

# vRealize Suite Lifecycle Manager 1.1 Installation, Upgrade, and Management

vRealize Suite 2017

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<https://docs.vmware.com/>

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# vRealize Suite Lifecycle Manager 1.1 Installation, Upgrade, and Management

*vRealize Suite Lifecycle Manager 1.1 Installation and Management* provides instructions for installing VMware vRealize Suite Lifecycle Manager and using vRealize Suite Lifecycle Manager to install and manage products in the vRealize Suite.

## Intended Audience

This information is intended for anyone who wants to use vRealize Suite Lifecycle Manager to deploy and manage the vRealize Suite of products to monitor and manage a software-defined data center (SDDC). The information is written for experienced virtual machine administrators who are familiar with enterprise management applications and data center operations.

## VMware Technical Publications Glossary

VMware Technical Publications provides a glossary of terms that might be unfamiliar to you. For definitions of terms as they are used in VMware technical documentation, go to <http://www.vmware.com/support/pubs>.

# Installing and Configuring vRealize Suite Lifecycle Manager

# 1

vRealize Suite Lifecycle Manager provides a single installation and management platform for all products in the vRealize Suite.

- [System Requirements](#)

Systems that run vRealize Suite Lifecycle Manager must meet specific hardware and operating system requirements.

- [Deploy the vRealize Suite Lifecycle Manager Appliance](#)

Deploy the vRealize Suite Lifecycle Manager appliance to begin using vRealize Suite Lifecycle Manager.

- [Log In to vRealize Suite Lifecycle Manager](#)

Log in to the vRealize Suite Lifecycle Manager UI to create and manage cloud environments with vRealize Suite Lifecycle Manager.

- [Check for and Install vRealize Suite Lifecycle Manager Updates and Upgrades from a Repository](#)

You can check for and install updates to the vRealize Suite Lifecycle Manager appliance.

- [Install Upgrades to vRealize Suite Lifecycle Manager from an ISO File](#)

You can upgrade vRealize Suite Lifecycle Manager using an upgrade ISO file

- [Configuring vRealize Suite Lifecycle Manager Common Settings](#)

You can modify settings for vRealize Suite Lifecycle Manager, such as passwords, SSH settings, and configuration drift interval.

- [Configure Product OVA Settings](#)

Select an OVA to use for each vRealize Suite product.

- [Add a VMware Identity Manager](#)

You can add a VMware Identity Manager to vRealize Suite Lifecycle Manager.

- [Configure My VMware Settings](#)

Enter your My VMware user name and password to enable vRealize Suite Lifecycle Manager to download product Binary through My VMware. You can also enter using the proxy server under MyVMware Settings.

- [vRealize Suite Lifecycle Manager Logs](#)

You can configure how vRealize Suite Lifecycle Manager collects log files and download log files for troubleshooting purposes.

- [Generate a New Wild Card Certificate](#)

You can generate a new wild card certificate for vRealize Suite products that are deployed in vRealize Suite Lifecycle Manager.

- [Enable or Disable Proxy Settings](#)

If you are using a proxy server in your network, you must configure the proxy server in vRealize Suite Lifecycle Manager.

- [Add a Data Center to vRealize Suite Lifecycle Manager](#)

You can add a data center to vRealize Suite Lifecycle Manager to back your private cloud environments.

- [Assign a User Role in vRealize Suite Lifecycle Manager](#)

Create a user role in the vSphere Web Client with privileges that are required for vRealize Suite Lifecycle Manager. The same role can be assigned to the user who can add a vCenter in vRealize Suite Lifecycle Manager.

- [Add a vCenter to a Data Center](#)

Add a vCenter to a Data Center before using that vCenter to create a private cloud environment.

## System Requirements

Systems that run vRealize Suite Lifecycle Manager must meet specific hardware and operating system requirements.

### Minimum Software Requirements

Verify that the system where you run vRealize Suite Lifecycle Manager meets the following minimum software requirements.

- vCenter Server 6.0 or 6.5
- ESXi version 6.0 or 6.5

### Minimum Hardware Requirements

Verify that the system where you run vRealize Suite Lifecycle Manager meets the following minimum software requirements.

- 2 vCPUs
- 16 GB memory
- 127 GB storage

## Supported vRealize Suite Products

vRealize Suite Lifecycle Manager supports the following vRealize Suite products and product versions.

- vRealize Automation 7.2 and 7.3
- vRealize Orchestrator 7.2 and 7.3 (embedded with vRealize Automation)
- vRealize Business for Cloud 7.2.1, 7.3, and 7.3.1
- vRealize Operations Manager 6.5 and 6.6.1
- vRealize Log Insight 4.3 and 4.5

For more information about vRealize Suite, see [vRealize Suite Overview](#)

## Deploy the vRealize Suite Lifecycle Manager Appliance

Deploy the vRealize Suite Lifecycle Manager appliance to begin using vRealize Suite Lifecycle Manager.

To create the appliance, you use the vSphere Client to download and deploy a partially configured virtual machine from a template.

### Prerequisites

- Log in to the vSphere Client with an account that has permission to deploy OVF templates to the inventory.
- Download vRealize Suite Lifecycle Manager .ovf or .ova file from [My VMware](#) to a location accessible to the vSphere Client.

### Procedure

- 1 Select the vSphere **Deploy OVF Template**.
- 2 Enter the path to the vRealize Suite Lifecycle Manager appliance .ovf or .ova file.
- 3 Read and accept the end-user license agreement.
- 4 Enter an appliance name and inventory location.

When you deploy appliances, use a different name for each one, and do not include non-alphanumeric characters such as underscores ( \_ ) in names.

- 5 Select the host and cluster in which the appliance will reside.
- 6 Review the template details.
- 7 Select the resource pool in which the appliance will reside.
- 8 Select the storage that will host the appliance.



**9** Select **Thick** as the disk format.

Format does not affect appliance disk size. If an appliance needs more space for data, increase disk size by using vSphere after deploying.

**10** From the drop-down menu, select a Destination Network.**11** Complete the appliance properties.

- a For **Hostname**, enter the appliance FQDN.
- b (Optional) Enter the certificate properties.
- c In Network Properties, when using static IP addresses, enter the values for gateway, netmask, and DNS servers. You must also enter the IP address, FQDN, and domain for the appliance itself.

---

**Note** vRealize Suite Lifecycle Manager does not verify the revocation status of the SSL certificates. You must verify the status manually before accepting the certificate.

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**12** Depending on your deployment, vCenter Server, and DNS configuration, select one of the following ways of finishing deployment and powering up the appliance.

- If you deployed to vSphere, and **Power on after deployment** is available on the Ready to Complete page, take the following steps.
  - a Select **Power on after deployment** and click **Finish**.
  - b After the file finishes deploying into vCenter Server, click **Close**.
  - c Wait for the virtual machine to start, which might take up to 5 minutes.
- If you deployed to vSphere, and **Power on after deployment** is not available on the Ready to Complete page, take the following steps.
  - a After the file finishes deploying into vCenter Server, click **Close**.
  - b Power on the vRealize Suite Lifecycle Manager appliance.
  - c Wait for the virtual machine to start, which might take up to 5 minutes.
  - d Verify that the vRealize Suite Lifecycle Manager appliance is deployed by pinging its FQDN. If you cannot ping the appliance, restart the virtual machine.
  - e Wait for the virtual machine to start, which might take up to 5 minutes.

**13** Verify that the vRealize Suite Lifecycle Manager appliance is deployed by pinging its FQDN.**Results**

Log in to vRealize Suite Lifecycle Manager using a supported Web browser. See [Log In to vRealize Suite Lifecycle Manager](#) and [System Requirements](#).

# Log In to vRealize Suite Lifecycle Manager

Log in to the vRealize Suite Lifecycle Manager UI to create and manage cloud environments with vRealize Suite Lifecycle Manager.

## Prerequisites

Deploy the vRealize Suite Lifecycle Manager appliance. See [Deploy the vRealize Suite Lifecycle Manager Appliance](#).

## Procedure

- 1 Use a supported Web browser to connect to your vRealize Suite Lifecycle Manager appliance by using the appliance's IP address.

**`https://IP address/vr1cm`**

---

**Note** You can also access vRealize Suite Lifecycle Manager using the URL `https://IP address`. The URL `http://IP address` does not successfully redirect to vRealize Suite Lifecycle Manager.

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- 2 Enter the administrator user name.

**`admin@localhost`**

- 3 Enter the default administrator password.

**`vmware`**

- 4 Click **Log In**.

## What to do next

If you are logging in to vRealize Suite Lifecycle Manager for the first time, reset the root password.

Configure a new administrator password and other vRealize Suite Lifecycle Manager settings, such as and SSH settings and configuration drift interval. See [Configuring vRealize Suite Lifecycle Manager Common Settings](#).

# Check for and Install vRealize Suite Lifecycle Manager Updates and Upgrades from a Repository

You can check for and install updates to the vRealize Suite Lifecycle Manager appliance.

Upgrade is available for vRealize Suite Lifecycle Manager version 1.0 to version 1.1. You can also upgrade vRealize Suite Lifecycle Manager by using an ISO file to install the upgrade. See [Install Upgrades to vRealize Suite Lifecycle Manager from an ISO File](#).

## Prerequisites

- Verify that you meet the system requirements. See [System Requirements](#).

- Take a snapshot of the vRealize Suite Lifecycle Manager virtual appliance. If you encounter any problems during upgrade, you can revert to this snapshot.
- Verify that no critical tasks are currently in progress in vRealize Suite Lifecycle Manager. The upgrade process stops and starts vRealize Suite Lifecycle Manager servers and restarts the vRealize Suite Lifecycle Manager virtual appliance, which might corrupt in-progress tasks.

## Procedure

- 1 Click **Settings** and click the **Update** tab.

vRealize Suite Lifecycle Manager displays the name, version number, and vendor of the current vRealize Suite Lifecycle Manager appliance.

- 2 Select the repository for vRealize Suite Lifecycle Manager updates.

Option	Description
<b>Default</b>	Use the default VMware repository for vRealize Suite Lifecycle Manager updates. To use this option, the vRealize Suite Lifecycle Manager virtual appliance must have access to My VMware.
<b>Repository URL</b>	Enter the repository URL for updates. To use this option, extract the ISO containing the upgrade files to a private repository. Do not use a private repository that requires authentication for file access.

- 3 Click **CHECK UPDATES**.

After a few minutes, vRealize Suite Lifecycle Manager displays a message indicating whether there are updates available.

- 4 Select the upgrades to install, and click **INSTALL UPGRADES**.

vRealize Suite Lifecycle Manager appliance enters maintenance mode. During the upgrade, the vRealize Suite Lifecycle Manager appliance is rebooted and is unavailable for a brief period. After the upgrade, the following message appears in the **Home > Settings > Update Section**.

Upgrade Completed Successfully from 1.0.x.x to 1.1.y.y

- 5 After a few minutes, refresh the vRealize Suite Lifecycle Manager UI and click **Settings > Update**.

If the **Reboot** button is not visible, wait a few minutes and repeat this step.

- 6 Click **Reboot** to reboot vRealize Suite Lifecycle Manager and finish the upgrade process.

## Results

After the reboot, vRealize Suite Lifecycle Manager displays the message **Upgrade Completed Successfully** if the upgrade is successful.

# Install Upgrades to vRealize Suite Lifecycle Manager from an ISO File

You can upgrade vRealize Suite Lifecycle Manager using an upgrade ISO file

Upgrade is available for vRealize Suite Lifecycle Manager version 1.0 to version 1.1. You can also upgrade vRealize Suite Lifecycle Manager from My VMware or a private repository. See [Check for and Install vRealize Suite Lifecycle Manager Updates from a Repository](#).

## Prerequisites

- Verify that you meet the system requirements. See [System Requirements](#).
- Take a snapshot of the vRealize Suite Lifecycle Manager virtual appliance. If you encounter any problems during upgrade, you can revert to this snapshot.
- Verify that no critical tasks are currently in progress in vRealize Suite Lifecycle Manager. The upgrade process stops and starts vRealize Suite Lifecycle Manager servers and restarts the vRealize Suite Lifecycle Manager virtual appliance, which might corrupt in-progress tasks.

## Procedure

- 1 Mount the upgrade ISO file on the vRealize Suite Lifecycle Manager virtual appliance's CD ROM drive.
- 2 Use SSH to connect to the vRealize Suite Lifecycle Manager virtual appliance.
- 3 Edit `provider-runtime.xml` by running `vi /opt/vmware/var/lib/vami/update/provider/provider-runtime.xml`.
- 4 Place the existing file content between comment tags.
- 5 Add the following to the file.

```
<? xml version="1.0" encoding="UTF-8"?>
<service>
  <properties>
    <property name="localRepositoryAddress" value="cdrom://" />
    <property name="localRepositoryPasswordFormat" value="base64" />
  </properties>
</service>
```

- 6 Save and close the file.
- 7 Verify that a new version is available by running the command `/opt/vmware/bin/vamcli update --check`.

This should return a message similar to the following:

```
Checking for available updates, this process can take a few minutes....
Available Updates -
  1.1.x.x Build yyyy
```

- 8 If a 1.1 build is available, run the command `/opt/vmware/bin/vamcli update --install latest -- accepteu1a` to trigger the upgrade.

The upgrade process restarts the vRealize Suite Lifecycle Manager virtual appliance, which might cause your SSH session to expire.

- 9 After a few minutes, log in to the vRealize Suite Lifecycle Manager web UI and click **Settings > Update**.

If the update is finished, vRealize Suite Lifecycle Manager displays the message **Upgrade Completed Successfully**. If you do not see this message, wait a few minutes and repeat this step.

## Configuring vRealize Suite Lifecycle Manager Common Settings

You can modify settings for vRealize Suite Lifecycle Manager, such as passwords, SSH settings, and configuration drift interval.

The first time you view the common configuration page, you must provide data for all available settings to save any settings.

- [Change vRealize Suite Lifecycle Manager Passwords](#)  
You can change the default administrator password and set passwords for root and SSH users.
- [Change the Configuration Drift Interval](#)  
Set the interval of time vRealize Suite Lifecycle Manager uses to collect data for configuration drift reports.
- [Restart the vRealize Suite Lifecycle Manager Server](#)  
You can restart the vRealize Suite Lifecycle Manager server immediately or schedule weekly server restarts.
- [Enable or Disable SSH on vRealize Suite Lifecycle Manager](#)  
You can enable SSH for troubleshooting purposes.
- [Join or Leave the VMware Customer Experience Program](#)  
You can join or leave the VMware Customer Experience Program at any time.

### Change vRealize Suite Lifecycle Manager Passwords

You can change the default administrator password and set passwords for root and SSH users.

#### Procedure

- 1 Click **Settings** and click the **Common Configuration** tab.

- 2 Type new passwords for root, administrator, and SSH users.

vRealize Suite Lifecycle Manager enforces the following password requirements:

- Between 8 and 16 characters long
- At least one uppercase character
- At least one lowercase character
- At least one numerical digit
- At least one special character

- 3 Click **SAVE**.

#### What to do next

If you changed the administrator password, vRealize Suite Lifecycle Manager logs you out and displays the log in page. Log in with the new administrator password to continue using vRealize Suite Lifecycle Manager.

## Change the Configuration Drift Interval

Set the interval of time vRealize Suite Lifecycle Manager uses to collect data for configuration drift reports.

#### Procedure

- 1 Click **Settings** and click the **Common Configuration** tab.
- 2 Enter the Configuration Drift interval in hours.
- 3 Click **SAVE**.

## Restart the vRealize Suite Lifecycle Manager Server

You can restart the vRealize Suite Lifecycle Manager server immediately or schedule weekly server restarts.

#### Procedure

- 1 Click **Settings** and click the **Common Configurations** tab.
- 2 To restart the server immediately, click **RESTART SERVER**.
- 3 To schedule a weekly server restart, select **Schedule a restart** and select the day of the week and time for the weekly restart.
- 4 Click **SAVE**.

## Enable or Disable SSH on vRealize Suite Lifecycle Manager

You can enable SSH for troubleshooting purposes.

As a best practice, disable SSH in a production environment, and activate it only to troubleshoot problems that you cannot resolve by other means. Leave it enabled only while needed for a specific purpose and in accordance with your organization's security policies.

SSH is enabled by default for vRealize Automation, vRealize Business for Cloud, vRealize Log Insight, and vRealize Operations Manager.

#### Procedure

- 1 Click **Settings** and click the **Common Configuration** tab.
- 2 Select **SSH Enabled** to enable SSH connections or deselect it to disable SSH connections.
- 3 Click **SAVE**.

## Join or Leave the VMware Customer Experience Program

You can join or leave the VMware Customer Experience Program at any time.

This product participates in the VMware Customer Experience Program (CEIP). Details regarding the data collected through CEIP and the purposes for which it is used by VMware are set forth at the Trust & Assurance Center at <http://www.vmware.com/trustvmware/ceip.html>.

#### Procedure

- 1 Click **Settings** and click the **Common Configuration** tab.
- 2 Select **Join the VMware Customer Experience Improvement Program** to join CEIP or deselect the option to leave CEIP.
- 3 Click **Update**.

## Configure Product OVA Settings

Select an OVA to use for each vRealize Suite product.

#### Prerequisites

To use an OVA downloaded from My VMware, verify that you have registered with My VMware and registered My VMware services with vRealize Suite Lifecycle Manager. See [Configure My VMware Settings](#).

#### Procedure

- 1 Click **Settings** and click the **Ova Configuration** tab.
- 2 Select the location type.

Select **NFS** or **Local** to map to a downloaded OVA with products dependent on the OVA location, or select **My VMware** to map to an OVA downloaded from My VMware.

---

**Note** To download an OVA from My VMware, click **My VMware®** on the **OVA Configuration** tab, and click the download arrow under **Actions** for the OVA to download.

---

- 3 Enter the location of the OVA file to use in the **Base Location** text box, and click **Get**.
- 4 Select the product to configure an OVA for from the **Product Name** drop-down menu.
- 5 Select the version of the product to configure an OVA for from the **Product Version** drop-down menu.
- 6 Under **Product Binary Type**, select whether the OVA is an install or upgrade OVA.
- 7 Select the OVA file from the **Product Binary** drop-down menu, and click **Save**.

## Add a VMware Identity Manager

You can add a VMware Identity Manager to vRealize Suite Lifecycle Manager.

### Prerequisites

Verify that you have an existing VMware Identity Manager version 2.9.2. vRealize Suite Lifecycle Manager supports only version 2.9.2 of the VMware Identity Manager.

### Procedure

- 1 Click **Settings** and click the **Identity Manager** tab.
- 2 Select whether to add an existing identity manager or install a new identity manager.

Option	Description
<b>Add Existing Identity Manager</b>	<ol style="list-style-type: none"> <li>a Click <b>ADD ACTIVE DIRECTORY</b> at the bottom of the page and provide active directory details.</li> <li>b Enter the host name for the identity manager in the form of a fully qualified domain name.</li> <li>c Enter the admin user name, Admin Group name, and password for the identity manager, and click <b>Update</b>.</li> </ol>
<b>Install New Identity Manager</b>	<ol style="list-style-type: none"> <li>a Click <b>ADD ACTIVE DIRECTORY</b> at the bottom of the page and provide active directory details.</li> <li>b Select an existing data center or click <b>+</b> to add a new data center.  For information on adding a new data center, see <a href="#">Add a Data Center to vRealize Suite Lifecycle Manager</a>.</li> <li>c Click <b>Install</b>.</li> <li>d Accept the EULA and provide the <b>Infra</b> and network details.</li> <li>e Enter host and IP details, Admin Group, and passwords for root, admin, and SSH user.</li> <li>f Click <b>Submit</b> and click <b>SAVE</b> to close the wizard.</li> </ol>

When you register an existing identity manager, a duplicate catalog entry is created.

### Results

After vRealize Suite Lifecycle Manager is registered to the identity manager, vRealize Suite Lifecycle Manager is visible in the VMware Identity Manager app catalog.



## What to do next

You can view install progress for a new VMware Identity Manager on the **Requests** tab. When the request shows a status of **COMPLETED**, vRealize Suite Lifecycle Manager is registered to VMware Identity Manager.

## Configure My VMware Settings

Enter your My VMware user name and password to enable vRealize Suite Lifecycle Manager to download product Binary through My VMware. You can also enter using the proxy server under MyVMware Settings.

The configured My VMware user must have permissions to download and view licenses.

### Procedure

- 1 Click **Settings** and click the **My VMware** tab.
- 2 Enter your My VMware user name and password, and click **Submit**.

After registration, you can download all the required binaries.

---

**Note** To download Product Binary, click the download arrow under **Actions** for the Product Binary to download. If your network requires proxy settings to access external websites, you can provide those details under the Configure Proxy section of My VMware tab.

---

## vRealize Suite Lifecycle Manager Logs

You can configure how vRealize Suite Lifecycle Manager collects log files and download log files for troubleshooting purposes.

## Configure vRealize Suite Lifecycle Manager Logging

You can configure the level of information vRealize Suite Lifecycle Manager collects in log files and the number of log files for vRealize Suite Lifecycle Manager to keep.

### Procedure

- 1 Click **Settings** and click the **Logs** tab.
- 2 In the **Select Log Level** drop-down menu, select the level of information vRealize Suite Lifecycle Manager collects in its log files.
- 3 In the **Select Log File Count** drop-down menu, select the number of log files for vRealize Suite Lifecycle Manager to keep.

vRealize Suite Lifecycle Manager starts a new log file when the previous file reaches more than 25 MB. vRealize Suite Lifecycle Manager keeps the most recent log files and deletes any older log files over the number specified.

- 4 Click **Update Log Level**.

## Download vRealize Suite Lifecycle Manager Logs

Download vRealize Suite Lifecycle Manager logs to help troubleshoot any problems you encounter.

### Procedure

- 1 Click **Settings** and click the **Logs** tab.
- 2 Click **Trigger Download Logs**.

---

**Note** After you trigger the download logs, you can go to request page to monitor the log download status.

---

### What to do next

View download progress on the Requests page. When the download is complete, vRealize Suite Lifecycle Manager displays a link to the downloaded logs.

## Generate a New Wild Card Certificate

You can generate a new wild card certificate for vRealize Suite products that are deployed in vRealize Suite Lifecycle Manager.

### Procedure

- 1 Click **Settings** and click the **Generate Certificate** tab.
- 2 Update the certificate settings as necessary, and click **Generate Certificate**.

### Results

vRealize Suite Lifecycle Manager generates a new Wild card certificate for the specific domain provided by the user.

## Enable or Disable Proxy Settings

If you are using a proxy server in your network, you must configure the proxy server in vRealize Suite Lifecycle Manager.

### Prerequisites

You must have installed and configured a proxy server in your network before using it in vRealize Suite Lifecycle Manager

### Procedure

- 1 Click **Settings** and click the **Proxy** tab.

If vRealize Suite Lifecycle Manager is already configured to use a proxy server, those proxy details are displayed.

- 2 Select **Use a Proxy Server** to use a proxy server for vRealize Suite Lifecycle Manager, or deselect it to remove an existing proxy server.

vRealize Suite Lifecycle Manager does not save proxy server settings when you disable proxy.

- 3 If you are enabling proxy, enter the server, port, user name, and password for the proxy server.
- 4 Click **Save**.

## Add a Data Center to vRealize Suite Lifecycle Manager

You can add a data center to vRealize Suite Lifecycle Manager to back your private cloud environments.

### Procedure

- 1 On the **Manage Data Centers**, click the three dots on the top right of the page, and click **+ Add Data Center**.
- 2 Enter the **Data Center Name** and provide a **Location**.
- 3 Click **ADD**.

### What to do next

Add a vCenter to the data center. See [Add a vCenter to a Data Center](#).

## Assign a User Role in vRealize Suite Lifecycle Manager

Create a user role in the vSphere Web Client with privileges that are required for vRealize Suite Lifecycle Manager. The same role can be assigned to the user who can add a vCenter in vRealize Suite Lifecycle Manager.

### Prerequisites

Verify that you have administrative privileges to add a role to a user or a user group.

### Procedure

- 1 Log in to vSphere Web Client by using the vSphere Web Client.
- 2 On the home page of vSphere web client, click **Roles** under Administration.
- 3 Create a new role for all application-to-application interactions between vRealize Suite Lifecycle Manager and vSphere.
- 4 On the Roles page, click the **Create role action** icon.
- 5 Clone **Read-only** and provide a name to the role.

- 6 In the **Create Role** dialog box, configure the role using the following configuration settings, and click **Next**.

Setting	Value
Role Name	vRealize Suite Lifecycle Manager
Privilege	<ul style="list-style-type: none"> <li>■ Datastore               <ul style="list-style-type: none"> <li>■ Allocate Space</li> <li>■ Browse Datastore</li> <li>■ Update Virtual Machine Files</li> </ul> </li> <li>■ Host.Local               <ul style="list-style-type: none"> <li>■ Operations- Add Host to vCenter</li> <li>■ Operations - Create Virtual Machine</li> <li>■ Operations - Delete Virtual Machine</li> <li>■ Operations - Reconfigure Virtual Machine</li> </ul> </li> <li>■ Network               <ul style="list-style-type: none"> <li>■ Assign Network</li> </ul> </li> <li>■ Resource               <ul style="list-style-type: none"> <li>■ Assign vApp to Resource Pool</li> <li>■ Assign Virtual Machine to Resource Pool</li> </ul> </li> <li>■ vApp               <ul style="list-style-type: none"> <li>■ Select All privileges</li> </ul> </li> <li>■ Virtual Machines               <ul style="list-style-type: none"> <li>■ Select All privileges</li> </ul> </li> </ul>

This role inherits the System Anonymous, System View and System Read privileges.

- 7 Provide a name to the new role and click **Finish**.
- 8 Select **Global Permissions** under the Administration and click **Add permission**.

**Note** You must have administrative privileges to use vCenter.

- 9 Select the user and role that you have created, and click **OK**.

## Add a vCenter to a Data Center

Add a vCenter to a Data Center before using that vCenter to create a private cloud environment.

### Prerequisites

Ensure that you have the vCenter fully qualified domain name, user name, and password.

### Procedure

- 1 On the **Manage Data Centers** page, click **Manage vCenters**.
- 2 Click **+ Add vCenter**

- 3 Enter the **Host Name** in the form of a fully qualified domain name.

---

**Note** You must have administrative privileges to use vCenter.

---

- 4 Enter the **User Name** and **Password** for the vCenter.

- 5 Select the **vCenter Type**.

- Management: All VMware SDDC Suite products are managed by this vCenter type.
- Workload: All the payload or business related VMs are managed by this vCenter type.
- Consolidated Management and Workload: Is a vCenter type, where both VMware SDDC Suite products and payload VMs are managed together.

vCenter Type selection is currently used only for classification; the setting has no associated product functionality.

- 6 Click **Submit**

#### What to do next

Go to the **Requests** page to see the status of this request. When the status is **Completed**, you can use this vCenter to create environments.

# Creating an Environment

## 2

You can create an environment and install vRealize Suite products.

You can use vRealize Suite Lifecycle Manager to install the following vRealize Suite products and versions.

- vRealize Automation 7.2 and 7.3
- vRealize Orchestrator 7.2 and 7.3 (embedded with vRealize Automation)
- vRealize Business for Cloud 7.2.1, 7.3, and 7.3.1
- vRealize Operations Manager 6.5 and 6.6.1
- vRealize Log Insight 4.3, 4.5, and 4.5.1

This chapter includes the following topics:

- [Create a New Private Cloud Environment Using the Installation Wizard](#)
- [Create a New Private Cloud Environment Using a Configuration File](#)

## Create a New Private Cloud Environment Using the Installation Wizard

You can use the installation wizard to create a private cloud environment and install vRealize Suite products.

### Prerequisites

- Configure Product Binaries for the products to install. See [Configure Product OVA Settings](#).
- Ensure that you have added a vCenter server to the data center with valid credentials and the request is complete.
- Generate a single SAN certificate with host names for each product to install from the Certificate tab in the UI.
- Verify that your system meets the hardware and software requirements for each of the vRealize Suite products you want to install. See the following product documentation for system requirements.
  - [vRealize Automation documentation](#)

- [vRealize Business for Cloud documentation](#)
- [vRealize Operations Manager documentation](#)
- [vRealize Log Insight documentation](#)
- If you are installing vRealize Automation, you must meet the following additional prerequisites.
  - Configure the vRealize Automation load balancer. See [vRealize Automation Load Balancing](#).
  - Disable the second member of each pool in the vRealize Automation load balancer. You can re-enable these members after installation is complete.
  - The cloud administrator has added all IaaS nodes and the Windows database server to the domain.
  - The Windows database server and IaaS meet all vRealize Automation prerequisites. See *IaaS Windows Servers*.

Add the domain user as part of **User Rights Assignment** under **Local Security Policies** for **Log on as a Service** and **Log on as a batch job**.

- The domain user has added the SQL server to the domain.
- Add the domain user as part of the SQL DB user Logins list with the sysadmin privilege.
- Install latest JRE (Java 1.8 or later) and create a JAVA\_HOME environment variable on all Windows nodes.
- Install Microsoft .NET Framework 3.5.
- Install Microsoft .NET Framework 4.5.2 or later.
  - A copy of .NET is available from any vRealize Automation appliance: <https://vrealize-automation-appliance-fqdn:5480/installer/>

If you use Internet Explorer for the download, verify that Enhanced Security Configuration is disabled. Navigate to res://iesetup.dll/SoftAdmin.htm on the Windows server.
- Set **User Access Control** settings to **Never Notify** on both Windows and database server virtual machines.
- Take a snapshot of the database machine and all Windows IaaS machines after configuration and before triggering the deployment in vRealize Suite Lifecycle Manager.
- Configure one NSX Edge as Active and one as Passive for the Windows machine. For detailed information on how to configure the NSX Load Balancer, see [Load Balancing the Cloud Management Platform in Region A](#).

- On all of the windows IaaS machines used in vRealize Automation deployment, log in to windows machine at least once as a domain user. If you do not login at least once to the IaaS machines, then the following error appears:

```
Private key is invalid: Error occurred while decoding private key. The computer must be
trusted for delegation
and the current user must be configured to allow delegation.
```

- Ensure that the IaaS nodes do not have any vRealize Automation components already installed. Follow the steps in the KB article [58871](#) to uninstall any vRealize Automation components in the IaaS node.
- Update the registry key on both Windows and database server virtual machines.
  - 1 Use the default PowerShell and run the following command as administrator on all Windows and database server virtual machines: `Set-ItemProperty -Path "HKLM:\Software\Microsoft\Windows\CurrentVersion\Policies\System" -Name "EnableLUA" -Value "0"`
  - 2 Reboot the Windows virtual machine.
- Verify that the TLS 1.0 and 1.1 values are not present in the IaaS windows machine registry path `HKLM\SYSTEM\CurrentControlSet\Control\SecurityProviders\SCHANNEL\Protocols`.
- Alternatively, vRealize Automation install precheck provides a script, which can be executed in all Windows and database server to perform the above operations.
- If you are importing an existing vRealize Operations Manager installation, set a root password for that installation.

## Procedure

### 1 [Configure Environment Settings for a New Private Cloud](#)

Configure environment settings, such as name, password, and data center for a private cloud environment.

### 2 [Select the vRealize Suite Products to Install](#)

Select which vRealize Suite products to install in the private cloud environment.

### 3 [Configure Licensing and Accept License Agreement](#)

Accept the VMware end-user license agreement and enter the license key.

### 4 [Configure Private Cloud Environment Details](#)

Configure vCenter, cluster, network, datastore, and certificate details for a new private cloud environment.

### 5 [Configure vRealize Suite Products for Installation](#)

Configure the product details for each vRealize Suite product that you are installing in the private cloud environment.



## 6 Confirm Environment and Installation Settings

Verify that the environment and installation settings are accurate.

## 7 Import an Existing Environment using Installation Wizard

You can use the installation wizard to import existing private cloud environment for a vRealize Suite product.

# Configure Environment Settings for a New Private Cloud

Configure environment settings, such as name, password, and data center for a private cloud environment.

### Procedure

- 1 Log in to vRealize Suite Lifecycle Manager as administrator and click **Create Environment**.
- 2 Click **Using Installation Wizard**.
- 3 From **Select a Data Center**, select an existing data center for this environment, or click **+** to add a data center to vRealize Suite Lifecycle Manager.

For information on adding a data center, see [Add a Data Center to vRealize Suite Lifecycle Manager](#).

- 4 In **Environment Name**, enter a descriptive name for the new private cloud environment.  
This name must be unique among environments on this instance of vRealize Suite Lifecycle Manager.
- 5 Select the environment type.

Option	Description
Production	Production
Test	For testing new developments
Stage	To stage changes before releasing them to production
Development	For active development

- 6 Enter a **Default password for all products** to set a common password for all vRealize Suite products in the environment.

The default password must be a minimum of eight characters.

---

**Note** The default password does not change the vRealize Business for Cloud application password in standalone vRealize Business for Cloud deployments

---

- 7 Enter an **Administrator Email** for vRealize Suite Lifecycle Manager to send administrator alerts.

- 8 (Optional) Select **Join the VMware Customer Experience Program** to join CEIP for this environment.

This product participates in the VMware Customer Experience Program (CEIP). Details regarding the data collected through CEIP and the purposes for which it is used by VMware are set forth at the Trust & Assurance Center at <http://www.vmware.com/trustvmware/ceip.html>.

## Select the vRealize Suite Products to Install

Select which vRealize Suite products to install in the private cloud environment.

### Prerequisites

Verify that you have a data center and environment credentials already created.

### Procedure

- 1 Select whether to install vRealize Suite products by product or solution.

Option	Description
<b>Products</b>	Select which individual vRealize Suite products to add to the private cloud environment and whether to do a new install of each product or import and existing installation of the product. For each new install, select the product <b>Version</b> and <b>Size</b> to deploy.
<b>Solutions</b>	<p>Select a use case-based solution for the environment, and vRealize Suite Lifecycle Manager installs the vRealize Suite products and product versions best suited to that use case. You can mouse-over the product icons to see which products and product versions are included in each solution.</p> <p>vRealize Suite Lifecycle Manager offers the following environment solutions:</p> <ul style="list-style-type: none"> <li>■ <b>IT Automating IT</b> - Enable automation and simplification of workload provisioning tasks of production-ready infrastructure and applications across multi-cloud environments. For details, see <a href="#">VMware Validated Design for IT Automating IT</a>.</li> <li>■ <b>Micro-Segmentation</b> - Enable distribution of firewall and isolation policies to create better network security built inside the data center. For details, see <a href="#">VMware Validated Design for Micro Segmentation</a>.</li> <li>■ <b>Intelligent Operations</b> - Enable proactive identification and remediation of performance, capacity, and configuration issues of the infrastructure. For details, see <a href="#">VMware Validated Design for Intelligent Operations</a>.</li> </ul>

- 2 Click **Next**.

## Configure Licensing and Accept License Agreement

Accept the VMware end-user license agreement and enter the license key.

### Procedure

- 1 Read the end-user license agreement, select **I agree to the terms and conditions**, and click **Next**.

- 2 Select the license key from the drop-down menu or use the **Add vRealize Suite License Key** option, and click **Next**.

## Configure Private Cloud Environment Details

Configure vCenter, cluster, network, datastore, and certificate details for a new private cloud environment.

### Procedure

- 1 Enter the details of the vCenter where you are installing the vRealize Suite and the names of the cluster, network, and datastore to use for this environment.

The vCenter name must be in the form of a fully qualified domain name.

- 2 Select the disk file format, and click **Next**.

Option	Description
Thin	Use for evaluation and testing.
Thick	Use for production environments.

- 3 Enter the default gateway, domain, domain search path, DNS server, and netmask details for the environment, and click **Next**.
- 4 Enter the key passphrase and private key.
- 5 Enter certificate chain for the SAN certificate to import or select the **Generated Certificate** option, and click **Next**.

For information on generating a SAN certificate, see [Generate a New Wild Card Certificate](#).

## Replace the Certificate of the Management Site for vRealize Automation

You can replace the SSL certificate of the management site service if your certificate expires or if you are using a self-signed certificate and your company security policy requires you to use its SSL certificates. You secure the management site service on port 5480.

### Prerequisites

- New certificates must be in PEM format and the private key cannot be encrypted. By default, the vRealize Automation appliance management site SSL certificate and private key are stored in a PEM file located at `/opt/vmware/etc/lighttpd/server.pem`.

### Procedure

- 1 Log in by using the appliance console or SSH.
- 2 Back up your current certificate file.

```
cp /opt/vmware/etc/lighttpd/server.pem /opt/vmware/etc/lighttpd/server.pem-bak
```

- 3 Copy the new certificate to your appliance by replacing the content of the file `/opt/vmware/etc/lighttpd/server.pem` with the new certificate information.
- 4 Run the following command to restart the lighttpd server.
 

```
service vami-lighttpd restart
```
- 5 Run the following command to restart the haproxy service.
 

```
service haproxy restart
```
- 6 Log in to the management console and validate that the certificate is replaced. You might need to restart your browser.

## Configure vRealize Suite Products for Installation

Configure the product details for each vRealize Suite product that you are installing in the private cloud environment.

Configuration tabs appear only for the products you selected to install. You can access advanced properties if you want to update the advanced configurations like adding different vCenter, enabling or disabling the registration with VMware Identity Manager and so on.

### Procedure

- 1 Click the **vRealize Automation** tab to configure installation details for vRealize Automation.
  - a Enter the user name and password for the Windows Server vRealize Automation uses.  
The Windows user must have administrator rights.
  - b Enter the fully qualified domain name in the form of a fully qualified domain name and IP address for the vRealize Automation appliance.
  - c Enter the names in the form of fully qualified domain names and IP addresses for the Infrastructure as a Service (IaaS) Web and Management servers.  
  
For more information about IaaS, see [Infrastructure as a Service](#).
  - d (Optional) Click **Add** to add additional components and select the type of component to add.
  - e Enter the host name in the form of a fully qualified domain name and IP address for each component.  
  
Windows machines that host the Model Manager Web service, Manager Service, and Microsoft SQL Server database must be able to resolve each other by Windows Internet Name Service (WINS) name.
  - f In the **Database Instance** text box, specify the database instance or click **Scan** and select from the list of instances. If the database instance is on a non-default port, include the port number in instance specification by using the form `dbhost,SQL_port_number\SQLinstance`. The Microsoft SQL default port number is 1443.

- 2 Click the **vRealize Business for Cloud** tab to configure installation details for vRealize Business for Cloud.
  - a Select the **Currency** to use from the drop-down menu.
  - b (Optional) Click **Add** to add additional components and then select the type of component to add from the drop-down menu.
  - c Enter the host name in the form of a fully qualified domain name and the IP address for each component.
- 3 Click the **vRealize Operations** tab to configure installation details for vRealize Operations Manager.
  - a Enter the NTP server address.
  - b (Optional) Click **Add** to add additional components and then select the type of component to add.
  - c Enter the host name in the form of a fully qualified domain name and the IP address for each component.
- 4 Click the **vRealize Log Insight** tab to configure installation details for vRealize Log Insight.
  - a (Optional) Click **Add** to add additional components and then select the type of component to add.
  - b Enter the host name in the form of a fully qualified domain name and the IP address for each component.
  - c If you are adding Cluster Virtual IPS, optionally enter load balancer settings.
- 5 Click **Next**.

## Confirm Environment and Installation Settings

Verify that the environment and installation settings are accurate.

### Procedure

- 1 Verify that the listed environment and installation settings are accurate.
- 2 (Optional) Click **Back** or click the relevant page in the navigation pane to change any settings.
- 3 (Optional) Click **Export** to export a configuration file with all the product and user data for this private cloud.

You can use the exported configuration file to create a private cloud. See [Create a New Private Cloud Environment Using a Configuration File](#). Modify the exported configuration file as required before using it to create another private cloud.

Update/modify the exported configuration file as required before using it to create another private cloud.

#### 4 Click **Finish**.

vRealize Suite Lifecycle Manager creates the private cloud environment and begins installing the selected vRealize Suite products in the background.

#### What to do next

To monitor product installation progress, click **Home**. Installation progress appears under **Recent Requests**.

## Import an Existing Environment using Installation Wizard

You can use the installation wizard to import existing private cloud environment for a vRealize Suite product.

#### Prerequisites

Verify that you have an existing vRealize Suite instance.

#### Procedure

- 1 Log in to vRealize Suite Lifecycle Manager as an administrator and click **Environment**.
- 2 Select **Using Installation wizard**.
- 3 After entering the environment data fields, under vRealize Suite, click **Import > Create Environment**.
- 4 After you agree to the terms and conditions of EULA, click **Next**.
- 5 Enter the License Key details by either selecting an existing license or add a new license for a vRealize Suite product, and click **Next**.
- 6 Provide your **Infrastructure**, **Network**, and **Certificate** information in the following drop-down menus.
- 7 Under **Products Details** page, update the details and select all the vCenters where all product components are installed.

If you are importing an existing vRealize Operations Manager installation, set a root password for that installation.

- 8 Read the Summary of the provided information and click **Submit**.

## Create a New Private Cloud Environment Using a Configuration File

You can create a private cloud environment using a JSON product configuration file.

#### Prerequisites

- Configure OVA settings for the products to install. See [Configure Product OVA Settings](#).

- Ensure that you have added a vCenter to the data center with valid credentials and the request has completed. See [Add a vCenter to a Data Center](#).
- In the configuration file, change `encoded:true` to `encoded:false`, and ensure that all passwords in the configuration file appear in plain text.

#### Procedure

- 1 Log in to vRealize Suite Lifecycle Manager as administrator and click **Create Environment**.
- 2 Click **Using Configuration file**.
- 3 From **Select a Data Center**, select an existing data center for this environment, or click **+** to add a data center to vRealize Suite Lifecycle Manager.

For information on adding a data center, see [Add a Data Center to vRealize Suite Lifecycle Manager](#).

- 4 In **Environment Name**, enter a descriptive name for the new private cloud environment.  
This name must be unique among environments on this instance of vRealize Suite Lifecycle Manager.
- 5 Select the environment type.

Option	Description
<b>Production</b>	Production
<b>Test</b>	For testing new developments
<b>Stage</b>	To stage changes before releasing them to production
<b>Development</b>	For active development

- 6 Enter a **Default password for all products** to set a common password for all vRealize Suite products in the environment.

The default password must be a minimum of eight characters.

**Note** The default password does not change the vRealize Business for Cloud application password in standalone vRealize Business for Cloud deployments

- 7 Enter an **Administrator Email** for vRealize Suite Lifecycle Manager to send administrator alerts.
- 8 (Optional) Select **Join the VMware Customer Experience Program** to join CEIP for this environment.

This product participates in the VMware Customer Experience Program (CEIP). Details regarding the data collected through CEIP and the purposes for which it is used by VMware are set forth at the Trust & Assurance Center at <http://www.vmware.com/trustvmware/ceip.html>.

- 9 Paste the text of the product configuration JSON file into the **Product Config JSON** text box, and click **Create Environment**.

## Example: Sample Deployment JSON Files

The following is an example of a JSON file for an Intelligent Operations advanced deployment.

```
{
  "requestId": "null",
  "environmentId": "",
  "infrastructure": {
    "sourceLink": "",
    "properties": {
      "bindPassword": "",
      "dataCenterName": "Datacenter-Name",
      "vcHostname": "vCenter Server Host name",
      "environmentId": "",
      "masterVidmAdminUserName": "",
      "netmask": "Network-Netmask",
      "environmentName": "vRealize Suite Large Advance",
      "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
      "enableTelemetry": "true",
      "dnsServers": "Network-DNS-Server-IPs",
      "diskFormat": "Thin",
      "baseDN": "",
      "vcPassword": "vCenter Server Password",
      "defaultPassword": "vRealize Suite Products password",
      "adminEmail": "cloud admin email address",
      "adName": "",
      "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\n\NZImiZPyLQQBGRYFbG9jYWwxZzARBgoJkiaJk/IsZAEZ\nnFnNxyS1\n-----END CERTIFICATE-----",
      "masterKeyPassphrase": "",
      "datastoreName": "VC Datastore Name",
      "masterVidmAdminPassword": "",
      "masterVidmEnabled": "",
      "uberAdmin": "",
      "license": "",
      "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\nn4Hf/7hp59x\n\nGGlHmsQAidubXQdBMGgxiBGGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
      "bindDN": "",
      "vmNetwork": "Network-Portgroup",
      "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\nn4Hf/7hp59x\n\nGGlHmsQAidubXQdBMGgxiBGGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
      "masterVidmHostName": "",
      "groupDN": "",
      "masterVidmCloudAdminGroup": "",
      "vcUsername": "vCenter Server Username",
      "domain": "",
      "acceptEULA": "true",
      "keyPassphrase": "",
      "gateway": "Network-Gateway",
      "searchpath": "",
      "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\n\NZImiZPyLQQBGRYFbG9jYWwxZzARBgoJkiaJk/IsZAEZ\nnFnNxyS1\n-----END CERTIFICATE-----"
    }
  },
  "encoded": false,
  "products": [
```



```

{
  "id": "vrli",
  "version": "4.5.0",
  "clusterVIP": [],
  "properties": {
    "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "vrliLicenseKey": "",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "vRLI-IP",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "uberAdmin": "",
        "network": "Network-Portgroup",
        "masterVidmEnabled": "",
        "vrliAdminEmail": "",
        "hostname": "vRLI-Hostname",
        "password": "vCenter Server Password",
        "masterVidmHostName": "",
        "masterVidmAdminUserName": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-master",
        "diskFormat": "Thin",
        "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname",
        "searchpath": "",
        "gateway": "Network-Gateway"
      }
    },
    {
      "sourceLink": "",
      "type": "vrli-worker",
      "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-01",

```

```

        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "vrli-worker",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-02",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
}
]
},
{
    "id": "vrops",
    "version": "6.6.1",
    "clusterVIP": [],
    "properties": {
        "ntpServerIP": "NTP Server IP"
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "master",
            "properties": {
                "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
                "installerLocation": "/data/productlinks/vrops/6.6.1/install/vrops.ova",
                "vCenterHost": "vCenter Server Host name",
                "storage": "VC Datastore Name",
                "network": "Network-Portgroup",
                "password": "vCenter Server Password",
                "hostname": "vROPS-Hostname",
                "masterVidmAdminUserName": "",
                "netmask": "Network-Netmask",
                "diskFormat": "Thin",
                "ntpServer": "NTP Server IP",
                "address": "vROPS-IP",
                "certificateChain": "",
                "dns": "Network-DNS-Server-IPs",

```

```

        "ipAddress": "vROPS-IP",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "masterVidmEnabled": "false",
        "license": "",
        "privateKey": "",
        "masterVidmHostName": "",
        "domain": "",
        "name": "S1-master",
        "keyPassphrase": "",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "replica",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-replica",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",

```

```

        "domain": "",
        "name": "S1-data-01",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "smallrc or largerc",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-remotecollector-01",
        "ntpServer": "NTP Server IP",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
        "cluster": "LCM-DC#LCM-Cluster-02",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "smallrc or largerc",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrops-remotecollector-02",
        "ntpServer": "NTP Server IP",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
}
}

```

```

    ]
  }
]
}

```

The following is an example of a JSON file for an Intelligent Operations simple deployment.

```

{
  "requestId": "null",
  "environmentId": "",
  "infrastructure": {
    "sourceLink": "",
    "properties": {
      "bindPassword": "",
      "dataCenterName": "Datacenter-Name",
      "vcHostname": "vCenter Server Host name",
      "environmentId": "",
      "masterVidmAdminUserName": "",
      "netmask": "Network-Netmask",
      "environmentName": "vRealize Suite Large Simple",
      "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
      "enableTelemetry": "true",
      "dnsServers": "Network-DNS-Server-IPs",
      "diskFormat": "Thin",
      "baseDN": "",
      "vcPassword": "vCenter Server Password",
      "defaultPassword": "vRealize Suite Products password",
      "adminEmail": "cloud admin email address",
      "adName": "",
      "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\n\nCZImiZPyLQGBGRYFbG9jYWwxEzARBgoJkiaJk/IsZAEZ\nFnNkYS1\n\n-----END CERTIFICATE-----",
      "masterKeyPassphrase": "",
      "datastoreName": "VC Datastore Name",
      "masterVidmAdminPassword": "",
      "masterVidmEnabled": "",
      "uberAdmin": "",
      "license": "",
      "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\nn4Hf/7hp59x\n\nGGlHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n\n-----END RSA PRIVATE KEY-----",
      "bindDN": "",
      "vmNetwork": "Network-Portgroup",
      "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\nn4Hf/7hp59x\n\nGGlHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n\n-----END RSA PRIVATE KEY-----",
      "masterVidmHostName": "",
      "groupDN": "",
      "masterVidmCloudAdminGroup": "",
      "vcUsername": "vCenter Server Username",
      "domain": "",
      "acceptEULA": "true",
      "keyPassphrase": "",
      "gateway": "Network-Gateway",
      "searchpath": "",
      "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\n\nCZImiZPyLQGBGRYFbG9jYWwxEzARBgoJkiaJk/IsZAEZ\nFnNkYS1\n\n-----END CERTIFICATE-----"
    }
  }
}

```

```

},
"encoded": false,
"products": [
  {
    "id": "vrli",
    "version": "4.5.0",
    "clusterVIP": [],
    "properties": {
      "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
    }
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "name": "S1-vrli-master",
        "ipAddress": "",
        "hostname": ""
      }
    },
    {
      "sourceLink": "",
      "type": "vrli-worker",
      "properties": {
        "name": "S1-vrli-worker-01",
        "ipAddress": "",
        "hostname": ""
      }
    },
    {
      "sourceLink": "",
      "type": "vrli-worker",
      "properties": {
        "name": "S1-vrli-worker-02",
        "ipAddress": "",
        "hostname": ""
      }
    }
  ]
},
{
  "id": "vrops",
  "version": "6.6.1",
  "clusterVIP": [],
  "properties": {
    "ntpServerIP": "NTP Server IP"
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "master",
      "properties": {
        "name": "S1-master",
        "ipAddress": "vROPS-IP",
        "hostname": "vROPS-Hostname"
      }
    }
  ]
}

```

```

    }
  },
  {
    "sourceLink": "",
    "type": "replica",
    "properties": {
      "name": "S1-replica",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "data",
    "properties": {
      "name": "S1-data-01",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
      "name": "S1-remotecollector-01",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
      "name": "S2-vrops-remotecollector-02",
      "ipAddress": "",
      "hostname": ""
    }
  }
]
}

```

The following is an example of a JSON file for an IT Automating IT advanced deployment.

```

{
  "requestId": "null",
  "environmentId": "",
  "infrastructure": {
    "sourceLink": "",
    "properties": {
      "bindPassword": "",
      "dataCenterName": "Datacenter-Name",
      "vcHostname": "vCenter Server Host name",
      "environmentId": ""
    }
  }
}

```

```

    "masterVidmAdminUserName": "",
    "netmask": "Network-Netmask",
    "environmentName": "vRealize Suite Large Advance",
    "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
    "enableTelemetry": "true",
    "dnsServers": "Network-DNS-Server-IPs",
    "diskFormat": "Thin",
    "baseDN": "",
    "vcPassword": "vCenter Server Password",
    "defaultPassword": "vRealize Suite Products password",
    "adminEmail": "cloud admin email address",
    "adName": "",
    "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLQQBGRYFbG9jYWwxEzARBgJkiaJk/IsZAEZ\nFnNxYS1\n-----END CERTIFICATE-----",
    "masterKeyPassphrase": "",
    "datastoreName": "VC Datastore Name",
    "masterVidmAdminPassword": "",
    "masterVidmEnabled": "",
    "uberAdmin": "",
    "license": "",
    "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x
\nGGLHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "bindDN": "",
    "vmNetwork": "Network-Portgroup",
    "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x
\nGGLHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "masterVidmHostName": "",
    "groupDN": "",
    "masterVidmCloudAdminGroup": "",
    "vcUsername": "vCenter Server Username",
    "domain": "",
    "acceptEULA": "true",
    "keyPassphrase": "",
    "gateway": "Network-Gateway",
    "searchpath": "",
    "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLQQBGRYFbG9jYWwxEzARBgJkiaJk/IsZAEZ\nFnNxYS1\n-----END CERTIFICATE-----"
  }
},
"encoded": false,
"products": [
  {
    "id": "vrli",
    "version": "4.5.0",
    "clusterVIP": [],
    "properties": {
      "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
    }
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "vrliLicenseKey": "",

```



```

    "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
    "dns": "Network-DNS-Server-IPs",
    "ipAddress": "vRLI-IP",
    "vCenterHost": "vCenter Server Host name",
    "storage": "VC Datastore Name",
    "userName": "vCenter Server Username",
    "masterVidmAdminPassword": "",
    "uberAdmin": "",
    "network": "Network-Portgroup",
    "masterVidmEnabled": "",
    "vrliAdminEmail": "",
    "hostname": "vRLI-Hostname",
    "password": "vCenter Server Password",
    "masterVidmHostName": "",
    "masterVidmAdminUserName": "",
    "netmask": "Network-Netmask",
    "domain": "",
    "name": "S1-vrli-master",
    "diskFormat": "Thin",
    "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname",
    "searchpath": "",
    "gateway": "Network-Gateway"
  }
},
{
  "sourceLink": "",
  "type": "vrli-worker",
  "properties": {
    "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
    "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
    "ipAddress": "",
    "dns": "Network-DNS-Server-IPs",
    "vCenterHost": "vCenter Server Host name",
    "storage": "VC Datastore Name",
    "userName": "vCenter Server Username",
    "network": "Network-Portgroup",
    "hostname": "",
    "password": "vCenter Server Password",
    "netmask": "Network-Netmask",
    "domain": "",
    "name": "S1-vrli-worker-01",
    "diskFormat": "Thin",
    "gateway": "Network-Gateway",
    "searchpath": ""
  }
},
{
  "sourceLink": "",
  "type": "vrli-worker",
  "properties": {
    "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
    "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
    "ipAddress": "",
    "dns": "Network-DNS-Server-IPs",
    "vCenterHost": "vCenter Server Host name",

```

```

        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-02",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
}
],
{
    "id": "vra",
    "version": "7.3.0",
    "clusterVIP": [
        {
            "type": "vra",
            "hostname": "vRA-LoadBalancer-Hostname",
            "ipAddress": "vRA-LoadBalancer-IP"
        },
        {
            "type": "iaas-web",
            "hostname": "IaaS-Web-LoadBalancer-Hostname",
            "ipAddress": "IaaS-Web-LoadBalancer-IP"
        },
        {
            "type": "iaas-manager",
            "hostname": "IaaS-Manager-Service-LoadBalancer-Hostname",
            "ipAddress": "IaaS-Manager-Service-LoadBalancer-IP"
        }
    ],
    "properties": {
        "windowsPassword": "",
        "windowsUsername": ""
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "vra-server-primary",
            "properties": {
                "vidmVraDisabledAdvanced": "",
                "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
                "certificateChain": "",
                "installerLocation": "/data/productlinks/vra/7.3.0/install/vra.ova",
                "dns": "Network-DNS-Server-IPs",
                "ipAddress": "vRA-IP",
                "vCenterHost": "vCenter Server Host name",
                "storage": "VC Datastore Name",
                "userName": "vCenter Server Username",
                "network": "Network-Portgroup",
                "vidmPassword": "",

```

```

        "privateKey": "",
        "licenseKey": "",
        "hostname": "vRA-Hostname",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vra-server-primary",
        "keyPassphrase": "",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "vra-server-secondary",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "installerLocation": "/data/productlinks/vra/7.3.0/install/vra.ova",
        "certificateChain": "",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "vidmPassword": "",
        "privateKey": "",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vra-server-secondary",
        "keyPassphrase": "",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "db",
    "properties": {
        "useWindowsAuthentication": "true",
        "useExistingDatabase": "false",
        "password": "vCenter Server Password",
        "hostname": "",
        "databaseName": "iaas",
        "name": "db",
        "databaseUserName": "",
        "databasePassword": "",
        "ipAddress": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{

```

```

    "sourceLink": "",
    "type": "iaas-web",
    "properties": {
      "webPassword": "",
      "vidmPassword": "",
      "hostname": "",
      "password": "vCenter Server Password",
      "ipAddress": "",
      "name": "iaas-web-01",
      "webUserName": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-web",
    "properties": {
      "vidmPassword": "",
      "webPassword": "",
      "password": "vCenter Server Password",
      "hostname": "",
      "ipAddress": "",
      "name": "iaas-web-02",
      "vCenterHost": "vCenter Server Host name",
      "webUserName": "",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-manager-active",
    "properties": {
      "password": "vCenter Server Password",
      "hostname": "",
      "msUserName": "",
      "msPassword": "",
      "name": "iaas-manager-active",
      "ipAddress": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-manager-passive",
    "properties": {
      "password": "vCenter Server Password",
      "hostname": "",
      "msUserName": "",
      "msPassword": "",
      "name": "iaas-manager-passive",
      "ipAddress": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  }
}

```

```

    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-orchestrator",
    "properties": {
      "demPassword": "",
      "hostname": "",
      "password": "vCenter Server Password",
      "ipAddress": "",
      "name": "Demorchestrator-02",
      "demUserName": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-orchestrator",
    "properties": {
      "demPassword": "",
      "password": "vCenter Server Password",
      "hostname": "",
      "name": "Demorchestrator-01",
      "ipAddress": "",
      "demUserName": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
      "demPassword": "",
      "password": "vCenter Server Password",
      "hostname": "",
      "name": "Demworker-01-2",
      "ipAddress": "",
      "demUserName": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
      "demPassword": "",
      "password": "vCenter Server Password",
      "hostname": "",
      "name": "Demworker-01-3",
      "ipAddress": "",
      "demUserName": "",
      "vCenterHost": "vCenter Server Host name",

```

```

        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "hostname": "",
        "password": "vCenter Server Password",
        "ipAddress": "",
        "name": "Demworker-02-2",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "hostname": "",
        "password": "vCenter Server Password",
        "name": "Demworker-02-3",
        "ipAddress": "",
        "vCenterHost": "vCenter Server Host name",
        "demUserName": "",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "password": "vCenter Server Password",
        "hostname": "",
        "name": "Demworker-01-1",
        "ipAddress": "",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "hostname": "",
        "password": "vCenter Server Password",
        "name": "Demworker-02-1",
        "ipAddress": "",
        "vCenterHost": "vCenter Server Host name",

```

```

        "demUserName": "",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "proxy-agent-vsphere",
    "properties": {
        "password": "vCenter Server Password",
        "hostname": "",
        "agentUserName": "",
        "name": "VCAgent-1",
        "ipAddress": "",
        "agentName": "VCAgent-1",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username",
        "vsphereEndpointName": "VCEndpoint-1",
        "agentPassword": ""
    }
},
{
    "sourceLink": "",
    "type": "proxy-agent-vsphere",
    "properties": {
        "hostname": "",
        "password": "vCenter Server Password",
        "agentUserName": "",
        "ipAddress": "",
        "name": "VCAgent-2",
        "agentName": "VCAgent-2",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username",
        "vsphereEndpointName": "VCEndpoint-2",
        "agentPassword": ""
    }
}
]
},
{
    "id": "vrbc",
    "version": "7.3.0",
    "clusterVIP": [],
    "properties": {
        "currency": "USD - US Dollar"
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "vrbc-server",
            "properties": {
                "ssoPassword": "",
                "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
                "vrbcTelemetryEnabled": "true",
                "installerLocation": "/data/productlinks/vrbc/7.3.0/install/vrbc.ova",
                "tenantPassword": "",

```

```

    "vCenterHost": "vCenter Server Host name",
    "storage": "VC Datastore Name",
    "network": "Network-Portgroup",
    "password": "vCenter Server Password",
    "hostname": "vRB-Hostname",
    "masterVidmAdminUserName": "",
    "netmask": "Network-Netmask",
    "diskFormat": "Thin",
    "vrbCurrency": "USD - US Dollar",
    "certificateChain": "",
    "ipAddress": "vRB-IP",
    "dns": "Network-DNS-Server-IPs",
    "vrbLicenseKey": "",
    "userName": "vCenter Server Username",
    "masterVidmAdminPassword": "",
    "uberAdmin": "",
    "masterVidmEnabled": "",
    "isTelemetryEnable": "true",
    "privateKey": "",
    "masterVidmHostName": "",
    "domain": "",
    "name": "S1-vrb-server",
    "searchpath": "",
    "gateway": "Network-Gateway"
  }
},
{
  "sourceLink": "",
  "type": "vrb-collector",
  "properties": {
    "ssoPassword": "",
    "cluster": "LCM-DC#LCM-Cluster-02",
    "vrbTelemetryEnabled": "true",
    "installerLocation": "/data/productlinks/vrbc/7.3.0/install/vrbc.ova",
    "tenantPassword": "",
    "vCenterHost": "lcm-vc.",
    "storage": "VC Datastore Name",
    "network": "Network-Portgroup",
    "hostname": "",
    "password": "vCenter Server Password",
    "masterVidmAdminUserName": "",
    "netmask": "Network-Netmask",
    "diskFormat": "Thin",
    "vrbCurrency": "USD - US Dollar",
    "sshEnabled": "True",
    "ipAddress": "",
    "dns": "Network-DNS-Server-IPs",
    "vrbLicenseKey": "",
    "userName": "vCenter Server Username",
    "masterVidmAdminPassword": "",
    "isTelemetryEnable": "true",
    "masterVidmEnabled": "true",
    "uberAdmin": "",
    "masterVidmHostName": "",
    "domain": "",

```



```

        "name": "S1-vrb-collector",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
}
],
{
    "id": "vrops",
    "version": "6.6.1",
    "clusterVIP": [],
    "properties": {
        "ntpServerIP": "NTP Server IP"
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "master",
            "properties": {
                "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
                "installerLocation": "/data/productlinks/vrops/6.6.1/install/vrops.ova",
                "vCenterHost": "vCenter Server Host name",
                "storage": "VC Datastore Name",
                "network": "Network-Portgroup",
                "password": "vCenter Server Password",
                "hostname": "vROPS-Hostname",
                "masterVidmAdminUserName": "",
                "netmask": "Network-Netmask",
                "diskFormat": "Thin",
                "ntpServer": "NTP Server IP",
                "address": "vROPS-IP",
                "certificateChain": "",
                "dns": "Network-DNS-Server-IPs",
                "ipAddress": "vROPS-IP",
                "deployOption": "xsmall or small or medium or large or xlarge",
                "userName": "vCenter Server Username",
                "masterVidmAdminPassword": "",
                "masterVidmEnabled": "false",
                "license": "",
                "privateKey": "",
                "masterVidmHostName": "",
                "domain": "",
                "name": "S1-master",
                "keyPassphrase": "",
                "gateway": "Network-Gateway",
                "searchpath": ""
            }
        },
        {
            "sourceLink": "",
            "type": "replica",
            "properties": {
                "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
                "address": "",
                "ipAddress": "",

```

```

        "deployOption": "xsmall or small or medium or large or xlarge",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-replica",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-01",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "smallrc or largerc",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "",

```

```

        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-remotecollector-01",
        "ntpServer": "NTP Server IP",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
        "cluster": "LCM-DC#LCM-Cluster-02",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "smallrc or largerc",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrops-remotecollector-02",
        "ntpServer": "NTP Server IP",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
}
]
}
]
}

```

The following is an example of a JSON file for an IT Automating IT simple deployment.

```

{
    "requestId": "null",
    "environmentId": "",
    "infrastructure": {
        "sourceLink": "",
        "properties": {
            "bindPassword": "",
            "dataCenterName": "Datacenter-Name",
            "vcHostname": "vCenter Server Host name",
            "environmentId": "",
            "masterVidmAdminUserName": "",
            "netmask": "Network-Netmask",
            "environmentName": "vRealize Suite Large Simple",
            "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
            "enableTelemetry": "true",

```

```

    "dnsServers": "Network-DNS-Server-IPs",
    "diskFormat": "Thin",
    "baseDN": "",
    "vcPassword": "vCenter Server Password",
    "defaultPassword": "vRealize Suite Products password",
    "adminEmail": "cloud admin email address",
    "adName": "",
    "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLQG8GRYFbG9jYWwxEzARBg9JkiaJk/IsZAEZ\nFnNkYS1\n-----END CERTIFICATE-----",
    "masterKeyPassphrase": "",
    "datastoreName": "VC Datastore Name",
    "masterVidmAdminPassword": "",
    "masterVidmEnabled": "",
    "uberAdmin": "",
    "license": "",
    "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x
\nGGLHmsQAidubXQdBMGgxiGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "bindDN": "",
    "vmNetwork": "Network-Portgroup",
    "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x
\nGGLHmsQAidubXQdBMGgxiGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "masterVidmHostName": "",
    "groupDN": "",
    "masterVidmCloudAdminGroup": "",
    "vcUsername": "vCenter Server Username",
    "domain": "",
    "acceptEULA": "true",
    "keyPassphrase": "",
    "gateway": "Network-Gateway",
    "searchpath": "",
    "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLQG8GRYFbG9jYWwxEzARBg9JkiaJk/IsZAEZ\nFnNkYS1\n-----END CERTIFICATE-----"
  }
},
"encoded": false,
"products": [
  {
    "id": "vrli",
    "version": "4.5.0",
    "clusterVIP": [],
    "properties": {
      "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
    }
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "name": "S1-vrli-master",
        "ipAddress": "",
        "hostname": ""
      }
    }
  ],
  {
    "sourceLink": "",

```

```

        "type": "vrli-worker",
        "properties": {
            "name": "S1-vrli-worker-01",
            "ipAddress": "",
            "hostname": ""
        }
    },
    {
        "sourceLink": "",
        "type": "vrli-worker",
        "properties": {
            "name": "S1-vrli-worker-02",
            "ipAddress": "",
            "hostname": ""
        }
    }
]
},
{
    "id": "vra",
    "version": "7.3.0",
    "clusterVIP": [
        {
            "type": "vra",
            "hostname": "vRA-LoadBalancer-Hostname",
            "ipAddress": "vRA-LoadBalancer-IP"
        },
        {
            "type": "iaas-web",
            "hostname": "IaaS-Web-LoadBalancer-Hostname",
            "ipAddress": "IaaS-Web-LoadBalancer-IP"
        },
        {
            "type": "iaas-manager",
            "hostname": "IaaS-Manager-Service-LoadBalancer-Hostname",
            "ipAddress": "IaaS-Manager-Service-LoadBalancer-IP"
        }
    ],
    "properties": {
        "windowsPassword": "",
        "windowsUsername": ""
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "vra-server-primary",
            "properties": {
                "name": "S1-vra-server-primary",
                "ipAddress": "vRA-IP",
                "hostname": "vRA-Hostname"
            }
        },
        {
            "sourceLink": "",
            "type": "vra-server-secondary",

```

```

    "properties": {
      "name": "S1-vra-server-secondary",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "db",
    "properties": {
      "name": "db",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-web",
    "properties": {
      "name": "iaas-web-01",
      "ipAddress": "IaaS-Web-IP",
      "hostname": "IaaS-Web-Hostname"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-web",
    "properties": {
      "name": "iaas-web-02",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-manager-active",
    "properties": {
      "name": "iaas-manager-active",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-manager-passive",
    "properties": {
      "name": "iaas-manager-passive",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-orchestrator",
    "properties": {

```

```

        "name": "Demorchestrator-02",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-orchestrator",
    "properties": {
        "name": "Demorchestrator-01",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "name": "Demworker-01-2",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "name": "Demworker-01-3",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "name": "Demworker-02-2",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "name": "Demworker-02-3",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "name": "Demworker-01-1",

```

```

        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "name": "Demworker-02-1",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "proxy-agent-vsphere",
    "properties": {
        "name": "VCAgent-1",
        "ipAddress": "",
        "hostname": ""
    }
},
{
    "sourceLink": "",
    "type": "proxy-agent-vsphere",
    "properties": {
        "name": "VCAgent-2",
        "ipAddress": "",
        "hostname": ""
    }
}
]
},
{
    "id": "vrbc",
    "version": "7.3.0",
    "clusterVIP": [],
    "properties": {
        "currency": "USD - US Dollar"
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "vrbc-server",
            "properties": {
                "name": "S1-vrb-server",
                "ipAddress": "vRB-IP",
                "hostname": "vRB-Hostname"
            }
        },
        {
            "sourceLink": "",
            "type": "vrbc-collector",
            "properties": {
                "name": "S2-vrb-collector",

```



```

        "ipAddress": "",
        "hostname": ""
    }
}
],
{
    "id": "vrops",
    "version": "6.6.1",
    "clusterVIP": [],
    "properties": {
        "ntpServerIP": "NTP Server IP"
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "master",
            "properties": {
                "name": "S1-master",
                "ipAddress": "vROPS-IP",
                "hostname": "vROPS-Hostname"
            }
        },
        {
            "sourceLink": "",
            "type": "replica",
            "properties": {
                "name": "S1-replica",
                "ipAddress": "",
                "hostname": ""
            }
        },
        {
            "sourceLink": "",
            "type": "data",
            "properties": {
                "name": "S1-data-01",
                "ipAddress": "",
                "hostname": ""
            }
        },
        {
            "sourceLink": "",
            "type": "remotecollector",
            "properties": {
                "name": "S1-remotecollector-01",
                "ipAddress": "",
                "hostname": ""
            }
        },
        {
            "sourceLink": "",
            "type": "remotecollector",
            "properties": {
                "name": "S2-vrops-remotecollector-02",

```

```

        "ipAddress": "",
        "hostname": ""
    }
}
]
}
]
}

```

The following is an example of a JSON file for a Micro-Segmentation advanced deployment.

```

{
  "requestId": "null",
  "environmentId": "",
  "infrastructure": {
    "sourceLink": "",
    "properties": {
      "bindPassword": "",
      "dataCenterName": "Datacenter-Name",
      "vcHostname": "vCenter Server Host name",
      "environmentId": "",
      "masterVidmAdminUserName": "",
      "netmask": "Network-Netmask",
      "environmentName": "vRealize Suite Large Advance",
      "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
      "enableTelemetry": "true",
      "dnsServers": "Network-DNS-Server-IPs",
      "diskFormat": "Thin",
      "baseDN": "",
      "vcPassword": "vCenter Server Password",
      "defaultPassword": "vRealize Suite Products password",
      "adminEmail": "cloud admin email address",
      "adName": "",
      "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\n\
      \nCZImiZPYLGQBGRYFbG9jYWwxEzARBgoJkiaJk/IsZAEZ\n\
      \nFnNxYS1\n-----END CERTIFICATE-----",
      "masterKeyPassphrase": "",
      "datastoreName": "VC Datastore Name",
      "masterVidmAdminPassword": "",
      "masterVidmEnabled": "",
      "uberAdmin": "",
      "license": "",
      "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n\
      \n4Hf/7hp59x\n\
      \nGGlHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n\
      \n-----END RSA PRIVATE KEY-----",
      "bindDN": "",
      "vmNetwork": "Network-Portgroup",
      "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n\
      \n4Hf/7hp59x\n\
      \nGGlHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n\
      \n-----END RSA PRIVATE KEY-----",
      "masterVidmHostName": "",
      "groupDN": "",
      "masterVidmCloudAdminGroup": "",
      "vcUsername": "vCenter Server Username",
      "domain": "",
      "acceptEULA": "true",
      "keyPassphrase": "",
      "gateway": "Network-Gateway",
    }
  }
}

```

```

    "searchpath": "",
    "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLGQBGRYFbG9jYWwxZzARBgoJkiaJk/IsZAEZ\nFnNxYS1\n-----END CERTIFICATE-----"
  }
},
"encoded": false,
"products": [
  {
    "id": "vrli",
    "version": "4.5.0",
    "clusterVIP": [],
    "properties": {
      "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
    }
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "vrliLicenseKey": "",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "vRLI-IP",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "uberAdmin": "",
        "network": "Network-Portgroup",
        "masterVidmEnabled": "",
        "vrliAdminEmail": "",
        "hostname": "vRLI-Hostname",
        "password": "vCenter Server Password",
        "masterVidmHostName": "",
        "masterVidmAdminUserName": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-master",
        "diskFormat": "Thin",
        "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname",
        "searchpath": "",
        "gateway": "Network-Gateway"
      }
    }
  ],
  {
    "sourceLink": "",
    "type": "vrli-worker",
    "properties": {
      "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
      "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
      "ipAddress": "",
      "dns": "Network-DNS-Server-IPs",
      "vCenterHost": "vCenter Server Host name",
      "storage": "VC Datastore Name",

```

```

        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-01",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "vrli-worker",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-02",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
}
]
}
]
}

```

The following is an example of a JSON file for a Micro-Segmentation simple deployment.

```

{
    "requestId": "null",
    "environmentId": "",
    "infrastructure": {
        "sourceLink": "",
        "properties": {
            "bindPassword": "",
            "dataCenterName": "Datacenter-Name",
            "vcHostname": "vCenter Server Host name",
            "environmentId": "",
            "masterVidmAdminUserName": "",
            "netmask": "Network-Netmask",
            "environmentName": "vRealize Suite Large Simple",
            "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",

```

```

    "enableTelemetry": "true",
    "dnsServers": "Network-DNS-Server-IPs",
    "diskFormat": "Thin",
    "baseDN": "",
    "vcPassword": "vCenter Server Password",
    "defaultPassword": "vRealize Suite Products password",
    "adminEmail": "cloud admin email address",
    "adName": "",
    "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLQQBGRYFbG9jYWwxEzARBgJkiaJk/IsZAEZ\nFnNxyS1\n-----END CERTIFICATE-----",
    "masterKeyPassphrase": "",
    "datastoreName": "VC Datastore Name",
    "masterVidmAdminPassword": "",
    "masterVidmEnabled": "",
    "uberAdmin": "",
    "license": "",
    "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x
\nGGlHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWIig0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "bindDN": "",
    "vmNetwork": "Network-Portgroup",
    "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x
\nGGlHmsQAidubXQdBMGgxbGZz/6cEoUs3+EWIig0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "masterVidmHostName": "",
    "groupDN": "",
    "masterVidmCloudAdminGroup": "",
    "vcUsername": "vCenter Server Username",
    "domain": "",
    "acceptEULA": "true",
    "keyPassphrase": "",
    "gateway": "Network-Gateway",
    "searchpath": "",
    "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC
\nCZImiZPyLQQBGRYFbG9jYWwxEzARBgJkiaJk/IsZAEZ\nFnNxyS1\n-----END CERTIFICATE-----"
  }
},
"encoded": false,
"products": [
  {
    "id": "vrli",
    "version": "4.5.0",
    "clusterVIP": [],
    "properties": {
      "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
    }
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "name": "S1-vrli-master",
        "ipAddress": "",
        "hostname": ""
      }
    }
  ],
  {

```

```

        "sourceLink": "",
        "type": "vrli-worker",
        "properties": {
            "name": "S1-vrli-worker-01",
            "ipAddress": "",
            "hostname": ""
        }
    },
    {
        "sourceLink": "",
        "type": "vrli-worker",
        "properties": {
            "name": "S1-vrli-worker-02",
            "ipAddress": "",
            "hostname": ""
        }
    }
]
}
]
}

```

The following is an example of a JSON file for an advanced deployment of all vRealize Suite products.

```

{
    "requestId": "null",
    "environmentId": "",
    "infrastructure": {
        "sourceLink": "",
        "properties": {
            "bindPassword": "",
            "dataCenterName": "Datacenter-Name",
            "vcHostname": "vCenter Server Host name",
            "environmentId": "",
            "masterVidmAdminUserName": "",
            "netmask": "Network-Netmask",
            "environmentName": "vRealize Suite Large Advance",
            "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
            "enableTelemetry": "true",
            "dnsServers": "Network-DNS-Server-IPs",
            "diskFormat": "Thin",
            "baseDN": "",
            "vcPassword": "vCenter Server Password",
            "defaultPassword": "vRealize Suite Products password",
            "adminEmail": "cloud admin email address",
            "adName": "",
            "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\n\nCZImiZPyLGQBGRYFbG9jYWwxEzARBgoJkiaJk/IsZAEZ\n\nFnNxYS1\n\n-----END CERTIFICATE-----",
            "masterKeyPassphrase": "",
            "datastoreName": "VC Datastore Name",
            "masterVidmAdminPassword": "",
            "masterVidmEnabled": "",
            "uberAdmin": "",
            "license": "",

```

```

    "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x\nGGlHmsQAidubXQdBMGgxiBzZz/6cEoUs3+EWtIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "bindDN": "",
    "vmNetwork": "Network-Portgroup",
    "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x\nGGlHmsQAidubXQdBMGgxiBzZz/6cEoUs3+EWtIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
    "masterVidmHostName": "",
    "groupDN": "",
    "masterVidmCloudAdminGroup": "",
    "vcUsername": "vCenter Server Username",
    "domain": "",
    "acceptEULA": "true",
    "keyPassphrase": "",
    "gateway": "Network-Gateway",
    "searchpath": "",
    "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\nCZImizPyLGQBGRYFbG9jYWwxEzARBgoJkiaJk/IsZAEZ\nFnNxyS1\n-----END CERTIFICATE-----"
  }
},
"encoded": false,
"products": [
  {
    "id": "vrli",
    "version": "4.5.0",
    "clusterVIP": [],
    "properties": {
      "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
    }
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrli-master",
      "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "vrliLicenseKey": "",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "vRLI-IP",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "uberAdmin": "",
        "network": "Network-Portgroup",
        "masterVidmEnabled": "",
        "vrliAdminEmail": "",
        "hostname": "vRLI-Hostname",
        "password": "vCenter Server Password",
        "masterVidmHostName": "",
        "masterVidmAdminUserName": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-master",
        "diskFormat": "Thin",
        "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname",

```

```

        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "vrli-worker",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-01",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "vrli-worker",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "installerLocation": "/data/productlinks/vrli/4.5.0/install/vrli.ova",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrli-worker-02",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
}
]
},
{
    "id": "vra",
    "version": "7.3.0",
    "clusterVIP": [
        {

```



```

    "type": "vra",
    "hostname": "vRA-LoadBalancer-Hostname",
    "ipAddress": "vRA-LoadBalancer-IP"
  },
  {
    "type": "iaas-web",
    "hostname": "IaaS-Web-LoadBalancer-Hostname",
    "ipAddress": "IaaS-Web-LoadBalancer-IP"
  },
  {
    "type": "iaas-manager",
    "hostname": "IaaS-Manager-Service-LoadBalancer-Hostname",
    "ipAddress": "IaaS-Manager-Service-LoadBalancer-IP"
  }
],
"properties": {
  "windowsPassword": "",
  "windowsUsername": ""
},
"nodes": [
  {
    "sourceLink": "",
    "type": "vra-server-primary",
    "properties": {
      "vidmVraDisabledAdvanced": "",
      "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
      "certificateChain": "",
      "installerLocation": "/data/productlinks/vra/7.3.0/install/vra.ova",
      "dns": "Network-DNS-Server-IPs",
      "ipAddress": "vRA-IP",
      "vCenterHost": "vCenter Server Host name",
      "storage": "VC Datastore Name",
      "userName": "vCenter Server Username",
      "network": "Network-Portgroup",
      "vidmPassword": "",
      "privateKey": "",
      "licenseKey": "",
      "hostname": "vRA-Hostname",
      "password": "vCenter Server Password",
      "netmask": "Network-Netmask",
      "domain": "",
      "name": "S1-vra-server-primary",
      "keyPassphrase": "",
      "gateway": "Network-Gateway",
      "searchpath": ""
    }
  },
  {
    "sourceLink": "",
    "type": "vra-server-secondary",
    "properties": {
      "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
      "installerLocation": "/data/productlinks/vra/7.3.0/install/vra.ova",
      "certificateChain": "",
      "ipAddress": "",

```

```

        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "vidmPassword": "",
        "privateKey": "",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vra-server-secondary",
        "keyPassphrase": "",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "db",
    "properties": {
        "useWindowsAuthentication": "true",
        "useExistingDatabase": "false",
        "password": "vCenter Server Password",
        "hostname": "",
        "databaseName": "iaas",
        "name": "db",
        "databaseUserName": "",
        "databasePassword": "",
        "ipAddress": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-web",
    "properties": {
        "webPassword": "",
        "vidmPassword": "",
        "hostname": "",
        "password": "vCenter Server Password",
        "ipAddress": "",
        "name": "iaas-web-01",
        "webUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-web",
    "properties": {
        "vidmPassword": "",
        "webPassword": "",

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        "password": "vCenter Server Password",
        "hostname": "",
        "ipAddress": "",
        "name": "iaas-web-02",
        "vCenterHost": "vCenter Server Host name",
        "webUserName": "",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-manager-active",
    "properties": {
        "password": "vCenter Server Password",
        "hostname": "",
        "msUserName": "",
        "msPassword": "",
        "name": "iaas-manager-active",
        "ipAddress": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-manager-passive",
    "properties": {
        "password": "vCenter Server Password",
        "hostname": "",
        "msUserName": "",
        "msPassword": "",
        "name": "iaas-manager-passive",
        "ipAddress": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-orchestrator",
    "properties": {
        "demPassword": "",
        "hostname": "",
        "password": "vCenter Server Password",
        "ipAddress": "",
        "name": "Demorchestrator-02",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-orchestrator",
    "properties": {

```

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        "demPassword": "",
        "password": "vCenter Server Password",
        "hostname": "",
        "name": "Demorchestrator-01",
        "ipAddress": "",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "password": "vCenter Server Password",
        "hostname": "",
        "name": "Demworker-01-2",
        "ipAddress": "",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "password": "vCenter Server Password",
        "hostname": "",
        "name": "Demworker-01-3",
        "ipAddress": "",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
        "demPassword": "",
        "hostname": "",
        "password": "vCenter Server Password",
        "ipAddress": "",
        "name": "Demworker-02-2",
        "demUserName": "",
        "vCenterHost": "vCenter Server Host name",
        "userName": "vCenter Server Username"
    }
},
{
    "sourceLink": "",
    "type": "iaas-dem-worker",

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```

    "properties": {
      "demPassword": "",
      "hostname": "",
      "password": "vCenter Server Password",
      "name": "Demworker-02-3",
      "ipAddress": "",
      "vCenterHost": "vCenter Server Host name",
      "demUserName": "",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
      "demPassword": "",
      "password": "vCenter Server Password",
      "hostname": "",
      "name": "Demworker-01-1",
      "ipAddress": "",
      "demUserName": "",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "iaas-dem-worker",
    "properties": {
      "demPassword": "",
      "hostname": "",
      "password": "vCenter Server Password",
      "name": "Demworker-02-1",
      "ipAddress": "",
      "vCenterHost": "vCenter Server Host name",
      "demUserName": "",
      "userName": "vCenter Server Username"
    }
  },
  {
    "sourceLink": "",
    "type": "proxy-agent-vsphere",
    "properties": {
      "password": "vCenter Server Password",
      "hostname": "",
      "agentUserName": "",
      "name": "VCAgent-1",
      "ipAddress": "",
      "agentName": "VCAgent-1",
      "vCenterHost": "vCenter Server Host name",
      "userName": "vCenter Server Username",
      "vsphereEndpointName": "VCEndpoint-1",
      "agentPassword": ""
    }
  }
},

```

```

{
  "sourceLink": "",
  "type": "proxy-agent-vsphere",
  "properties": {
    "hostname": "",
    "password": "vCenter Server Password",
    "agentUserName": "",
    "ipAddress": "",
    "name": "VCAgent-2",
    "agentName": "VCAgent-2",
    "vCenterHost": "vCenter Server Host name",
    "userName": "vCenter Server Username",
    "vsphereEndpointName": "VCEndpoint-2",
    "agentPassword": ""
  }
}
],
{
  "id": "vrbc",
  "version": "7.3.0",
  "clusterVIP": [],
  "properties": {
    "currency": "USD - US Dollar"
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vrb-server",
      "properties": {
        "ssoPassword": "",
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "vrbTelemetryEnabled": "true",
        "installerLocation": "/data/productlinks/vrbc/7.3.0/install/vrbc.ova",
        "tenantPassword": "",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "vRB-Hostname",
        "masterVidmAdminUserName": "",
        "netmask": "Network-Netmask",
        "diskFormat": "Thin",
        "vrbCurrency": "USD - US Dollar",
        "certificateChain": "",
        "ipAddress": "vRB-IP",
        "dns": "Network-DNS-Server-IPs",
        "vrbLicenseKey": "",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "uberAdmin": "",
        "masterVidmEnabled": "",
        "isTelemetryEnable": "true",
        "privateKey": "",
        "masterVidmHostName": "",

```

```

        "domain": "",
        "name": "S1-vrb-server",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "vrbc-collector",
    "properties": {
        "ssoPassword": "",
        "cluster": "LCM-DC#LCM-Cluster-02",
        "vrbcTelemetryEnabled": "true",
        "installerLocation": "/data/productlinks/vrbc/7.3.0/install/vrbc.ova",
        "tenantPassword": "",
        "vCenterHost": "lcm-vc.",
        "storage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "masterVidmAdminUserName": "",
        "netmask": "Network-Netmask",
        "diskFormat": "Thin",
        "vrbcCurrency": "USD - US Dollar",
        "sshEnabled": "True",
        "ipAddress": "",
        "dns": "Network-DNS-Server-IPs",
        "vrbcLicenseKey": "",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "isTelemetryEnable": "true",
        "masterVidmEnabled": "true",
        "uberAdmin": "",
        "masterVidmHostName": "",
        "domain": "",
        "name": "S1-vrb-collector",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
}
]
},
{
    "id": "vrops",
    "version": "6.6.1",
    "clusterVIP": [],
    "properties": {
        "ntpServerIP": "NTP Server IP"
    },
    "nodes": [
        {
            "sourceLink": "",
            "type": "master",
            "properties": {
                "cluster": "VC-Datacenter-Name#VC-Cluster-Name",

```

```

        "installerLocation": "/data/productlinks/vrops/6.6.1/install/vrops.ova",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "vROPS-Hostname",
        "masterVidmAdminUserName": "",
        "netmask": "Network-Netmask",
        "diskFormat": "Thin",
        "ntpServer": "NTP Server IP",
        "address": "vROPS-IP",
        "certificateChain": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "vROPS-IP",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "userName": "vCenter Server Username",
        "masterVidmAdminPassword": "",
        "masterVidmEnabled": "false",
        "license": "",
        "privateKey": "",
        "masterVidmHostName": "",
        "domain": "",
        "name": "S1-master",
        "keyPassphrase": "",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "replica",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "dns": "Network-DNS-Server-IPs",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-replica",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {

```



```

        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-01",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-02",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",

```

```

        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-03",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-04",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",

```

```

        "name": "S1-data-05",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-06",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-07",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{

```

```

    "sourceLink": "",
    "type": "data",
    "properties": {
      "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
      "address": "",
      "dns": "Network-DNS-Server-IPs",
      "ipAddress": "",
      "deployOption": "xsmall or small or medium or large or xlarge",
      "vCenterHost": "vCenter Server Host name",
      "storage": "VC Datastore Name",
      "userName": "vCenter Server Username",
      "extendedStorage": "VC Datastore Name",
      "network": "Network-Portgroup",
      "hostname": "",
      "password": "vCenter Server Password",
      "netmask": "Network-Netmask",
      "domain": "",
      "name": "S1-data-08",
      "diskFormat": "Thin",
      "gateway": "Network-Gateway",
      "searchpath": ""
    }
  },
  {
    "sourceLink": "",
    "type": "data",
    "properties": {
      "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
      "address": "",
      "dns": "Network-DNS-Server-IPs",
      "ipAddress": "",
      "deployOption": "xsmall or small or medium or large or xlarge",
      "vCenterHost": "vCenter Server Host name",
      "storage": "VC Datastore Name",
      "userName": "vCenter Server Username",
      "extendedStorage": "VC Datastore Name",
      "network": "Network-Portgroup",
      "hostname": "",
      "password": "vCenter Server Password",
      "netmask": "Network-Netmask",
      "domain": "",
      "name": "S1-data-09",
      "diskFormat": "Thin",
      "gateway": "Network-Gateway",
      "searchpath": ""
    }
  },
  {
    "sourceLink": "",
    "type": "data",
    "properties": {
      "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
      "address": "",
      "dns": "Network-DNS-Server-IPs",
      "ipAddress": "",

```

```

        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-10",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",
        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-11",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "data",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "xsmall or small or medium or large or xlarge",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "extendedStorage": "VC Datastore Name",
        "network": "Network-Portgroup",
        "hostname": "",

```

```

        "password": "vCenter Server Password",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-data-12",
        "diskFormat": "Thin",
        "gateway": "Network-Gateway",
        "searchpath": ""
    }
},
{
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
        "cluster": "VC-Datacenter-Name#VC-Cluster-Name",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "smallrc or largerc",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-remotecollector-01",
        "ntpServer": "NTP Server IP",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
},
{
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
        "cluster": "LCM-DC#LCM-Cluster-02",
        "address": "",
        "dns": "Network-DNS-Server-IPs",
        "ipAddress": "",
        "deployOption": "smallrc or largerc",
        "vCenterHost": "vCenter Server Host name",
        "storage": "VC Datastore Name",
        "userName": "vCenter Server Username",
        "network": "Network-Portgroup",
        "password": "vCenter Server Password",
        "hostname": "",
        "netmask": "Network-Netmask",
        "domain": "",
        "name": "S1-vrops-remotecollector-02",
        "ntpServer": "NTP Server IP",
        "diskFormat": "Thin",
        "searchpath": "",
        "gateway": "Network-Gateway"
    }
}

```

```

    }
  }
]
}
]
}

```

The following is an example of a JSON file for a simple deployment of all vRealize Suite products.

```

{
  "requestId": "null",
  "environmentId": "",
  "infrastructure": {
    "sourceLink": "",
    "properties": {
      "bindPassword": "",
      "dataCenterName": "Datacenter-Name",
      "vcHostname": "vCenter Server Host name",
      "environmentId": "",
      "masterVidmAdminUserName": "",
      "netmask": "Network-Netmask",
      "environmentName": "vRealize Suite Large Simple",
      "clusterName": "VC-Datacenter-Name#VC-Cluster-Name",
      "enableTelemetry": "true",
      "dnsServers": "Network-DNS-Server-IPs",
      "diskFormat": "Thin",
      "baseDN": "",
      "vcPassword": "vCenter Server Password",
      "defaultPassword": "vRealize Suite Products password",
      "adminEmail": "cloud admin email address",
      "adName": "",
      "certificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC\nCZImiZPyLQGBGRYFbG9jYWwxEzARBgoJkiaJk/IsZAEZ\nFnNxYS1\n-----END CERTIFICATE-----",
      "masterKeyPassphrase": "",
      "datastoreName": "VC Datastore Name",
      "masterVidmAdminPassword": "",
      "masterVidmEnabled": "",
      "uberAdmin": "",
      "license": "",
      "privateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x\nGG1HmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
      "bindDN": "",
      "vmNetwork": "Network-Portgroup",
      "masterPrivateKey": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpQIBAAKCA\n4Hf/7hp59x\nGG1HmsQAidubXQdBMGgxbGZz/6cEoUs3+EWTIg0pLt3a78yCkK9wLZ/U=\n-----END RSA PRIVATE KEY-----",
      "masterVidmHostName": "",
      "groupDN": "",
      "masterVidmCloudAdminGroup": "",
      "vcUsername": "vCenter Server Username",
      "domain": "",
      "acceptEULA": "true",
      "keyPassphrase": "",
      "gateway": "Network-Gateway",
      "searchpath": "",
      "masterCertificateChain": "-----BEGIN CERTIFICATE-----\nMIIG3zC

```

```

\nCZImizPyLGQBGRYFbG9jYWwxZzARBgoJkiaJk/IsZAEZ\nFnNxyS1\n-----END CERTIFICATE-----"
    }
  },
  "encoded": false,
  "products": [
    {
      "id": "vrli",
      "version": "4.5.0",
      "clusterVIP": [],
      "properties": {
        "vrliClusterVips": "vRLI-Cluster-IP#vRLI-Cluster-IP-Hostname"
      },
      "nodes": [
        {
          "sourceLink": "",
          "type": "vrli-master",
          "properties": {
            "name": "S1-vrli-master",
            "ipAddress": "",
            "hostname": ""
          }
        },
        {
          "sourceLink": "",
          "type": "vrli-worker",
          "properties": {
            "name": "S1-vrli-worker-01",
            "ipAddress": "",
            "hostname": ""
          }
        },
        {
          "sourceLink": "",
          "type": "vrli-worker",
          "properties": {
            "name": "S1-vrli-worker-02",
            "ipAddress": "",
            "hostname": ""
          }
        }
      ]
    },
    {
      "id": "vra",
      "version": "7.3.0",
      "clusterVIP": [
        {
          "type": "vra",
          "hostname": "vRA-LoadBalancer-Hostname",
          "ipAddress": "vRA-LoadBalancer-IP"
        },
        {
          "type": "iaas-web",
          "hostname": "IaaS-Web-LoadBalancer-Hostname",
          "ipAddress": "IaaS-Web-LoadBalancer-IP"
        }
      ]
    }
  ]
}

```



```

    },
    {
      "type": "iaas-manager",
      "hostname": "IaaS-Manager-Service-LoadBalancer-Hostname",
      "ipAddress": "IaaS-Manager-Service-LoadBalancer-IP"
    }
  ],
  "properties": {
    "windowsPassword": "",
    "windowsUsername": ""
  },
  "nodes": [
    {
      "sourceLink": "",
      "type": "vra-server-primary",
      "properties": {
        "name": "S1-vra-server-primary",
        "ipAddress": "vRA-IP",
        "hostname": "vRA-Hostname"
      }
    },
    {
      "sourceLink": "",
      "type": "vra-server-secondary",
      "properties": {
        "name": "S1-vra-server-secondary",
        "ipAddress": "",
        "hostname": ""
      }
    },
    {
      "sourceLink": "",
      "type": "db",
      "properties": {
        "name": "db",
        "ipAddress": "",
        "hostname": ""
      }
    },
    {
      "sourceLink": "",
      "type": "iaas-web",
      "properties": {
        "name": "iaas-web-01",
        "ipAddress": "IaaS-Web-IP",
        "hostname": "IaaS-Web-Hostname"
      }
    },
    {
      "sourceLink": "",
      "type": "iaas-web",
      "properties": {
        "name": "iaas-web-02",
        "ipAddress": "",
        "hostname": ""
      }
    }
  ]
}

```

```

    }
  },
  {
    "sourceLink": "",
    "type": "iaas-manager-active",
    "properties": {
      "name": "iaas-manager-active",
      "ipAddress": "",
      "hostname": ""
    }
  }
},
{
  "sourceLink": "",
  "type": "iaas-manager-passive",
  "properties": {
    "name": "iaas-manager-passive",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-orchestrator",
  "properties": {
    "name": "Demorchestrator-02",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-orchestrator",
  "properties": {
    "name": "Demorchestrator-01",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-worker",
  "properties": {
    "name": "Demworker-01-2",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-worker",
  "properties": {
    "name": "Demworker-01-3",
    "ipAddress": "",
    "hostname": ""
  }
}

```

```

},
{
  "sourceLink": "",
  "type": "iaas-dem-worker",
  "properties": {
    "name": "Demworker-02-2",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-worker",
  "properties": {
    "name": "Demworker-02-3",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-worker",
  "properties": {
    "name": "Demworker-01-1",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "iaas-dem-worker",
  "properties": {
    "name": "Demworker-02-1",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "proxy-agent-vsphere",
  "properties": {
    "name": "VCAgent-1",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "proxy-agent-vsphere",
  "properties": {
    "name": "VCAgent-2",
    "ipAddress": "",
    "hostname": ""
  }
}
}

```

```

    ]
  },
  {
    "id": "vrbc",
    "version": "7.3.0",
    "clusterVIP": [],
    "properties": {
      "currency": "USD - US Dollar"
    },
    "nodes": [
      {
        "sourceLink": "",
        "type": "vrbc-server",
        "properties": {
          "name": "S1-vrb-server",
          "ipAddress": "vRB-IP",
          "hostname": "vRB-Hostname"
        }
      },
      {
        "sourceLink": "",
        "type": "vrbc-collector",
        "properties": {
          "name": "S2-vrb-collector",
          "ipAddress": "",
          "hostname": ""
        }
      }
    ]
  },
  {
    "id": "vroops",
    "version": "6.6.1",
    "clusterVIP": [],
    "properties": {
      "ntpServerIP": "NTP Server IP"
    },
    "nodes": [
      {
        "sourceLink": "",
        "type": "master",
        "properties": {
          "name": "S1-master",
          "ipAddress": "vROPS-IP",
          "hostname": "vROPS-Hostname"
        }
      },
      {
        "sourceLink": "",
        "type": "replica",
        "properties": {
          "name": "S1-replica",
          "ipAddress": "",
          "hostname": ""
        }
      }
    ]
  }
}

```

```

},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-01",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-02",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-03",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-04",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-05",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-06",
    "ipAddress": "",
    "hostname": ""
  }
},

```

```

{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-07",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-08",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-09",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-10",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-11",
    "ipAddress": "",
    "hostname": ""
  }
},
{
  "sourceLink": "",
  "type": "data",
  "properties": {
    "name": "S1-data-12",
    "ipAddress": "",
    "hostname": ""
  }
},
{

```

```

    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
      "name": "S1-remotecollector-01",
      "ipAddress": "",
      "hostname": ""
    }
  },
  {
    "sourceLink": "",
    "type": "remotecollector",
    "properties": {
      "name": "S2-vrops-remotecollector-02",
      "ipAddress": "",
      "hostname": ""
    }
  }
]
}

```

### What to do next

To monitor product installation progress, click the **Home** button. vRealize Suite Lifecycle Manager displays installation progress for the environment under **Recent Requests** and on the **Requests** tab.

# Managing Private Cloud Environments

# 3

You can manage data centers, vCenters, and vRealize Suite products in your private cloud environments.

This chapter includes the following topics:

- [Add a Product to an Existing Private Cloud Environment](#)
- [Export a Private Cloud Environment Configuration File](#)
- [Download Private Cloud Product Logs](#)
- [Delete an Environment](#)
- [Managing vRealize Suite Products in a Private Cloud](#)
- [Configure Health Monitoring for the vRealize Suite Management Stack](#)
- [View Data Center Topology](#)
- [Adding and Managing Content from Marketplace](#)

## Add a Product to an Existing Private Cloud Environment

If the needs or use case of your environment change, you can add a product to an existing environment.

Organic growth allows you to import an existing vRealize Suite product to an existing environment or to trigger a fresh deployment of the product to add to an existing environment.

An environment can contain only one instance of each supported vRealize Suite product.

### Prerequisites

Have an existing private cloud environment in vRealize Suite Lifecycle Manager that does not already contain all of the supported vRealize Suite products.

### Procedure

- 1 Click **Manage Environments**.
- 2 Click the ellipsis (...) for the environment, and select **Add Products** under **Organic Growth**.
- 3 Select the products to add and enter the necessary configuration information.



## Export a Private Cloud Environment Configuration File

You can export a private cloud environment configuration file to reuse a deployment's configuration for future environment deployments.

### Procedure

- 1 Click **Manage Environments**.
- 2 Click the ellipsis (...) for the environment, and select **Export Configuration**.
- 3 Click **Save File** and click **OK**.

The configuration file is downloaded to your browser's default download location.

### What to do next

Use the configuration file to create new private cloud environments. See [Create a New Private Cloud Environment Using a Configuration File](#).

## Download Private Cloud Product Logs

You can download product log file bundles to share with VMware support.

### Procedure

- 1 Click **Manage Environments**.
- 2 Click the ellipsis (...) for the environment, and select **Download Logs**.

### Results

Downloaded logs are stored in /data/support-bundle.

## Delete an Environment

You can delete an existing environment from vRealize Suite Lifecycle Manager.

In vRealize Suite Lifecycle Manager 1.1 has the option to delete the environment and not individual products. You cannot select a specific product within an environment to delete.

You can delete both successful and failed environment deployments. You can delete environments that are failed to deploy.

### Procedure

- 1 Click **Manage Environments** to delete a successfully installed environment, or delete a failed environment deployment listed under **Recent Requests** in Home page.
- 2 Click the three dots in the upper right corner of the environment tile, and select **Delete Environment**.

- 3 (Optional) Select **Delete related virtual machines from vCenter** to delete all virtual machines associated with this environment from vCenter server.

If you do not select this option, all virtual machines associated with this environment remain in vCenter after the environment is deleted from vRealize Suite Lifecycle Manager.

- 4 (Optional) Select **Delete related Windows machines** to delete Windows machines associated with vRealize Automation this environment.

This option is available only if you choose to delete all related virtual machines from vCenter. Ensure to confirm this action before you proceed.

- 5 Click **DELETE**.

- 6 If you chose to delete virtual machines associate with the environment, verify that the list of virtual machines to delete is correct, and click **CONFIRM DELETE**.

IaaS virtual machine names do not appear in this list.

---

**Note** If the delete operation fails, an option is enabled in the environment card "Delete environment from vRealize Suite Lifecycle Manager". This action deletes the environment from vRealize Suite Lifecycle Manager and you can delete the VMs manually and separate them from vCenter server. For brownfield import, if you fail to add vCenter list, then delete environment confirmation dialog box does not show the VM list in that particular vCenter and you have to clean them up manually. For an organic growth, the environment card from the recent activity home page is neither deleted nor grayed out.

---

- 7 Click **CLOSE**.

## Results

The environment is removed from vRealize Suite Lifecycle Manager.

## What to do next

You can view the progress of the delete operation on the **Requests** page.

# Managing vRealize Suite Products in a Private Cloud

You can use VMware vRealize Suite Lifecycle Manager to upgrade and patch vRealize Suite products and to download product logs.

- [Create a Product Snapshot](#)

Create a snapshot of a product to save a snapshot of the product's state at a particular point in time.

- [Upgrade a vRealize Suite Product](#)

You can use vRealize Suite Lifecycle Manager to upgrade vRealize Suite product installations.

## ■ Configuration Drift

Configuration drift shows the changes in product configuration over time and allows you to revert a product to an earlier configuration state.

## Create a Product Snapshot

Create a snapshot of a product to save a snapshot of the product's state at a particular point in time.

This procedure does not apply to snapshots of vRealize Automation database virtual machines. Snapshots of vRealize Automation database virtual machines must be taken manually rather than through vRealize Suite Lifecycle Manager.

### Procedure

- 1 Click **Manage Environments**.
- 2 Click **VIEW DETAILS** for the environment the product to snapshot is part of.
- 3 Click the ellipses (...) icon next to the name of the product to snapshot and select **Create Snapshot**.

### Results

vRealize Suite Lifecycle Manager vRealize Suite Lifecycle Manager saves state and configuration details for the product's virtual appliance.

### What to do next

After you take a product snapshot, you can revert the product virtual appliance to the state of the snapshot if necessary due to upgrade failures or to bring product virtual machines back to a known good state.

## Upgrade a vRealize Suite Product

You can use vRealize Suite Lifecycle Manager to upgrade vRealize Suite product installations.

### Prerequisites

Verify that the vRealize Suite product to upgrade is part of a vRealize Suite Lifecycle Manager private cloud environment, and take a snapshot of the product that you can revert to in the event that something goes wrong with the upgrade. See [Create a Product Snapshot](#).

If you are upgrading vRealize Automation, ensure that the following additional prerequisites are met:

- The vRealize Automation management agent and all IaaS Windows nodes are running.
- The second member in the vRealize Automation load balancer is disabled.

### Procedure

- 1 Click **Manage Environments**.

- 2 Click **VIEW DETAILS** for the environment the product to upgrade is part of.
- 3 Click the ellipses (...) icon next to the name of the product to upgrade and select **Upgrade** from the drop-down menu.
- 4 Choose a product version to upgrade to.
- 5 If you are upgrading vRealize Automation or vRealize Business for Cloud, choose whether to upgrade from the **Default** repository, the **vRealize Suite Lifecycle Manager Repository**, or a manually-entered **Repository URL**.
- 6 If you are upgrading vRealize Log Insight or vRealize Operations Manager, choose whether to upgrade from the **vRealize Suite Lifecycle Manager Repository**, or a manually-entered **Repository URL**.
- 7 Click **Upgrade**.

#### What to do next

You can view the progress of the upgrade on the **Requests** tab.

## Configuration Drift

Configuration drift shows the changes in product configuration over time and allows you to revert a product to an earlier configuration state.

- [Save a Product Baseline](#)  
Save a product baseline to capture a product's configuration parameters at a given time.
- [View a Configuration Drift Report](#)  
View a configuration drift report to view the changes in a product's current configuration compared to the product's configuration drift baseline.
- [Revert a Product to a Previous Configuration](#)  
You can revert a product's configuration to a previous state if you discover problems with the product's current configuration.
- [Export a Configuration Drift Baseline](#)  
Export a configuration drift baseline to use a product's baseline as the configuration drift baseline for other deployments of the product.
- [Import a Configuration Drift Baseline](#)  
Import a configuration drift baseline to have vRealize Suite Lifecycle Manager use an imported baseline to generate configuration drift reports for this product.

### Save a Product Baseline

Save a product baseline to capture a product's configuration parameters at a given time.

vRealize Suite Lifecycle Manager uses the product baseline to generate configuration drift reports that show how the current product configuration differs from the baseline configuration.

## Procedure

- 1 Click **Manage Environments**.
- 2 Click **DETAILS** for the environment the product to upgrade is part of.
- 3 Click the ellipses (...) icon next to the name of the product and select **Save Baseline**.

## Results

vRealize Suite Lifecycle Manager saves the current product configuration as the product baseline. You can save a new product baseline at any time.

## View a Configuration Drift Report

View a configuration drift report to view the changes in a product's current configuration compared to the product's configuration drift baseline.

### Prerequisites

Verify that the product has a saved baseline for vRealize Suite Lifecycle Manager to measure current product configurations against. See [Save a Product Baseline](#).

## Procedure

- 1 Click **Manage Environments**.
- 2 Click **DETAILS** for the environment the product to upgrade is part of.
- 3 Click the ellipses (...) icon next to the name of the product and select **Show Report**.
- 4 Select an instance on the **Drift TimeLine** to view the configuration drift report for the date and time listed for the instance.
- 5 Select the view for the drift report.

Option	Description
<b>Full View</b>	Complete configurations captured by the baseline report.
<b>Drifted View</b>	Changes in configuration compared to the baseline report.

## Revert a Product to a Previous Configuration

You can revert a product's configuration to a previous state if you discover problems with the product's current configuration.

### Prerequisites

You must have a saved configuration drift baseline for the product to revert it to a previous state. See [Save a Product Baseline](#).

## Procedure

- 1 Click **Manage Environments**.

- 2 Click **DETAILS** for the environment the product to upgrade is part of.
- 3 Click the ellipses (...) icon next to the name of the product and select **Show Report**.
- 4 Select an instance on the **Drift TimeLine** to view the configuration drift report for the date and time listed for the instance.
- 5 Select **Full View** and verify that you have a stable configuration available to revert to.
- 6 Click **Remediate**.
- 7 Click the date and time under **Remediation Baseline** to change the date and time to use as the product baseline to revert to.  
  
By default, the remediation baseline is set to the saved configuration drift baseline.
- 8 Verify that the configuration values listed in the remediation baseline are the values you want to revert to, and click **Save**.

#### What to do next

Check the **Reports** page and check the **Remediation Report** to verify the remediation completed without errors.

Save a new product baseline. See [Save a Product Baseline](#).

## Export a Configuration Drift Baseline

Export a configuration drift baseline to use a product's baseline as the configuration drift baseline for other deployments of the product.

#### Procedure

- 1 Click **Manage Environments**.
- 2 Click **DETAILS** for the environment the product to upgrade is part of.
- 3 Click the ellipses (...) icon next to the name of the product and select **Export Baseline**.
- 4 Click **Save File** and click **OK**.

#### Results

The product's configuration drift baseline file is downloaded to your browser's default download location.

#### Example

#### What to do next

Import the downloaded configuration drift baseline file to other deployments of the product. See [Import a Configuration Drift Baseline](#).

## Import a Configuration Drift Baseline

Import a configuration drift baseline to have vRealize Suite Lifecycle Manager use an imported baseline to generate configuration drift reports for this product.

By default, the configuration drift baseline for a product is the product configuration at the time of deployment.

### Prerequisites

Export a configuration drift baseline from another deployment of this product. See [Export a Configuration Drift Baseline](#).

### Procedure

- 1 Click **Manage Environments**.
- 2 Click **DETAILS** for the environment the product to upgrade is part of.
- 3 Click the ellipses (...) icon next to the name of the product to and select **Import Baseline**.
- 4 Click **Browse**, navigate to the configuration drift baseline file to import, and click **OK**.

### Results

## Configure Health Monitoring for the vRealize Suite Management Stack

When vRealize Operations Manager is part of your environment, you can retrieve and display the health status of vRealize Suite products in vRealize Suite Lifecycle Manager.

Health status information in vRealize Suite Lifecycle Manager is available only for vRealize Suite Lifecycle Manager supported products: vRealize Automation, vRealize Operations Manager, vRealize Log Insight, and vRealize Business for Cloud.

### Prerequisites

Verify that you have a private cloud environment that contains VMware vRealize Operations Manager. For information on adding to an existing environment, see [Add a Product to an Existing Cloud Environment](#). For information on creating an environment, see [Creating a Private Cloud Environment](#).

- [Health Status in vRealize Suite Lifecycle Manager](#)  
vRealize Suite Lifecycle Manager displays private cloud environment health for the environment as a whole and at the individual product level.
- [View the SDDC Health Overview Dashboard in VMware vRealize Operations Manager](#)  
With vRealize Suite Lifecycle Manager, you can view detailed health status in vRealize Operations Manager.

**Procedure**

- 1 Configure vRealize Operations Manager with the VMware SDDC Management Health Solution Management Pack. See [VMware SDDC Management Health Solution microsite](#) on the VMware Solution Exchange.
- 2 Configure adapter instances for vRealize Log Insight, vRealize Business for Cloud, and vRealize Automation in vRealize Operations Manager.

For information on configuring adapters in vRealize Operations Manager, see the following topics:

- [Configuring vRealize Log Insight with vRealize Operations Manager](#)
- [Configure the vRealize Business for Cloud Adapter](#)
- [Configuring vRealize Automation](#)

- 3 If you have an instance of vRealize Automation in your environment, install End Point Operations Management agents on all nodes on vRealize Automation applications and on any new node added to the vRealize Automation cluster later.

See [End Point Operations Management Agent Installation and Deployment](#) .

**Results**

vRealize Suite Lifecycle Manager displays the health status of the vRealize Suite management stack as provided by VMware SDDC Management Health Solution Management Pack.

vRealize Suite Lifecycle Manager retrieves health status information from one instance of vRealize Operations Manager in a given private cloud environment. The health displayed applies only to the vRealize Suite products configured in the target vRealize Operations Manager instance within the private cloud environment. Do not configure additional vRealize Suite products from other private cloud environments in the same instance of vRealize Operations Manager.

**What to do next**

View the health status of vRealize Suite in vRealize Suite Lifecycle Manager. See [Health Status in vRealize Suite Lifecycle Manager](#).

**Health Status in vRealize Suite Lifecycle Manager**

vRealize Suite Lifecycle Manager displays private cloud environment health for the environment as a whole and at the individual product level.

**Health Status By Color**

The following table presents a color-coded guide to help you determine the health status of your private cloud environment.



Color	Status
Gray	<p>A gray status indicates one of the following scenarios:</p> <ul style="list-style-type: none"> <li>■ vRealize Operations Manager is not part of your private cloud environment.</li> <li>■ vRealize Operations Manager is not configured with VMware SDDC Management Health Solution Management Pack.</li> <li>■ An error occurred while determining private cloud environment health.</li> <li>■ Health information is not yet available.</li> </ul>
Green	vRealize Operations Manager is reporting health as Green, as per its policies, for all configured products.
Yellow	vRealize Operations Manager is reporting health as Yellow, as per its policies, for at least one configured product.
Red	vRealize Operations Manager is reporting health as Orange or Red, as per its policies, for at least one configured product.

Health status in vRealize Suite Lifecycle Manager continues to display these colors, even when you only partially configure vRealize Suite products in vRealize Operations Manager. vRealize Suite Lifecycle Manager does not attempt to determine health status of vRealize Suite products that are not configured in the private cloud environment.

## View the SDDC Health Overview Dashboard in VMware vRealize Operations Manager

With vRealize Suite Lifecycle Manager, you can view detailed health status in vRealize Operations Manager.

### Prerequisites

Verify that you have valid vRealize Operations Manager credentials or have VMware Identity Manager configured.

### Procedure

- 1 In vRealize Suite Lifecycle Manager, click the health status for the private cloud environment to open the SDDC Health Overview Dashboard for the environment in VMware vRealize Operations Manager.
- 2 In vRealize Suite Lifecycle Manager, click the health status for an individual product to open the summary page for that product in VMware vRealize Operations Manager.

## View Data Center Topology

You can view the topology of a data center in vRealize Suite Lifecycle Manager.

### Procedure

- 1 Click **Manage Data Centers**.
- 2 Click the **Overview** tab.

### Results

A topology map of the data center appears.

## Adding and Managing Content from Marketplace

You can use vRealize Suite Lifecycle Manager to add and manage content from Marketplace.

Marketplace contains content, including vRealize Automation blueprints and OVAs, vRealize Operations Manager management packs, and vRealize Log Insight content packs, that you can download and deploy in your vRealize Suite environments.

## Getting Started with Marketplace

Provide My VMware credentials and sync Marketplace metadata to begin using Marketplace in vRealize Suite Lifecycle Manager.

### Prerequisites

- Verify that the vRealize Suite Lifecycle Manager virtual appliance is connected to the Internet.
- Verify that you have entered your My VMware credentials in vRealize Suite Lifecycle Manager. See [My VMware Settings](#).

### Procedure

- 1 Click **Marketplace**.
- 2 Click the **Refresh Content from Marketplace** button.

### Results

After a few minutes, available content appears on the **Marketplace** tab.

### What to do next

Search for and download content from Marketplace. See [Find and Download Content from Marketplace](#).

## Find and Download Content from Marketplace

You can use vRealize Suite Lifecycle Manager to search for and download content from Marketplace.

### Prerequisites

Verify that you have performed an initial Marketplace sync to load Marketplace content. See [Getting Started with Marketplace](#).

## Procedure

- 1 Click **Marketplace** and click the **All** tab.

vRealize Suite Lifecycle Manager displays all content available for vRealize Suite in Marketplace.

- 2 (Optional) To filter the list of available content by search terms, enter search terms into the **Search** text box.

- 3 (Optional) To filter the list of available content by product, publisher, or technology, click **Filter** and select the appropriate filters.

- 4 Click **View Details** for to learn more about the downloadable content, including what products and version the content is compatible with, user ratings for the content, and a list of related content.

Free content is marked **FREE CONTENT**.

- 5 Click **Download** to download the content to vRealize Suite Lifecycle Manager.

## Results

Downloaded content appears on the **Downloaded** tab of the **Marketplace** page.

## What to do next

Install the content you downloaded. See [Install Downloaded Marketplace Content](#).

## View and Upgrade Downloaded Marketplace Content

You can view details about content previously downloaded from Marketplace, including version number and last updated date.

## Procedure

- 1 Click **Marketplace** and click the **Downloaded** tab.

vRealize Suite Lifecycle Manager displays all Marketplace content downloaded to vRealize Suite Lifecycle Manager from Marketplace.

- 2 If there is an update available for content, you can download a newer version of the content.

You cannot upgrade a VMware vRealize Operations Manager management pack using vRealize Suite Lifecycle Manager. If the same content is installed again, the request fails with a conflict. However, an update is successful for a new version of VMware vRealize Operations Manager.

- a Mouseover the notification icon in the upper left corner of the content tile to verify that there is an available update.

If there are no notifications for the content, the notification icon does not appear.

If there is a newer version of the content available, vRealize Suite Lifecycle Manager displays the message **New version updates are available for the app.**

- b Click the three dots on the upper right corner of the content tile, and select **Upgrade**.
- c To download, select a version, and click **Continue**.

If you are upgrading a vRealize Automation blueprint, vRealize Orchestrator plugin, or vRealize Log Insight content pack, or upgrading a VMware vRealize Operations Manager management pack with a newer version, the previous content is overwritten with upgraded content. If you attempt to update a VMware vRealize Operations Manager management pack with the same version that is already installed, the update fails.

- 3 Click **View Details** to view information about the content, including related content and the date the content was last modified.

## Install a Downloaded Marketplace Content

You can install content downloaded from Marketplace.

### Prerequisites

Download the content to install from Marketplace. See [Find and Download Content from Marketplace](#).

### Procedure

- 1 Click **Marketplace** and click the **Downloaded** tab.  
vRealize Suite Lifecycle Manager displays all content that has been downloaded to vRealize Suite Lifecycle Manager from Marketplace.
- 2 Click the three dots in the upper right corner of the tile for the content to install, and click **Install**.
- 3 Select the data center and environment to install the content on and click **Install**.

### What to do next

You can track installation progress on the **Requests** page.

## Delete Content Downloaded from the Marketplace

You can delete content that you downloaded from Marketplace. However, this does not remove the content from the environments in which it is installed through vRealize Suite Lifecycle Manager.

### Procedure

- 1 Click **Marketplace** and click the **Downloaded** tab.
- 2 Click the three dots in the upper right corner of the tile for to delete and click **Delete**.
- 3 Click **Yes**.

### Results

The content is deleted from vRealize Suite Lifecycle Manager and no longer appears under downloaded content on the **Marketplace** page.

# Backup and Restore

# 4

Backup and restore your vRealize Suite Lifecycle Manager system for any event of corruption, data loss or appliance failure.

To backup and restore vRealize Suite components, see the Backup and Restore section in the [vRealize Suite Information Center](#).

This chapter includes the following topics:

- [Backup vRealize Suite Lifecycle Manager using VMware vSphere Data Protection](#)
- [Restore vRealize Suite Lifecycle Manager Using vSphere Data Protection](#)

## Backup vRealize Suite Lifecycle Manager using VMware vSphere Data Protection

This section provides guidance on the use of a vSphere Storage APIs - Data Protection (VADP) solution for performing backup and restore of vRealize Suite Lifecycle Manager. You can back up vRealize Suite Lifecycle Manager by using vSphere Data Protection by creating a backup schedule and retention policies. You are not required to delete any snapshots, however, be aware that vSphere Data Protection deletes all existing snapshots at the time of backup.

### Prerequisites

- Verify that vRealize Suite Lifecycle Manager VM is powered on and accessible while the backup is taking place.
- Deploy and configure the vSphere Data Protection appliance. For more information on vSphere Data protection, see *vSphere Data Protection Administration Guide*.

### Procedure

- 1 In the left pane of the VMware vSphere Web Client, select **vSphere Data Protection**.
- 2 Select the pre-configured vSphere Data Protection appliance and click **Connect**.
- 3 On the **Getting Started** tab, select **Create Backup Job**.
- 4 Select the **Guest Images** and click **Next**.
- 5 Select the **Full Images** and click **Next**.

- 6 Under the **Inventory Tree**, select vRealize Suite Lifecycle Manager VM to back up, and click **Next**.
- 7 Set a schedule for the backup job, and click **Next**.
- 8 Specify a retention policy for the backup job, and click **Next**.
- 9 Enter a name for the backup job, and click **Next**.
- 10 Review the summary information for the backup job and click **Finish**.
- 11 The newly created backup job is listed under the **Backup** tab. The backup runs automatically according to the schedule you configured.
- 12 (Optional) To run the backup job manually at a later time.
  - a On the **Backup** tab, select the **Backup Job**.
  - b Click **Backup Now**, and select **Backup all Sources**.
- 13 (Optional) On the **Reports** tab, select **Job Details** to verify that the backup job was completed.

## Restore vRealize Suite Lifecycle Manager Using vSphere Data Protection

You can restore the backed up data for vRealize Suite Lifecycle Manager by using vSphere Data Protection.

### Prerequisites

- Deploy and configure the vSphere Data Protection appliance. See the *vSphere Data Protection Administration Guide* for more information.
- Access the vSphere Web Client to log in as an administrator to the vCenter Server instance that manages your environment.
- In the Web Client verify that the virtual machines have the latest VMware Tools installed.

### Procedure

- 1 In the left pane of the vSphere Web Client, select **vSphere Data Protection**.
- 2 Select the pre-configured **vSphere Data Protection** appliance, and click **Connect**.
- 3 Click the **Restore** tab.
- 4 Select the vRealize Suite Lifecycle Manager virtual machine listed.

All performed backups for this virtual machine are displayed.
- 5 Select the backup from which you want to restore components.
- 6 Double-click the backup job, and select the components that you want to restore.
- 7 Click **Restore** to start the **Restore backup** wizard.

- 8** On the **Select Backup** page, verify that the backup is correct and click **Next**.
- 9** On the **Set Restore Options** page, select the **Restore** to original location, and click **Next**.  
  
If you deselect the Restore to original location check box, you can select a different destination for the restore. You might have to specify options such as the host name, network, datastore, and folder.
- 10** On the **Ready to complete** page, review the summary information for the restore request, and click **Finish**.
- 11** To verify that the restore operation is successful, power on the virtual machine and check that all vRealize Suite Lifecycle Manager services are running.



# Troubleshooting vRealize Suite Lifecycle Manager

## 5

vRealize Suite Lifecycle Manager troubleshooting topics provide solutions to problems you might experience installing and managing vRealize Suite with vRealize Suite Lifecycle Manager.

- [Unexpectedly Large vRealize Operations Manager Virtual Machine Fails to Power On Due to Resource Limitations](#)

vRealize Operations Manager virtual machines are deployed with a large size regardless of deployment size in vRealize Suite Lifecycle Manager.

- [Environment Deployment Fails During vRLI Clustering and vIDM Registration](#)

Environment deployment fails during the Adding vIDM user as vRLI Super Admin task while running vRLI Clustering and vIDM Registration

## Unexpectedly Large vRealize Operations Manager Virtual Machine Fails to Power On Due to Resource Limitations

vRealize Operations Manager virtual machines are deployed with a large size regardless of deployment size in vRealize Suite Lifecycle Manager.

### Problem

When you deploy vRealize Operations Manager in vRealize Suite Lifecycle Manager, vRealize Operations Manager virtual machines are deployed with a large size regardless of the deployment size you select for vRealize Operations Manager during environment creation in vRealize Suite Lifecycle Manager. If you have budgeted resources for a different size virtual machine, the virtual machine might fail to power on due to resource limitations.

### Cause

vRealize Operations Manager deployment size set in vRealize Suite Lifecycle Manager is based on the number of virtual machines, catalog items, concurrent provisions, and other workload metrics for your vRealize Operations Manager environment. Virtual machine size is unrelated to deployment size.

## Solution

vRealize Operations Manager virtual machines deployed from vRealize Suite Lifecycle Manager have a large (16 vCPU and 48 GB RAM) virtual machine size and require sufficient vCPU and RAM to power on successfully.

# Environment Deployment Fails During vRLI Clustering and vIDM Registration

Environment deployment fails during the Adding vIDM user as vRLI Super Admin task while running vRLI Clustering and vIDM Registration

## Problem

Even upon retry, environment deployment fails during the Adding vIDM user as vRLI Super Admin task while running vRLI Clustering and vIDM Registration.

The following error message appears in the logs:

```
{"errorMessage":"Unable to retrieve information about this user from VMware Identity Manager.", "errorCode":"RBAC_USERS_ERROR", "errorDetails": {"errorCode":"com.vmware.loginsight.api.errors.rbac.invalid_vidm_user"}}
```

## Solution

- 1 Add the VMware Identity Manager uberAdmin user to vRealize Log Insight by using the vRealize Log Insight UI.  
See [Create a New User Account in vRealize Log Insight](#).
- 2 Remove the VMware Identity Manager uberAdmin user from vRealize Log Insight by using the vRealize Log Insight UI.
- 3 Retry the environment deployment in vRealize Suite Lifecycle Manager.