

vRealize Suite Lifecycle Manager 1.0 Installation and Management

vRealize Suite 2017

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vRealize Suite Lifecycle Manager 1.0 Installation and Management

vRealize Suite Lifecycle Manager 1.0 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](#) on page 8
Systems that run vRealize Suite Lifecycle Manager must meet specific hardware and operating system requirements.
- [Deploy the vRealize Suite Lifecycle Manager Appliance](#) on page 8
Deploy the vRealize Suite Lifecycle Manager appliance to begin using vRealize Suite Lifecycle Manager.
- [Log In to vRealize Suite Lifecycle Manager](#) on page 10
Log in to the vRealize Suite Lifecycle Manager UI to create and manage cloud environments with vRealize Suite Lifecycle Manager.
- [Configuring vRealize Suite Lifecycle Manager Common Settings](#) on page 10
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- [Configure Product OVA Settings](#) on page 12
Select an OVA to use for each vRealize Suite product.
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Enter your My VMware user name and password to enable vRealize Suite Lifecycle Manager to download product OVAs through My VMware.
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You can configure how vRealize Suite Lifecycle Manager collects log files and download log files for troubleshooting purposes.
- [Check for and Install vRealize Suite Lifecycle Manager Updates](#) on page 14
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- [Generate a New SAN Certificate](#) on page 14
You can generate a new certificate for the vRealize Suite Lifecycle Manager appliance.
- [Add a Data Center to vRealize Suite Lifecycle Manager](#) on page 15
You can add a data center to vRealize Suite Lifecycle Manager to back your private cloud environments.

- [Add a vCenter to a Data Center](#) on page 15
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, add disk 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.
- 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.

Log in to vRealize Suite Lifecycle Manager using a supported Web browser. See [“Log In to vRealize Suite Lifecycle Manager,”](#) on page 10 and [“System Requirements,”](#) on page 8.

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,”](#) on page 8.

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.

- 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,”](#) on page 10.

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](#) on page 11
You can change the default administrator password and set passwords for root and SSH users.
- [Change the Configuration Drift Interval](#) on page 11
Set the interval of time vRealize Suite Lifecycle Manager uses to collect data for configuration drift reports.
- [Enable or Disable SSH on vRealize Suite Lifecycle Manager](#) on page 11
You can enable SSH for troubleshooting purposes.
- [Join or Leave the VMware Customer Experience Program](#) on page 12
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**.

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 MyVMware Settings](#),” on page 13.

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
Add Existing Identity Manager	<ol style="list-style-type: none"> Click ADD ACTIVE DIRECTORY at the bottom of the page and provide active directory details. Enter the host name for the identity manager in the form of a fully qualified domain name. Enter the admin user name, Admin Group name, and password for the identity manager, and click Update.
Install New Identity Manager	<ol style="list-style-type: none"> Click ADD ACTIVE DIRECTORY at the bottom of the page and provide active directory details. Select an existing data center or click + to add a new data center. For information on adding a new data center, see “Add a Data Center to vRealize Suite Lifecycle Manager,” on page 15. Click Install. Accept the EULA and provide the Infra and network details. Enter host and IP details, Admin Group, and passwords for root, admin, and SSHuser. Click Submit and click SAVE to close the wizard.

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 MyVMware Settings

Enter your My VMware user name and password to enable vRealize Suite Lifecycle Manager to download product OVAs through My VMware.

Procedure

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

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 10 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**.

When the download completes, vRealize Suite Lifecycle Manager displays the logs. You must refresh the page to view the downloaded logs.

Check for and Install vRealize Suite Lifecycle Manager Updates

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

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
Default	Use the default VMware repository for vRealize Suite Lifecycle Manager updates.
Repository URL	Enter the .pak file or repository URL for updates.

- 3 Click **Check Updates**.

After a few minutes, vRealize Suite Lifecycle Manager displays a message indicating whether there are updates available.
- 4 (Optional) To install an available update, click **Install Upgrades**.

Generate a New SAN Certificate

You can generate a new certificate for the vRealize Suite Lifecycle Manager appliance.

Procedure

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

vRealize Suite Lifecycle Manager generates a new SAN certificate.

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](#).

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.
- 4 Enter the **User Name** and **Password** for the vCenter.
- 5 Select the **vCenter Type** and 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 a Private Cloud Environment

2

You can create a new private cloud 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 and 4.5

This chapter includes the following topics:

- [“Create a New Private Cloud Environment Using the Installation Wizard,”](#) on page 17
- [“Create a New Private Cloud Environment Using a Configuration File,”](#) on page 22

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 OVA settings for the products to install. See [“Configure Product OVA Settings,”](#) on page 12.
- Ensure that you have added a vCenter to the data center with valid credentials and the request is complete. See [“Add a vCenter to a Data Center,”](#) on page 15.

Procedure

- 1 [Configure Environment Settings for a New Private Cloud](#) on page 18
Configure environment settings, such as name, password, and data center for a private cloud environment.
- 2 [Select the vRealize Suite Products to Install](#) on page 18
Select which vRealize Suite products to install in the private cloud environment.
- 3 [Configure Licensing and Accept License Agreement](#) on page 20
Accept the VMware end-user license agreement and enter the license key.
- 4 [Configure Private Cloud Environment Details](#) on page 20
Configure vCenter, cluster, network, datastore, and certificate details for a new private cloud environment.

- 5 [Configure vRealize Suite Products for Installation](#) on page 21
Configure the product details for each vRealize Suite product that you are installing in the private cloud environment.
- 6 [Confirm Environment and Installation Settings](#) on page 22
Verify that the environment and installation settings are accurate.

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,”](#) on page 15.
- 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

- Generate a SAN certificate with host names for each product to install.

- 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 reenble 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.
 - 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](#).
 - 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.

Procedure

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

Option	Description
Products	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 Version and Size to install.
Solutions	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. vRealize Suite Lifecycle Manager offers the following environment solutions: <ul style="list-style-type: none"> ■ IT Automating IT - Enable automation and simplification of workload provisioning tasks of production-ready infrastructure and applications across multi-cloud environments. For details, see VMware Validated Design for IT Automating IT 4.0. ■ Micro-Segmentation - Enable distribution of firewall and isolation policies to create better network security built inside the data center. ■ Intelligent Operations - Enable proactive identification and remediation of performance, capacity, and configuration issues of the infrastructure. For details, see Monitoring and Alerting.

- 2 Click **Install**.

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 SAN Certificate,”](#) on page 14.

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.

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.
This 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.

For more information about the vRealize Automation appliance, see [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.
- 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,”](#) on page 22. Modify the exported configuration file as required before using it create another private cloud.

Update/modify the exported configuration file as required before using it 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**.

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,”](#) on page 12.
- 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,”](#) on page 15.
- 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,”](#) on page 15.

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

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,”](#) on page 25
- [“Export a Private Cloud Environment Configuration File,”](#) on page 25
- [“Download Private Cloud Product Logs,”](#) on page 26
- [“Managing vRealize Suite Products in a Private Cloud,”](#) on page 26
- [“Configure Health Monitoring for the vRealize Suite Management Stack,”](#) on page 29
- [“View Data Center Topology,”](#) on page 31

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,”](#) on page 22.

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**.

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

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](#) on page 26
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](#) on page 27
You can use vRealize Suite Lifecycle Manager to upgrade vRealize Suite product installations.
- [Configuration Drift](#) on page 27
Configuration drift shows the changes in product configuration over time, based on a user-defined product baseline.

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**.

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.

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,”](#) on page 26.

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, based on a user-defined product baseline.

- [Save a Product Baseline](#) on page 28
Save a product baseline to capture a product's configuration parameters at a given time.
- [View a Configuration Drift Report](#) on page 28
View a configuration drift report to view the changes in a product's current configuration compared to the product's configuration drift baseline.
- [Export a Configuration Drift Baseline](#) on page 28
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](#) on page 29
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 Private Clouds**.
- 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**.

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,”](#) on page 28.

Procedure

- 1 Click **Manage Private Clouds**.
- 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
Full View	Complete configurations captured by the baseline report.
Drifted View	Changes in configuration compared to the baseline report.

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 Private Clouds**.
- 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**.

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

What to do next

Import the downloaded configuration drift baseline file to other deployments of the product. See [“Import a Configuration Drift Baseline,”](#) on page 29.

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,”](#) on page 28.

Procedure

- 1 Click **Manage Private Clouds**.
- 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**.

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](#) on page 30
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](#) on page 31
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](#) .

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,”](#) on page 30.

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"> ■ vRealize Operations Manager is not part of your private cloud environment. ■ vRealize Operations Manager is not configured with VMware SDDC Management Health Solution Management Pack. ■ An error occurred while determining private cloud environment health. ■ Health information is not yet available.
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.

A topology map of the data center appears.

Troubleshooting vRealize Suite Lifecycle Manager

4

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](#) on page 33

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](#) on page 34
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.

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