer file) must contain the string <code>installer</code> in the filename.• Each file in the multipart bundle must keep its original name: Do not rename any files.

Parameter	Type	Description
vxrail	VxRailManagerSpec object	(Required) Information regarding the VxRail Manager See the VxRailManagerSpec object description below.
vcenter	VcenterSpec object	(Required) Information regarding the vCenter See the VcenterSpec object description below.
witness	WitnessSpec object	(Optional) Information regarding the witness for stretched clusters including 2-node vSAN clusters. See the WitnessSpec object description below.
upgrade_sequence	UpgradeSequence object	(Optional) Information regarding a stretched cluster upgrade sequence selection. Do not specify for standard clusters or vSAN 2-node clusters. For a stretched cluster, this option is optional. The UpgradeSequence object contains the following property: <ul style="list-style-type: none"> preferred_fault_domain_first (boolean): Set true to upgrade preferred fault domain hosts first. (Required)

Example:

```
{
  "bundle_file_locator":"/data/store2/
VXRAIL_COMPOSITE-4.7.320-10688414_for_4.7.x_Min.zip",
  "vxrail":{
    "vxm_root_user":{"
      "username":"root",
      "password":"foo"
    }
  },
  "vcenter":{
    "vc_admin_user":{"
      "username":"administrator@vsphere.local",
      "password":"foo"
    },
    "vcsa_root_user":{"
      "username":"root",
      "password":"foo"
    },
    "psc_root_user":{"
      "username":" root",
      "password":"foo"
    },
    "migration_spec":{
      "source_vcsa_host":{
        "name":"vxrail34-esx-02.local",
        "user":{
          "username":"root",
          "password":"foo"
        }
      },
      "source_psc_host":{
        "name":"vxrail34-esx-02.local",
        "user":{
          "username":"root",
          "password":"foo"
        }
      }
    }
  },
}
```

```


        "target_vcsa_host":{
            "name":"vxrail34-esx-01.local",
            "user":{
                "username":"root",
                "password":"foo"
            }
        },
        "temporary_ip_setting":{
            "temporary_ip":"10.10.199.80",
            "gateway":"10.10.198.253",
            "netmask":"255.255.255.0"
        }
    }
}

```

vxrail VxRailManagerSpec object: (Required) Information regarding the VxRail Manager.

Property	Type	Description
vxm_root_user	UserSpec object	(Required) Credentials for the user account. The UserSpec object contains: <ul style="list-style-type: none"> username (string): Username of the account password (string): Password of the account

vcenter VcenterSpec object: (Required) Information regarding the vCenter.

Property	Type	Description
vc_admin_user	UserSpec object	(Required) Credentials for vCenter Admin user. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
vcsa_root_user	UserSpec object	Credentials for VCSA Root user. Required if the upgrade bundle contains vCenter component. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
psc_root_user	UserSpec object	Credentials for PSC Root user. Required if the upgrade bundle contains vCenter component. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
migration_spec	VcenterMigrationSpec object	Information for vCenter migration-based upgrades. <div>  NOTE: <ul style="list-style-type: none"> For major vCenter upgrades (for example v6.7 to v7.0), this property must be provided. For minor vCenter upgrades (for example v7.0 U1 to v7.0 U2), this property must be null. </div> VcenterMigrationSpec contains: <ul style="list-style-type: none"> source_vcsa_host: object contains VxRail host information of the host which VCSA VM is currently on (Required): <ul style="list-style-type: none"> name (string): Hostname of the ESXi host user (UserSpec object): <ul style="list-style-type: none"> username (string) password (string)

Property	Type	Description
		<ul style="list-style-type: none"> • source_psc_host: object contains VxRail host information of the host on which PSC VM is currently on (Required): <ul style="list-style-type: none"> ◦ <code>name (string)</code>: Hostname of the ESXi host ◦ <code>user (UserSpec object)</code>: <ul style="list-style-type: none"> ▪ <code>username (string)</code> ▪ <code>password (string)</code> • target_vcsa_host: object contains VxRail host information of the host which VCSA/PSC VM is to be deployed on (Required): <ul style="list-style-type: none"> ◦ <code>name (string)</code>: Hostname of the ESXi host ◦ <code>user (UserSpec object)</code>: <ul style="list-style-type: none"> ▪ <code>username (string)</code> ▪ <code>password (string)</code> • temporary_ip_setting: object contains temporary IP settings for the vCenter upgrade (Required): <ul style="list-style-type: none"> ◦ <code>temporary_ip (string)</code>: Temporary IP to be used during the vCenter upgrade (Required) ◦ <code>gateway (string)</code>: Gateway to be used during the vCenter upgrade (Required) ◦ <code>netmask (string)</code>: Netmask to be used during the vCenter upgrade (Required)

witness WitnessSpec object: Information about the witness for a stretched cluster including vSAN 2-node clusters

Property	Type	Description
witness_user	UserSpec object	Credentials for the user account. UserSpec contains: <ul style="list-style-type: none"> • <code>username (string)</code> • <code>password (string)</code>
auto_witness_upgrade	boolean	(Required) Enter true to enable auto witness upgrades

Response

202	The request has been accepted for processing, but the processing has not been completed. A <code>request_id</code> will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
409	The request is rejected because the resource is busy. Possible scenarios include there's already an upgrade in progress, or some hardware operation is in progress.
500	The request for operation status failed with errors.

POST /v3/lcm/upgrade (7.0.100+)

Upgrades all VxRail software and hardware (version 3).

NOTE: If you are performing a multipart upgrade, upload all parts of the multipart bundle to the same folder before starting the upgrade.

URL

```
<VxRail IP address>/rest/vxm/v3/lcm/upgrade
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.100 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameter UpgradeSpec_v3: (Required) The parameters required for an upgrade.

Parameter	Type	Description
bundle_file_locator	string	(Required) The full path of the single upgrade bundle or first package of a multiple part upgrade bundle. Multiple part upgrade bundles must follow the naming conventions outlined below: <ul style="list-style-type: none">The first file (the installer file) must contain the string <code>installer</code> in the filename.Each file in the multipart bundle must keep its original name: Do not rename any files.
vxrail	object	(Required) Information regarding the VxRail Manager See the <code>VxRailManagerSpec</code> object description below.
vcenter	object	(Required) Information regarding the vCenter See the <code>VcenterEmbeddedPSCSpec</code> object description below.
witness	object	(Optional) Information regarding the witness for stretched clusters including 2-node vSAN clusters. See the <code>WitnessSpec</code> object description below.
upgrade_sequence	object	(Optional) Information regarding a stretched cluster upgrade sequence selection. Do not specify for standard clusters or vSAN 2-node clusters.

Parameter	Type	Description
		<p>For a stretched cluster, this option is optional.</p> <p>The UpgradeSequence object contains the following property:</p> <ul style="list-style-type: none"> preferred_fault_domain_first (boolean): Set true to upgrade preferred fault domain hosts first. (Required)

Example:

```
{
  "bundle_file_locator":"/data/store2/
VXRAIL_COMPOSITE-4.7.320-10688414_for_4.7.x_Min.zip",
  "vxrail":{
    "vxm_root_user":{"
      "username":"root",
      "password":"foo"
    }
  },
  "vcenter":{
    "vc_admin_user":{"
      "username":"administrator@vsphere.local",
      "password":"foo"
    },
    "vcsa_root_user":{"
      "username":"root",
      "password":"foo"
    },
    "migration_spec":{
      "source_vcsa_host":{
        "name":"vxrail34-esx-02.local",
        "user":{
          "username":"root",
          "password":"foo"
        }
      },
      "target_vcsa_host":{
        "name":"vxrail34-esx-01.local",
        "user":{
          "username":"root",
          "password":"foo"
        }
      },
      "temporary_ip_setting":{
        "temporary_ip":"10.10.199.80",
        "gateway":"10.10.198.253",
        "netmask":"255.255.255.0"
      }
    }
  }
}
```

vxrail VxRailManagerSpec object: (Required) Information regarding the VxRail Manager.

Property	Type	Description
vxm_root_user	object	<p>(Required) Credentials for the user account.</p> <p>The UserSpec object contains:</p> <ul style="list-style-type: none"> username (string): Username of the account password (string): Password of the account

vcenter VcenterEmbeddedPSCSpec object: (Required) Information regarding the vCenter.

Property	Type	Description
vc_admin_user	object	(Required) Credentials for vCenter Admin user. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
vcsa_root_user	object	Credentials for VCSA Root user. Required if the upgrade bundle contains vCenter component. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
migration_spec	object	Information for vCenter migration-based upgrades. <ul style="list-style-type: none"> For major vCenter upgrades, this property must be provided. For minor vCenter upgrades (for example v7.0 U1 to v7.0 U2), this property must be null. The VcenterEmbeddedPSCMigrationSpec object contains: <ul style="list-style-type: none"> source_vcsa_host: object contains VxRail host information of the host which VCSA VM is currently on (Required): <ul style="list-style-type: none"> name (string): Hostname of the ESXi host user (UserSpec object): <ul style="list-style-type: none"> username (string) password (string) target_vcsa_host: object contains VxRail host information of the host which VCSA VM is to be deployed on (Required): <ul style="list-style-type: none"> name (string): Hostname of the ESXi host user (UserSpec object): <ul style="list-style-type: none"> username (string) password (string) temporary_ip_setting: object contains temporary IP settings for the vCenter upgrade (Required): <ul style="list-style-type: none"> temporary_ip (string): Temporary IP to be used during the vCenter upgrade (Required) gateway (string): Gateway to be used during the vCenter upgrade (Required) netmask (string): Netmask to be used during the vCenter upgrade (Required)

witness WitnessSpec object: Information about the witness for a stretched cluster including vSAN 2-node clusters


Property	Type	Description
witness_user	object	Credentials for the user account. UserSpec contains: <ul style="list-style-type: none"> username (string) password (string)
auto_witness_upgrade	boolean	(Required) Enter true to enable auto witness upgrades

Response

202	The request has been accepted for processing, but the processing has not been completed. A <code>request_id</code> will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
403	The server understood the request but is refusing to fulfill it.
409	The request is rejected because the resource is busy. Possible scenarios include there's already an upgrade in progress, or some hardware operation is in progress.
500	The request for operation status failed with errors.

POST /v4/lcm/upgrade (7.0.240+)

Performs a partial upgrade of all VxRail software and hardware. Version 4 of this API includes the optional `target_hosts` property, which indicates the nodes to be upgraded. If `target_hosts` is empty or not provided, this API upgrades all nodes in the cluster.

 **NOTE:** If you are performing a multipart upgrade, upload all parts of the multipart bundle to the same folder before starting the upgrade.

URL

```
<VxRail IP address>/rest/vxm/v4/lcm/upgrade
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Body parameter UpgradeSpec_v4: (Required) The parameters required for an upgrade.

Parameter	Type	Description
<code>bundle_file_locator</code>	string	(Required) The full path of the single upgrade bundle or first package of a multiple part upgrade bundle. Multiple part upgrade bundles must follow the naming conventions outlined below: <ul style="list-style-type: none">The first file (the installer file) must contain the string <code>installer</code> in the filename.

Parameter	Type	Description
		<ul style="list-style-type: none"> Each file in the multipart bundle must keep its original name: Do not rename any files.
vxrail	object	(Required) Information regarding the VxRail Manager See the VxRailManagerSpec object description below.
vcenter	object	(Required) Information regarding the vCenter See the VcenterEmbeddedPSCSpec_v4 object description below.
witness	object	(Optional) Information regarding the witness for stretched clusters including 2-node vSAN clusters. The witness object only applies to a cluster when vLCM is not enabled. See the WitnessSpec object description below.
upgrade_sequence	object	(Optional) Information regarding a stretched cluster upgrade sequence selection. Do not specify for standard clusters or vSAN 2-node clusters. For a stretched cluster, this option is optional. The UpgradeSequence object only applies to a cluster when vLCM is not enabled. The UpgradeSequence object contains the following property: <ul style="list-style-type: none"> preferred_fault_domain_first (boolean): Set true to upgrade preferred fault domain hosts first. (Required)
target_hosts	[object]	(Optional) Hosts to be upgraded. The target_hosts object only applies to a cluster when vLCM is enabled. See the HostBaseSpec object description below.

Example:

```
{
  "bundle_file_locator":"/data/store2/
VXRAIL_COMPOSITE-4.7.320-10688414_for_4.7.x_Min.zip",
  "vxrail":{
    "vxm_root_user":{"
      "username":"root",
      "password":"foo"
    }
  },
  "vcenter":{
    "vc_admin_user":{"
      "username":"administrator@vsphere.local",
      "password":"foo"
    },
    "vcsa_root_user":{"
      "username":"root",
      "password":"foo"
    },
    "migration_spec":{
      "source_vcsa_host":{
        "name":"vxrail34-esx-02.local"
      }
    }
  },
}
```

```

        "target_vcsa_host":{
            "name":"vxrail34-esx-01.local"
        },
        "temporary_ip_setting":{
            "temporary_ip":"10.10.199.80",
            "gateway":"10.10.198.253",
            "netmask":"255.255.255.0"
        }
    },
    "target_hosts": [
        {
            "name": "string"
        }
    ]
}

```

vxrail VxRailManagerSpec object: (Required) Information regarding the VxRail Manager.

Property	Type	Description
vxm_root_user	object	(Required) Credentials for the user account. The UserSpec object contains: <ul style="list-style-type: none"> username (string): Username of the account password (string): Password of the account

vcenter VcenterEmbeddedPSCSpec_V4 object: (Required) Information regarding the vCenter.

Property	Type	Description
vc_admin_user	object	(Required) Credentials for vCenter Admin user. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
vcsa_root_user	object	Credentials for vCenter Server Appliance root user. Required if the upgrade bundle contains vCenter component. The UserSpec object contains: <ul style="list-style-type: none"> username (string) password (string)
migration_spec	object	Information for vCenter migration-based upgrades. <ul style="list-style-type: none"> For major vCenter upgrades, this property must be provided. For minor vCenter upgrades (for example v7.0 U1 to v7.0 U2), this property must be null. The VcenterEmbeddedPSCMigrationSpec object contains: <ul style="list-style-type: none"> source_vcsa_host: object contains VxRail host information of the host which vCenter Server Appliance VM is currently on (Required): <ul style="list-style-type: none"> name (string): Hostname of the ESXi host target_vcsa_host: object contains VxRail host information of the host which VCSA VM is to be deployed on (Required): <ul style="list-style-type: none"> name (string): Hostname of the ESXi host temporary_ip_setting: object contains temporary IP settings for the vCenter upgrade (Required):

Property	Type	Description
		<ul style="list-style-type: none"> temporary_ip (string): Temporary IP to be used during the vCenter upgrade (Required) gateway (string): Gateway to be used during the vCenter upgrade (Required) netmask (string): Netmask to be used during the vCenter upgrade (Required)

witness WitnessSpec object: Information about the witness for a stretched cluster including vSAN 2-node clusters.

Property	Type	Description
witness_user	object	Credentials for the user account. The UserSpec object contains: <ul style="list-style-type: none"> username (string): Username of the account password (string): Password of the account
auto_witness_upgrade	boolean	(Required) Enter true to enable auto witness upgrades.

host HostBaseSpec object: The hostname of the ESXi host to be upgraded.

Property	Type	Description
HostBaseSpec	object	Hostname of the ESXi host. HostBaseSpec contains: <ul style="list-style-type: none"> name (string)

Response

202	The request has been accepted for processing, but the processing has not been completed. A request_id will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
403	The server understood the request but is refusing to fulfill it.
409	The request is rejected because the resource is busy. Possible scenarios include there's already an upgrade in progress, or some hardware operation is in progress.
500	The request for operation status failed with errors.

POST /v1/cvs/compliance-report

Generate a compliance report containing component drift information against the current system baseline.

URL

```
<VxRail IP address>/rest/vxm/v1/cvs/compliance-report
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameter (Required) Contains an empty JSON request body.
Example:

```
{  
}
```

Response

- 202** The request has been accepted for processing, but the processing has not been completed. A `request_id` will be returned and can be used to check the status of the processing.
- 400** Invalid request parameters.
- 401** The provided vCenter credentials are not valid.
- 403** The server understood the request but is refusing to fulfill it.
- 409** The request could not be completed due to a conflict with the current state of the target resource.
- 500** The request for operation status failed with errors.

POST /v1/lcm/advisory-meta-bundle

Upload a metadata bundle for local advisory analysis.

URL

```
<VxRail IP address>/rest/vxm/v1/lcm/advisory-meta-bundle
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwGVuIHNLc2FtZQ==**

Body parameter

Parameter	Type	Description
meta_bundle	string (\$binary)	(Required) The binary string of the metadata bundle.

Example:

```
{  
}
```

Response

200 Successful operation.

POST /v1/lcm/advisory-report

Generate an advisory report that contains information about all online and local lifecycle management updates.

URL

```
<VxRail IP address>/rest/vxm/v1/lcm/advisory-report
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwGVuIHNLc2FtZQ==**

Body parameter (Required) Contains an empty JSON request body.
Example:

```
{  
}
```

Response

202	The request has been accepted for processing, but the processing has not been completed. A <code>request_id</code> will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
403	The server understood the request but is refusing to fulfill it.
409	The request could not be completed due to a conflict with the current state of the target resource.
500	The request for operation status failed with errors.

VxRail cluster management

The VxRail API supports features related to cluster management, including removing a host from the cluster and shutting down the cluster.

GET /v1/cluster

Retrieves VxRail cluster information and basic appliance information list.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Response

200 Successful operation.
ClusterInfo: Information about the cluster and the appliances in the cluster.

Parameter	Type	Description
cluster_id	string	The UUID of the VxRail cluster
product_type	string	Product type of the host
device_type	string	Device type of the host
vc_connected	boolean	Whether the vCenter is connected
health	string	Status of the health of the cluster. Supported values are Critical, Error, Warning, and Healthy.
operational_status	string	Operational status information
chassises	[object]	Information about a chassis installed in the system

Parameter	Type	Description
		<p>The <code>chassises</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>id</code> (string): ID of the chassis <code>psnt</code> (string): PSNT of the chassis <code>model</code> (string): Model of the chassis <code>render_category</code> (string): The chassis render category <code>generation</code> (integer): Generation of the chassis <code>health</code> (string): Status of the health of the chassis. Supported values are Critical, Error, Warning, and Healthy. <code>[missing]</code> (boolean): Whether the host health status is critical. Supported values are false (not critical) and true (critical).
<code>suppressed</code>	boolean	Whether under suppression mode or not
<code>last_time</code>	integer	The last time the cluster was updated

Example:

```
{
  "chassises": [
    {
      "generation": 0,
      "health": "string",
      "id": "string",
      "missing": true,
      "model": "string",
      "psnt": "string",
      "render_category": "string"
    }
  ],
  "cluster_id": "string",
  "device_type": "string",
  "health": "string",
  "last_time": "2019-09-17T17:48:56.418Z",
  "operational_status": "string",
  "product_type": "string",
  "suppressed": true,
  "vc_connected": true
}
```

400

Bad request.

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message           string
                    example: The provided vCenter credentials are not valid.
                    The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo:


```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

POST /v1/cluster/remove-host

Removes a host from the cluster.

 **NOTE:** This API only supports VxRail systems that are based on Dell PowerEdge servers. Quanta-based VxRail systems are not supported.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/remove-host
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters removeHostSpec: (Required) The specified host to be removed.

```
description: information needed for node removal operation.
type: object
required:
  - serialNumber
  - vcAdminUser
  - vcsaRootUser
properties:
  serial_number:
    description: host serial number.
    type: String
    example: EMCVB150600030
  vc_admin_user:
    description: credential for vCenter Admin user
    type: object
    properties:
      username:
        description: username of the account
        type: string
      password:
        description: password of the account
        type: string
  vcsa_root_user:
    description: credentials for VCSA Root user.
    type: object
    properties:
      username:
        description: username of the account
        type: string
      password:
        description: password of the account
        type: string
```

Response

202 The request has been accepted for processing, but the processing has not been completed.

```
{
  "request_id": "9c50511f-9119-4351-83e0-38ce0a93c73e"
}
```

400 The cluster host removal parameters are not valid.

401 Username or password is not recognized.

403 Node removal is not supported for two-node ROBO cluster.

409 A conflicting operation is running. Please wait for a while and then retry.

500 Failed with internal errors.

GeneralDescription :

```
{
  "message": "Unexpected internal server error."
}
```

POST /v1/cluster/shutdown

Shuts down a cluster or performs a shutdown dry run. Only system virtual machines are shut down with this API. User virtual machines must be shut down before running POST /v1/cluster/shutdown.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/shutdown
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Supported in 4.5.3xx and later
VxRail Software 4.7.x	Supported in 4.7.0xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Body parameters dryrun: (Optional) Performs a dry run to check whether it's safe to shutdown.

Parameter	Type	Description
dryrun	boolean	Performs a dry run to check whether it's safe to shutdown. The default value is false.

Example:

```
{"dryrun": false}
```

Response

202 The request has been accepted for processing, but the processing has not been completed. An ID will be returned and can be used to check the status of the processing.

```
{
  "request_id": "d737bd1d-a6fe-4277-9f26-20ee421cc140"
}
```

401 Username or password is not recognized.

403 The user is not allowed due to insufficient privilege.

GET /v1/cluster/system-virtual-machines

Retrieves name, status, and host information for all installed system virtual machines (VMs) in the VxRail cluster.

URL `https://<VxRail IP address>/rest/vxm/v1/cluster/system-virtual-machines`

Version support	VxRail Software	Supported versions
	VxRail Software 4.5.x	Not supported
	VxRail Software 4.7.x	Supported in 4.7.410 and later
	VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Response

200 Successful operation.
SystemVMInfo:

```
{
  description:    Information of the installed system VMs.
  name*         string      vm name.
  status*       string      vm status. Enum:Array[POWERED_ON, POWERED_OFF]
  host*         string      host FQDN system VM resides on.
}
```

Example:

```
{
  "name": "VxRail Manager",
  "status": "POWERED_ON",
  "host": "dell194-02.localdomain.local"
}
```

401 Unauthorized request.
ErrorResponse:

```
{
  error_code      integer($int32)
  message*       string
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  error_code      integer($int32)
  message*       string
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

ErrorResponse:

```
{
  errorCode       integer($int32)
  message         string
}
```

Example:

```
{
  "message": "The server failed to complete the request due to internal
error. Please try again later."
}
```

GET /v1/system/cluster-portgroups/{node_fqdn} (DEPRECATED)

Retrieves information about cluster portgroups used by a node.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/cluster-portgroups/
{node_fqdn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Deprecated from 7.0.300 and later

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters

node_fqdn: (Required) The FQDN of the node that you want to query.

Parameter	Type	Description
node_fqdn	string	The FQDN of the node that you want to query

Example:

```
v1/system/cluster-portgroups/myhost.mydomain.com
```

Response

200

Successful operation.

[ClusterPortgroupInfo]: Array of [portgroups] objects.

The [portgroups] object contains the following properties:

Parameter	Type	Description
name	string	The name of the portgroup
type	string	The type of the portgroup
portgroup_key	string	The key of the portgroup
portgroup_vlan	integer	The VLAN ID of the portgroup
vds_moid	string	The Managed Object ID (MOID) of the VMware Distributed Switch (VDS)
vds_name	string	The name of the VDS
vds_uuid	string	The UUID of the VDS

Example:

```
{
  "portgroups": [
    {
      "name": "VSAN_PG",
      "type": "VSAN",
      "portgroup_key": "dvportgroup-30",
      "portgroup_vlan": 100,
      "vds_name": "abc",
      "vds_moid": "dvs-24",
      "vds_uuid": "50 22 85 24 1a 89 42 e5-94 03 e0 d3 a6 50 7a a8"
    },
    {
      "name": "VMotion_PG",
      "type": "VMOTION",
      "portgroup_key": "dvportgroup-28",
      "portgroup_vlan": 200,
      "vds_name": "abc",
      "vds_moid": "dvs-24",
      "vds_uuid": "50 22 85 24 1a 89 42 e5-94 03 e0 d3 a6 50 7a a8"
    }
  ]
}
```

401

Unauthorized request.

ErrorResponse:

```
{
  message_code string
  error_code    integer($int32)
}
```

```
message*    string
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ErrorResponse:

```
{
  message_code string
  error_code   integer($int32)
  message*    string
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

ErrorResponse:

```
{
  message_code string
  error_code   integer($int32)
  message*    string
}
```

Example:

```
{
  "message": "The server failed to complete the request due to internal
error. Please try again later."
}
```

GET /v1/system/cluster-portgroups

Retrieves information about cluster portgroups used by a node. You specify the node using a query parameter.

URL

```
https://<VxRail IP address>/rest/vxm/v1/system/cluster-portgroups?
node_fqdn={node_fqdn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Query parameters node_fqdn: (Required) The FQDN of the node that you want to query.

Parameter	Type	Description
node_fqdn	string	The FQDN of the node that you want to query

Example:

```
v1/system/cluster-portgroups?node_fqdn=myhost.mydomain.com
```

Response

200 Successful operation.
[ClusterPortgroupInfo]: Array of [portgroups] objects.
The [portgroups] object contains the following properties:

Parameter	Type	Description
name	string	The name of the portgroup
type	string	The type of the portgroup
portgroup_key	string	The key of the portgroup
portgroup_vlan	integer	The VLAD ID of the portgroup
vds_moid	string	The Managed Object ID (MOID) of the VMware Distributed Switch (VDS)
vds_name	string	The name of the VDS
vds_uuid	string	The UUID of the VDS

Example:

```
{
  "portgroups": [
    {
      "name": "VSAN_PG",
      "type": "VSAN",
      "portgroup_key": "dvportgroup-30",
      "portgroup_vlan": 100,
      "vds_name": "abc",
      "vds_moid": "dvs-24",
      "vds_uuid": "50 22 85 24 1a 89 42 e5-94 03 e0 d3 a6 50 7a a8"
    },
    {
      "name": "VMotion_PG",
      "type": "VMOTION",
      "portgroup_key": "dvportgroup-28",
      "portgroup_vlan": 200,
      "vds_name": "abc",
      "vds_moid": "dvs-24",
      "vds_uuid": "50 22 85 24 1a 89 42 e5-94 03 e0 d3 a6 50 7a a8"
    }
  ]
}
```

401

Unauthorized request.

ErrorResponse:

```
{
  message_code string
  error_code   integer($int32)
  message*    string
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ErrorResponse:

```
{
  message_code string
  error_code   integer($int32)
  message*    string
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

ErrorResponse:

```
{
  message_code string
  error_code   integer($int32)
  message*    string
}
```

Example:

```
{
  "message": "The server failed to complete the request due to internal
error. Please try again later."
}
```

GET /v1/cluster/layer3/segments

Retrieves a list of layer 3 segments that are recognized by VxRail Manager.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segments
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200 Successful operation.
Returns an array of strings that list the segment names.
Example:

```
["VxRail-initial", "rack-temp-1"]
```

401 Unauthorized request.
UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403 Forbidden request.
ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404 The request resources was not found.

Example:

```
{
  "message": "Resource not found."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

POST /v1/cluster/layer3/segment

Creates a new segment.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segment
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters Layer3SegmentStartSpec: (Required) Information about the segment configuration, including the proxy IP, gateway, netmask, VLAN, and topology.

Property	Type	Description
segment	object	(Required) Configuration parameters for the segment. The segment object contains: <ul style="list-style-type: none">segment_label (string): The name of the segment to be created

Property	Type	Description
		<ul style="list-style-type: none"> • <code>proxy_ip (string)</code>: The IP address of the node that provides proxy service • <code>management_gateway (string)</code>: The IPv4 gateway address of the management traffic for the current segment • <code>management_netmask (string)</code>: The subnet mask of the management traffic for the current segment • <code>management_vlan (integer)</code>: The VLAN ID of the management traffic for the current segment • <code>management_topology (string)</code>: The topology type for management traffic for the VxRail cluster. Supported values are <code>DIFF_SUBNET</code> or <code>SAME_SUBNET</code> • <code>vsan_gateway (string)</code>: The IPv4 gateway address of the vSAN traffic for the current segment • <code>vsan_netmask (string)</code>: The subnet mask for the vSAN traffic for the current segment • <code>vsan_vlan (integer)</code>: The VLAN ID for the vSAN traffic for the current segment • <code>vsan_topology (string)</code>: The topology type for the vSAN traffic for the VxRail cluster. Supported values are <code>DIFF_SUBNET</code> or <code>SAME_SUBNET</code> • <code>vsan_init_gateway (string)</code>: The IPv4 gateway address of the vSAN traffic of the initial segment. <i>i</i> NOTE: When <code>vsan_topology</code> is set as <code>DIFF_SUBNET</code>, this value must be provided during the first L3 segment creation. • <code>vmotion_gateway (string)</code>: The IPv4 gateway address of the vSphere vMotion traffic of current segment • <code>vmotion_netmask (string)</code>: The subnet mask for the vSphere vMotion traffic of current segment • <code>vmotion_vlan (integer)</code>: The VLAN ID for the vSphere vMotion traffic of current segment • <code>vmotion_topology (string)</code>: The topology type for the vSphere vMotion traffic for the VxRail cluster. Supported values are <code>DIFF_SUBNET</code> or <code>SAME_SUBNET</code> • <code>vmotion_init_gateway (string)</code>: The IPv4 gateway address of the vSphere vMotion traffic for the initial segment <i>i</i> NOTE: When <code>vmotion_topology</code> is set as <code>DIFF_SUBNET</code>, this value must be provided during the first L3 segment creation.
<code>vcenter</code>	<code>object</code>	<p>(Required) Credentials for the vCenter administrator.</p> <p>The Account object contains:</p> <ul style="list-style-type: none"> • <code>username (string)</code>: Username of the account • <code>password (string)</code>: Password of the account

Example:

```
{
  "segment": {
    "segment_label": "rack-temp-1",
    "proxy_ip": "192.168.10.251",
    "management_gateway": "192.168.10.1",
    "management_netmask": "255.255.255.0",
    "management_vlan": 20,
    "management_topology": "DIFF_SUBNET",
    "vsan_gateway": "172.18.33.1",
```

```

    "vsan_netmask": "255.255.255.0",
    "vsan_vlan": 30,
    "vsan_topology": "DIFF_SUBNET",
    "vsan_init_gateway": "172.18.3.1",
    "vmotion_gateway": "172.18.43.1",
    "vmotion_netmask": "255.255.255.0",
    "vmotion_vlan": 40,
    "vmotion_topology": "DIFF_SUBNET",
    "vmotion_init_gateway": "172.18.4.1"
  },
  "vcenter": {
    "username": "administrator@vsphere.local",
    "password": "Testvxrail123!"
  }
}

```

Response

200 Successful operation.

400 Invalid request parameters.

Layer3SegmentInputErrorResponse: Error response for segment create or update input errors

```

{
  "message": [
    {
      "id": "segment_label",
      "errors": [
        "segment label occupied",
        "reserved segment label cannot be used",
        "there exists other segment without configured node"
      ]
    },
    {
      "id": "<management/vsan/vmotion>_topology",
      "errors": [
        "topology not specified",
        "invalid topology format",
        "topology different from the current configuration and cannot be
changed"
      ]
    },
    {
      "id": "proxy_ip",
      "errors": [
        "invalid ip format",
        "proxy ip already used by configured host",
        "proxy ip already used in other segments",
        "proxy ip not accessible",
        "proxy service not enabled",
        "proxy service version incompatible",
        "missing proxy ip in DIFF_SUBNET topology"
      ]
    },
    {
      "id": "<management/vsan/motion>_gateway",
      "errors": [
        "invalid ip format",
        "missing gateway while topology is DIFF_SUBNET",
        "in the same subnet with initial segment while topology is
DIFF_SUBNET"
      ]
    },
    {
      "id": "<management/vsan/motion>_netmask",
      "errors": [

```

```

        "invalid netmask format",
        "missing netmask while topology is DIFF_SUBNET",
        "in the same subnet with initial segment while topology is
DIFF_SUBNET"
    ],
    },
    {
        "id": "<management/vsan/motion>_vlan",
        "errors": [
            "invalid vlan format"
        ]
    },
    {
        "id": "<vsan/motion>_init_gateway",
        "errors": [
            "invalid ip format",
            "missing initial gateway while topology is DIFF_SUBNET",
            "in the same subnet with initial segment while topology is
DIFF_SUBNET"
        ]
    },
    {
        "id": "general_error",
        "errors": [
            "Segment creation/update is not allowed for this type of
cluster",
            "Segment is currently under expansion and update is not allowed
in this status"
        ]
    }
]
}

```

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

404 The request resources was not found.

Example:

```
{
  "message": "Resource not found."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/cluster/layer3/segment/{segment-label}

Retrieves the segment configuration for a specific segment.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segment/{segment-label}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvGVuIHNlc2FtZQ==**

Path parameters segment-label: (Required) The label of the segment that you want to query.

Parameter	Type	Description
segment-label	string	The label of the segment that you want to query

Example:

```
v1/cluster/layer3/segment/rack-temp-1
```


Response

200

Successful operation.

Layer3SegmentSpec: Configuration information about the specified segment.

Property	Type	Description
segment_label	string	The name of the segment
proxy_ip	string	The IP address of the node which provides the proxy service
management_gateway	string	The IPv4 gateway address for the management traffic for the current segment
management_netmask	string	The subnet mask for the management traffic for the current segment
management_vlan	integer	The VLAN ID for the management traffic for the current segment
management_topology	string	The topology type for the management traffic for the VxRail cluster. Supported values are DIFF_SUBNET, SAME_SUBNET, or UNDECIDED
vsan_gateway	string	The IPv4 gateway address for the vSAN traffic for the current segment
vsan_netmask	string	The subnet mask for the vSAN traffic for the current segment
vsan_vlan	integer	The VLAN ID for the vSAN traffic for the current segment
vsan_init_gateway	string	The IPv4 gateway address for the vSAN traffic for the initial segment
vsan_topology	string	The topology type for the vSAN traffic for the VxRail cluster. Supported values are DIFF_SUBNET, SAME_SUBNET, or UNDECIDED
vmotion_gateway	string	The IPv4 gateway address for the vSphere vMotion the current segment
vmotion_netmask	string	The subnet mask for the vSphere vMotion the current segment
vmotion_vlan	integer	The VLAN ID for the vSphere vMotion the current segment
vmotion_init_gateway	string	The IPv4 gateway address for the vSphere vMotion traffic for the initial segment
vmotion_topology	string	The topology type for the vSphere vMotion traffic for the VxRail cluster. Supported values are DIFF_SUBNET, SAME_SUBNET, or UNDECIDED

Example:

```
{
  "segment_label": "rack-temp-1",
  "management_gateway": "192.168.10.1",
  "management_netmask": "255.255.255.0",
  "management_vlan": 20,
  "vsan_gateway": "172.18.33.1",
  "vsan_netmask": "255.255.255.0",
  "vsan_vlan": 30,
  "vmotion_gateway": "172.18.43.1",
```

```
"vmotion_netmask": "255.255.255.0",
"vmotion_vlan": 40,
"proxy_ip": "192.168.10.251"
}
```

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404

The request resources was not found.

Example:

```
{
  "message": "Resource not found."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode        integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/cluster/layer3/segment/{segment-label}/health

Retrieves the health status for a specific segment.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segment/{segment-label}/health
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters segment-label: (Required) The label of the segment that you want to query.

Parameter	Type	Description
segment-label	string	The label of the segment that you want to query

Example:

```
v1/cluster/layer3/segment/rack-temp-1
```

Response

200 Successful operation.
SegmentStatusInfo: Information about the specified segment.

Property	Type	Description
type	string	The type of health check performed
status	string	The status of the health check. Supported values are HEALTHY, UNHEALTHY, or SKIP
errors	[objects]	Details about health check issues The errors object contains the following properties: <ul style="list-style-type: none">level (string): The severity level of the issue. Supported values are WARNING or ERRORfield (string): The category of the issue

Property	Type	Description
		<ul style="list-style-type: none"> message (string): The description of the issue

Example:

```
[
  {
    "type": "proxy",
    "status": "HEALTHY",
    "errors": []
  },
  {
    "type": "proxy",
    "status": "SKIPPED",
    "errors": []
  },
  {
    "type": "proxy",
    "status": "UNHEALTHY",
    "errors": [
      {
        "level": "ERROR",
        "field": "ip",
        "message": "proxy ip conflict with configured node"
      },
      {
        "level": "WARNING",
        "field": "service",
        "message": "proxy service not enabled"
      },
      {
        "level": "ERROR",
        "field": "service",
        "message": "proxy service version incompatible"
      }
    ]
  }
],
{
  "type": "network",
  "status": "UNHEALTHY",
  "errors": [
    {
      "level": "ERROR",
      "field": "vsan",
      "message": "vds saved in database can not be found in vCenter"
    },
    {
      "level": "ERROR",
      "field": "management",
      "message": "portgroup saved in database can not be found in
vCenter"
    },
    {
      "level": "ERROR",
      "field": "vsan",
      "message": "portgroup saved in database mismatch vds"
    },
    {
      "level": "ERROR",
      "field": "vmotion",
      "message": "portgroup vlan saved in database mismatch the value
in vCenter"
    }
  ]
}
]
```

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404

The request resources was not found.

Example:

```
{
  "message": "Resource not found."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

PATCH /v1/cluster/layer3/segment/{segment-label}

Changes the segment label for the specified segment.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segment/{segment-label}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters segment-label: (Required) The label of the segment that you want to change.

Parameter	Type	Description
segment-label	string	The current label of the segment that you want to change

Example:

```
v1/cluster/layer3/segment/rack-temp-1
```

Body parameters

Property	Type	Description
segment_label	string	(Required) The new label that you want the segment to be changed to.

Example:

```
{
  "segment_label": "rack-1"
}
```

Response

200 Successful operation.
Example:

```
{
  "message": "Successfully changed the label of the segment."
}
```

400

Bad request.

Example:

```
{
  "error_code": 60006,
  "message": "The segment label to be updated does not exist."
}
```

401

Unauthorized request.

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

Example:

```
{
  "message": "Access Denied."
}
```

404

The request resources was not found.

Example:

```
{
  "message": "Resource not found."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "The server failed to complete the request due to internal
error. Please try again later."
}
```

POST /v1/cluster/layer3/segment/{segment-label}

Updates the configuration for a specific segment.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segment/{segment-label}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters segment-label: (Required) The label of the segment that you want to update.

Parameter	Type	Description
segment-label	string	The current label of the segment that you want to update

Example:

```
v1/cluster/layer3/segment/rack-temp-1
```

Body parameters Layer3SegmentStartSpec: (Required) Information about the segment configuration, including the proxy IP, gateway, netmask, VLAN, and topology.

Property	Type	Description
segment	object	(Required) Configuration parameters for the segment. The segment object contains: <ul style="list-style-type: none">segment_label (string): The name of the segment to be createdproxy_ip (string): The IP address of the node that provides proxy servicemanagement_gateway (string): The IPv4 gateway address for the management traffic for the current segmentmanagement_netmask (string): The subnet mask of the management traffic for the current segmentmanagement_vlan (integer): The VLAN ID of the management traffic for the current segmentmanagement_topology (string): The topology type for the management traffic for the VxRail cluster. Supported values are DIFF_SUBNET, SAME_SUBNET, or UNDECIDEDvsan_gateway (string): The IPv4 gateway address for the vSAN traffic for the current segmentvsan_netmask (string): The subnet mask for the vSAN traffic for the current segmentvsan_vlan (integer): The VLAN ID for the vSAN traffic for the current segmentvsan_init_gateway (string): The IPv4 gateway address for the vSAN traffic for the initial segmentvsan_topology (string): The topology type for the vSAN traffic for the VxRail cluster. Supported values are DIFF_SUBNET, SAME_SUBNET, or UNDECIDED

Property	Type	Description
		<ul style="list-style-type: none"> <code>vmotion_gateway (string)</code>: The IPv4 gateway address for the vSphere vMotion traffic for the current segment <code>vmotion_netmask (string)</code>: The subnet mask for the vSphere vMotion traffic for the current segment <code>vmotion_vlan (integer)</code>: The VLAN ID for the vSphere vMotion traffic for the current segment <code>vmotion_init_gateway (string)</code>: The IPv4 gateway address for the vSphere vMotion traffic for the initial segment <code>vmotion_topology (string)</code>: The topology type for the vSphere vMotion traffic for the VxRail cluster. Supported values are <code>DIFF_SUBNET</code>, <code>SAME_SUBNET</code>, or <code>UNDECIDED</code>
<code>vcenter</code>	<code>object</code>	(Required) Credentials for the vCenter administrator. The Account object contains: <ul style="list-style-type: none"> <code>username (string)</code>: Username of the account. <code>password (string)</code>: Password of the account.

Example:

```
{
  "segment": {
    "segment_label": "rack-temp-1",
    "proxy_ip": "192.168.10.251",
    "management_gateway": "192.168.10.1",
    "management_netmask": "255.255.255.0",
    "management_vlan": 20,
    "management_topology": "DIFF_SUBNET",
    "vsan_gateway": "172.18.33.1",
    "vsan_netmask": "255.255.255.0",
    "vsan_vlan": 30,
    "vsan_topology": "DIFF_SUBNET",
    "vsan_init_gateway": "172.18.3.1",
    "vmotion_gateway": "172.18.43.1",
    "vmotion_netmask": "255.255.255.0",
    "vmotion_vlan": 40,
    "vmotion_topology": "DIFF_SUBNET",
    "vmotion_init_gateway": "172.18.4.1"
  },
  "vcenter": {
    "username": "administrator@vsphere.local",
    "password": "Testvxrail123!"
  }
}
```

Response

200

Successful operation.

Example:

```
{
  "message": "Successfully updated the segment configuration."
}
```

400

Invalid request parameters.

Layer3SegmentInputErrorResponse: Error response for segment update errors.

Example:

```
{
  "message": [
    {
      "id": "segment_label",
      "errors": [
        "segment label occupied",
        "reserved segment label cannot be used",
        "there exists other segment without configured node"
      ]
    },
    {
      "id": "<management/vsan/vmotion>_topology",
      "errors": [
        "topology not specified",
        "invalid topology format",
        "topology different from the current configuration and cannot be
changed"
      ]
    },
    {
      "id": "proxy_ip",
      "errors": [
        "invalid ip format",
        "proxy ip already used by configured host",
        "proxy ip already used in other segments",
        "proxy ip not accessible",
        "proxy service not enabled",
        "proxy service version incompatible",
        "missing proxy ip in DIFF_SUBNET topology"
      ]
    },
    {
      "id": "<management/vsan/motion>_gateway",
      "errors": [
        "invalid ip format",
        "missing gateway while topology is DIFF_SUBNET",
        "in the same subnet with initial segment while topology is
DIFF_SUBNET"
      ]
    },
    {
      "id": "<management/vsan/motion>_netmask",
      "errors": [
        "invalid netmask format",
        "missing netmask while topology is DIFF_SUBNET",
        "in the same subnet with initial segment while topology is
DIFF_SUBNET"
      ]
    },
    {
      "id": "<management/vsan/motion>_vlan",
      "errors": [
        "invalid vlan format"
      ]
    },
    {
      "id": "<vsan/motion>_init_gateway",
      "errors": [
        "invalid ip format",
        "missing initial gateway while topology is DIFF_SUBNET",
        "in the same subnet with initial segment while topology is
DIFF_SUBNET"
      ]
    },
    {
      "id": "general_error",
      "errors": [
        "Segment creation/update is not allowed for this type of
cluster",

```

```

        "Segment is currently under expansion and update is not allowed
in this status"
    ]
}
]
}

```

401

Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403

Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

404

The request resources was not found.

Example:

```

{
  "message": "Resource not found."
}

```

500

Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

DELETE /v1/cluster/layer3/segment/{segment-label}

Deletes a segment.

URL

```
https://<VxRail IP address>/rest/vxm/v1/cluster/layer3/segment/{segment-label}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpwcmVudHJlcn2FtZQ==**

Path parameters segment-label: (Required) The label of the segment that you want to delete.

Parameter	Type	Description
segment-label	string	The current label of the segment that you want to delete

Example:

```
v1/cluster/layer3/segment/rack-temp-1
```

Response

200 Successful operation.
Example:

```
{
  "message": "Successfully changed the label of the segment."
}
```

400 Bad request.
Example:

```
{
  "error_code": 60006,
  "message": "The segment label to be updated does not exist."
}
```

403 Forbidden request.

Example:

```
{
  "message": "Access Denied."
}
```

404

The request resources was not found.

Example:

```
{
  "message": "Resource not found."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "The server failed to complete the request due to internal
error. Please try again later."
}
```

POST /v1/cluster/expansion/validate

Validates a cluster expansion (layer 2 or layer 3) based on the provided expansion specification.

URL

```
<VxRail IP address>/rest/vxm/v1/cluster/expansion/validate
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization

(Required) Username and password encoded with Base64

Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Body parameter ExpansionRequest: (Required) Parameters to validate the cluster expansion (supports L2/L3 network configurations).

Parameter	Type	Description
version	string	(Required) The software version of the VxRail cluster. For example, 7.0.130
hosts	[object]	(Required) Information regarding the hosts in the cluster See the ExpansionNodeSpec object description below.
vcenter	object	(Required) vCenter credentials <ul style="list-style-type: none">username (string): Username of the account (Required)password (string): Password of the account (Required)
segment_label	string	(Optional) Label name of the segment.

Example:

```
{
  "version": "7.0.240",
  "hosts": [
    {
      "customer_supplied": {
        "management_ip": "10.62.81.11",
        "current_root_password": "Passw0rd!"
      },
      "hostname": "dellb05-01.localdomain.local",
      "accounts": {
        "root": {
          "username": "root",
          "password": "password"
        },
        "management": {
          "username": "management",
          "password": "Testesx123!"
        }
      },
      "network": [
        {
          "type": "management",
          "ip": "10.62.81.11"
        },
        {
          "type": "vsan",
          "ip": "10.62.81.11"
        },
        {
          "type": "vmotion",
          "ip": "10.62.81.11"
        }
      ],
      "geo_location": {
        "rack_name": "r1",
        "order_number": 1
      },
      "maintenance_mode": false,
      "nic_mappings": [
        {
          "vds_name": "vds1",
          "name": "uplink1",
          "physical_nic": "vmnic0"
        },
        {
          "vds_name": "vds1",
```

```

        "name": "uplink2",
        "physical_nic": "vmnic1"
    },
    ],
    "storage": {
        "disk_group_type": "2403"
    },
    },
    {
        "customer_supplied": {
            "management_ip": "10.62.81.12",
            "current_root_password": "Passw0rd!"
        },
        "hostname": "dellb05-02.localdomain.local",
        "accounts": {
            "root": {
                "username": "root",
                "password": "password"
            },
            "management": {
                "username": "management",
                "password": "Testesx123!"
            }
        },
        "network": [
            {
                "type": "management",
                "ip": "10.62.81.12"
            },
            {
                "type": "vsan",
                "ip": "10.62.81.12"
            },
            {
                "type": "vmotion",
                "ip": "10.62.81.12"
            }
        ],
        "geo_location": {
            "rack_name": "r1",
            "order_number": 2
        },
        "maintenance_mode": false,
        "nic_mappings": [
            {
                "vds_name": "vds1",
                "name": "uplink1",
                "physical_nic": "vmnic0"
            },
            {
                "vds_name": "vds1",
                "name": "uplink2",
                "physical_nic": "vmnic1"
            }
        ],
        "storage": {
            "slot_claims": [
                {
                    "usage": "non-vSAN",
                    "values": [
                        {
                            "slots": "0-3,9"
                        }
                    ]
                }
            ]
        }
    },
    },
    "vcenter": {
        "username": "administrator@vsphere.local",
        "password": "Testvxrail123!"
    }
}

```

```
}
}
```

hosts ExpansionNodeSpec object: (Required) Information regarding the hosts in the cluster.

Property	Type	Description
customer_supplied	object	Customer-supplied management IP address and password information The CustomerSuppliedSpec object contains: <ul style="list-style-type: none"> management_ip (string): IP address of the management node (Required) current_root_password (string): Password of the root account
host_psnt	string	PSNT of the host
hostname	string	(Required) Hostname of the host
accounts	object	(Required) Credentials for the host accounts The NodeAccount object contains: <ul style="list-style-type: none"> root (object) (Required): <ul style="list-style-type: none"> username (string) (Required) password (string) (Required) management (object) (Required): <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)
network	[object]	(Required) An array of network information for the host components The HostIP object contains: <ul style="list-style-type: none"> type (object) (Required): Type of component. Supported values include management, vsan, and vmotion. ip (string) (Required): IP address of the component
maintenance_mode	boolean	Whether the hosts remain in maintenance mode
nic_mappings	[object]	(Required) An array of NIC mappings for the hosts The nic_mappings object contains: <ul style="list-style-type: none"> vds_name (string) (Required): Name of the VDS name (string) (Required): Name of the uplink physical_nic (string) (Required): Name of the physical NIC
geo_location	object	Geographic location information for the host The geo_location object contains: <ul style="list-style-type: none"> rack_name (string): The name of the rack that houses the host position (integer): The position of the node in the rack
storage	object	Information about which disk slots are claimed as vSAN storage and which slots are non-vSAN storage The storage object contains:

Property	Type	Description
		<ul style="list-style-type: none"> disk_group_type (string): The disk group configuration for the appliance. Supported in VxRail 7.0.240 software and later. <ul style="list-style-type: none"> For the VxRail E660/F, P670F, and V670F appliances, disk_group_type uses the default configuration unless this property is specified. For all other appliance models, disk_group_type is not supported. <p>The first two digits in disk_group_type represent the number of disk slots in the appliance. The second two digits represent the disk group configuration. For example, 1001 represents an E660/F with 10 disk slots using the disk group 1 (DG1) configuration (1 cache disk and up to 7 capacity disks).</p> <p>Supported values include:</p> <ul style="list-style-type: none"> VxRail E660/F appliance: 1001 (default), 1002 VxRail P670F appliance: 2804 (default) VxRail V670F appliance: 2404 (default), 2403 [slot_claims] (object): <ul style="list-style-type: none"> usage (string): The type of usage the slot values are claimed as. Supported values are vSAN and non-vSAN. [values] (string): <ul style="list-style-type: none"> slots (string): A list of disk slots that are claimed as the type of usage defined in usage. Example values include 3, 6, 7-8

Response

202	The request has been accepted for processing, but the processing has not been completed. A request_id will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
403	The server understood the request but is refusing to fulfill it.
404	The server has not found anything matching the Request-URI.
500	The request for operation status failed with errors.

POST /v1/cluster/expansion

Performs a cluster expansion (layer 2 or layer 3) based on the provided expansion specification.

URL

```
<VxRail IP address>/rest/vxm/v1/cluster/expansion
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameter ExpansionRequest: (Required) Parameters for the cluster expansion (supports L2/L3 network configurations).

Parameter	Type	Description
version	string	(Required) The software version of the VxRail cluster. For example, 7.0.130
hosts	[object]	(Required) Information about the hosts in the cluster See the ExpansionNodeSpec object description below.
vcenter	object	(Required) vCenter credentials <ul style="list-style-type: none">username (string): Username of the account (Required)password (string): Password of the account (Required)
segment_label	string	(Optional) Label name of the segment

Example:

```
{
  "version": "7.0.240",
  "hosts": [
    {
      "host_psnt": "JBMX5V20000000",
      "hostname": "dellb05-01.localdomain.local",
      "accounts": {
        "root": {
          "username": "root",
          "password": "password"
        },
        "management": {
          "username": "management",
          "password": "Testesx123!"
        }
      },
      "network": [
        {
          "type": "management",
          "ip": "10.62.81.11"
        },
        {
          "type": "vsan",
          "ip": "10.62.81.11"
        },
        {
          "type": "vmotion",
```

```

        "ip": "10.62.81.11"
    },
    ],
    "storage": {
        "slot_claims": [
            {
                "usage": "non-vSAN",
                "values": [
                    {
                        "slots": "3,6,7-8"
                    }
                ]
            }
        ]
    },
    ],
    "geo_location": {
        "rack_name": "r1",
        "order_number": 1
    },
    "maintenance_mode": false,
    "nic_mappings": [
        {
            "vds_name": "vds1",
            "name": "uplink1",
            "physical_nic": "vmnic0"
        },
        {
            "vds_name": "vds1",
            "name": "uplink2",
            "physical_nic": "vmnic1"
        }
    ]
},
{
    "host_psnt": "JHN04D20000000",
    "hostname": "dellb05-02.localdomain.local",
    "accounts": {
        "root": {
            "username": "root",
            "password": "password"
        },
        "management": {
            "username": "management",
            "password": "Testesx123!"
        }
    },
    "network": [
        {
            "type": "management",
            "ip": "10.62.81.12"
        },
        {
            "type": "vsan",
            "ip": "10.62.81.12"
        },
        {
            "type": "vmotion",
            "ip": "10.62.81.12"
        }
    ],
    "geo_location": {
        "rack_name": "r1",
        "order_number": 2
    },
    "maintenance_mode": false,
    "nic_mappings": [
        {
            "vds_name": "vds1",
            "name": "uplink1",
            "physical_nic": "vmnic0"
        },
        {

```


```

        "vds_name": "vds1",
        "name": "uplink2",
        "physical_nic": "vmnic1"
    }
    ],
    "storage": {
        "disk_group_type": "2403"
    }
}
],
"vcenter": {
    "username": "administrator@vsphereAA.local",
    "password": "Testvxrail123!"
}
}

```

hosts ExpansionNodeSpec object: (Required) Information regarding the hosts in the cluster.

Property	Type	Description
customer_supplied	object	Customer-supplied management IP address and password information The CustomerSuppliedSpec object contains: <ul style="list-style-type: none"> management_ip (string): IP address of the management node (Required) current_root_password (string): Password of the root account
host_psnt	string	PSNT of the host
hostname	string	(Required) Hostname of the host
accounts	object	(Required) Credentials for the host accounts The NodeAccount object contains: <ul style="list-style-type: none"> root (object) (Required): <ul style="list-style-type: none"> username (string) (Required) password (string) (Required) management (object) (Required): <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)
network	[object]	(Required) An array of network information for the host components The HostIP object contains: <ul style="list-style-type: none"> type (object) (Required): Type of component. Supported values include management, vsan, and vmotion. ip (string) (Required): IP address of the component
maintenance_mode	boolean	Whether the hosts remain in maintenance mode after being added to the cluster
nic_mappings	[object]	(Required) An array of NIC mappings for the hosts The nic_mappings object contains: <ul style="list-style-type: none"> vds_name (string) (Required): Name of the VDS name (string) (Required): Name of the uplink physical_nic (string) (Required): Name of the physical NIC
geo_location	object	Geographic location information for the host The geo_location object contains:

Property	Type	Description
		<ul style="list-style-type: none"> <code>rack_name</code> (string): The name of the rack that houses the host <code>position</code> (integer): The position of the node in the rack
storage	object	<p>Information about which disk slots are claimed as vSAN storage and which slots are non-vSAN storage</p> <p> NOTE: The <code>storage</code> property is supported in VxRail software 7.0.130 and later.</p> <p>The <code>storage</code> object contains:</p> <ul style="list-style-type: none"> <code>disk_group_type</code> (string): The disk group configuration for the appliance. Supported in VxRail 7.0.240 software and later. <ul style="list-style-type: none"> For the VxRail E660/F, P670F, and V670F appliances, <code>disk_group_type</code> uses the default configuration unless this property is specified. For all other appliance models, <code>disk_group_type</code> is not supported. <p>The first two digits in <code>disk_group_type</code> represent the number of disk slots in the appliance. The second two digits represent the disk group configuration. For example, 1001 represents an E660/F with 10 disk slots using the disk group 1 (DG1) configuration (1 cache disk and up to 7 capacity disks).</p> <p>Supported values include:</p> <ul style="list-style-type: none"> VxRail E660/F appliance: 1001 (default), 1002 VxRail P670F appliance: 2804 (default) VxRail V670F appliance: 2404 (default), 2403 <code>[slot_claims]</code> (object): <ul style="list-style-type: none"> <code>usage</code> (string): The type of usage the slot values are claimed as. Supported values are <code>vSAN</code> and <code>non-vSAN</code>. <code>[values]</code> (string): <ul style="list-style-type: none"> <code>slots</code> (string): A list of disk slots that are claimed as the type of usage defined in <code>usage</code>. Example values include 3, 6, 7–8

Response

202	The request has been accepted for processing, but the processing has not been completed. A <code>request_id</code> will be returned and can be used to check the status of the processing.
400	Invalid request parameters.
401	The provided vCenter credentials are not valid.
403	The server understood the request but is refusing to fulfill it.
404	The server has not found anything matching the Request-URI.
500	The request for operation status failed with errors.

POST /v1/cluster/expansion/cancel

Cancels a failed cluster expansion.

URL

```
<VxRail IP address>/rest/vxm/v1/cluster/expansion/cancel
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmVudHJlc2FtZQ==**

Response

200 The request succeeded.

400 Invalid request parameters.

404 The server has not found anything matching the Request-URI.

500 The request for operation status failed with errors.

GET /v1/vc/mode

Retrieves the current vCenter mode and Platform Services Controller (PSC) mode.

URL

```
https://<VxRail IP address>/rest/vxm/v1/vc/mode
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200

Successful operation.

ClusterModeInfo:

```
{
  description:      vCenter and PSC mode information
  psc_mode          string
                   PSC mode
                   Enum: EMBEDDED, EXTERNAL
  vc_mode           string
                   vCenter mode
                   Enum: EMBEDDED, EXTERNAL
}
```

Example:

```
{
  "psc_mode": "EXTERNAL",
  "vc_mode": "EMBEDDED"
}
```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404

vCenter mode is not found.
ResourceNotFoundInfo:

```
{
  description:      Resource not found.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

500

Internal server error.
InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

PATCH /v1/vc/mode

Change the VxRail vCenter and Platform Services Controller (PSC) mode between internal mode and external mode.

URL

```
https://<VxRail IP address>/rest/vxm/v1/vc/mode
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvY2VudHJlc2FtZQ==**

Body parameters VcConversionSpec: (Required) Information needed to update the vCenter or PSC mode to internal or external

Property	Type	Description
psc_mode	string	(Required) Specifies the PSC mode that you want. Supported values are: <ul style="list-style-type: none">EMBEDDED: PSC is integrated with vCenterEXTERNAL: PSC is a separate appliance from vCenter Note that vCenter 7.0 only supports embedded PSC mode.
vc_admin_user	Account object	(Required) Credentials for the vCenter administrator. The Account object contains: <ul style="list-style-type: none">username (string): Username of the account.password (string): Password of the account.
vc_mode	string	(Required) Specifies the vCenter mode that you want. Supported values are: <ul style="list-style-type: none">EMBEDDED: vCenter is deployed by VxRailEXTERNAL: vCenter is external

Example:

```
{
  "psc_mode": "EXTERNAL",
  "vc_admin_user": {
    "password": "xxxxxxx",
    "username": "administrator@vsphere.local"
  },
  "vc_mode": "EXTERNAL"
}
```

Response

202 Successful operation.

AcceptedRequestInfo:

```
{
  description: Accepted request.
  request_id: string
               example: 5ffe7062-a590-45b8-a172-8d2cf119562e
               The detail message about the accepted request.
}
```

Example:

```
{
  "request_id": "5ffe7062-a590-45b8-a172-8d2cf119562e"
}
```

400 Request body is not correct.

BadRequestInfo:

```
{
  description: Bad request.
  errorCode: integer($int32)
               example: 40007
               The sub-errorcode to indicate the bad request.
}
```

```

message          string
                  example: request parameters invalid.
                  The detail error message about the bad request.
}

```

401

Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                    example: The provided vCenter credentials are not valid.
                    The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403

Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                    example: Access Denied.
                    The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

500

Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

VxRail appliance

The VxRail API supports querying and VxRail appliance chassis, disk, and host information.

GET /v1/chassis

Retrieves a list of VxRail chassis and information about every node in each chassis.

URL

```
https://<VxRail IP address>/rest/vxm/v1/chassis
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Successful operation.

ChassisInfo:

Example:

```
[
  {
    "description": "string",
    "generation": 0,
    "health": "string",
    "hosts": [
      {
        "health": "string",
        "hostname": "string",
        "id": "string",
        "led_status": "string",
        "manufacturer": "string",
        "missing": true,
        "name": "string",
```

```

        "operational_status": "string",
        "power_status": "string",
        "psnt": "string",
        "slot": 0,
        "sn": "string",
        "tpm_present": true
    }
],
"id": "string",
"missing": true,
"model": "string",
"part_number": "string",
"power_supplies": [
    {
        "health": "string",
        "manufacturer": "string",
        "missing": true,
        "name": "string",
        "part_number": "string",
        "revision_number": "string",
        "slot": 0,
        "sn": "string"
    }
],
"psnt": "string",
"render_category": "string",
"service_tag": "string",
"sn": "string"
}
]

```

400 Bad request

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

GET /v2/chassis

Retrieves a list of VxRail chassis and information about every node for each chassis (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/chassis
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvYVUyIHVlc2FtZQ==**

Response

200

Successful operation.

[ChassisInfoV2]:

Parameter	Type	Description
id	string	ID number of the chassis
sn	string	Serial number of the chassis
part_number	string	Part number of the chassis
description	string	Short description of the chassis
service_tag	string	Service tag number of the chassis
psnt	string	Product serial number tag (PSNT) of the chassis
model	string	Model type of the chassis
render_category	string	Dell render category of the chassis
generation	integer	VxRail generation of the chassis

Parameter	Type	Description
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
hosts	[object]	Information about each VxRail host The <code>hosts</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the host • <code>sn</code> (string): Serial number of the host • <code>slot</code> (integer): Rack slot position where the VxRail host appliance is installed • <code>hostname</code> (string): Hostname of the host • <code>name</code> (string): Name of the host • <code>manufacturer</code> (string): Manufacturer of the host • <code>psnt</code> (string): PSNT of the host • <code>led_status</code> (string): State of the chassis LED indicator for the host • <code>health</code> (string): Health status of the host Supported values are Critical, Error, Warning, and Healthy. • <code>missing</code> (boolean): Whether the host health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) • <code>tpm_present</code> (boolean): Whether a TPM security device is installed on the VxRail host • <code>operational_status</code> (string): Operational status of the host • <code>power_status</code> (string): Power supply status of the host • <code>geo_location</code> (object): Information about the geographical location of the host <ul style="list-style-type: none"> ◦ <code>rack_name</code> (string): Rack name where the host is located ◦ <code>order_number</code> (integer): Order number of the host
power_supplies	[object]	Information about the chassis power supplies The <code>power_supplies</code> object contains the following properties: <ul style="list-style-type: none"> • <code>sn</code> (string): Serial number of the power supply • <code>part_number</code> (string): Part number of the power supply • <code>revision_number</code> (string): Revision number of the power supply • <code>name</code> (string): Name of the power supply • <code>manufacturer</code> (string): Manufacturer of the power supply • <code>slot</code> (integer): Slot position of the power supply • <code>health</code> (string): Health status of the power supply Supported values are Critical, Error, Warning, and Healthy.

Parameter	Type	Description
		<ul style="list-style-type: none"> missing (boolean): Whether the power supply health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)

Example:

```
[
  {
    "id": "V06090200000000",
    "sn": "V060902",
    "description": "Main System Chassis",
    "service_tag": "V060902",
    "psnt": "V06090200000000",
    "model": "VxRail E560",
    "render_category": "DELL_R640",
    "generation": 3,
    "health": "Healthy",
    "missing": false,
    "hosts": [
      {
        "id": "V060902",
        "sn": "V060902",
        "slot": 1,
        "hostname": "vcluster609-esx02.vv13xapp01.local",
        "name": "vcluster609-esx02.vv13xapp01.local",
        "manufacturer": "Dell Inc.",
        "psnt": "V06090200000000",
        "led_status": "Blue:On",
        "health": "Healthy",
        "missing": false,
        "tpm_present": false,
        "operational_status": "normal",
        "power_status": "on",
        "geo_location": {
          "rack_name": "V0609",
          "order_number": 2
        }
      }
    ],
    "power_supplies": [
      {
        "sn": "V060902PSUSN000",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 1",
        "manufacturer": "DELL",
        "slot": 1,
        "health": "Healthy",
        "missing": false
      },
      {
        "sn": "V060902PSUSN001",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 2",
        "manufacturer": "DELL",
        "slot": 2,
        "health": "Healthy",
        "missing": false
      }
    ]
  }
]
```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

GET /v3/chassis

Retrieves a list of VxRail chassis and information about every node for each chassis (version 3). Version 3 of this API provides the same chassis information as version 2, plus firmware information for each host.

URL

```
https://<VxRail IP address>/rest/vxm/v3/chassis
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Response

200

Successful operation.

[ChassisInfoV3]:

Parameter	Type	Description
id	string	ID number of the chassis
sn	string	Serial number of the chassis
part_number	string	Part number of the chassis
description	string	Short description of the chassis
service_tag	string	Service tag number of the chassis
psnt	string	Product serial number tag (PSNT) of the chassis
model	string	Model type of the chassis
render_category	string	Dell render category of the chassis
generation	integer	VxRail generation of the chassis
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
hosts	[object]	Information about each VxRail host The <code>hosts</code> object contains the following properties: <ul style="list-style-type: none"><code>id</code> (string): ID of the host<code>sn</code> (string): Serial number of the host<code>slot</code> (integer): Rack slot position where the VxRail host appliance is installed<code>hostname</code> (string): Hostname of the host<code>name</code> (string): Name of the host<code>manufacturer</code> (string): Manufacturer of the host<code>psnt</code> (string): PSNT of the host<code>led_status</code> (string): State of the chassis LED indicator for the host<code>health</code> (string): Health status of the host Supported values are Critical, Error, Warning, and Healthy.<code>missing</code> (boolean): Whether the host health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)<code>tpm_present</code> (boolean): Whether a TPM security device is installed on the VxRail host

Parameter	Type	Description
		<ul style="list-style-type: none"> operational_status (string): Operational status of the host power_status (string): Power supply status of the host firmware_information (object): Information about host firmware <ul style="list-style-type: none"> bios_revision (string): Version of the BIOS firmware bmc_revision (string): Version of the baseboard management controller (BMC) firmware hba_version (string): Version of the host bus adapter (HBA) firmware expander_bpf_version (string): Version of the expander backplane firmware nonexpander_bpf_version (string): Version of the non-expander storage backplane firmware boss_version (string): Version of the BOSS firmware cpld_version (string): Version of the complex logical device (CPLD) firmware geo_location (object): Information about the geographical location of the host <ul style="list-style-type: none"> rack_name (string): Rack name where the host is located order_number (integer): Order number of the host
power_supplies	[object]	<p>Information about the chassis power supplies</p> <p>The power_supplies object contains the following properties:</p> <ul style="list-style-type: none"> sn (string): Serial number of the power supply part_number (string): Part number of the power supply revision_number (string): Revision number of the power supply name (string): Name of the power supply manufacturer (string): Manufacturer of the power supply slot (integer): Slot position of the power supply health (string): Health status of the power supply <p>Supported values are Critical, Error, Warning, and Healthy.</p> <ul style="list-style-type: none"> missing (boolean): Whether the power supply health status is critical. Supported values are false (not critical) and true (critical)

Example:

```
[
  {
    "id": "V0609020000000",
    "sn": "V060902",
    "description": "Main System Chassis",
    "service_tag": "V060902",
```

```

    "psnt": "V0609020000000",
    "model": "VxRail E560",
    "render_category": "DELL_R640",
    "generation": 3,
    "health": "Healthy",
    "missing": false,
    "hosts": [
      {
        "id": "V060902",
        "sn": "V060902",
        "slot": 1,
        "hostname": "vcluster609-esx02.vv13xapp01.local",
        "name": "vcluster609-esx02.vv13xapp01.local",
        "manufacturer": "Dell Inc.",
        "psnt": "V0609020000000",
        "led_status": "Blue:On",
        "health": "Healthy",
        "missing": false,
        "tpm_present": false,
        "operational_status": "normal",
        "power_status": "on",
        "firmware_information": {
          "bios_revision": "2.6.3",
          "bmc_revision": "4.10.10.10",
          "hba_version": "16.17.00.05",
          "expander_bpf_version": "2.46",
          "boss_version": "2.5.13.3022"
        },
        "geo_location": {
          "rack_name": "V0609",
          "order_number": 2
        }
      }
    ],
    "power_supplies": [
      {
        "sn": "V060902PSUSN000",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 1",
        "manufacturer": "DELL",
        "slot": 1,
        "health": "Healthy",
        "missing": false
      },
      {
        "sn": "V060902PSUSN001",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 2",
        "manufacturer": "DELL",
        "slot": 2,
        "health": "Healthy",
        "missing": false
      }
    ]
  }
]

```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
}

```

```
    The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

GET /v4/chassis

Retrieves a list of VxRail chassis and information about every node for each chassis (version 4). Version 4 of this API provides the same chassis information as version 3, plus adds support for satellite nodes.

URL

```
https://<VxRail IP address>/rest/vxm/v4/chassis
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvGVuIHNLc2FtZQ==**

Response

200

Successful operation.

[ChassisInfoV4]:

Parameter	Type	Description
id	string	ID number of the chassis
sn	string	Serial number of the chassis
part_number	string	Part number of the chassis
description	string	Short description of the chassis
service_tag	string	Service tag number of the chassis
psnt	string	Product serial number tag (PSNT) of the chassis
model	string	Model type of the chassis
render_category	string	Dell render category of the chassis
generation	integer	VxRail generation of the chassis
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
hosts	[object]	Information about each VxRail host The <code>hosts</code> object contains the following properties: <ul style="list-style-type: none"><code>id</code> (string): ID of the host<code>sn</code> (string): Serial number of the host<code>type</code> (string): Node type. Supported values include <code>CLUSTER</code> and <code>SATELLITE</code>.<code>slot</code> (integer): Rack slot position where the VxRail host appliance is installed<code>hostname</code> (string): Hostname of the host<code>name</code> (string): Name of the host<code>manufacturer</code> (string): Manufacturer of the host<code>psnt</code> (string): PSNT of the host<code>led_status</code> (string): State of the chassis LED indicator for the host<code>health</code> (string): Health status of the host Supported values are Critical, Error, Warning, and Healthy.<code>missing</code> (boolean): Whether the host health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)<code>tpm_present</code> (boolean): Whether a TPM security device is installed on the VxRail host<code>operational_status</code> (string): Operational status of the host

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>power_status</code> (string): Power supply status of the host • <code>firmware_information</code> (object): Information about host firmware <ul style="list-style-type: none"> ◦ <code>bios_revision</code> (string): Version of the BIOS firmware ◦ <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware ◦ <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware ◦ <code>expander_bpf_version</code> (string): Version of the expander backplane firmware ◦ <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware ◦ <code>boss_version</code> (string): Version of the BOSS firmware ◦ <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware ◦ <code>idsdm_version</code> (string): Version of the IDS DM firmware ◦ <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware ◦ <code>perc_version</code> (string): Version of the PERC firmware • <code>geo_location</code> (object): Information about the geographical location of the host <ul style="list-style-type: none"> ◦ <code>rack_name</code> (string): Rack name where the host is located ◦ <code>order_number</code> (integer): Order number of the host
<code>power_supplies</code>	[object]	<p>Information about the chassis power supplies</p> <p>The <code>power_supplies</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>sn</code> (string): Serial number of the power supply • <code>part_number</code> (string): Part number of the power supply • <code>revision_number</code> (string): Revision number of the power supply • <code>name</code> (string): Name of the power supply • <code>manufacturer</code> (string): Manufacturer of the power supply • <code>slot</code> (integer): Slot position of the power supply • <code>health</code> (string): Health status of the power supply <p>Supported values are Critical, Error, Warning, and Healthy.</p> <ul style="list-style-type: none"> • <code>missing</code> (boolean): Whether the power supply health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)

Example:

```
[
  {
    "id": "V06090200000000",
    "sn": "V060902",
    "description": "Main System Chassis",
    "service_tag": "V060902",
    "psnt": "V06090200000000",
    "model": "VxRail E560",
    "render_category": "DELL_R640",
    "generation": 3,
    "health": "Healthy",
    "missing": false,
    "hosts": [
      {
        "id": "V060902",
        "sn": "V060902",
        "type": "CLUSTER",
        "slot": 1,
        "hostname": "vcluster609-esx02.vv13xapp01.local",
        "name": "vcluster609-esx02.vv13xapp01.local",
        "manufacturer": "Dell Inc.",
        "psnt": "V06090200000000",
        "led_status": "Blue:On",
        "health": "Healthy",
        "missing": false,
        "tpm_present": false,
        "operational_status": "normal",
        "power_status": "on",
        "firmware_information": {
          "bios_revision": "2.6.3",
          "bmc_revision": "4.10.10.10",
          "hba_version": "16.17.00.05",
          "expander_bpf_version": "2.46",
          "boss_version": "2.5.13.3022"
        },
        "geo_location": {
          "rack_name": "V0609",
          "order_number": 2
        }
      }
    ],
    "power_supplies": [
      {
        "sn": "V060902PSUSN000",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 1",
        "manufacturer": "DELL",
        "slot": 1,
        "health": "Healthy",
        "missing": false
      },
      {
        "sn": "V060902PSUSN001",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 2",
        "manufacturer": "DELL",
        "slot": 2,
        "health": "Healthy",
        "missing": false
      }
    ]
  }
]
```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

GET /v1/chassis/{chassis_id}

Retrieves information about a specific VxRail chassis such as PSNT, model, and so on.

URL

```
https://<VxRail IP address>/rest/vxm/v1/chassis/{chassis_id}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Path parameters chassis_id : (Required) The chassis ID for the VxRail chassis you want to query.

Parameter	Type	Description
chassis_id	string	(Required) The chassis ID for the VxRail chassis you want to query

Example:

```
/v1/chassis/CH-ID1
```

Response

200 Successful operation.
ChassisInfo:

```
{
  description:      chassis info
  description       string
  generation        integer($int32)
                    chassis generation
  health            string
                    chassis health status
  hosts             [...]
  id                string
  missing           boolean
                    chassis is missing or not
  model             string
                    chassis model
  part_number       string
  power_supplies    [...]
  psnt              string
                    chassis model
  render_category   string
                    chassis render category
  service_tag       string
  sn                string
}
```

Example:

```
{
  "description": "string",
  "generation": 0,
  "health": "string",
  "hosts": [
    {
      "health": "string",
      "hostname": "string",
      "id": "string",
      "led_status": "string",
      "manufacturer": "string",
      "missing": true,
      "name": "string",
      "operational_status": "string",
      "power_status": "string",
      "psnt": "string",
      "slot": 0,
```

```

        "sn": "string",
        "tpm_present": true
    },
    ],
    "id": "string",
    "missing": true,
    "model": "string",
    "part_number": "string",
    "power_supplies": [
        {
            "health": "string",
            "manufacturer": "string",
            "missing": true,
            "name": "string",
            "part_number": "string",
            "revision_number": "string",
            "slot": 0,
            "sn": "string"
        }
    ],
    "psnt": "string",
    "render_category": "string",
    "service_tag": "string",
    "sn": "string"
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v2/chassis/{chassis_id}

Retrieves information about a specific VxRail chassis such as PSNT, model, and more (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/chassis/{chassis_id}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Path parameters chassis_id : (Required) The chassis ID for the VxRail chassis that you want to query.

Parameter	Type	Description
chassis_id	string	(Required) The chassis ID for the VxRail chassis that you want to query

Example:

```
/v2/chassis/V0609020000000
```

Response

200 Successful operation.
[ChassisInfoV2]:

Parameter	Type	Description
id	string	ID number of the chassis
sn	string	Serial number of the chassis
part_number	string	Part number of the chassis
description	string	Short description of the chassis
service_tag	string	Service tag number of the chassis
psnt	string	Product serial number tag (PSNT) of the chassis
model	string	Model type of the chassis
render_category	string	Dell render category of the chassis
generation	integer	VxRail generation of the chassis
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
hosts	[object]	Information about each VxRail host The <code>hosts</code> object contains the following properties: <ul style="list-style-type: none"> <code>id</code> (string): ID of the host <code>sn</code> (string): Serial number of the host <code>slot</code> (integer): Rack slot position where the VxRail host appliance is installed <code>hostname</code> (string): Hostname of the host <code>name</code> (string): Name of the host <code>manufacturer</code> (string): Manufacturer of the host <code>psnt</code> (string): PSNT of the host <code>led_status</code> (string): State of the chassis LED indicator for the host <code>health</code> (string): Health status of the host Supported values are Critical, Error, Warning, and Healthy. <code>missing</code> (boolean): Whether the host health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) <code>tpm_present</code> (boolean): Whether a TPM security device is installed on the VxRail host <code>operational_status</code> (string): Operational status of the host <code>power_status</code> (string): Power supply status of the host <code>geo_location</code> (object): Information about the geographical location of the host <ul style="list-style-type: none"> <code>rack_name</code> (string): Rack name where the host is located <code>order_number</code> (integer): Order number of the host
power_supplies	[object]	Information about the chassis power supplies The <code>power_supplies</code> object contains the following properties:

Parameter	Type	Description
		<ul style="list-style-type: none"> sn (string): Serial number of the power supply part_number (string): Part number of the power supply revision_number (string): Revision number of the power supply name (string): Name of the power supply manufacturer (string): Manufacturer of the power supply slot (integer): Slot position of the power supply health (string): Health status of the power supply <p>Supported values are Critical, Error, Warning, and Healthy.</p> <ul style="list-style-type: none"> missing (boolean): Whether the power supply health status is critical. Supported values are false (not critical) and true (critical)

Example:

```
{
  "id": "V0609010000000",
  "sn": "V060901",
  "description": "Main System Chassis",
  "service_tag": "V060901",
  "psnt": "V0609010000000",
  "model": "VxRail E560",
  "render_category": "DELL_R640",
  "generation": 3,
  "health": "Healthy",
  "missing": false,
  "hosts": [
    {
      "id": "V060901",
      "sn": "V060901",
      "slot": 1,
      "hostname": "vcluster609-esx01.vv13xapp01.local",
      "name": "vcluster609-esx01.vv13xapp01.local",
      "manufacturer": "Dell Inc.",
      "psnt": "V0609010000000",
      "led_status": "Blue:On",
      "health": "Healthy",
      "missing": false,
      "tpm_present": false,
      "operational_status": "normal",
      "power_status": "on",
      "geo_location": {
        "rack_name": "V0609",
        "order_number": 1
      }
    }
  ],
  "power_supplies": [
    {
      "sn": "V060901PSUSN000",
      "part_number": "0CMPGMA01",
      "revision_number": "00.23.32",
      "name": "Power Supply 1",
      "manufacturer": "DELL",
      "slot": 1,
      "health": "Healthy",
      "missing": false
    },
    {
      "sn": "V060901PSUSN001",
```

```

        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 2",
        "manufacturer": "DELL",
        "slot": 2,
        "health": "Healthy",
        "missing": false
    }
]
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

500 Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

GET /v3/chassis/{chassis_id}

Retrieves information about a specific VxRail chassis such as PSNT, model, and more (version 3). Version 3 of this API provides the same chassis information as version 2, plus firmware information for each host.

URL

```
https://<VxRail IP address>/rest/vxm/v3/chassis/{chassis_id}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.240 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters chassis_id : (Required) The chassis ID for the VxRail chassis that you want to query.

Parameter	Type	Description
chassis_id	string	(Required) The chassis ID for the VxRail chassis that you want to query

Example:

```
/v2/chassis/V0609020000000
```

Response

200 Successful operation.
[ChassisInfoV2]:

Parameter	Type	Description
id	string	ID number of the chassis
sn	string	Serial number of the chassis
part_number	string	Part number of the chassis
description	string	Short description of the chassis
service_tag	string	Service tag number of the chassis
psnt	string	Product serial number tag (PSNT) of the chassis
model	string	Model type of the chassis
render_category	string	Dell render category of the chassis

Parameter	Type	Description
generation	integer	VxRail generation of the chassis
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
hosts	[object]	<p>Information about each VxRail host</p> <p>The <code>hosts</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>id</code> (string): ID of the host <code>sn</code> (string): Serial number of the host <code>slot</code> (integer): Rack slot position where the VxRail host appliance is installed <code>hostname</code> (string): Hostname of the host <code>name</code> (string): Name of the host <code>manufacturer</code> (string): Manufacturer of the host <code>psnt</code> (string): PSNT of the host <code>led_status</code> (string): State of the chassis LED indicator for the host <code>health</code> (string): Health status of the host Supported values are Critical, Error, Warning, and Healthy. <code>missing</code> (boolean): Whether the host health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) <code>tpm_present</code> (boolean): Whether a TPM security device is installed on the VxRail host <code>operational_status</code> (string): Operational status of the host <code>power_status</code> (string): Power supply status of the host <code>firmware_information</code> (object): Information about host firmware <ul style="list-style-type: none"> <code>bios_revision</code> (string): Version of the BIOS firmware <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware <code>expander_bpf_version</code> (string): Version of the expander backplane firmware <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware <code>boss_version</code> (string): Version of the BOSS firmware <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware <code>geo_location</code> (object): Information about the geographical location of the host <ul style="list-style-type: none"> <code>rack_name</code> (string): Rack name where the host is located

Parameter	Type	Description
		<ul style="list-style-type: none"> order_number (integer): Order number of the host
power_supplies	[object]	<p>Information about the chassis power supplies</p> <p>The power_supplies object contains the following properties:</p> <ul style="list-style-type: none"> sn (string): Serial number of the power supply part_number (string): Part number of the power supply revision_number (string): Revision number of the power supply name (string): Name of the power supply manufacturer (string): Manufacturer of the power supply slot (integer): Slot position of the power supply health (string): Health status of the power supply <p>Supported values are Critical, Error, Warning, and Healthy.</p> <ul style="list-style-type: none"> missing (boolean): Whether the power supply health status is critical. Supported values are false (not critical) and true (critical)

Example:

```
{
  "id": "V06090100000000",
  "sn": "V060901",
  "description": "Main System Chassis",
  "service_tag": "V060901",
  "psnt": "V06090100000000",
  "model": "VxRail E560",
  "render_category": "DELL_R640",
  "generation": 3,
  "health": "Healthy",
  "missing": false,
  "hosts": [
    {
      "id": "V060901",
      "sn": "V060901",
      "slot": 1,
      "hostname": "vcluster609-esx01.vv13xapp01.local",
      "name": "vcluster609-esx01.vv13xapp01.local",
      "manufacturer": "Dell Inc.",
      "psnt": "V06090100000000",
      "led_status": "Blue:On",
      "health": "Healthy",
      "missing": false,
      "tpm_present": false,
      "operational_status": "normal",
      "power_status": "on",
      "firmware_information": {
        "bios_revision": "2.6.3",
        "bmc_revision": "4.10.10.10",
        "hba_version": "16.17.00.05",
        "expander_bpf_version": "2.46",
        "boss_version": "2.5.13.3022"
      },
      "geo_location": {
        "rack_name": "V0609",
        "order_number": 1
      }
    }
  ]
}
```

```

    },
    "power_supplies": [
      {
        "sn": "V060901PSUSN000",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 1",
        "manufacturer": "DELL",
        "slot": 1,
        "health": "Healthy",
        "missing": false
      },
      {
        "sn": "V060901PSUSN001",
        "part_number": "0CMPGMA01",
        "revision_number": "00.23.32",
        "name": "Power Supply 2",
        "manufacturer": "DELL",
        "slot": 2,
        "health": "Healthy",
        "missing": false
      }
    ]
  }
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v4/chassis/{chassis_id}

Retrieves information about a specific VxRail chassis such as PSNT, model, and more (version 4). Version 4 of this API provides the same chassis information as version 3, plus adds support for satellite nodes.

URL

```
https://<VxRail IP address>/rest/vxm/v4/chassis/{chassis_id}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters chassis_id : (Required) The chassis ID for the VxRail chassis that you want to query.

Parameter	Type	Description
chassis_id	string	(Required) The chassis ID for the VxRail chassis that you want to query

Example:

```
/v2/chassis/V0609020000000
```

Response

200 Successful operation.

[ChassisInfoV4]:

Parameter	Type	Description
id	string	ID number of the chassis
sn	string	Serial number of the chassis
part_number	string	Part number of the chassis
description	string	Short description of the chassis
service_tag	string	Service tag number of the chassis
psnt	string	Product serial number tag (PSNT) of the chassis
model	string	Model type of the chassis
render_category	string	Dell render category of the chassis
generation	integer	VxRail generation of the chassis
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
hosts	[object]	<p>Information about each VxRail host</p> <p>The <code>hosts</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>id</code> (string): ID of the host <code>sn</code> (string): Serial number of the host <code>type</code> (string): Node type. Supported values include <code>CLUSTER</code> and <code>SATELLITE</code>. <code>slot</code> (integer): Rack slot position where the VxRail host appliance is installed <code>hostname</code> (string): Hostname of the host <code>name</code> (string): Name of the host <code>manufacturer</code> (string): Manufacturer of the host <code>psnt</code> (string): PSNT of the host <code>led_status</code> (string): State of the chassis LED indicator for the host <code>health</code> (string): Health status of the host Supported values are Critical, Error, Warning, and Healthy. <code>missing</code> (boolean): Whether the host health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) <code>tpm_present</code> (boolean): Whether a TPM security device is installed on the VxRail host <code>operational_status</code> (string): Operational status of the host <code>power_status</code> (string): Power supply status of the host <code>firmware_information</code> (object): Information about host firmware <ul style="list-style-type: none"> <code>bios_revision</code> (string): Version of the BIOS firmware

Parameter	Type	Description
		<ul style="list-style-type: none"> ◦ <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware ◦ <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware ◦ <code>expander_bpf_version</code> (string): Version of the expander backplane firmware ◦ <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware ◦ <code>boss_version</code> (string): Version of the BOSS firmware ◦ <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware ◦ <code>idsdm_version</code> (string): Version of the IDS DM firmware ◦ <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware ◦ <code>perc_version</code> (string): Version of the PERC firmware • <code>geo_location</code> (object): Information about the geographical location of the host <ul style="list-style-type: none"> ◦ <code>rack_name</code> (string): Rack name where the host is located ◦ <code>order_number</code> (integer): Order number of the host
<code>power_supplies</code>	[object]	<p>Information about the chassis power supplies</p> <p>The <code>power_supplies</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>sn</code> (string): Serial number of the power supply • <code>part_number</code> (string): Part number of the power supply • <code>revision_number</code> (string): Revision number of the power supply • <code>name</code> (string): Name of the power supply • <code>manufacturer</code> (string): Manufacturer of the power supply • <code>slot</code> (integer): Slot position of the power supply • <code>health</code> (string): Health status of the power supply <p>Supported values are Critical, Error, Warning, and Healthy.</p> <ul style="list-style-type: none"> • <code>missing</code> (boolean): Whether the power supply health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)

Example:

```
{
  "id": "V0609010000000",
  "sn": "V060901",
  "description": "Main System Chassis",
  "service_tag": "V060901",
  "psnt": "V0609010000000",
  "model": "VxRail E560",
  "render_category": "DELL_R640",
  "generation": 3,
```

```

"health": "Healthy",
"missing": false,
"hosts": [
  {
    "id": "V060901",
    "sn": "V060901",
    "type": "CLUSTER",
    "slot": 1,
    "hostname": "vcluster609-esx01.vv13xapp01.local",
    "name": "vcluster609-esx01.vv13xapp01.local",
    "manufacturer": "Dell Inc.",
    "psnt": "V0609010000000",
    "led_status": "Blue:On",
    "health": "Healthy",
    "missing": false,
    "tpm_present": false,
    "operational_status": "normal",
    "power_status": "on",
    "firmware_information": {
      "bios_revision": "2.6.3",
      "bmc_revision": "4.10.10.10",
      "hba_version": "16.17.00.05",
      "expander_bpf_version": "2.46",
      "boss_version": "2.5.13.3022"
    },
    "geo_location": {
      "rack_name": "V0609",
      "order_number": 1
    }
  }
],
"power_supplies": [
  {
    "sn": "V060901PSUSN000",
    "part_number": "0CMPGMA01",
    "revision_number": "00.23.32",
    "name": "Power Supply 1",
    "manufacturer": "DELL",
    "slot": 1,
    "health": "Healthy",
    "missing": false
  },
  {
    "sn": "V060901PSUSN001",
    "part_number": "0CMPGMA01",
    "revision_number": "00.23.32",
    "name": "Power Supply 2",
    "manufacturer": "DELL",
    "slot": 2,
    "health": "Healthy",
    "missing": false
  }
]
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/disks

Retrieves a list of disks and their associated information.

URL

```
https://<VxRail IP address>/rest/vxm/v1/disks
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 through 7.0.210 Deprecated in 7.0.240

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Response

200

Successful operation.

[DiskInfo]: An array of each disk and its associated information

Example:

```
[
  {
    "id": "V060904DVSNO2",
    "sn": "V060904DVSNO2",
    "guid": "6000c29839d19d07b808fb10fec8a780",
    "disk_type": "HDD",
    "protocol": "SAS",
    "enclosure": 0,
    "bay": 1,
    "slot": 4,
    "missing": false,
    "capacity": "400.0GB"
  },
  {
    "id": "V060904DVSNO3",
    "sn": "V060904DVSNO3",
    "guid": "6000c2914b4b67792089673f2a9cb2de",
    "disk_type": "SSD",
    "protocol": "SAS",
    "enclosure": 0,
    "bay": 1,
    "slot": 9,
    "missing": false,
    "capacity": "40.0GB"
  }
]
```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/disks/{disk_sn}

Retrieves information about a specific disk such as serial number, usage statistics, and so on.

URL

```
https://<VxRail IP address>/rest/vxm/v1/disk/{disk_sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 through 7.0.210 Deprecated in 7.0.240

Request

Authorization

(Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters disk_sn: (Required) The serial number of the disk you want to query.

Parameter	Type	Description
disk_sn	string	The serial number of the disk you want to query

Example:

```
/v1/disks/V060902DVSN00
```

Response

200 Successful operation.
DiskInfo:

```
{
  description:          disk infomation
  capacity              string
                        disk capacity
  disk_state            string
                        disk status
  disk_type             string
                        disk type
  enclosure             integer($int32)
                        disk enclosure
  firmware_revision     string
                        disk firmware revision
  guid                 string
  id                   string
                        disk id
  led_status            string
                        disk led status
  manufacturer          string
                        disk manufacturer
  max_capable_speed     string
                        disk max capable speed
  missing               boolean
                        disk is missing or not
  model                 string
                        disk model
  protocol              string
                        disk protocol
  remaining_write_endurance_rate
                        string
                        disk write endurance remaining rate
  slot                  integer($int32)
                        disk slot
  sn                    string
                        disk serial number
  write_endurance       string
                        disk write endurance
  write_endurance_status
                        string
                        disk write endurance status
}
```

Example:

```
{
  "id": "V060902DVSN00",
  "sn": "V060902DVSN00",
  "guid": "6000c298a4477c10d5d89f963ac4f8aa",
  "disk_type": "HDD",
  "protocol": "SAS",
  "enclosure": 0,
  "bay": 1,
  "slot": 0,
```

```
"missing": false,
"capacity": "400.0GB"
}
```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403 Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/hosts

Retrieves a list of VxRail hosts and their associated subcomponent information.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Response

200 Successful operation.
Host: [array]
Example:

```
[
  {
    "boot_devices": [
      {
        "avr_erase_count": 0,
        "block_size": "string",
        "bootdevice_type": "string",
        "capacity": "string",
        "device_model": "string",
        "firmware_version": "string",
        "health": "string",
        "id": "string",
        "max_erase_count": 0,
        "power_cycle_count": 0,
        "power_on_hours": 0,
        "sata_type": "string",
        "slot": 0,
        "sn": "string"
      }
    ],
    "disks": [
      {
        "capacity": "string",
        "disk_state": "string",
        "disk_type": "string",
        "enclosure": 0,
        "firmware_revision": "string",
        "guid": "string",
```

```

        "id": "string",
        "led_status": "string",
        "manufacturer": "string",
        "max_capable_speed": "string",
        "missing": true,
        "model": "string",
        "protocol": "string",
        "remaining_write_endurance_rate": "string",
        "slot": 0,
        "sn": "string",
        "write_endurance": "string",
        "write_endurance_status": "string"
    }
],
"firmwareInfo": {
    "bios_revision": "string",
    "bmc_revision": "string",
    "boss_version": "string",
    "cpld_version": "string",
    "expander_bpf_version": "string",
    "hba_version": "string",
    "idsdm_version": "string",
    "nonexpander_bpf_version": "string"
},
"health": "string",
"hostname": "string",
"id": "string",
"led_status": "string",
"manufacturer": "string",
"missing": true,
"name": "string",
"nics": [
    {
        "firmware_family_version": "string",
        "id": "string",
        "link_speed": "string",
        "link_status": "string",
        "mac": "string",
        "slot": 0
    }
],
"operational_status": "string",
"part_number": "string",
"power_status": "string",
"psnt": "string",
"slot": 0,
"sn": "string",
"tpm_present": true
}
]

```

400 Bad request

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404

Host not found.

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v2/hosts

Retrieves a list of VxRail hosts and the associated subcomponent information (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization (Required) Username and password encoded with Base64.

Example value: **Basic QWxhZGRpbjpvGVuIHNLc2FtZQ==**

Response

200

Successful operation.

[HostV2]: An array of VxRail hosts and the associated information for each host

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
part_number	string	Part number of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none"><code>id</code> (string): ID of the boot device<code>sn</code> (string): Serial number of the boot device<code>device_model</code> (string): Model number of the boot device<code>sata_type</code> (string): Type of disk drive of the device<code>power_on_hours</code> (integer): Number of hours the device is powered on<code>power_cycle_count</code> (integer): Number of times of the device power cycled<code>max_erase_count</code> (integer): Maximum erase count for the device<code>avr_erase_count</code> (integer): Average erase count for the device<code>block_size</code> (string): Block size of the disk device<code>capacity</code> (string): Capacity of the device disk

Parameter	Type	Description
		<ul style="list-style-type: none"> health (string): Health status of the boot device (percentage) firmware_version (string): Version of the firmware for the boot device bootdevice_type (string): Type of boot device solution slot (integer): The slot position of the boot device
nics	[object]	<p>Information about each NIC on the VxRail host</p> <p>The nics object contains the following properties:</p> <ul style="list-style-type: none"> id (string): ID of the NIC mac (string): MAC address of the NIC link_status (string): The link status of the NIC link_speed (string): The link speed of the NIC slot (integer): The slot position of the NIC firmware_family_version (string): Version of the firmware for the NIC
disks	[object]	<p>Information about each disk installed in the VxRail host</p> <p>The disks object contains the following properties:</p> <ul style="list-style-type: none"> id (string): ID of the disk sn (string): Serial number of the disk guid (string): Global unique identifier of the disk manufacturer (string): Manufacturer of the disk model (string): Model of the disk disk_type (string): Type of disk drive protocol (string): Type of transport protocol max_capable_speed (string): Maximum capable speed of the disk enclosure (integer): Enclosure where the disk is installed slot (integer): Slot where the disk is installed psnt (string): PSNT of the disk disk_state (string): Health state of the disk led_status (string): State of the chassis LED indicator for the disk missing (boolean): Whether the disk health status is critical. Supported values are false (not critical) and true (critical) capacity (string): Capacity of the disk write_endurance (string): Write endurance of the disk (usage percentage) write_endurance_status (string): Status of the write endurance of the disk remaining_write_endurance_rate (string): Remaining write endurance of the disk (percentage remaining) firmware_revision (string): Version of the firmware for the disk
firmwareInfo	object	Information about the firmware versions installed on the host

Parameter	Type	Description
		<p>The firmwareInfo object contains the following properties:</p> <ul style="list-style-type: none"> • bios_revision (string): Version of the BIOS firmware • bmc_revision (string): Version of the baseboard management controller (BMC) firmware • hba_version (string): Version of the host bus adapter (HBA) firmware • expander_bpf_version (string): Version of the expander backplane firmware • nonexpander_bpf_version (string): Version of the non-expander storage backplane firmware • boss_version (string): Version of the BOSS firmware • cpld_version (string): Version of the complex logical device (CPLD) firmware • idsdm_version (string): Version of the internal dual SD module (IDSDM) firmware
geo_location	object	<p>Information about the geographical location of the host</p> <p>The geo_location object contains the following properties:</p> <ul style="list-style-type: none"> • rack_name (string): Rack name where the host is located • order_number (integer): Order number of the host

Example:

```
[
  [
    {
      "id": "v060902",
      "sn": "v060902",
      "slot": 1,
      "hostname": "vcluster609-esx02.vv13xapp01.local",
      "name": "vcluster609-esx02.vv13xapp01.local",
      "manufacturer": "Dell Inc.",
      "psnt": "V0609020000000",
      "led_status": "Blue:On",
      "health": "Healthy",
      "missing": false,
      "tpm_present": false,
      "operational_status": "normal",
      "power_status": "on",
      "boot_devices": [
        {
          "id": "18331E196141",
          "sn": "18331E196141",
          "device_model": "MTFDDAV240TCB",
          "sata_type": "SSD",
          "capacity": "223.57GB",
          "health": "100%",
          "firmware_version": "D0DE008",
          "bootdevice_type": "BOSS"
        },
        {
          "id": "18331E18542B",
          "sn": "18331E18542B",
          "device_model": "MTFDDAV240TCB",
          "sata_type": "SSD",
          "capacity": "223.57GB",

```

```

    "health": "100%",
    "firmware_version": "D0DE008",
    "bootdevice_type": "BOSS"
  }
],
"nics": [
  {
    "id": "E4:43:4B:3D:05:30",
    "mac": "E4:43:4B:3D:05:30",
    "link_status": "Up",
    "link_speed": "10 Gbps",
    "slot": 1,
    "firmware_family_version": "19.5.12"
  },
  {
    "id": "E4:43:4B:3D:05:31",
    "mac": "E4:43:4B:3D:05:31",
    "link_status": "Up",
    "link_speed": "10 Gbps",
    "slot": 2,
    "firmware_family_version": "19.5.12"
  }
],
"disks": [
  {
    "id": "V060902DVSN00",
    "sn": "V060902DVSN00",
    "guid": "6000c298a4477c10d5d89f963ac4f8aa",
    "manufacturer": "SAMSUNG",
    "model": "MZILS1T9HEJH0D3",
    "disk_type": "HDD",
    "protocol": "SAS",
    "max_capable_speed": "12 Gb/s",
    "enclosure": 0,
    "bay": 1,
    "slot": 0,
    "disk_state": "OK",
    "led_status": "Green:On",
    "missing": false,
    "capacity": "400.0GB",
    "firmware_revision": "DSL7"
  },
  {
    "id": "V060902DVSN01",
    "sn": "V060902DVSN01",
    "guid": "6000c2972a17cle736830d5e6f32b80e",
    "manufacturer": "TOSHIBA",
    "model": "PX05SMB040Y",
    "disk_type": "SSD",
    "protocol": "SAS",
    "max_capable_speed": "12 Gb/s",
    "enclosure": 0,
    "bay": 1,
    "slot": 8,
    "disk_state": "OK",
    "led_status": "Green:On",
    "missing": false,
    "capacity": "40.0GB",
    "write_endurance": "3",
    "remaining_write_endurance_rate": "97%",
    "firmware_revision": "AS0E"
  }
],
"firmwareInfo": {
  "bios_revision": "2.6.3",
  "bmc_revision": "4.10.10.10",
  "hba_version": "16.17.00.05",
  "expander_bpf_version": "2.46",
  "boss_version": "2.5.13.3022",
  "cpld_version": "1.0.2",
  "idsdm_version": "1.9"
}

```

```

    },
    "geo_location": {
      "rack_name": "V0609",
      "order_number": 2
    }
  }
]

```

400 Bad request

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

404 Host not found.

500 Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

GET /v3/hosts

Retrieves a list of VxRail hosts and the associated subcomponent information (version 3).

URL

```
https://<VxRail IP address>/rest/vxm/v3/hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Response

200 Successful operation.
[HostV3]: An array of VxRail hosts and the associated information for each host

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host

Parameter	Type	Description
part_number	string	Part number of the host
power_status	string	Power supply status of the host
boot_devices	[object]	<p>Information about each boot device on the VxRail host</p> <p>The <code>boot_devices</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the boot device • <code>sn</code> (string): Serial number of the boot device • <code>device_model</code> (string): Model number of the boot device • <code>sata_type</code> (string): Type of disk drive of the device • <code>power_on_hours</code> (integer): Number of hours the device is powered on • <code>power_cycle_count</code> (integer): Number of times of the device power cycled • <code>max_erase_count</code> (integer): Maximum erase count for the device • <code>avr_erase_count</code> (integer): Average erase count for the device • <code>block_size</code> (string): Block size of the disk device • <code>capacity</code> (string): Capacity of the device disk • <code>health</code> (string): Health status of the boot device (percentage) • <code>firmware_version</code> (string): Version of the firmware for the boot device • <code>bootdevice_type</code> (string): Type of boot device solution • <code>slot</code> (integer): The slot position of the boot device
nics	[object]	<p>Information about each NIC on the VxRail host</p> <p>The <code>nics</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the NIC • <code>mac</code> (string): MAC address of the NIC • <code>link_status</code> (string): The link status of the NIC • <code>link_speed</code> (string): The link speed of the NIC • <code>slot</code> (integer): The slot position of the NIC • <code>firmware_family_version</code> (string): Version of the firmware for the NIC
disks	[object]	<p>Information about each disk installed in the VxRail host</p> <p>The <code>disks</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the disk • <code>sn</code> (string): Serial number of the disk • <code>guid</code> (string): Global unique identifier of the disk • <code>manufacturer</code> (string): Manufacturer of the disk • <code>model</code> (string): Model of the disk • <code>disk_type</code> (string): Type of disk drive • <code>protocol</code> (string): Type of transport protocol • <code>max_capable_speed</code> (string): Maximum capable speed of the disk • <code>enclosure</code> (integer): Enclosure where the disk is installed

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>slot</code> (integer): Slot where the disk is installed • <code>psnt</code> (string): PSNT of the disk • <code>disk_state</code> (string): Health state of the disk • <code>led_status</code> (string): State of the chassis LED indicator for the disk • <code>missing</code> (boolean): Whether the disk health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) • <code>capacity</code> (string): Capacity of the disk • <code>write_endurance</code> (string): Write endurance of the disk (usage percentage) • <code>write_endurance_status</code> (string): Status of the write endurance • <code>remaining_write_endurance_rate</code> (string): Remaining write endurance of the disk (percentage remaining) • <code>firmware_revision</code> (string): Version of the firmware for the disk • <code>disk_claim_type</code> (string): Usage type claimed for the disk. Disks can be claimed as <code>vSAN</code> or <code>non-vSAN</code>
<code>firmwareInfo</code>	object	<p>Information about the firmware versions installed on the host</p> <p>The <code>firmwareInfo</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>bios_revision</code> (string): Version of the BIOS firmware • <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware • <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware • <code>expander_bpf_version</code> (string): Version of the expander backplane firmware • <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware • <code>boss_version</code> (string): Version of the BOSS firmware • <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware • <code>idsdm_version</code> (string): Version of the internal dual SD module (IDSDM) firmware • <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware
<code>geo_location</code>	object	<p>Information about the geographical location of the host</p> <p>The <code>geo_location</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>rack_name</code> (string): Rack name where the host is located • <code>order_number</code> (integer): Order number of the host

Example:

```
[
  [
```

```

{
  "id": "V060902",
  "sn": "V060902",
  "slot": 1,
  "hostname": "vcluster609-esx02.vv13xapp01.local",
  "name": "vcluster609-esx02.vv13xapp01.local",
  "manufacturer": "Dell Inc.",
  "psnt": "V0609020000000",
  "led_status": "Blue:On",
  "health": "Healthy",
  "missing": false,
  "tpm_present": false,
  "operational_status": "normal",
  "power_status": "on",
  "boot_devices": [
    {
      "id": "18331E196141",
      "sn": "18331E196141",
      "device_model": "MTFDDAV240TCB",
      "sata_type": "SSD",
      "capacity": "223.57GB",
      "health": "100%",
      "firmware_version": "D0DE008",
      "bootdevice_type": "BOSS"
    },
    {
      "id": "18331E18542B",
      "sn": "18331E18542B",
      "device_model": "MTFDDAV240TCB",
      "sata_type": "SSD",
      "capacity": "223.57GB",
      "health": "100%",
      "firmware_version": "D0DE008",
      "bootdevice_type": "BOSS"
    }
  ],
  "nics": [
    {
      "id": "E4:43:4B:3D:05:30",
      "mac": "E4:43:4B:3D:05:30",
      "link_status": "Up",
      "link_speed": "10 Gbps",
      "slot": 1,
      "firmware_family_version": "19.5.12"
    },
    {
      "id": "E4:43:4B:3D:05:31",
      "mac": "E4:43:4B:3D:05:31",
      "link_status": "Up",
      "link_speed": "10 Gbps",
      "slot": 2,
      "firmware_family_version": "19.5.12"
    }
  ],
  "disks": [
    {
      "id": "V060902DVSNO0",
      "sn": "V060902DVSNO0",
      "guid": "6000c298a4477c10d5d89f963ac4f8aa",
      "manufacturer": "SAMSUNG",
      "model": "MZILS1T9HEJH0D3",
      "disk_type": "HDD",
      "protocol": "SAS",
      "max_capable_speed": "12 Gb/s",
      "enclosure": 0,
      "bay": 1,
      "slot": 0,
      "disk_state": "OK",
      "led_status": "Green:On",
      "missing": false,
      "capacity": "400.0GB",

```

```

        "firmware_revision": "DSL7"
    },
    {
        "id": "V060902DVSNO1",
        "sn": "V060902DVSNO1",
        "guid": "6000c2972a17c1e736830d5e6f32b80e",
        "manufacturer": "TOSHIBA",
        "model": "PX05SMB040Y",
        "disk_type": "SSD",
        "protocol": "SAS",
        "max_capable_speed": "12 Gb/s",
        "enclosure": 0,
        "bay": 1,
        "slot": 8,
        "disk_state": "OK",
        "led_status": "Green:On",
        "missing": false,
        "capacity": "40.0GB",
        "write_endurance": "3",
        "remaining_write_endurance_rate": "97%",
        "firmware_revision": "AS0E",
        "disk_claim_type": "vSAN"
    }
],
"firmwareInfo": {
    "bios_revision": "2.6.3",
    "bmc_revision": "4.10.10.10",
    "hba_version": "16.17.00.05",
    "expander_bpf_version": "2.46",
    "boss_version": "2.5.13.3022",
    "cpld_version": "1.0.2",
    "idsdm_version": "1.9"
},
"geo_location": {
    "rack_name": "V0609",
    "order_number": 2
}
}
]

```

400 Bad request

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
}

```



```
} The detail error message about the forbidden request.
```

Example:

```
{
  "message": "Access Denied."
}
```

404 Host not found.

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v4/hosts

Retrieves a list of VxRail hosts and the associated subcomponent information (version 4).

URL

```
https://<VxRail IP address>/rest/vxm/v4/hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.210 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Response

200 Successful operation.

[HostV4]: An array of VxRail hosts and the associated information for each host

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the boot device • <code>sn</code> (string): Serial number of the boot device • <code>device_model</code> (string): Model number of the boot device • <code>sata_type</code> (string): Type of disk drive of the device • <code>power_on_hours</code> (integer): Number of hours the device is powered on • <code>power_cycle_count</code> (integer): Number of times of the device power cycled • <code>max_erase_count</code> (integer): Maximum erase count for the device • <code>avr_erase_count</code> (integer): Average erase count for the device • <code>capacity</code> (string): Capacity of the device disk • <code>health</code> (string): Health status of the boot device (percentage) • <code>firmware_version</code> (string): Version of the firmware for the boot device • <code>bootdevice_type</code> (string): Type of boot device solution • <code>block_size</code> (string): Block size of boot device • <code>slot</code> (integer): The slot position of the boot device • <code>status</code> (string): Status of the boot device

Parameter	Type	Description
		<ul style="list-style-type: none"> part_number (string): Part number of the boot device manufacturer (string): Manufacturer of boot device controller_firmware (string): Controller firmware version of boot device controller_model (string): Controller model of boot device controller_status (string): Controller status of boot device
nics	[object]	<p>Information about each NIC on the VxRail host</p> <p>The nics object contains the following properties:</p> <ul style="list-style-type: none"> id (string): ID of the NIC mac (string): MAC address of the NIC link_status (string): The link status of the NIC link_speed (string): The link speed of the NIC slot (integer): The slot position of the NIC firmware_family_version (string): Version of the firmware for the NIC
disks	[object]	<p>Information about each disk installed in the VxRail host</p> <p>The disks object contains the following properties:</p> <ul style="list-style-type: none"> id (string): ID of the disk sn (string): Serial number of the disk manufacturer (string): Manufacturer of the disk model (string): Model of the disk disk_type (string): Type of disk drive protocol (string): Type of transport protocol max_capable_speed (string): Maximum capable speed of the disk enclosure (integer): Enclosure where the disk is installed slot (integer): Slot where the disk is installed psnt (string): PSNT of the disk disk_state (string): Health state of the disk led_status (string): State of the chassis LED indicator for the disk missing (boolean): Whether the disk health status is critical. Supported values are false (not critical) and true (critical) capacity (string): Capacity of the disk write_endurance (string): Write endurance of the disk (usage percentage) write_endurance_status (string): Status of the write endurance remaining_write_endurance_rate (string): Remaining write endurance of the disk (percentage remaining) firmware_revision (string): Version of the firmware for the disk disk_claim_type (string): Usage type claimed for the disk. Disks can be claimed as vSAN or non-vSAN

Parameter	Type	Description
firmwareInfo	object	<p>Information about the firmware versions installed on the host</p> <p>The firmwareInfo object contains the following properties:</p> <ul style="list-style-type: none"> • bios_revision (string): Version of the BIOS firmware • bmc_revision (string): Version of the baseboard management controller (BMC) firmware • hba_version (string): Version of the host bus adapter (HBA) firmware • expander_bpf_version (string): Version of the expander backplane firmware • nonexpander_bpf_version (string): Version of the non-expander storage backplane firmware • boss_version (string): Version of the BOSS firmware • cpld_version (string): Version of the complex logical device (CPLD) firmware • idsdm_version (string): Version of the internal dual SD module (IDSDM) firmware • dcpm_version (string): Version of the DC Persistent Memory (DCPM) firmware
geo_location	object	<p>Information about the geographical location of the host</p> <p>The geo_location object contains the following properties:</p> <ul style="list-style-type: none"> • rack_name (string): Rack name where the host is located • order_number (integer): Order number of the host
drive_configuration	object	<p>Information about the drive configuration on the host</p> <p>The drive_configuration object contains the following properties:</p> <ul style="list-style-type: none"> • type (string): Type of disk group configuration

Example:

```
[
  {
    "id": "v060902",
    "sn": "v060902",
    "slot": 1,
    "hostname": "vcluster609-esx02.vv13xapp01.local",
    "name": "vcluster609-esx02.vv13xapp01.local",
    "manufacturer": "Dell Inc.",
    "psnt": "v0609020000000",
    "led_status": "Blue:On",
    "health": "Healthy",
    "missing": false,
    "tpm_present": false,
    "operational_status": "normal",
    "power_status": "on",
    "boot_devices": [
      {
        "id": "18331E196141",
        "sn": "18331E196141",
        "device_model": "MTFDDAV240TCB",
        "sata_type": "SSD",
        "power_on_hours": 1,

```

```

    "power_cycle_count": 1,
    "max_erase_count": 1,
    "avr_erase_count": 1,
    "capacity": "480103981056",
    "health": "string",
    "firmware_version": "2.5.13.4008",
    "bootdevice_type": "string",
    "block_size": "512",
    "slot": 1,
    "status": "NORMAL",
    "part_number": "TW07FXC3PIHiT0440",
    "manufacturer": "INTEL",
    "controller_firmware": "2.5.13.4008",
    "controller_model": "BOSS-S2",
    "controller_status": "NORMAL"
  },
  {
    "id": "18331E18542B",
    "sn": "18331E18542B",
    "device_model": "MTFDDAV240TCB",
    "sata_type": "SSD",
    "power_on_hours": 1,
    "power_cycle_count": 1,
    "max_erase_count": 1,
    "avr_erase_count": 1,
    "capacity": "480103981056",
    "health": "string",
    "firmware_version": "2.5.13.4008",
    "bootdevice_type": "string",
    "block_size": "512",
    "slot": 1,
    "status": "NORMAL",
    "part_number": "TW07FXC3PIHiT0440",
    "manufacturer": "INTEL",
    "controller_firmware": "2.5.13.4008",
    "controller_model": "BOSS-S2",
    "controller_status": "NORMAL"
  }
],
"nics": [
  {
    "id": "E4:43:4B:3D:05:30",
    "mac": "E4:43:4B:3D:05:30",
    "link_status": "Up",
    "link_speed": "10 Gbps",
    "slot": 1,
    "firmware_family_version": "19.5.12"
  },
  {
    "id": "E4:43:4B:3D:05:31",
    "mac": "E4:43:4B:3D:05:31",
    "link_status": "Up",
    "link_speed": "10 Gbps",
    "slot": 2,
    "firmware_family_version": "19.5.12"
  }
],
"disks": [
  {
    "id": "V060902DVSN00",
    "sn": "V060902DVSN00",
    "guid": "6000c298a4477c10d5d89f963ac4f8aa",
    "manufacturer": "SAMSUNG",
    "model": "MZILS1T9HEJH0D3",
    "disk_type": "HDD",
    "protocol": "SAS",
    "max_capable_speed": "12 Gb/s",
    "enclosure": 0,
    "bay": 1,
    "slot": 0,
    "disk_state": "OK",

```

```

        "led_status": "Green:On",
        "missing": false,
        "capacity": "400.0GB",
        "firmware_revision": "DSL7"
    },
    {
        "id": "V060902DVSNO1",
        "sn": "V060902DVSNO1",
        "guid": "6000c2972a17c1e736830d5e6f32b80e",
        "manufacturer": "TOSHIBA",
        "model": "PX05SMB040Y",
        "disk_type": "SSD",
        "protocol": "SAS",
        "max_capable_speed": "12 Gb/s",
        "enclosure": 0,
        "bay": 1,
        "slot": 8,
        "disk_state": "OK",
        "led_status": "Green:On",
        "missing": false,
        "capacity": "40.0GB",
        "write_endurance": "3",
        "remaining_write_endurance_rate": "97%",
        "firmware_revision": "AS0E",
        "disk_claim_type": "vSAN"
    }
],
"firmwareInfo": {
    "bios_revision": "2.6.3",
    "bmc_revision": "4.10.10.10",
    "hba_version": "16.17.00.05",
    "expander_bpf_version": "2.46",
    "boss_version": "2.5.13.3022",
    "cpld_version": "1.0.2",
    "idsdm_version": "1.9"
},
"geo_location": {
    "rack_name": "V0609",
    "order_number": 2
},
"drive_configuration": {
    "type": "2401"
}
}
]

```

400 Bad request

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message           string
                   example: Access Denied.
                   The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404 Host not found.

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v5/hosts

Retrieves a list of VxRail hosts and the associated subcomponent information (version 5). Version 5 of this API provides the same host information as version 4, plus adds support for satellite nodes.

URL

```
https://<VxRail IP address>/rest/vxm/v5/hosts
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYVUHNlc2FtZQ==**

Response

200

Successful operation.

[HostV4]: An array of VxRail hosts and the associated information for each host

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
type	string	Node type. Supported values include <code>CLUSTER</code> and <code>SATELLITE</code>
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none">• <code>id</code> (string): ID of the boot device• <code>sn</code> (string): Serial number of the boot device• <code>device_model</code> (string): Model number of the boot device• <code>sata_type</code> (string): Type of disk drive of the device• <code>power_on_hours</code> (integer): Number of hours the device is powered on• <code>power_cycle_count</code> (integer): Number of times of the device power cycled• <code>max_erase_count</code> (integer): Maximum erase count for the device• <code>avr_erase_count</code> (integer): Average erase count for the device• <code>capacity</code> (string): Capacity of the device disk• <code>health</code> (string): Health status of the boot device (percentage)• <code>firmware_version</code> (string): Version of the firmware for the boot device

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>bootdevice_type</code> (string): Type of boot device solution • <code>block_size</code> (string): Block size of boot device • <code>slot</code> (integer): The slot position of the boot device • <code>status</code> (string): Status of the boot device • <code>part_number</code> (string): Part number of the boot device • <code>manufacturer</code> (string): Manufacturer of boot device • <code>controller_firmware</code> (string): Controller firmware version of boot device • <code>controller_model</code> (string): Controller model of boot device • <code>controller_status</code> (string): Controller status of boot device
<code>nics</code>	[object]	<p>Information about each NIC on the VxRail host</p> <p>The <code>nics</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the NIC • <code>mac</code> (string): MAC address of the NIC • <code>link_status</code> (string): The link status of the NIC • <code>link_speed</code> (string): The link speed of the NIC • <code>slot</code> (integer): The slot position of the NIC • <code>firmware_family_version</code> (string): Version of the firmware for the NIC
<code>disks</code>	[object]	<p>Information about each disk installed in the VxRail host</p> <p>The <code>disks</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the disk • <code>sn</code> (string): Serial number of the disk • <code>manufacturer</code> (string): Manufacturer of the disk • <code>model</code> (string): Model of the disk • <code>disk_type</code> (string): Type of disk drive • <code>protocol</code> (string): Type of transport protocol • <code>max_capable_speed</code> (string): Maximum capable speed of the disk • <code>enclosure</code> (integer): Enclosure where the disk is installed • <code>slot</code> (integer): Slot where the disk is installed • <code>psnt</code> (string): PSNT of the disk • <code>disk_state</code> (string): Health state of the disk • <code>led_status</code> (string): State of the chassis LED indicator for the disk • <code>missing</code> (boolean): Whether the disk health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) • <code>capacity</code> (string): Capacity of the disk • <code>write_endurance</code> (string): Write endurance of the disk (usage percentage) • <code>write_endurance_status</code> (string): Status of the write endurance • <code>remaining_write_endurance_rate</code> of the disk

Parameter	Type	Description
		<ul style="list-style-type: none"> (string): Remaining write endurance of the disk (percentage remaining) <code>firmware_revision</code> (string): Version of the firmware for the disk <code>disk_claim_type</code> (string): Usage type claimed for the disk. Disks can be claimed as <code>vSAN</code> or <code>non-vSAN</code>
<code>firmwareInfo</code>	object	<p>Information about the firmware versions installed on the host</p> <p>The <code>firmwareInfo</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>bios_revision</code> (string): Version of the BIOS firmware <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware <code>expander_bpf_version</code> (string): Version of the expander backplane firmware <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware <code>boss_version</code> (string): Version of the BOSS firmware <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware <code>idsdm_version</code> (string): Version of the internal dual SD module (IDSMD) firmware <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware <code>perc_version</code> (string): Version of the PERC firmware
<code>geo_location</code>	object	<p>Information about the geographical location of the host</p> <p>The <code>geo_location</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>rack_name</code> (string): Rack name where the host is located <code>order_number</code> (integer): Order number of the host
<code>drive_configuration</code>	object	<p>Information about the drive configuration on the host</p> <p>The <code>drive_configuration</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>type</code> (string): Type of disk group configuration

Example:

```
[
  {
    "id": "V060902",
    "sn": "V060902",
    "type": "CLUSTER",
    "slot": 1,
    "hostname": "vcluster609-esx02.vv13xapp01.local",
    "name": "vcluster609-esx02.vv13xapp01.local",
    "manufacturer": "Dell Inc.",
    "psnt": "V0609020000000",
    "led_status": "Blue:On",
```

```

"health": "Healthy",
"missing": false,
"tpm_present": false,
"operational_status": "normal",
"power_status": "on",
"boot_devices": [
  {
    "id": "18331E196141",
    "sn": "18331E196141",
    "device_model": "MTFDDAV240TCB",
    "sata_type": "SSD",
    "power_on_hours": 1,
    "power_cycle_count": 1,
    "max_erase_count": 1,
    "avr_erase_count": 1,
    "capacity": "480103981056",
    "health": "string",
    "firmware_version": "2.5.13.4008",
    "bootdevice_type": "string",
    "block_size": "512",
    "slot": 1,
    "status": "NORMAL",
    "part_number": "TW07FXC3PIHiT0440",
    "manufacturer": "INTEL",
    "controller_firmware": "2.5.13.4008",
    "controller_model": "BOSS-S2",
    "controller_status": "NORMAL"
  },
  {
    "id": "18331E18542B",
    "sn": "18331E18542B",
    "device_model": "MTFDDAV240TCB",
    "sata_type": "SSD",
    "power_on_hours": 1,
    "power_cycle_count": 1,
    "max_erase_count": 1,
    "avr_erase_count": 1,
    "capacity": "480103981056",
    "health": "string",
    "firmware_version": "2.5.13.4008",
    "bootdevice_type": "string",
    "block_size": "512",
    "slot": 1,
    "status": "NORMAL",
    "part_number": "TW07FXC3PIHiT0440",
    "manufacturer": "INTEL",
    "controller_firmware": "2.5.13.4008",
    "controller_model": "BOSS-S2",
    "controller_status": "NORMAL"
  }
],
"nics": [
  {
    "id": "E4:43:4B:3D:05:30",
    "mac": "E4:43:4B:3D:05:30",
    "link_status": "Up",
    "link_speed": "10 Gbps",
    "slot": 1,
    "firmware_family_version": "19.5.12"
  },
  {
    "id": "E4:43:4B:3D:05:31",
    "mac": "E4:43:4B:3D:05:31",
    "link_status": "Up",
    "link_speed": "10 Gbps",
    "slot": 2,
    "firmware_family_version": "19.5.12"
  }
],
"disks": [
  {

```

```

        "id": "V060902DVSNO0",
        "sn": "V060902DVSNO0",
        "guid": "6000c298a4477c10d5d89f963ac4f8aa",
        "manufacturer": "SAMSUNG",
        "model": "MZILS1T9HEJH0D3",
        "disk_type": "HDD",
        "protocol": "SAS",
        "max_capable_speed": "12 Gb/s",
        "enclosure": 0,
        "bay": 1,
        "slot": 0,
        "disk_state": "OK",
        "led_status": "Green:On",
        "missing": false,
        "capacity": "400.0GB",
        "firmware_revision": "DSL7"
    },
    {
        "id": "V060902DVSNO1",
        "sn": "V060902DVSNO1",
        "guid": "6000c2972a17c1e736830d5e6f32b80e",
        "manufacturer": "TOSHIBA",
        "model": "PX05SMB040Y",
        "disk_type": "SSD",
        "protocol": "SAS",
        "max_capable_speed": "12 Gb/s",
        "enclosure": 0,
        "bay": 1,
        "slot": 8,
        "disk_state": "OK",
        "led_status": "Green:On",
        "missing": false,
        "capacity": "40.0GB",
        "write_endurance": "3",
        "remaining_write_endurance_rate": "97%",
        "firmware_revision": "AS0E",
        "disk_claim_type": "vSAN"
    }
],
"firmwareInfo": {
    "bios_revision": "2.6.3",
    "bmc_revision": "4.10.10.10",
    "hba_version": "16.17.00.05",
    "expander_bpf_version": "2.46",
    "boss_version": "2.5.13.3022",
    "cpld_version": "1.0.2",
    "idsdm_version": "1.9"
},
"geo_location": {
    "rack_name": "V0609",
    "order_number": 2
},
"drive_configuration": {
    "type": "2401"
}
}
]

```

400

Bad request

401

Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message           string
                    example: The provided vCenter credentials are not valid.
}

```

```
        The detail error message about the unauthorized request.
    }
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404

Host not found.

500

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v1/hosts/disk-slot-mappings

Retrieves disk slots and usage mappings for a set of hosts.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/disk-slot-mappings
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported

VxRail Software	Supported versions
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters HostDiskSlotMappingRequest: (Required) Information needed to retrieve disk slot usage for a host.

Parameter	Type	Description
host_serial_number	string	(Required) Serial number of the host. This property is mandatory if the customer_supplied property is not supplied.
diskgroup_type	string	<p>The disk group configuration for the appliance. This property is supported in VxRail 7.0.240 software and later.</p> <ul style="list-style-type: none"> For the VxRail E660/F, P670F, and V670F appliances, disk_group_type uses the default configuration unless this property is specified. For all other appliance models, disk_group_type is not supported. <p>The first two digits in disk_group_type represent the number of disk slots in the appliance. The second two digits represent the disk group configuration. For example, 1001 represents an E660/F with 10 disk slots using the disk group 1 (DG1) configuration (1 cache disk and up to 7 capacity disks).</p> <p>Supported values include:</p> <ul style="list-style-type: none"> VxRail E660/F appliance: 1001 (default), 1002 VxRail P670F appliance: 2804 (default) VxRail V670F appliance: 2404 (default), 2403
customer_supplied	object	<p>(Required) Information about the management server . This property is mandatory if the host_serial_number property is not supplied.</p> <p>The customer_supplied object contains the following properties:</p> <ul style="list-style-type: none"> management_ip (string): Management IP address current_root_password (string): Root password

Example:

```
{
  "hosts": [
    {
      "host_serial_number": "969WVL2"
    },
    {
      "customer_supplied": {
```

```

        "management_ip": "10.20.201.11",
        "current_root_password": "Password"
    }
}
]
}

```

Response

200

Successfully retrieved all slot mappings for hosts.

[HostDiskSlotMappingsResponse]: An array of VxRail hosts and the associated disk usage mappings for each host

Parameter	Type	Description
host	string	If <code>host_serial_number</code> is supplied in the request object, this property returns the host serial number; otherwise, the property returns the host ID address
all_slots	[object]	Information about slot positions for all disk drives The <code>all_slots</code> object contains the following properties: <ul style="list-style-type: none"> • <code>bay_info</code> object provides information about the bay slots and contains the following properties: <ul style="list-style-type: none"> ◦ <code>bay_id</code> object provides information about the bay IDs and contains the following properties: <ul style="list-style-type: none"> ▪ <code>slots</code> ([integer]): A list of all slot positions where a disk drive is installed
vsan_slots	[object]	A list of all slot positions where a disk drive is claimed for vSAN usage The <code>vsan_slots</code> object contains the following properties: <ul style="list-style-type: none"> • <code>capacity</code> ([object]): The <code>capacity</code> object contains information about slot drives claimed for capacity usage. • <code>cache</code> ([object]): The <code>cache</code> object contains information about slot drives claimed for cache usage. Both the <code>capacity</code> object and the <code>cache</code> object contain the following properties: <ul style="list-style-type: none"> • ◦ <code>bay_info_with_dg</code> (object): The <code>bay_info_with_dg</code> object contains the following properties: <ul style="list-style-type: none"> ◦ <code>slots</code> ([object]): Provides a list of all slot and disk groups and contains the following properties: <ul style="list-style-type: none"> ▪ <code>slot</code> (integer): Slot number ▪ <code>diskgroup</code> (integer): Disk group ID
non_vsan_slots	[object]	A list of all slot positions where a disk drive is claimed for non-vSAN usage The <code>non_vsan_slots</code> object contains the following properties: <ul style="list-style-type: none"> • <code>bay_info</code> object provides information about the bay slots and contains the following properties:

Parameter	Type	Description
		<ul style="list-style-type: none"> bay_id object provides information about the bay IDs and contains the following properties: <ul style="list-style-type: none"> slots ([integer]): A list of all slot positions where a disk drive is installed

Example:

```
{
  "hosts": [
    {
      "host": "969WVL2 or 10.12.128.1",
      "all_slots": [
        {"bay0": {"slots": [1,2,3,4]}},
        {"bay1": {"slots": [1,2,3,4]}}
      ],
      "vsan_slots": {
        "capacity": [
          {"bay0": {"slots": [{"slot":1, "diskgroup":1}, {"slot":2,
"diskgroup":2}]}},
          {"bay1": {"slots": [{"slot":1, "diskgroup":1}, {"slot":2,
"diskgroup":2}]}]}
        ],
        "cache": [
          {"bay0": {"slots": [{"slot":3, "diskgroup":1}]}},
          {"bay1": {"slots": [{"slot":3, "diskgroup":2}]}]}
        ]
      }
    },
    {"non_vsan_slots": {
      "bay0": {"slots": [4]}},
      "bay1": {"slots": [4]}}
    }
  ]
}
```

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Retrieved a partial list of slot mappings for hosts.

[HostDiskSlotMappingsResponse]: An array of VxRail hosts and the associated disk usage mappings for each host

Parameter	Type	Description
host	string	If host_serial_number is supplied in the request object, this property returns the host serial number; otherwise, the property returns the host ID address
all_slots	[object]	<p>Information about slot positions for all disk drives</p> <p>The all_slots object contains the following properties:</p> <ul style="list-style-type: none"> bay_info object provides information about the bay slots and contains the following properties: <ul style="list-style-type: none"> bay_id object provides information about the bay IDs and contains the following properties: <ul style="list-style-type: none"> slots ([integer]): A list of all slot positions where a disk drive is installed
vsan_slots	[object]	<p>A list of all slot positions where a disk drive is claimed for vSAN usage</p> <p>The vsan_slots object contains the following properties:</p>

Parameter	Type	Description
		<ul style="list-style-type: none"> <code>capacity</code> ([object]): The <code>capacity</code> object contains information about slot drives claimed for capacity usage. <code>cache</code> ([object]): The <code>cache</code> object contains information about slot drives claimed for cache usage. <p>Both the <code>capacity</code> object and the <code>cache</code> object contain the following properties:</p> <ul style="list-style-type: none"> <code>bay_info_with_dg</code> (object): The <code>bay_info_with_dg</code> object contains the following properties: <code>slots</code> ([object]): Provides a list of all slot and disk groups and contains the following properties: <ul style="list-style-type: none"> <code>slot</code> (integer): Slot number <code>diskgroup</code> (integer): Disk group ID
<code>non_vsan_slots</code>	[object]	<p>A list of all slot positions where a disk drive is claimed for non-vSAN usage</p> <p>The <code>non_vsan_slots</code> object contains the following properties:</p> <ul style="list-style-type: none"> <code>bay_info</code> object provides information about the bay slots and contains the following properties: <ul style="list-style-type: none"> <code>bay_id</code> object provides information about the bay IDs and contains the following properties: <ul style="list-style-type: none"> <code>slots</code> ([integer]): A list of all slot positions where a disk drive is installed

400	Bad request.
401	Unauthorized request.
500	Internal server error.

GET /v1/hosts/{sn}

Retrieves information about a specific host and its associate subcomponents.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Path parameters sn: (Required) The serial number of the node you want to query.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Example:

```
/v1/hosts/SN1
```

Response

200 Successful operation.
Host:

```
{
  description:          host information
  boot_devices          [...]
  disks                 [...]
  firmwareInfo          FirmwareInfo{...}
  health                string
                        host health status
  hostname              string
                        host hostname
  id                    string
                        host id
  led_status            string
                        host led status
  manufacturer           string
                        host manufacturer
  missing               boolean
                        host is missing or not
  name                  string
                        host name
  nics                  [...]
  operational_status     string
                        host operational status
  part_number           string
  power_status          string
                        host power status
  psnt                  string
                        host psnt
  slot                  integer($int32)
                        host slot
  sn                    string
                        host sn
  tpm_present           boolean
                        host support tpm or not
}
```

Example:

```
{
  "boot_devices": [
    {
      "avr_erase_count": 0,
      "block_size": "string",
```

```

        "bootdevice_type": "string",
        "capacity": "string",
        "device_model": "string",
        "firmware_version": "string",
        "health": "string",
        "id": "string",
        "max_erase_count": 0,
        "power_cycle_count": 0,
        "power_on_hours": 0,
        "sata_type": "string",
        "slot": 0,
        "sn": "string"
    }
],
"disks": [
    {
        "capacity": "string",
        "disk_state": "string",
        "disk_type": "string",
        "enclosure": 0,
        "firmware_revision": "string",
        "guid": "string",
        "id": "string",
        "led_status": "string",
        "manufacturer": "string",
        "max_capable_speed": "string",
        "missing": true,
        "model": "string",
        "protocol": "string",
        "remaining_write_endurance_rate": "string",
        "slot": 0,
        "sn": "string",
        "write_endurance": "string",
        "write_endurance_status": "string"
    }
],
"firmwareInfo": {
    "bios_revision": "string",
    "bmc_revision": "string",
    "boss_version": "string",
    "cpld_version": "string",
    "expander_bpf_version": "string",
    "hba_version": "string",
    "idsdm_version": "string",
    "nonexpander_bpf_version": "string"
},
"health": "string",
"hostname": "string",
"id": "string",
"led_status": "string",
"manufacturer": "string",
"missing": true,
"name": "string",
"nics": [
    {
        "firmware_family_version": "string",
        "id": "string",
        "link_speed": "string",
        "link_status": "string",
        "mac": "string",
        "slot": 0
    }
],
"operational_status": "string",
"part_number": "string",
"power_status": "string",
"psnt": "string",
"slot": 0,
"sn": "string",
"tpm_present": true
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403 Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404 Host is not found.

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v2/hosts/{sn}

Retrieves information about a specific host and its associated subcomponents (version 2).

URL

```
https://<VxRail IP address>/rest/vxm/v2/hosts/{sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters sn: (Required) The serial number of the node you want to query.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Example:

```
/v2/hosts/V060903
```

Response

200 Successful operation.
HostV2 object properties:

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host

Parameter	Type	Description
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the boot device • <code>sn</code> (string): Serial number of the boot device • <code>device_model</code> (string): Model number of the boot device • <code>sata_type</code> (string): Type of disk drive of the device • <code>power_on_hours</code> (integer): Number of hours the device is powered on • <code>power_cycle_count</code> (integer): Number of times of the device power cycled • <code>max_erase_count</code> (integer): Maximum erase count for the device • <code>avr_erase_count</code> (integer): Average erase count for the device • <code>capacity</code> (string): Capacity of the device disk • <code>health</code> (string): Health status of the boot device (percentage) • <code>firmware_version</code> (string): Version of the firmware for the boot device • <code>bootdevice_type</code> (string): Type of boot device solution
nics	[object]	Information about each NIC on the VxRail host The <code>nics</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the NIC • <code>mac</code> (string): MAC address of the NIC • <code>link_status</code> (string): The link status of the NIC • <code>link_speed</code> (string): The link speed of the NIC • <code>slot</code> (integer): The slot position of the NIC • <code>firmware_family_version</code> (string): Version of the firmware for the NIC
disks	[object]	Information about each disk installed in the VxRail host The <code>disks</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the disk • <code>sn</code> (string): Serial number of the disk • <code>manufacturer</code> (string): Manufacturer of the disk • <code>model</code> (string): Model of the disk • <code>disk_type</code> (string): Type of disk drive

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>protocol</code> (string): Type of transport protocol • <code>max_capable_speed</code> (string): Maximum capable speed of the disk • <code>enclosure</code> (integer): Enclosure where the disk is installed • <code>slot</code> (integer): Slot where the disk is installed • <code>psnt</code> (string): PSNT of the disk • <code>disk_state</code> (string): Health state of the disk • <code>led_status</code> (string): State of the chassis LED indicator for the disk • <code>missing</code> (boolean): Whether the disk health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) • <code>capacity</code> (string): Capacity of the disk • <code>write_endurance</code> (string): Write endurance of the disk (usage percentage) • <code>write_endurance_status</code> (string): Status of the write endurance of the disk • <code>remaining_write_endurance_rate</code> (string): Remaining write endurance of the disk (percentage remaining) • <code>firmware_revision</code> (string): Version of the firmware for the disk
<code>firmwareInfo</code>	object	<p>Information about the firmware versions installed on the host</p> <p>The <code>firmwareInfo</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>bios_revision</code> (string): Version of the BIOS firmware • <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware • <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware • <code>expander_bpf_version</code> (string): Version of the expander backplane firmware • <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware • <code>boss_version</code> (string): Version of the BOSS firmware • <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware • <code>idsdm_version</code> (string): Version of the internal dual SD module (IDSMD) firmware
<code>geo_location</code>	object	<p>Information about the geographical location of the host</p> <p>The <code>geo_location</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>rack_name</code> (string): Rack name where the host is located • <code>order_number</code> (integer): Order number of the host

Example:

```
{
  "id": "V060903",
  "sn": "V060903",
  "slot": 1,
  "hostname": "vcluster609-esx03.vv13xapp01.local",
  "name": "vcluster609-esx03.vv13xapp01.local",
  "manufacturer": "Dell Inc.",
  "psnt": "V06090300000000",
  "led_status": "Blue:On",
  "health": "Healthy",
  "missing": false,
  "tpm_present": false,
  "operational_status": "normal",
  "power_status": "on",
  "boot_devices": [
    {
      "id": "18331E196141",
      "sn": "18331E196141",
      "device_model": "MTFDDAV240TCB",
      "sata_type": "SSD",
      "capacity": "223.57GB",
      "health": "100%",
      "firmware_version": "D0DE008",
      "bootdevice_type": "BOSS"
    },
    {
      "id": "18331E18542B",
      "sn": "18331E18542B",
      "device_model": "MTFDDAV240TCB",
      "sata_type": "SSD",
      "capacity": "223.57GB",
      "health": "100%",
      "firmware_version": "D0DE008",
      "bootdevice_type": "BOSS"
    }
  ],
  "nics": [
    {
      "id": "E4:43:4B:3D:05:30",
      "mac": "E4:43:4B:3D:05:30",
      "link_status": "Up",
      "link_speed": "10 Gbps",
      "slot": 1,
      "firmware_family_version": "19.5.12"
    }
  ],
  "disks": [
    {
      "id": "V060903DVSNO0",
      "sn": "V060903DVSNO0",
      "guid": "6000c29d6f8c897928a48ff59c7e880b",
      "manufacturer": "SAMSUNG",
      "model": "MZILS1T9HEJH0D3",
      "disk_type": "HDD",
      "protocol": "SAS",
      "max_capable_speed": "12 Gb/s",
      "enclosure": 0,
      "bay": 1,
      "slot": 0,
      "disk_state": "OK",
      "led_status": "Green:On",
      "missing": false,
      "capacity": "400.0GB",
      "firmware_revision": "DSL7"
    }
  ],
  "firmwareInfo": {
    "bios_revision": "2.6.3",
    "bmc_revision": "4.10.10.10",
  }
}
```



```

        "hba_version": "16.17.00.05",
        "expander_bpf_version": "2.46",
        "boss_version": "2.5.13.3022",
        "cpld_version": "1.0.2",
        "idsdm_version": "1.9"
    },
    "geo_location": {
        "rack_name": "V0609",
        "order_number": 3
    }
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

404 Host is not found.

500 Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

GET /v3/hosts/{sn}

Retrieves information about a specific host and its associated subcomponents (version 3).

URL

```
https://<VxRail IP address>/rest/vxm/v3/hosts/{sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.130 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters sn: (Required) The serial number of the node you want to query.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Example:

```
/v3/hosts/V060903
```

Response

200 Successful operation.
HostV3 object properties:

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host

Parameter	Type	Description
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the boot device • <code>sn</code> (string): Serial number of the boot device • <code>device_model</code> (string): Model number of the boot device • <code>sata_type</code> (string): Type of disk drive of the device • <code>power_on_hours</code> (integer): Number of hours the device is powered on • <code>power_cycle_count</code> (integer): Number of times of the device power cycled • <code>max_erase_count</code> (integer): Maximum erase count for the device • <code>avr_erase_count</code> (integer): Average erase count for the device • <code>capacity</code> (string): Capacity of the device disk • <code>health</code> (string): Health status of the boot device (percentage) • <code>firmware_version</code> (string): Version of the firmware for the boot device • <code>bootdevice_type</code> (string): Type of boot device solution
nics	[object]	Information about each NIC on the VxRail host The <code>nics</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the NIC • <code>mac</code> (string): MAC address of the NIC • <code>link_status</code> (string): The link status of the NIC • <code>link_speed</code> (string): The link speed of the NIC • <code>slot</code> (integer): The slot position of the NIC • <code>firmware_family_version</code> (string): Version of the firmware for the NIC
disks	[object]	Information about each disk installed in the VxRail host The <code>disks</code> object contains the following properties: <ul style="list-style-type: none"> • <code>id</code> (string): ID of the disk • <code>sn</code> (string): Serial number of the disk • <code>manufacturer</code> (string): Manufacturer of the disk • <code>model</code> (string): Model of the disk • <code>disk_type</code> (string): Type of disk drive

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>protocol</code> (string): Type of transport protocol • <code>max_capable_speed</code> (string): Maximum capable speed of the disk • <code>enclosure</code> (integer): Enclosure where the disk is installed • <code>slot</code> (integer): Slot where the disk is installed • <code>psnt</code> (string): PSNT of the disk • <code>disk_state</code> (string): Health state of the disk • <code>led_status</code> (string): State of the chassis LED indicator for the disk • <code>missing</code> (boolean): Whether the disk health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) • <code>capacity</code> (string): Capacity of the disk • <code>write_endurance</code> (string): Write endurance of the disk (usage percentage) • <code>write_endurance_status</code> (string): Status of the write endurance of the disk • <code>remaining_write_endurance_rate</code> (string): Remaining write endurance of the disk (percentage remaining) • <code>firmware_revision</code> (string): Version of the firmware for the disk • <code>disk_claim_type</code> (string): Usage type claimed for the disk. Disks can be claimed as <code>vSAN</code> or <code>non-vSAN</code>
<code>firmwareInfo</code>	object	<p>Information about the firmware versions installed on the host</p> <p>The <code>firmwareInfo</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>bios_revision</code> (string): Version of the BIOS firmware • <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware • <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware • <code>expander_bpf_version</code> (string): Version of the expander backplane firmware • <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware • <code>boss_version</code> (string): Version of the BOSS firmware • <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware • <code>idsdm_version</code> (string): Version of the internal dual SD module (IDSDM) firmware • <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware
<code>geo_location</code>	object	<p>Information about the geographical location of the host</p> <p>The <code>geo_location</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>rack_name</code> (string): Rack name where the host is located

Parameter	Type	Description
		<ul style="list-style-type: none"> order_number (integer): Order number of the host

Example:

```
{
  "id": "V060903",
  "sn": "V060903",
  "slot": 1,
  "hostname": "vcluster609-esx03.vv13xapp01.local",
  "name": "vcluster609-esx03.vv13xapp01.local",
  "manufacturer": "Dell Inc.",
  "psnt": "V0609030000000",
  "led_status": "Blue:On",
  "health": "Healthy",
  "missing": false,
  "tpm_present": false,
  "operational_status": "normal",
  "power_status": "on",
  "boot_devices": [
    {
      "id": "18331E196141",
      "sn": "18331E196141",
      "device_model": "MTFDDAV240TCB",
      "sata_type": "SSD",
      "capacity": "223.57GB",
      "health": "100%",
      "firmware_version": "D0DE008",
      "bootdevice_type": "BOSS"
    },
    {
      "id": "18331E18542B",
      "sn": "18331E18542B",
      "device_model": "MTFDDAV240TCB",
      "sata_type": "SSD",
      "capacity": "223.57GB",
      "health": "100%",
      "firmware_version": "D0DE008",
      "bootdevice_type": "BOSS"
    }
  ],
  "nics": [
    {
      "id": "E4:43:4B:3D:05:30",
      "mac": "E4:43:4B:3D:05:30",
      "link_status": "Up",
      "link_speed": "10 Gbps",
      "slot": 1,
      "firmware_family_version": "19.5.12"
    }
  ],
  "disks": [
    {
      "id": "V060903DVSN00",
      "sn": "V060903DVSN00",
      "guid": "6000c29d6f8c897928a48ff59c7e880b",
      "manufacturer": "SAMSUNG",
      "model": "MZILS1T9HEJH0D3",
      "disk_type": "HDD",
      "protocol": "SAS",
      "max_capable_speed": "12 Gb/s",
      "enclosure": 0,
      "bay": 1,
      "slot": 0,
      "disk_state": "OK",
      "led_status": "Green:On",
      "missing": false,
      "capacity": "400.0GB",

```

```

        "firmware_revision": "DSL7",
        "disk_claim_type": "vSAN"
    },
    ],
    "firmwareInfo": {
        "bios_revision": "2.6.3",
        "bmc_revision": "4.10.10.10",
        "hba_version": "16.17.00.05",
        "expander_bpf_version": "2.46",
        "boss_version": "2.5.13.3022",
        "cpld_version": "1.0.2",
        "idsdm_version": "1.9"
    },
    "geo_location": {
        "rack_name": "V0609",
        "order_number": 3
    }
}

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

404 Host is not found.

500 Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v4/hosts/{sn}

Retrieves information about a specific host and its associated subcomponents (version 4).

URL

```
https://<VxRail IP address>/rest/vxm/v4/hosts/{sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.210 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters sn: (Required) The serial number of the node you want to query.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Example:

```
/v4/hosts/V060903
```

Response

200 Successful operation.
HostV4 object properties:

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host

Parameter	Type	Description
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none"> <code>id</code> (string): ID of the boot device <code>sn</code> (string): Serial number of the boot device <code>device_model</code> (string): Model number of the boot device <code>sata_type</code> (string): Type of disk drive of the device <code>power_on_hours</code> (integer): Number of hours the device is powered on <code>power_cycle_count</code> (integer): Number of times of the device power cycled <code>max_erase_count</code> (integer): Maximum erase count for the device <code>avr_erase_count</code> (integer): Average erase count for the device <code>capacity</code> (string): Capacity of the device disk <code>health</code> (string): Health status of the boot device (percentage) <code>firmware_version</code> (string): Version of the firmware for the boot device <code>bootdevice_type</code> (string): Type of boot device solution <code>block_size</code> (string): Block size of boot device <code>slot</code> (integer): The slot position of the boot device <code>status</code> (string): Status of the boot device <code>part_number</code> (string): Part number of the boot device <code>manufacturer</code> (string): Manufacturer of boot device <code>controller_firmware</code> (string): Controller firmware version of boot device

Parameter	Type	Description
		<ul style="list-style-type: none"> controller_model (string): Controller model of boot device controller_status (string): Controller status of boot device
nics	[object]	<p>Information about each NIC on the VxRail host</p> <p>The nics object contains the following properties:</p> <ul style="list-style-type: none"> id (string): ID of the NIC mac (string): MAC address of the NIC link_status (string): The link status of the NIC link_speed (string): The link speed of the NIC slot (integer): The slot position of the NIC firmware_family_version (string): Version of the firmware for the NIC
disks	[object]	<p>Information about each disk installed in the VxRail host</p> <p>The disks object contains the following properties:</p> <ul style="list-style-type: none"> id (string): ID of the disk sn (string): Serial number of the disk manufacturer (string): Manufacturer of the disk model (string): Model of the disk disk_type (string): Type of disk drive protocol (string): Type of transport protocol max_capable_speed (string): Maximum capable speed of the disk enclosure (integer): Enclosure where the disk is installed slot (integer): Slot where the disk is installed psnt (string): PSNT of the disk disk_state (string): Health state of the disk led_status (string): State of the chassis LED indicator for the disk missing (boolean): Whether the disk health status is critical. Supported values are false (not critical) and true (critical) capacity (string): Capacity of the disk write_endurance (string): Write endurance of the disk (usage percentage) write_endurance_status (string): Status of the write endurance remaining_write_endurance_rate (string): Remaining write endurance of the disk (percentage remaining) firmware_revision (string): Version of the firmware for the disk disk_claim_type (string): Usage type claimed for the disk. Disks can be claimed as vSAN or non-vSAN
firmwareInfo	object	<p>Information about the firmware versions installed on the host</p> <p>The firmwareInfo object contains the following properties:</p>

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>bios_revision</code> (string): Version of the BIOS firmware • <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware • <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware • <code>expander_bpf_version</code> (string): Version of the expander backplane firmware • <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware • <code>boss_version</code> (string): Version of the BOSS firmware • <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware • <code>idsdm_version</code> (string): Version of the internal dual SD module (IDSDM) firmware • <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware
<code>geo_location</code>	object	<p>Information about the geographical location of the host</p> <p>The <code>geo_location</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>rack_name</code> (string): Rack name where the host is located • <code>order_number</code> (integer): Order number of the host
<code>drive_configuration</code>	object	<p>Information about the drive configuration on the host</p> <p>The <code>drive_configuration</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>type</code> (string): Type of disk group configuration

Example:

```
[
  {
    "id": "V060902",
    "sn": "V060902",
    "slot": 1,
    "hostname": "vcluster609-esx02.vv13xapp01.local",
    "name": "vcluster609-esx02.vv13xapp01.local",
    "manufacturer": "Dell Inc.",
    "psnt": "V0609020000000",
    "led_status": "Blue:On",
    "health": "Healthy",
    "missing": false,
    "tpm_present": false,
    "operational_status": "normal",
    "power_status": "on",
    "boot_devices": [
      {
        "id": "18331E196141",
        "sn": "18331E196141",
        "device_model": "MTFDDAV240TCB",
        "sata_type": "SSD",
        "power_on_hours": 1,
        "power_cycle_count": 1,
        "max_erase_count": 1,
        "avr_erase_count": 1,
        "capacity": "480103981056",
        "health": "string",
```

```

        "firmware_version": "2.5.13.4008",
        "bootdevice_type": "string",
        "block_size": "512",
        "slot": 1,
        "status": "NORMAL",
        "part_number": "TW07FXC3PIHiT0440",
        "manufacturer": "INTEL",
        "controller_firmware": "2.5.13.4008",
        "controller_model": "BOSS-S2",
        "controller_status": "NORMAL"
    },
    {
        "id": "18331E18542B",
        "sn": "18331E18542B",
        "device_model": "MTFDDAV240TCB",
        "sata_type": "SSD",
        "power_on_hours": 1,
        "power_cycle_count": 1,
        "max_erase_count": 1,
        "avr_erase_count": 1,
        "capacity": "480103981056",
        "health": "string",
        "firmware_version": "2.5.13.4008",
        "bootdevice_type": "string",
        "block_size": "512",
        "slot": 1,
        "status": "NORMAL",
        "part_number": "TW07FXC3PIHiT0440",
        "manufacturer": "INTEL",
        "controller_firmware": "2.5.13.4008",
        "controller_model": "BOSS-S2",
        "controller_status": "NORMAL"
    }
],
"nics": [
    {
        "id": "E4:43:4B:3D:05:30",
        "mac": "E4:43:4B:3D:05:30",
        "link_status": "Up",
        "link_speed": "10 Gbps",
        "slot": 1,
        "firmware_family_version": "19.5.12"
    },
    {
        "id": "E4:43:4B:3D:05:31",
        "mac": "E4:43:4B:3D:05:31",
        "link_status": "Up",
        "link_speed": "10 Gbps",
        "slot": 2,
        "firmware_family_version": "19.5.12"
    }
],
"disks": [
    {
        "id": "V060902DVSNO0",
        "sn": "V060902DVSNO0",
        "guid": "6000c298a4477c10d5d89f963ac4f8aa",
        "manufacturer": "SAMSUNG",
        "model": "MZILS1T9HEJH0D3",
        "disk_type": "HDD",
        "protocol": "SAS",
        "max_capable_speed": "12 Gb/s",
        "enclosure": 0,
        "bay": 1,
        "slot": 0,
        "disk_state": "OK",
        "led_status": "Green:On",
        "missing": false,
        "capacity": "400.0GB",
        "firmware_revision": "DSL7"
    },

```

```

    {
      "id": "V060902DVSN01",
      "sn": "V060902DVSN01",
      "guid": "6000c2972a17c1e736830d5e6f32b80e",
      "manufacturer": "TOSHIBA",
      "model": "PX05SMB040Y",
      "disk_type": "SSD",
      "protocol": "SAS",
      "max_capable_speed": "12 Gb/s",
      "enclosure": 0,
      "bay": 1,
      "slot": 8,
      "disk_state": "OK",
      "led_status": "Green:On",
      "missing": false,
      "capacity": "40.0GB",
      "write_endurance": "3",
      "remaining_write_endurance_rate": "97%",
      "firmware_revision": "AS0E",
      "disk_claim_type": "vSAN"
    }
  ],
  "firmwareInfo": {
    "bios_revision": "2.6.3",
    "bmc_revision": "4.10.10.10",
    "hba_version": "16.17.00.05",
    "expander_bpf_version": "2.46",
    "boss_version": "2.5.13.3022",
    "cpld_version": "1.0.2",
    "idsdm_version": "1.9"
  },
  "geo_location": {
    "rack_name": "V0609",
    "order_number": 2
  },
  "drive_configuration": {
    "type": "2401"
  }
}
]

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                   example: The provided vCenter credentials are not valid.
                   The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                   example: Access Denied.
}

```

```
} The detail error message about the forbidden request.
```

Example:

```
{
  "message": "Access Denied."
}
```

404 Host is not found.

500 Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

GET /v5/hosts/{sn}

Retrieves information about a specific host and its associated subcomponents (version 5). Version 5 of this API provides the same host information as version 4, plus adds support for satellite nodes.

URL

```
https://<VxRail IP address>/rest/vxm/v5/hosts/{sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.300 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Path parameters sn: (Required) The serial number of the node you want to query.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Example:

```
/v4/hosts/V060903
```

Response

200

Successful operation.

HostV5 object properties:

Parameter	Type	Description
id	string	ID number of the host
sn	string	Serial number of the host
guid	string	GUID of the disk
type	string	Node type. Supported values include <code>CLUSTER</code> and <code>SATELLITE</code>
slot	integer	Rack slot position where the VxRail host appliance is installed
hostname	string	Hostname of the host
name	string	Name of the host
manufacturer	string	Manufacturer of the host
psnt	string	Product serial number tag (PSNT) of the host
led_status	string	State of the chassis LED indicator for the host
health	string	Health status of the VxRail system Supported values are Critical, Error, Warning, and Healthy.
missing	boolean	Whether the chassis health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical)
tpm_present	boolean	Whether a TPM security device is installed on the VxRail host
operational_status	string	Operational status of the host
power_status	string	Power supply status of the host
boot_devices	[object]	Information about each boot device on the VxRail host The <code>boot_devices</code> object contains the following properties: <ul style="list-style-type: none"> <code>id</code> (string): ID of the boot device <code>sn</code> (string): Serial number of the boot device <code>device_model</code> (string): Model number of the boot device <code>sata_type</code> (string): Type of disk drive of the device

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>power_on_hours</code> (integer): Number of hours the device is powered on • <code>power_cycle_count</code> (integer): Number of times of the device power cycled • <code>max_erase_count</code> (integer): Maximum erase count for the device • <code>avr_erase_count</code> (integer): Average erase count for the device • <code>capacity</code> (string): Capacity of the device disk • <code>health</code> (string): Health status of the boot device (percentage) • <code>firmware_version</code> (string): Version of the firmware for the boot device • <code>bootdevice_type</code> (string): Type of boot device solution • <code>block_size</code> (string): Block size of boot device • <code>slot</code> (integer): The slot position of the boot device • <code>status</code> (string): Status of the boot device • <code>part_number</code> (string): Part number of the boot device • <code>manufacturer</code> (string): Manufacturer of boot device • <code>controller_firmware</code> (string): Controller firmware version of boot device • <code>controller_model</code> (string): Controller model of boot device • <code>controller_status</code> (string): Controller status of boot device
<code>nics</code>	[object]	<p>Information about each NIC on the VxRail host</p> <p>The <code>nics</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the NIC • <code>mac</code> (string): MAC address of the NIC • <code>link_status</code> (string): The link status of the NIC • <code>link_speed</code> (string): The link speed of the NIC • <code>slot</code> (integer): The slot position of the NIC • <code>firmware_family_version</code> (string): Version of the firmware for the NIC
<code>disks</code>	[object]	<p>Information about each disk installed in the VxRail host</p> <p>The <code>disks</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>id</code> (string): ID of the disk • <code>sn</code> (string): Serial number of the disk • <code>manufacturer</code> (string): Manufacturer of the disk • <code>model</code> (string): Model of the disk • <code>disk_type</code> (string): Type of disk drive • <code>protocol</code> (string): Type of transport protocol • <code>max_capable_speed</code> (string): Maximum capable speed of the disk • <code>enclosure</code> (integer): Enclosure where the disk is installed • <code>slot</code> (integer): Slot where the disk is installed • <code>psnt</code> (string): PSNT of the disk

Parameter	Type	Description
		<ul style="list-style-type: none"> • <code>disk_state</code> (string): Health state of the disk • <code>led_status</code> (string): State of the chassis LED indicator for the disk • <code>missing</code> (boolean): Whether the disk health status is critical. Supported values are <code>false</code> (not critical) and <code>true</code> (critical) • <code>capacity</code> (string): Capacity of the disk • <code>write_endurance</code> (string): Write endurance of the disk (usage percentage) • <code>write_endurance_status</code> (string): Status of the write endurance • <code>remaining_write_endurance_rate</code> (string): Remaining write endurance of the disk (percentage remaining) • <code>firmware_revision</code> (string): Version of the firmware for the disk • <code>disk_claim_type</code> (string): Usage type claimed for the disk. Disks can be claimed as <code>vSAN</code> or <code>non-vSAN</code>
<code>firmwareInfo</code>	object	<p>Information about the firmware versions installed on the host</p> <p>The <code>firmwareInfo</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>bios_revision</code> (string): Version of the BIOS firmware • <code>bmc_revision</code> (string): Version of the baseboard management controller (BMC) firmware • <code>hba_version</code> (string): Version of the host bus adapter (HBA) firmware • <code>expander_bpf_version</code> (string): Version of the expander backplane firmware • <code>nonexpander_bpf_version</code> (string): Version of the non-expander storage backplane firmware • <code>boss_version</code> (string): Version of the BOSS firmware • <code>cpld_version</code> (string): Version of the complex logical device (CPLD) firmware • <code>idsdm_version</code> (string): Version of the internal dual SD module (IDSMD) firmware • <code>dcpm_version</code> (string): Version of the DC Persistent Memory (DCPM) firmware • <code>perc_version</code> (string): Version of the PERC firmware
<code>geo_location</code>	object	<p>Information about the geographical location of the host</p> <p>The <code>geo_location</code> object contains the following properties:</p> <ul style="list-style-type: none"> • <code>rack_name</code> (string): Rack name where the host is located • <code>order_number</code> (integer): Order number of the host
<code>drive_configuration</code>	object	<p>Information about the drive configuration on the host</p> <p>The <code>drive_configuration</code> object contains the following properties:</p>

Parameter	Type	Description
		<ul style="list-style-type: none"> type (string): Type of disk group configuration

Example:

```
[
  {
    "id": "V060902",
    "sn": "V060902",
    "type": "CLUSTER",
    "slot": 1,
    "hostname": "vcluster609-esx02.vv13xapp01.local",
    "name": "vcluster609-esx02.vv13xapp01.local",
    "manufacturer": "Dell Inc.",
    "psnt": "V0609020000000",
    "led_status": "Blue:On",
    "health": "Healthy",
    "missing": false,
    "tpm_present": false,
    "operational_status": "normal",
    "power_status": "on",
    "boot_devices": [
      {
        "id": "18331E196141",
        "sn": "18331E196141",
        "device_model": "MTFDDAV240TCB",
        "sata_type": "SSD",
        "power_on_hours": 1,
        "power_cycle_count": 1,
        "max_erase_count": 1,
        "avr_erase_count": 1,
        "capacity": "480103981056",
        "health": "string",
        "firmware_version": "2.5.13.4008",
        "bootdevice_type": "string",
        "block_size": "512",
        "slot": 1,
        "status": "NORMAL",
        "part_number": "TW07FXC3PIHiT0440",
        "manufacturer": "INTEL",
        "controller_firmware": "2.5.13.4008",
        "controller_model": "BOSS-S2",
        "controller_status": "NORMAL"
      },
      {
        "id": "18331E18542B",
        "sn": "18331E18542B",
        "device_model": "MTFDDAV240TCB",
        "sata_type": "SSD",
        "power_on_hours": 1,
        "power_cycle_count": 1,
        "max_erase_count": 1,
        "avr_erase_count": 1,
        "capacity": "480103981056",
        "health": "string",
        "firmware_version": "2.5.13.4008",
        "bootdevice_type": "string",
        "block_size": "512",
        "slot": 1,
        "status": "NORMAL",
        "part_number": "TW07FXC3PIHiT0440",
        "manufacturer": "INTEL",
        "controller_firmware": "2.5.13.4008",
        "controller_model": "BOSS-S2",
        "controller_status": "NORMAL"
      }
    ],
    "nics": [
```

```

    {
      "id": "E4:43:4B:3D:05:30",
      "mac": "E4:43:4B:3D:05:30",
      "link_status": "Up",
      "link_speed": "10 Gbps",
      "slot": 1,
      "firmware_family_version": "19.5.12"
    },
    {
      "id": "E4:43:4B:3D:05:31",
      "mac": "E4:43:4B:3D:05:31",
      "link_status": "Up",
      "link_speed": "10 Gbps",
      "slot": 2,
      "firmware_family_version": "19.5.12"
    }
  ],
  "disks": [
    {
      "id": "V060902DVSNO0",
      "sn": "V060902DVSNO0",
      "guid": "6000c298a4477c10d5d89f963ac4f8aa",
      "manufacturer": "SAMSUNG",
      "model": "MZILS1T9HEJH0D3",
      "disk_type": "HDD",
      "protocol": "SAS",
      "max_capable_speed": "12 Gb/s",
      "enclosure": 0,
      "bay": 1,
      "slot": 0,
      "disk_state": "OK",
      "led_status": "Green:On",
      "missing": false,
      "capacity": "400.0GB",
      "firmware_revision": "DSL7"
    },
    {
      "id": "V060902DVSNO1",
      "sn": "V060902DVSNO1",
      "guid": "6000c2972a17c1e736830d5e6f32b80e",
      "manufacturer": "TOSHIBA",
      "model": "PX05SMB040Y",
      "disk_type": "SSD",
      "protocol": "SAS",
      "max_capable_speed": "12 Gb/s",
      "enclosure": 0,
      "bay": 1,
      "slot": 8,
      "disk_state": "OK",
      "led_status": "Green:On",
      "missing": false,
      "capacity": "40.0GB",
      "write_endurance": "3",
      "remaining_write_endurance_rate": "97%",
      "firmware_revision": "AS0E",
      "disk_claim_type": "vSAN"
    }
  ],
  "firmwareInfo": {
    "bios_revision": "2.6.3",
    "bmc_revision": "4.10.10.10",
    "hba_version": "16.17.00.05",
    "expander_bpf_version": "2.46",
    "boss_version": "2.5.13.3022",
    "cpld_version": "1.0.2",
    "idsdm_version": "1.9"
  },
  "geo_location": {
    "rack_name": "V0609",
    "order_number": 2
  },

```

```

        "drive_configuration": {
            "type": "2401"
        }
    }
]

```

400 Bad request.

401 Unauthorized request.

UnauthorizedRequestInfo:

```

{
  description:      Unauthorized request.
  message          string
                  example: The provided vCenter credentials are not valid.
                  The detail error message about the unauthorized request.
}

```

Example:

```

{
  "message": "The provided vCenter credentials are not valid."
}

```

403 Forbidden request.

ForbiddenRequestInfo:

```

{
  description:      Forbidden request.
  message          string
                  example: Access Denied.
                  The detail error message about the forbidden request.
}

```

Example:

```

{
  "message": "Access Denied."
}

```

404 Host is not found.

500 Internal server error.

InternalServerErrorInfo:

```

{
  description:      Internal server error.
  errorCode         integer($int32)
  message          string
}

```

Example:

```

{
  "errorCode": 0,
  "message": "string"
}

```

PATCH /v1/hosts/{sn}

Updates the geographical information about a specific host.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Not supported
VxRail Software 7.0.x	Supported in 7.0.010 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Path parameters sn: (Required) The serial number of the node you want to update.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to update

Example:

```
/v1/hosts/V060903
```

Body parameters HostUpdateSpec: (Required) Geographical information that you want to update.

Parameter	Type	Description
geo_location	object	Information about the geographical location of the host The geo_location object contains the following properties: <ul style="list-style-type: none">rack_name (string): Rack name where the host is locatedorder_number (integer): Order number of the host

Example:

```
{
  "geo_location": {
    "rack_name": "rack1",
    "order_number": 1
  }
}
```

Response

202	The request has been accepted for processing, but the processing has not been completed. A <code>request_id</code> will be returned and can be used to check the status of the processing.
400	Bad request.
401	Unauthorized request.
403	Forbidden request.
404	Host is not found.
500	Internal server error.

POST /v1/hosts/{sn}/shutdown

Shuts down a selected host. Includes performing a dry run.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}/shutdown
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.3xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64.
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Body parameter HostShutdownSpec: (Required) Required information for the host to be shut down.

Parameter	Type	Description
<code>dryrun</code>	boolean	Performs a dry run to check whether it is safe to shutdown
<code>evacuate_poweredoff_vms</code>	boolean	Move powered off virtual machines for this node When <code>evacuate_poweredoff_vms</code> is set to true, vCenter migrates all VMs (including powered off and suspended VMs) to other hosts. When <code>evacuate_poweredoff_vms</code> is set to false, vCenter only migrates running VMs to other hosts.

Path parameter `sn`: (Required) The serial number of the node you want to shut down.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to shutdown

Response

202

Successful operation.

AcceptedRequestInfo:

```
{
  description:
    Accepted request.
  request_id   string
  example: 5ffe7062-a590-45b8-a172-8d2cf119562e
  The detail message about the accepted request.
}
```

Example:

```
{
  "request_id": "5ffe7062-a590-45b8-a172-8d2cf119562e"
}
```

400

Bad request.

401

Unauthorized request.

UnauthorizedRequestInfo:

```
{
  description:      Unauthorized request.
  message           string
                    example: The provided vCenter credentials are not valid.
                    The detail error message about the unauthorized request.
}
```

Example:

```
{
  "message": "The provided vCenter credentials are not valid."
}
```

403

Forbidden request.

ForbiddenRequestInfo:

```
{
  description:      Forbidden request.
  message           string
                    example: Access Denied.
                    The detail error message about the forbidden request.
}
```

Example:

```
{
  "message": "Access Denied."
}
```

404

Host is not found.

Internal server error.

InternalServerErrorInfo:

```
{
  description:      Internal server error.
  errorCode         integer($int32)
  message           string
}
```

Example:

```
{
  "errorCode": 0,
  "message": "string"
}
```

The VxRail API supports querying and configuring VxRail hosts' iDRAC parameters.

GET /v1/hosts/{sn}/idrac/available-user-ids

Retrieves a list of the available iDRAC user slot IDs.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}/idrac/available-user-ids
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==**

Path parameters sn: (Required) The serial number of the host to be queried.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Example:

```
/v1/hosts/SN1/idrac/available-user-ids
```

Response

200 Operation successful.
Example:

```
[
  4,
  5,
```


500 Unexpected internal error.

```
Internal error: Error message from PS: /usr/lib/vmware-marvin/marvind/
webapps/ROOT/WEB-INF/classes/scripts/esxcli-client.py (No such file or
directory)
```

Retrieves a list of created iDRAC user accounts on the specified host.

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Path parameters `sn`: (Required) The serial number of the host to be queried.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Response

200 Operation successful.

Example:

```
[
  {
    "id": 2,
    "name": "root",
    "privilege": "ADMIN"
  },
  {
    "id": 3,
    "name": "testuser",
    "privilege": "ADMIN"
  },
  {
    "id": 9,
    "name": "testuser3",
    "privilege": "ADMIN"
  },
  {
    "id": 15,
    "name": "vxpsvc",
    "privilege": "ADMIN"
  },
  {
    "id": 16,
    "name": "PTADMIN",
    "privilege": "ADMIN"
  }
]
```

401 Unauthorized request.

403 Forbidden request.

404 Host not found.

500 Unexpected internal error.

unknownError:

```
Internal error: Error message from PS: /usr/lib/vmware-marvin/marvind/
webapps/ROOT/WEB-INF/classes/scripts/esxcli-client.py (No such file or
directory)
```

POST /v1/hosts/{sn}/idrac/users

Creates an iDRAC user account.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}/idrac/users
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameter IdracUserCreateSpec: (Required) The iDRAC user account information for the user to be created.

Parameter	Type	Description
id	integer	The iDRAC user slot ID
name	string	(Required) The iDRAC user name
password	string	(Required) The iDRAC user password
privilege	string	(Required) The permissions (privilege) of the iDRAC user. Supported values include ADMIN, OPER, or READONLY.

Path parameter sn: (Required) The serial number of the host to be queried.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to shutdown

Response

202 Operation successful.

The request has been accepted for processing, but the processing has not been completed. A requestId will be returned and can be used to check the status of the processing.

Example:

```
{
  "request_id": "SBI_1333"
}
```

400 Invalid request parameters.

401 Unauthorized request.

403 Forbidden request.

404 Host not found.

PUT /v1/hosts/{sn}/idrac/users/{userId}

Updates an iDRAC user account.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}/idrac/users/{userId}
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==**

Body parameters IdracUserUpdateSpec: (Required) The iDRAC user account information for the user to be updated.

Parameter	Type	Description
name	string	(Required) The iDRAC user name
password	string	(Required) The iDRAC user password
privilege	string	(Required) The permissions (privilege) of the iDRAC user. Supported values include ADMIN, OPER, or READONLY.

Path parameters sn: (Required) The serial number of the host to be queried.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to shutdown

userId: (Required) The serial number of the host to be queried.

Parameter	Type	Description
userId	string	(Required) The unique identifier of the iDRAC user. The user ID range is 3 through 16.

Response

202	Operation successful. <div>The request has been accepted for processing, but the processing has not been completed. A requestId will be returned and can be used to check the status of the processing.</div> Example: <div><pre>{ "request_id": "SBI_1333" }</pre></div>
400	Invalid request parameters.
401	Unauthorized request.
403	Forbidden request.
404	Host not found.

GET /v1/hosts/{sn}/idrac/network

Retrieves the iDRAC network settings on the specified host.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}/idrac/network
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpvYGVuIHNLc2FtZQ==**

Path parameters sn: (Required) The serial number of the host to be queried.

Parameter	Type	Description
sn	string	The serial number of the nodes that you want to query

Response

200

Operation successful.
Example:

```
{
  "ip": {
    "type": "ipv4",
    "ip_address": "192.168.102.33",
    "netmask": "255.255.255.0",
    "gateway": "192.168.102.1"
  },
  "dhcp_enabled": false,
  "vlan": {
    "vlan_id": 0,
    "vlan_priority": 0
  }
}
```

401

Unauthorized request.

403

Forbidden request.

404

Host not found.

500

Unexpected internal server error.
unknownError:

```
Internal error: Error message from PS: /usr/lib/vmware-marvin/marvind/
webapps/ROOT/WEB-INF/classes/scripts/esxcli-client.py (No such file or
directory)
```

PATCH /v1/hosts/{sn}/idrac/network

Updates the iDRAC network settings on the specified host.

URL

```
https://<VxRail IP address>/rest/vxm/v1/hosts/{sn}/idrac/network
```

Version support

VxRail Software	Supported versions
VxRail Software 4.5.x	Not supported
VxRail Software 4.7.x	Supported in 4.7.1xx and later
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Authorization (Required) Username and password encoded with Base64
Example value: **Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==**

Body parameters IdracNetworkSpec: (Required) The network parameters for the iDRAC network.

Parameter	Type	Description
dhcp_enabled	boolean	(Required) Whether the DHCP service is enabled or not
ip	IdracIP object	(Required) IP information for iDRAC The IdracIP object contains the following properties: <ul style="list-style-type: none">• ip_address (string): The IP address of the iDRAC (Required)• gateway (string): The gateway of the iDRAC (Required)• netmask (string): The netmask of the iDRAC (Required)• type (string): The VLAN ID setting of the iDRAC (Required): IPv4 or IPv6. Only IPv4 is supported in the current version.
vlan	IdracNetworkVlan object	(Required) The VLAN information for the iDRAC network The IdracNetworkVlan object contains the following properties: <ul style="list-style-type: none">• vlan_id (string): The IPv4 address / VLAN ID setting of the iDRAC. 0 means disabled (Required)• vlan_priority (string): The VLAN priority of the iDRAC (Required). The default value is 0.

Path parameters sn: (Required) The serial number of the host to be queried.

Parameter	Type	Description
sn	string	The serial number of the host to be queried

Response

202 The request has been accepted for processing, but the processing has not been completed. A requestId will be returned and can be used to check the status of the processing.

Example:

```
{
  "request_id": "SBI_1333"
}
```

400 Invalid request parameters.

401 Unauthorized request.

403 Forbidden request.

404 Host not found.