



# Lenovo XClarity Integrator for VMware vRealize Automation Installation and User's Guide



**Version 1.0.0**

**Note**

Before using this information and the product it supports, read the information in Appendix A “Notices” on page 17.

**First Edition (August 2016)**

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## About this publication

This guide provides information about how to install and use Lenovo XClarity Integrator for VMware vRealize Automation. The soft bundle contains the XaaS Blueprints for Virtualization, Network, Server, ESXi, and Master Blueprint.

This information is intended for users who are responsible for the installation and configuration of Lenovo XClarity Integrator for VMware vRealize Automation. This information is written for experienced users who are familiar with the following technologies and software:

- Virtual machine technology
- VMware vRealize Automation
- VMware vRealize Orchestrator workflow development
- Lenovo XClarity Integrator
- Lenovo XClarity Integrator for VMware vRealize Orchestrator
- Lenovo Network Plugin for VMware vRealize Orchestrator

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## Conventions and terminology

Paragraphs that start with a bold **Note**, **Important**, or **Attention** are notices with specific meanings that highlight key information.

**Note:** These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

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## World Wide Web resources

You can find additional information about Lenovo XClarity Integrator for VMware vRealize Automation in the product documentation and on the World Wide Web.

### Lenovo XClarity Integrator for VMware vRealize Automation site

Locate the latest downloads for the Lenovo XClarity Integrator for VMware vRealize Automation:

- Lenovo XClarity Integrator for VMware website

### System Management with Lenovo XClarity Solutions

This website provides an overview of the Lenovo XClarity solutions that integrate System x and Flex System hardware to provide system management capability:

- System Management with Lenovo XClarity Solution website

### Lenovo technical support portal

This website can assist you in locating support for hardware and software:

- Lenovo Support Portal website

### ServerProven websites

The following websites provide an overview of hardware compatibility for BladeCenter, Flex System, System x, and xSeries® hardware:

- [Lenovo ServerProven: Compatibility for BladeCenter products](#)
- [Lenovo ServerProven: Compatability for Flex System Chassis](#)
- [Lenovo ServerProven: Compatability for System x hardware, applications, and middleware](#)

### **VMware vRealize Automation website**

Locate documentation in several formats to assist you with installing, using, and developing with VMware vRealize Automation.

- [VMware vRealize Automation Documentation website](#)

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## Chapter 1. Overview

Lenovo XClarity Integrator for VMware vRealize Automation is installed on top of vRealize Automation and allows cloud administrators to easily, and repeatedly, provision hardware infrastructure components (such as Lenovo servers, storage systems, and network devices) into vRealize-managed hybrid cloud environments.

### What is vRealize Automation?

VMware vRealize Automation automates the delivery of personalized infrastructure, applications, and custom IT services. This cloud automation software lets you deploy across a multi-vendor hybrid cloud infrastructure, giving you both flexibility and investment protection for current and future technology choices.

### What is vRealize Orchestrator?

VMware vRealize Orchestrator is a development and process-automation platform that provides a library of extensible workflows to manage the VMware vCenter infrastructure. vRealize Orchestrator exposes every operation in the vCenter Server API, allowing users to join all of these operations into automated processes. vRealize Orchestrator also allows integration with other management and administration solutions through its open plug-in architecture.

### What is vRealize CloudClient?

VMware vRealize CloudClient is a command-line utility that provides verb-based access to vRealize Automation, vRealize Orchestrator, and VMware Site Recovery Manager management functions. The command-line utility provides a unified interface across the vRealize Automation APIs.

### What does Lenovo XClarity Integrator for VMware vRealize Automation contain?

The Lenovo XClarity Integrator for VMware vRealize Automation contains the following files.

- **com.lenovo.library.softbundle.package**. This vRealize Orchestrator workflow package contains the workflows that are required for the Lenovo Virtualization, Network, Server, ESXi and Master Blueprints.
- **CloudClient.properties**. This file configures the tenant name, tenant administrator credentials, and server details.
- **vra\_install\_properties.xml**. This file contains the properties that are required to install Lenovo XClarity Integrator for VMware vRealize Automation, such as the vRealize Automation package file name and location and entitlement name to which the services are to be tied.
- **Lenovoicon\_72.png**. This is the image file name.
- **LenovoSoftBundle\_Full\_Package\_v1.0.0.zip**. This CloudClient package contains the following XaaS Blueprints. This package is imported in to vRealize Automation using CloudClient. After the package is imported, all the XaaS Blueprints are imported automatically and catalog items are created.

The package contains following folders and catalog items.

- Lenovo Virtualization
  - Create cluster
  - Delete cluster
  - Add host to cluster
  - Remove host
  - Enter maintenance mode
  - Exit maintenance mode
  - Create distributed virtual switch with port group
  - Attach host to distributed virtual switch
  - Add port group to distributed virtual switch
  - Create private VLAN
  - Delete private VLAN

- Update distributed virtual port group
- Delete distributed virtual port group
- Add a vCenter Server instance
- Lenovo Network
  - Create new VLAN
  - Delete VLAN
  - Add switch port to VLAN
  - Add trunk port to VLAN
  - Register switch
- Lenovo Server
  - Install ESXi
  - Add license to provisioned ESXi host
  - Configure ESXi host
  - Assign a configuration pattern
  - Deassign a configuration pattern
  - Get XClarity Administrators associated to a vCenter
  - Master Workflow
- **LenovoSoftBundle.jar**. The executable file that installs Lenovo XClarity Integrator for VMware vRealize Automation.
- **Lenovo\_XClarity\_Integrator\_for\_VMware\_vRealize\_Automation\_License.txt**. This file contains the End User License Agreement (EULA) for Lenovo XClarity Integrator for VMware vRealize Automation.
- **lxc\_i\_vra\_v1.0.0\_ug.pdf**. This document provides information about how to install and use Lenovo XClarity Integrator for VMware vRealize Automation.
- **lxc\_i\_vra\_v1.0.0\_rn.pdf**. This document provides the latest information about the Lenovo XClarity Integrator for VMware vRealize Automation, including known issues and workarounds.

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## Software requirements

This section describes software requirements for Lenovo XClarity Integrator for VMware vRealize Automation.

Lenovo XClarity Integrator for VMware vRealize Automation requires the following software:

- **VMware vRealize Automation v7.0**  
For more information, see the VMware vRealize Automation Documentation website.
- **VMware vRealize Orchestrator v7.0**  
For more information, see the VMware vRealize Orchestrator Documentation website. The following plug-ins must be installed and configured in VMware vRealize Orchestrator:
  - **Lenovo XClarity Integrator for VMware vRealize Orchestrator v1.0.3**  
For more information, see the VMware vRealize Orchestrator Documentation website.
  - **Lenovo XClarity Integrator for VMware vCenter v4.2.0**  
For more information, see the Lenovo XClarity Integrator for VMware website.
  - **Lenovo Network Plugin for VMware vRealize Orchestrator v1.2.0**  
For more information, see the Lenovo Networking Plug-in for VMware vRealize Orchestrator (vRO) online documentation.
  - **VMware vCenter Orchestrator Plug-In for vCloud Automation Center (vCAC) v7.0.1**  
To configure the plug-in, click **Workflow Library → vRealize Automation → Infrastructure Administration → Configuration → Add an IaaS Host** from VMware vRealize Orchestrator, and follow the instructions in the wizard. When complete, the **IaaS Host for vRA [https://vra-*<host\_name>*]** entry is displayed under vRealize Automation Infrastructure.



For more information, see the vRealize Orchestrator Plug-Ins Information website.

**Attention:**

- Ensure that the host’s authentication type is set to “NTLM.”
- Ensure that the you are logged in as “administrator” or as a user that has administrator-level access on the IaaS machine
- Ensure that you provide the correct domain name in **Domain for NTLM authentication**. If you are logged in as “administrator”, specify “Domain” as the host name.
- **vRealize Orchestrator Plug-in for vRealize Automation (vCACCAFE) 7.0.1**

For more information, see the vRealize Orchestrator Plug-in for vRealize Automation v7.0.1 website.

**Note:** If you use the embedded VMware vRealize Orchestrator for VMware vRealize Automation, the **Default [https://vra-<host\_name>]** entry is added automatically when you install the vCACCAFE plug-in.

**Attention:** Ensure that the host is configured with “Shared Session” session mode and “administrator@vsphere.local” credentials.

- **VMware vRealize CloudClient v4.1**

For installation instructions, see the VMware vRealize CloudClient website.

- **Java Runtime Environment 1.7U80 or later for Windows**

**Note:** Ensure that the PATH environment variable includes the JRE installation directory.

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## Hardware requirements

This section describes hardware that is supported by Lenovo XClarity Integrator for VMware vRealize Automation.

Although Lenovo XClarity Integrator for VMware vRealize Automation does not have hardware limitations, the hardware that is supported is limited to the configurations that are listed in the following tables.

Configurations	Systems
Flex System and switch configurations	Flex System x240 M5 servers
	Flex System Storage Enclosure Node with support for up to 12 SAS/SATA drives
	Lenovo Flex System Fabric EN4093R 10Gb Scalable Switch Switch 8.3.9+
Rack server and switch configurations	Lenovo x3650 M5 Servers
	<ul style="list-style-type: none"><li>• Lenovo RackSwitch G8272 8.2.5+ network switches deployed in a VLAG configuration</li><li>• Lenovo RackSwitch 8264 8.3.2+ network switches deployed in a VLAG configuration</li></ul>



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## Chapter 2. Installing and configuring Lenovo XClarity Integrator for VMware vRealize Automation

Lenovo XClarity Integrator for VMware vRealize Automation is installed using the VMware vRealize CloudClient.

### Before you begin

Ensure that all required software is installed and configured (see Software requirements).

Ensure that the Business Group, Reservations, and Entitlement are created in VMware vRealize Automation. For more information, see the VMware vRealize Automation online documentation.

Ensure that the VMware vRealize Orchestrator Control Center service is in the Running state. The Control Center service is stopped by default in vRealize Automation.

### Procedure

To install and configure Lenovo XClarity Integrator for VMware vRealize Automation, complete the following steps

- Step 1. Download the Lenovo XClarity Integrator for VMware vRealize Automation from the Lenovo XClarity Integrator for VMware website, and extract the file in a temporary directory.
- Step 2. Import the vRealize Orchestrator Workflow Package.
  - a. Log in to VMware vRealize Orchestrator Client (see VMware vRealize Automation online documentation).
  - b. Select **Design** from the drop-down list in the window title.
  - c. Click the **Packages** tab.
  - d. Click **Import Package**, and then select the **com.lenovo.library.softbundle.package** package is located in the temporary directory where you extracted Lenovo XClarity Integrator for VMware vRealize Automation files.
  - e. When the import is complete, click the **Workflows** tab, and verify that:
    - The **Lenovo Softbundle** folder is created.
    - The workflows under the **Virtualization**, **Network**, **Server**, **ESXi**, and **Master** folders are imported correctly.
  - f. Click the **Workflow → Library → Lenovo Softbundle → Master → Master Workflow**.
  - g. Click the **General** tab.
  - h. Edit the **defaultvRAHost** and **vcacHost** attributes with the configured hosts from the inventory in the vCACCAFE and vCAC plugins. For more information, see Software requirements.

#### Notes:

- Ensure that the **defaultvRAHost** points to the vRealize Automation Host.
- Ensure that the **vcacHost** points to the IaaS host.

Step 3. Copy the `CloudClient.properties` file from the temporary directory where you extracted Lenovo XClarity Integrator for VMware vRealize Automation files to the `<CloudClient_install_dir>` directory.

Step 4. Edit the `CloudClient.properties` file with a valid vRealize Automation tenant URL name, tenant administrator and XaaS architect credentials, and server details to ensure that the installation script can connect to vRealize Automation.

```
# CloudClient.properties file is used to log in to the CloudClient automatically
# and is located the same directory as lib and bin folders.
```

```
# To provide and encrypt passwords in a file, use the following command:
# login keyfile -file <file_name.txt> -password <password>
```

```
# vra_server : vRealize Automation Virtual Appliance
vra_server=<vra-host_name>
```

```
# vra_tenant : Tenant Name, defaults to vsphere.local
vra_tenant=<tenant_url_name>
```

```
#vra_username : SSO user name in the form user@domain.com
vra_username=<tenant_admin and XaaS_architect_user_name>
```

```
# vra_password : SSO password
vra_password=<tenant_admin and XaaS_architect_passsword>
```

```
# vra_keyfile : Encrypted file location for SSO password
vra_keyfile=
```

#### Notes:

- The vra\_server, vra\_tenant, vra\_username, and vra\_password properties must be specified in CloudClient.properties file.
- The vra\_username user must have “Tenant Administrator” and “XaaS Architect” roles.
- The vra\_tenant must be the tenant URL name (not the Tenant name) . The tenant URL name is case sensitive and can be seen by logging to vRealize Automation.

Step 5. Locate the vra\_install\_properties.xml file in the temporary directory where you extracted the Lenovo XClarity Integrator for VMware vRealize Automation files.

Step 6. Edit the vra\_install\_properties.xml file with the package file name and location, the image file name and location, and the vRealize Automation entitlement name under all three services. The Catalog items and the Services will be associated with this entitlement.

```
<services>
  <service name=Lenovo Virtualization>
    <description>XaaS Lenovo Virtualization Blueprint Service</description>
    <catalogitems>
      <catalogitem>Add a vCenter Server instance</catalogitem>
      <catalogitem>Delete distributed virtual port group</catalogitem>
      <catalogitem>Update distributed virtual port group</catalogitem>
      <catalogitem>Create private VLAN</catalogitem>
      <catalogitem>Delete private VLAN</catalogitem>
      <catalogitem>Add port group to distributed virtual switch</catalogitem>
      <catalogitem>Attach host to distributed virtual switch</catalogitem>
      <catalogitem>Create distributed virtual switch with port group</catalogitem>
      <catalogitem>Exit maintenance mode</catalogitem>
      <catalogitem>Enter maintenance mode</catalogitem>
      <catalogitem>Remove host</catalogitem>
      <catalogitem>Add host to cluster</catalogitem>
      <catalogitem>Delete cluster</catalogitem>
      <catalogitem>Create cluster</catalogitem>
    </catalogitems>
    <entitlement>EntitlementName</entitlement>
  </service>
  <service name=Lenovo Network>
    <description>XaaS Lenovo Network Blueprint Service</description>
    <catalogitems>
      <catalogitem>Create new VLAN</catalogitem>
      <catalogitem>Delete VLAN</catalogitem>
    </catalogitems>
  </service>
</services>
```

```

    <catalogitem>Register switch</catalogitems>
  </catalogitems>
  <catalogitem>Add switch port to VLAN</catalogitems>
  <catalogitem>Add trunk port to VLAN</catalogitems>
</catalogitems>
<entitlement>EntitlementName</entitlement>
</service>
<service name=Lenovo Server>
  <description>XaaS Lenovo Server Blueprint Service</description>
  <catalogitems>
    <catalogitem>Add license to provisioned ESXi host</catalogitems>
    <catalogitem>Configure ESXi host</catalogitems>
    <catalogitem>Get XClarity Administrator associated to a vCenter</catalogitems>
    <catalogitem>Assign a configuration pattern</catalogitems>
    <catalogitem>Deassign a configuration pattern</catalogitems>
    <catalogitem>Install ESXi</catalogitems>
    <catalogitem>Master Workflow</catalogitems>
  </catalogitems>
  <entitlement>EntitlementName</entitlement>
</service>
<packagefilename><LXCI_vRO_temp_dir>\lenovosoftware3.zip</packagefilename>
<imagefilename><LXCI_vRO_temp_dir>\Lenovoicon_72.png</imagefilename>
</services>

```

- Step 7. Log in to the command prompt, and run the **cloudclient.bat** command from the `<CloudClient_install_dir>\bin` directory.
- Step 8. Log in to VMware CloudClient, and accept the EULA and Certificates, if required.
- Step 9. Exit from the Cloud Client.
- Step 10. Change to the directory where you extracted the Lenovo XClarity Integrator for VMware vRealize Automation files.
- Step 11. Import Lenovo XClarity Integrator for VMware vRealize Automation by running the following command from the temporary directory where you extracted the Lenovo XClarity Integrator for VMware vRealize Automation files.

```

java -jar LenovoSoftBundle.jar -configxml <LXCI_vRO_temp_dir>\vra_install_properties.xml
-cloudclientpath <CloudClient_install_dir>\bin\cloudclient.bat

```

where

- `<LXCI_vRO_temp_dir>` is the temporary directory where you extracted Lenovo XClarity Integrator for VMware vRealize Automation files
- `<CloudClient_install_dir>` is the directory where VMware CloudClient is installed.

For example

```

java -jar LenovoSoftBundle.jar
-configxml C:\temp\SoftBundle_Install_Script_and_Properties\vra_install_properties.xml
-cloudclientpath C:\cloudclient-4.1.0-3792252\bin\cloudclient.bat

```

- Step 12. After the installation completes successfully, log in to vRealize Automation, and verify the following conditions:
  - The Lenovo Virtualization, Lenovo Network, and Lenovo Server Services are created under **Administration → Services**.
  - The XaaS Blueprints are imported under the **Administration → Catalog Items**.
  - The entitlements are updated to the newly created service under the **Administration → Entitlements**.
  - Catalog items are available in the **Catalog** tab for the entitled users.



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## Chapter 3. Using Lenovo XClarity Integrator for VMware vRealize Automation

Lenovo XClarity Integrator for VMware vRealize Automation contains XaaS blueprints that enable the cloud administrators to easily and repeatedly provision hardware infrastructure components (such as Lenovo servers, storage systems, and network devices) into vRealize-managed hybrid cloud environments.

### Procedure

To begin using Lenovo XClarity Integrator for VMware vRealize Automation, complete the following steps.

- Step 1. Login to vRealize Automation. Ensure that you log in to VMware vRealize Automation using a user account that is entitlement to access the XaaS blueprints of the Lenovo XClarity Integrator for VMware vRealize Automation under the Lenovo Virtualization, Lenovo Server, and Lenovo Network services.
- Step 2. Click the **Catalog** tab.
- Step 3. Click the **Lenovo Virtualization, Lenovo Server, or Lenovo Network** tab to run the XaaS blueprints.
- Step 4. Click the XaaS blueprints that you want to run.

For information about available blueprints, see “XaaS blueprints” on page 9 .

---

## XaaS blueprints

Lenovo XClarity Integrator for VMware vRealize Automation includes the following XaaS blueprints.

### Attention:

- Before running the Lenovo Virtualization or Lenovo Server blueprints, ensure that you configure the vCenter Server instance by running **Add a vCenter Server instance**.
- Before running the Lenovo Server blueprints, ensure that you configure Lenovo XClarity Integrator for VMware vRealize Automation using the **Get XClarity Administrators associated to a vCenter** blueprint.
- Before running the Lenovo Network blueprints, ensure that you configure switches using the **Register Switch** blueprint.

Table 1. XaaS blueprints for the Lenovo Virtualization service

XaaS blueprint name	Description
Add a vCenter Server instance	Configures VMware vRealize Orchestrator to connect to a new vCenter Server instance, so that you can run workflows over the objects in the vSphere infrastructure.
Create cluster	Creates a new cluster in a host folder.
Delete cluster	Deletes a cluster.
Add host to cluster	Adds a host to the cluster. This workflow fails if it cannot authenticate the SSL certificate of the host.
Remove host	Removes a host and unregisters it from vCenter Server. If the host is part of a cluster, you must put the host in maintenance mode before attempting to remove it.
Enter maintenance mode	Puts the host into maintenance mode. You can cancel this task.
Exit maintenance mode	Exits maintenance mode. You can cancel this task.

Table 1. XaaS blueprints for the Lenovo Virtualization service (continued)

XaaS blueprint name	Description
Create distributed virtual switch with port group	Creates a new distributed virtual switch with a distributed virtual port group.
Attach host to distributed virtual switch	Adds a host to a distributed virtual switch.
Add port group to distributed virtual switch	Adds a new distributed virtual port group to the specified distributed virtual switch.
Create private VLAN	Creates a VLAN on the specified distributed virtual switch.
Delete private VLAN	Deletes a VLAN from the specified distributed virtual switch.
Update distributed virtual port group	Updates the configuration of a specified distributed virtual port group.
Delete distributed virtual port group	Deletes a specified distributed virtual port group

Table 2. XaaS blueprints for the Lenovo Network service

XaaS blueprint name	Description
Register switch	Adds switches to the vRealize Orchestrator management domain using its IPv4 address and credentials.
Create new VLAN	Creates a new VLAN on a switch.
Delete VLAN	Removes existing VLAN from a switch.
Add switch port to VLAN	Adds a port to an existing VLAN.
Add trunk port to VLAN	Adds a trunk port to an existing VLAN.

Table 3. XaaS blueprints for the Lenovo Server service

XaaS blueprint name	Description
Get XClarity Administrators associated to a vCenter	Retrieves a list of Lenovo XClarity Administrator instances that have been associated with a vCenter.
Assign a configuration pattern	Assigns a configuration pattern to a server.
Deassign a configuration pattern	Unassigns a configuration pattern from a server
Install ESXi	Installs ESXi on the server.
Configure ESXi host	Configures ESXi Host with a host profile.
Add license to provisioned ESXi host	Adds License to the selected ESXi host.
Master Workflow	<p>Provisions the available XClarity server from Lenovo XClarity Administrator with ESXi image, adds the ESXi host to the Cluster Compute Resource and to the distributed switch, and connects to uplink port group. The Master workflow also forces the data collection in VMware vRealize Automation.</p> <p><b>Attention:</b></p> <ul style="list-style-type: none"> <li>To run the Master Blueprint, you must be logged in as a user with “Tenant Administrator” and “Fabric Administrator” privileges. Using a service account that is in the “Fabric admin” group and “Tenant admin” group is recommended.</li> <li>For Master workflow in vRealize Automation, the defaultvRAHost and vcacHost attributes on the <b>General</b> tab must be configured with the configured hosts from the inventory. For more information, see Software requirements.</li> <li>The physical switch that is connected to the XClarity server that is being provisioned through the <b>Master Workflow</b> must be registered using the</li> </ul>



Table 3. XaaS blueprints for the Lenovo Server service (continued)

XaaS blueprint name	Description
	<b>Register Switch</b> blueprint. Otherwise, the <b>Host Mac Address List</b> drop-down is empty.



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## Chapter 4. Uninstalling Lenovo XClarity Integrator for VMware vRealize Automation

You can uninstall Lenovo XClarity Integrator for VMware vRealize Automation when it is no longer needed.

### Procedure

To uninstall Lenovo XClarity Integrator for VMware vRealize Automation, complete the following steps

Step 1. Remove the vRealize Orchestrator Workflow Package.

- a. Log in to VMware vRealize Orchestrator Client (see VMware vRealize Automation online documentation).
- b. Select **Design** from the drop-down list in the window title.
- c. Click the **Packages** tab.
- d. Right-click the **com.lenovo.library.softbundle** package.
- e. Click **Delete element with content**.
- f. Verify that the **Library → Lenovo Softbundle** folder is removed from the vRealize Orchestrator.

Step 2. Remove the XaaS blueprints.

- a. Log in to VMware vRealize Automation as XaaS Architect.
- b. Click **Design → XaaS Blueprints**
- c. Delete the following blueprints:
  - Lenovo Virtualization
    - Create cluster
    - Delete cluster
    - Add host to cluster
    - Remove host
    - Enter maintenance mode
    - Exit maintenance mode
    - Create distributed virtual switch with port group
    - Attach host to distributed virtual switch
    - Add port group to distributed virtual switch
    - Create private VLAN
    - Delete private VLAN
    - Update distributed virtual port group
    - Delete distributed virtual port group
    - Add a vCenter Server instance
  - Lenovo Network
    - Create new VLAN
    - Delete VLAN
    - Add switch port to VLAN
    - Add trunk port to VLAN
    - Register switch
  - Lenovo Server
    - Install ESXi
    - Add license to provisioned ESXi host
    - Configure ESXi host
    - Assign a configuration pattern
    - Deassign a configuration pattern
    - Get XClarity Administrators associated to a vCenter

- Master Workflow
- d. Click **Administration**, and then click the **Services** tab.
- e. Delete the following services.
  - Lenovo Virtualization
  - Lenovo Network
  - Lenovo Server

---

## Chapter 5. Troubleshooting

This section provides troubleshooting information to help you to resolve problems with Lenovo XClarity Integrator for VMware vRealize Automation.

- **XClarity Server is not listed in the drop-down box.**

### **Description**

For the following blueprints, **XClarity Server** is not listed in the drop-down after selecting an Lenovo XClarity Administrator instance that is offline.

- Assign a configuration pattern
- Deassign a configuration pattern
- Install ESXi
- Master Workflow

### **Workaround**

Ensure that Lenovo XClarity Administrator is online and is reachable on the network.

- **The “Get XClarity Administrators associated to a vCenter” blueprint fails.**

### **Description**

If the Lenovo XClarity Administrator that is registered in vCenter is offline, the “Get XClarity Administrators associated to a vCenter” blueprint fails.

### **Workaround**

Ensure that Lenovo XClarity Administrator is online and is reachable on the network.



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## Appendix A. Notices

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## Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

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