

Dell EMC VxRail Appliance

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

API User Guide

Rev 11

May 2020

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CHAPTER 1

Introduction

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About this guide

This document describes the API for the VxRail appliance, including VxRail appliance 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 appliance software versions 4.7.300 and later, API documentation is included onboard the VxRail appliance and can be accessed from your host. See [VxRail onboard API documentation](#) for more information.

Revision history

The following table lists the revision history for the VxRail Appliance API User Guide.

Table 1 Revision history

Revision Number	Date	Description
11	May 28, 2020	Updated for VxRail Appliance Software 4.7.510 and updated publishing formats.
10	April 28, 2020	Updated for VxRail Appliance Software 7.0.000.
09	February 19, 2020	Updated descriptions for <code>POST /v1/system/validate-credential</code> and <code>POST /v1/system/update-credential</code> plus minor updates and corrections.
08	December 17, 2019	Updated for VxRail Appliance 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 Appliance Software 4.7.300.
04	July 31, 2019	Added upgrade note for <code>POST /lcm/upgrade</code> .
03	June 27, 2019	Updated for VxRail Appliance Software 4.7.200 plus minor updates and corrections.
02	January 22, 2019	Updated for VxRail Appliance software 4.7.100 and minor corrections.
01	December 14, 2018	Initial release.

VxRail documentation

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

Table 2 VxRail core administration and lifecycle management documentation

Document	Description
SolVe Online for VxRail	(Login required) Step-by-step instructions for procedures such as replacing hardware or performing system administrative tasks are available through SolVe Online and the SolVe Desktop application. For more information about SolVe for VxRail, refer to KB 525271 .
VxRail Appliance 7.0.x Administration Guide VxRail Appliance 4.7.x Administration Guide VxRail Appliance 4.5.x Administration Guide	These documents describe the VxRail appliance, how it works, and how to perform administrative tasks.
VxRail 7.0.x Release Notes VxRail 4.7.x Release Notes VxRail 4.5.x Release Notes	(Login required) These documents contain a brief description of VxRail Manager releases, including lists of known issues and workarounds.

Table 3 VxRail support matrices

Document	Description
VxRail 7.0.x Support Matrix VxRail 4.7.x Support Matrix VxRail 4.5.x Support Matrix VxRail 4.0.x Support Matrix	These documents provide information about supported software, firmware, and hardware versions for Dell EMC VxRail appliances based on Dell PowerEdge hardware, including the E Series, P Series, S Series, and V Series.
VxRail Appliance Simple Support Matrix	This document provides information about external software compatibility versions for VxRail appliances.

Table 4 VxRail API and Event guides

Document	Description
VxRail Appliance API User Guide	This document describes the API for the VxRail appliance versions 4.5.x, 4.7.x, and 7.0.x.
VxRail API Cookbook	This document provides sample VxRail API workflows.
VxRail API PowerShell Package	(Download package) The VxRail API PowerShell Package provides the VxRail API PowerShell user guide and modules to enable the management of VxRail systems using PowerShell cmdlets.
VxRail Event Code Reference	(Login required) This reference guide lists the alert and event codes generated by VxRail Manager.

Table 5 VxRail appliance hardware documentation

Document	Description
VxRail Appliance Owner's Manuals <ul style="list-style-type: none"> • VxRail P580N Owner's Manual • VxRail Appliances on 14th Generation PowerEdge Servers P Series, V series, and S Series Owner's Manual • VxRail Appliances on 14th Generation PowerEdge Servers E Series Owner's Manual • VxRail G560 and G560F Owner's Manual • VxRail 60 Series Appliance Owner's Manual • VxRail 100 Series and 200 Series Appliance Owner's Manual • VxRail G Series Appliance Owner's Manual 	These documents describe the various VxRail appliances, including their physical features and technical specifications.
VxRail Appliance Getting Started Guides <ul style="list-style-type: none"> • VxRail G560 and G560F Getting Started Guide • VxRail E Series Appliance Getting Started With Your Appliance • VxRail P Series, S Series, and V Series Appliances Getting Started With Your Appliance 	These documents describe considerations for unpacking and preparing to install VxRail appliances.

Table 6 VxRail security guides

Document	Description
VxRail Security Configuration Guide	(Login required) This guide provides an overview of the configuration, deployment, and usage settings needed to ensure secure operation of the VxRail appliance.
VxRail Appliance STIG Compliance Guide	(Login required) This document provides guidance on the secure installation and secure use of the VxRail appliance for the DoDIN Approved Products List (APL) Deployment Configuration.

Table 7 VxRail planning guides

Document	Description
VxRail vCenter Server Planning Guide	This planning guide discusses guidance for the various vCenter Server deployment options supported on VxRail appliances.
VxRail Planning Guide for Virtual SAN Stretched Cluster	This planning guide provides better insights into the requirements necessary for VxRail to implement Virtual SAN Stretched Cluster.
vSAN 2-Node Cluster on VxRail Planning Guide	This guide provides information for the planning of a VMware vSAN 2-Node Cluster infrastructure on a VxRail platform. (Not for VCF on VxRail solution deployments.)

Table 7 VxRail planning guides (continued)

Document	Description
VxRail Networking Guide with Dell EMC S4148-ON Switches	The deployment guide covers the process of connecting a cluster of VxRail nodes to Dell EMC Networking S4148-ON switches in a high-availability configuration.
VxRail Network Planning Guide	This is a network planning and consideration guide for the VxRail. It provides valuable insight into supported switch requirements and the networking required to support VxRail.
Networking Guides > VxRail Networking Solutions	The networking guides provided on this website assist with the deployment of your infrastructure and the optimal connectivity of your Dell EMC Networking products. Click VxRail Networking Solutions for specific VxRail solutions.
VxRail Fabric Automation SmartFabric Services User Guide	This solution brief provides an overview of how VxRail works with HCI network fabrics using Dell OS10 Enterprise Edition SmartFabric services. (Not for VCF on VxRail solution deployments.)

CHAPTER 2

Getting Started

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VxRail API base URL

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

<VxM_IP> is the network IP address of the VxRail Appliance. The base URL is for a single VxRail cluster only. For customer-supplied vCenters with multiple clusters, each cluster has its own distinct base URL.

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.

The following authorization method is configured for the VxRail REST API:

- HTTP Basic authentication

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 Appliance in software versions 4.7.300 and later.

You can access onboard API documentation by entering 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 of the VxRail Appliance.

CHAPTER 3

VxRail system status

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

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• POST /v1/callhome/deployment.....	24
• POST /v2/callhome/deployment.....	28
• POST /v1/callhome/access-code.....	31
• POST /v1/callhome/internal/register.....	32
• POST /v1/callhome/external/register.....	33
• POST /v2/callhome/external/register.....	36
• POST /v1/callhome/internal/upgrade.....	39
• DELETE /v1/callhome/disable.....	42
• GET /v1/telemetry/tier.....	43
• POST /v1/telemetry/tier.....	45
• GET /v1/requests.....	47
• GET /v1/requests/<requestID>.....	49
• GET /v1/system/internet-mode.....	51
• PUT /v1/system/internet-mode.....	52
• GET /v1/system/proxy.....	53
• POST /v1/system/proxy.....	54
• PATCH /v1/system/proxy.....	57
• DELETE /v1/system/proxy.....	59
• POST /v1/system/validate-credential.....	60
• POST /v1/system/update-credential.....	63
• GET /v1/system/available-hosts.....	65
• GET /v1/system/cluster-hosts.....	67
• POST /v1/certificates/import-vxm.....	69

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

Parameters

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 appliance
installed_time	integer	Time that the VxRail appliance 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 appliance 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,

Parameter	Type	Description
		<ul style="list-style-type: none"> UPGRADE_PRECHECKING, ERR_UPGRADE_PRECHECKER, UPGRADING, UPGRADED, and ERR_UPGRADED.
installed_components	[InstalledComponent] objects	<p>Information about software components installed in the VxRail system</p> <p>InstalledComponent objects contain the following:</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
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 /v1/system-health (DEPRECATED)

Get the current 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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

Response**200**

The system health has been successfully returned.

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

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

401

Username/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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHh1c2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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.

Example:

```
{
  "is_muted": true
}
```

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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHh1c2FtZQ==`

CallhomeSettingsSpec

(Required) Sets whether call home mode is muted or unmuted.

Parameter	Type	Description
<code>is_muted</code>	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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`**Response****200**

Call home operation status successfully returned.

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

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 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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHh1c2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHNlc2FtZQ==`

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 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."
}
```

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUuIHNlc2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvGVuIHNlc2FtZQ==`

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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHh1c2FtZQ==`**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	Supported versions
VxRail Software 7.0.x	Not supported

Request

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHN1c2FtZQ==`

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"> <code>ip (string)</code>: IP address of the SRS server <code>primary (boolean)</code>: Whether the SRS server is primary or not <code>success (boolean)</code>: 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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHNlc2FtZQ==`

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

Parameter	Type	Description
		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
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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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."
}
```

500**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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHN1c2FtZQ==`

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**Parameters****Authorization**

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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**Parameters****Authorization**

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHh1c2FtZQ==`

\$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

Parameter	Type	Description
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/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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==

id

(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"
}
```

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHN1c2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

DarkSiteSettingsSpec

(Required) Whether the system network is a dark site or not.

Parameter	Type	Description
<code>is_dark_site</code>	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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHN1c2FtZQ==`

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.

403

The user is not allowed due to insufficient privilege.

404

Resource not found.

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

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwVGVuIHNlc2FtZQ==`

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	ProxySettings object	Settings for the proxy server ProxySettings 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 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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHh1c2FtZQ==`

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	ProxySettings object	Settings for the proxy server ProxySettings 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 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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwvcGVuIHN1c2FtZQ==`

EsrPasswordSpec

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

credentialSpec

(Required) Credentials input for validation.

Parameter	Type	Description
vxrail	VxRailCredentialSpec object	Information regarding credentials for VxRail Manager See VxRailCredentialSpec description below.

Parameter	Type	Description
vcenter	VcenterSpec object	Information regarding credentials for vCenter See VcenterSpec description below.
hosts	[EsxiHostCredentialSpec] objects	Information regarding credentials and serial numbers for a list of ESXi hosts See EsxiHostCredentialSpec description below.
witness-user	WitnessNodeCredentialSpec object	Information regarding the witness credentials for stretched clusters including 2-node vSAN clusters See WitnessNodeCredentialSpec 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"
    }
  },
  "vxrail": {
    "vxm_root_user": {
      "password": "string",
      "username": "string"
    }
  },
  "witness-user": {
    "witness_user": {
      "password": "string",
      "username": "string"
    }
  }
}
```

VxRailCredentialSpec object: The access information for VxRail Manager.

Property	Type	Description
vxm_root_user	ApplianceUser object	Credentials for the VxRail Manager ApplianceUser contains user account credentials: <ul style="list-style-type: none"> username (string): Username of the account (Required)

Property	Type	Description
		<ul style="list-style-type: none"> password (string): Password of the account (Required)

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)

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

WitnessNodeCredentialSpec object: The access information for the witness node.

Property	Type	Description
witness_user	ApplianceUser object	Credentials for the vSAN witness host ApplianceUser contains user account credentials: <ul style="list-style-type: none"> username (string) (Required) password (string) (Required)

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==`

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 <code>psc</code> and <code>esxi</code>
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."
  }
]

```

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

\$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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==`

\$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.

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/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**Parameters****Authorization**

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvYVUyIHNNc2FtZQ==`**CertificateUpdateSpec**

(Required) The VxRail Manager certificate parameters

```
{
  description:      Import the content of certificate, primary key,
  root certificate and password.
  cert*            string
                  example: Certificate content
                  The contents of the certificate
  password*       string
                  example: testPassword
                  The contents of the password
  primary_key*    string
                  example: Primary key content
                  The contents of the primary key
  root_cert_chain* string
                  example: Root certificate content
                  The contents of the root certificate
}
```

Example:

```
{
  "cert": "Certificate content",
  "password": "testPassword",
  "primary_key": "Primary key content",
  "root_cert_chain": "Root certificate content"
}
```

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.**

CHAPTER 4

VxRail eServices

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

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- [GET /v1/support/chat-url](#)..... 80

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==`

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 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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==

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": "ka1f100000GBiEAAW",
    "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": "ka2f100000GBiEAAW",
    "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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwGVuIHh1c2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYGVuIHh1c2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHNlc2FtZQ==`

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/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	Supported versions
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Parameters

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.

CHAPTER 5

VxRail Support

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

• GET /v1/support/account	84
• POST /v1/support/account	85
• PUT /v1/support/account	86
• DELETE /v1/support/account	88
• GET /v1/support/contact	89
• GET /v1/support/logs	91
• POST /v1/support/logs	92
• GET /v1/support/logs/<logID>	94
• GET /v1/support/logs/<logID>/download	95

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

Parameters

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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpvYVUyIHh1c2FtZQ==

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:

```
Network connection timed out.
```

General Description:

```
Unexpected internal server error.
```

DarksiteForbidden:

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

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==

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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

\$filter

The conditions for the query.

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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpvVGluIHN1c2FtZQ==

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 <code>types=idrac</code> 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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

logId

(Required) The specific log that you want to query.

Response

200

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

```
{
  "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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpvYGVuIHN1c2FtZQ==

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.

CHAPTER 6

VxRail life cycle management (LCM)

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

- [POST /v1/lcm/upgrade \(4.5.0xx, 4.5.1xx, 4.5.2xx\)](#)..... 98
- [POST /v1/lcm/upgrade \(4.5.3xx+, 4.7.x, 7.0.x\)](#)..... 99
- [POST /v2/lcm/upgrade \(4.7.410+, 7.0.x\)](#)..... 103

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 Appliance 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 QWxhZGRpbjpvYVUyIHNLc2FtZQ==`

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).

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	Supported versions
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 upgrade bundle
  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":"/tmp/
  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 `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.

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).

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHNlc2FtZQ==`

upgradeSpecs

(Required) The parameters required for an upgrade.

Parameter	Type	Description
bundle_file_locator	string	(Required) Full path to the upgrade bundle
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": "/tmp/
  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_vcса_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_vcса_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>	UserSpec object	(Required) Credentials for the user account. The UserSpec object contains: <ul style="list-style-type: none"> <code>username</code> (string): Username of the account <code>password</code> (string): Password of the account

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

Property	Type	Description
<code>vc_admin_user</code>	UserSpec object	(Required) Credentials for vCenter Admin user. The UserSpec object contains: <ul style="list-style-type: none"> <code>username</code> (string) <code>password</code> (string)
<code>vcса_root_user</code>	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"> <code>username</code> (string)

Property	Type	Description
		<ul style="list-style-type: none"> password (string)
psc_root_user	UserSpec object	<p>Credentials for PSC Root user. Required if the upgrade bundle contains vCenter component. The UserSpec object contains:</p> <ul style="list-style-type: none"> username (string) password (string)
migration_spec	VcenterMigrationSpec object	<p>Information for vCenter migration-based upgrades. VcenterMigrationSpec contains:</p> <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) 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"> 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/PSC 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	UserSpec 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 `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.

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.

CHAPTER 7

VxRail cluster management

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

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- [POST /v1/cluster/remove-host](#)..... 112
- [POST /v1/cluster/shutdown](#)..... 114
- [GET /v1/cluster/system-virtual-machines](#)..... 115
- [GET /v1/vc/mode](#)..... 117
- [PATCH /v1/vc/mode](#)..... 119

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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvGVuIHNlc2FtZQ==`

Response

200

Successful operation.

ClusterInfo:

```
{
  description:          The response information about cluster info,
  appliance basic info list.
  chassis               [...]
  cluster_id            string
                       vxrail cluster UUID
  device_type           string
                       device type
  health               string
                       cluster health status
  last_time             string($date-time)
                       last cluster update time
  operational_status    string
                       operational status
  product_type          string
                       product type
  suppressed            boolean
                       under suppression mode or not
  vc_connected          boolean
                       example: true
                       vc connection is available
}
```

Example:

```
{
  "chassis": [
    {
      "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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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.

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHh1c2FtZQ==`

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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvcmVudHJlc2FtZQ==`

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/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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpwcmVudHN1c2FtZQ==`

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	Supported versions
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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

VcConversionSpec

(Required) Information needed to update the vCenter or PSC mode to internal or external

Property	Type	Description
<code>psc_mode</code>	<code>string</code>	(Required) Specifies the PSC mode that you want. Supported values are: <ul style="list-style-type: none"> EMBEDDED: PSC is integrated with vCenter EXTERNAL: PSC is a separate appliance from vCenter Note that vCenter 7.0 only supports embedded PSC mode.
<code>vc_admin_user</code>	<code>Account object</code>	(Required) Credentials for the vCenter administrator. The <code>Account object</code> contains: <ul style="list-style-type: none"> <code>username (string)</code>: Username of the account. <code>password (string)</code>: Password of the account.
<code>vc_mode</code>	<code>string</code>	(Required) Specifies the vCenter mode that you want. Supported values are: <ul style="list-style-type: none"> EMBEDDED: vCenter is deployed by VxRail EXTERNAL: 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"
}
```

CHAPTER 8

VxRail appliance

The VxRail API supports querying and VxRail appliance chassis, disk, and host information.

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- [GET /v1/chassis/{chassis_id}](#)..... 126
- [GET /v1/disks](#)..... 129
- [GET /v1/disks/{disk_sn}](#)..... 131
- [GET /v1/hosts](#)..... 134
- [GET /v1/hosts/{sn}](#)..... 138
- [GET /v1/hosts/{sn}/shutdown](#)..... 142

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

Parameters

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 /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**Parameters****Authorization**

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvYVUuIHNlc2FtZQ==`**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 /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 and later

Request**Parameters****Authorization**

(Required) Username and password encoded with Base64.

Example value: Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==

Response**200****Successful operation.**

DiskInfo:

```
DiskInfo      {array}
```

Example:

```
[
  {
    "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"
  }
]
```

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	Supported versions
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpwcmVudHN1c2FtZQ==`

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/1
```

Response

200

Successful operation.

DiskInfo:

```
{
  description:          disk infomation
  capacity             string
  disk_state           disk capacity
  disk_type            string
  disk_status          disk status
  disk_type            string
  enclosure            disk type
  enclosure            integer($int32)
  firmware_revision   disk enclosure
  firmware_revision   string
  guid                 disk firmware revision
  id                   string
  id                   string
  led_status           disk id
  led_status           string
  manufacturer         disk led status
  manufacturer         string
  max_capable_speed   disk manufacturer
  max_capable_speed   string
  missing              disk max capable speed
  missing              boolean
  model                disk is missing or not
  model                string
  protocol             disk model
  protocol             string
  protocol             string
  protocol             disk protocol
}
```

```

remaining_write_endurance_rate    string
slot                               disk write endurance remaining rate
                                   integer($int32)
sn                                 disk slot
                                   string
write_endurance                   disk serial number
                                   string
write_endurance_status            disk write endurance
                                   string
                                   disk write endurance status
}

```

Example:

```

{
  "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"
}

```

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 value

```
{
  "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	Supported versions
VxRail Software 7.0.x	Supported in 7.0.000 and later

Request

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvYGVuIHN1c2FtZQ==`

Response

200

Successful operation.

Host:

```
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 /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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpvYGVuIHNlc2FtZQ==`

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
```

```

id                host hostname
                  string
led_status        host id
                  string
manufacturer      host led status
                  string
missing           host manufacturer
                  boolean
name              host is missing or not
                  string
                 host name
nics              [...]
operational_status host operational status
part_number       string
power_status      string
psnt              host power status
                  string
slot              host psnt
                  integer($int32)
sn                host slot
                  string
tpm_present       host sn
                  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 /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

Parameters

Authorization

(Required) Username and password encoded with Base64.

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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

HostShutdownSpec

(Required) Required information for the host to be shut down.

Parameter	Type	Description
dryrun	boolean	Performs a dry run to check whether it's safe to shutdown
evacuate_poweredoff_vms	boolean	Evacuate powered off vms for this node

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.

500

Internal server error.

InternalServerErrorInfo:

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

Example:

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


CHAPTER 9

iDRAC

The VxRail API supports querying and configuring VxRail hosts' iDRAC parameters.

- [GET /v1/hosts/{sn}/idrac/available-user-ids](#)..... 146
- [GET /v1/hosts/{sn}/idrac/users](#)..... 147
- [POST /v1/hosts/{sn}/idrac/users](#)..... 149
- [PUT /v1/hosts/{sn}/idrac/users/{userId}](#)..... 150
- [GET /v1/hosts/{sn}/idrac/network](#)..... 152
- [PATCH /v1/hosts/{sn}/idrac/network](#)..... 153

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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

```
/v1/hosts/SN1/idrac/available-user-ids
```

Response

200

Operation successful.

Example:

```
[
  4,
  5,
  6,
  7,
  8,
  10,
  11,
```

```
12,
13,
14
]
```

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)
```

GET /v1/hosts/{sn}/idrac/users

Retrieves a list of created iDRAC user accounts on the specified host.

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudGVudGVudDpjb2FuZG91`

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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

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.

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: Basic QWxhZGRpbjpvGVuIHNlc2FtZQ==

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.

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.

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.

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

Parameters

Authorization

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpwcmVudHNlc2FtZQ==`

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**Parameters****Authorization**

(Required) Username and password encoded with Base64

Example value: `Basic QWxhZGRpbjpvYVUyIHN1c2FtZQ==`

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

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.

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.

