

Installing agents that are needed for VMControl

Prerequisites:

Make sure that you have met the following prerequisites before you complete the steps in this quick start guide:

- An IBM Flex System Manager management node is installed in a chassis and is managing the devices in that chassis, which include one or more compute nodes that have been discovered by the IBM Flex System Manager management node. For more information, see the following quick start guides:
 - *Installing the IBM Flex System Enterprise Chassis*
 - *Configuring components of the IBM Flex System Enterprise Chassis*
 - *Configuring the IBM Flex System Manager management node*
 - *Selecting one or more chassis to be managed in the IBM Flex Systems Manager domain or Adding a chassis to an existing Flex System Manager management domain*
- The appropriate hypervisor has been installed on the compute node on which the agent is to be installed.

Steps:

The agents that you need to install for VMControl and the processes that you follow to install those agents differ depending on the virtualization environment in which you are working.

RHEL KVM

To manage a KVM host from IBM Flex System Manager VMControl, you must manually install an agent called the KVM Platform Agent on the host. You cannot use the Deploy Agent wizard on the IBM Flex System Manager management node to deploy the KVM Platform Agent to the host.

Note: You can deploy Red Hat Enterprise Linux (KVM) Linux Kernel-based Virtual Machine (KVM) to X-Architecture compute nodes from the IBM Flex System Manager management node using the Deploy Compute Node Images task. If you do so, the agent is automatically installed, so you do not have to install it manually.

More information about the Deploy Compute Node Images task from the IBM Flex System Manager management node is available at this location:

Information Center (Internet):

http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.8731.doc/com.ibm.director.osdeployment_ngui.helps.doc/fsm_deploying_compute_node_images.html

The IBM Flex System product documentation is also available on the IBM Flex System Manager management node. To access the installed documentation, click Information Center from the IBM Flex System Manager Home page and then navigate to: IBM Flex System information → Management devices and solutions → IBM Flex System Manager management node → Managing compute nodes → Provisioning compute nodes from the management interface → Using the Deploy compute node images task to deploy operating systems

Complete the following steps to install the agent on the host:

1. Download the **IBM Systems Director 6.3.1 Platform Agent for RHEL 6 for Linux on IBM x86-64 on KVM** from the IBM website. You'll need an IBM user ID and password to proceed with the download.
<http://www.ibm.com/systems/software/director/downloads/agents.html>
2. Use a tool such as Secure Copy (SCP) to copy the image to the KVM host.
3. Before running the installation, you must prepare the KVM host as follows:
 - Disable SELinux or turn to Permissive mode.

SELinux runs in any of the following states:

State	Description
Disabled	SELinux is disabled. You can tell that SELinux is in the disabled state by determining if no files exist in the <code>/selinux/</code> directory.
Permissive (enabled)	SELinux is enabled but not enforcing any security policies. You can tell that SELinux is in the permissive state by determining if any of the following conditions are true: <ul style="list-style-type: none">• The <code>SELINUX</code> variable in <code>/etc/sysconfig/selinux/enforce</code> is set to permissive or a value not equal to "1".• When you run the <code>getenforce</code> command, it outputs "Permissive".
Enforcing (enabled)	SELinux is enabled and enforcing security policies. You can tell that SELinux is in the enforcing state by determining if any of the following conditions are true: <ul style="list-style-type: none">• The <code>SELINUX</code> variable in <code>/etc/sysconfig/selinux/enforce</code> is set to enforcing or "1".• When you run the <code>getenforce</code> command, it outputs "Enforcing".

To set SELinux to permissive, run the following command:

```
/usr/sbin/setenforce Permissive
```

- Find the required RPMs on the KVM distribution DVD in the `/Packages` directory and install them in the order listed in the following topic:

In the information center (Internet):

http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.8731.doc/com.ibm.director.vim.helps.doc/fsd0_t_preparing_to_install_core_on_xseries_kvm_pa.html

The IBM Flex System product documentation is also available on the IBM Flex System Manager management node. To access the installed documentation, click Information Center from the IBM Flex System Manager Home page and then navigate to:

IBM Flex System information→ Management devices and solutions→ IBM Flex System Manager management node→ Managing virtualized resources→ VMControl→ Installing VMControl→ Installing VMControl agents and subagents→ Installing and uninstalling KVM Platform Agent→ Preparing to install KVM Platform Agent

- Apply the required firewall rules on the KVM host.
For a description of this process, see the section “KVM requirements,” which is located in the following topic:

In the information center (Internet):

http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.8731.doc/com.ibm.director.vim.helps.doc/fsd0_vim_r_kvm.html

The IBM Flex System product documentation is also available on the IBM Flex System Manager management node. To access the installed documentation, click Information Center from the IBM Flex System Manager Home page and then navigate to:

IBM Flex System information→ Management devices and solutions→ IBM Flex System Manager management node→ Managing virtualized resources→ VMControl→ Planning for VMControl→ Supported virtualization environments

4. Install the agent using the instructions provided in this topic:

In the information center (Internet):

http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.8731.doc/com.ibm.director.vim.helps.doc/fsd0_vim_t_installing_kvm_platform%20agent_on_linux_for_xseries.html

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IBM Flex System information→ Management devices and solutions→ IBM Flex System Manager management node→ Managing virtualized resources→ VMControl→ Installing VMControl→ Installing VMControl agents and subagents→ Installing and uninstalling KVM Platform Agent→ Installing KVM Platform Agent

5. After the agent is installed, it is started automatically. You do not need to reboot the system.
6. Discover, request access to, and inventory the KVM host from the IBM Flex System Manager management software.

For more information about discovering systems, see the following topic:

http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.8731.doc/com.ibm.director.discovery.helps.doc/fqm0_t_discovering_systems_with_system_discovery.html

The IBM Flex System product documentation is also available on the IBM Flex System Manager management node. To access the installed documentation, click Information Center from the IBM Flex System Manager Home page and then navigate to:

IBM Flex System information→ Management devices and solutions→ IBM Flex System Manager management node→ Managing all resources→ Discovering systems and collecting inventory data

Power Virtual I/O Server

The Virtual I/O Server provided with Power Systems compute nodes comes with Common Agent and Platform Agent preinstalled. Depending on which exact VIOS version you're using, you might need to turn on the agent.

1. To verify if the agent has already been started, run this command from the Power Systems compute node:
`lssrc -s cas_agent`
2. To start it manually, run this command as root from the Power Systems compute node:
`startsrc -s cas_agent`

VMware ESXi 5.0

If you're running the VMware ESXi 5.0 hypervisor, you do not need to install an agent. However, the hypervisor must be managed by a VMware vCenter 5.0 management server. IBM Flex System Manager VMControl would manage the VMware environment through VMware vCenter. You can discover the VMware vCenter server from the IBM Flex System Manager management software directly.

For more information about discovering VMware vCenter and ESXi managed hosts, see the following topic:

http://pic.dhe.ibm.com/infocenter/flexsys/information/topic/com.ibm.acc.8731.doc/com.ibm.director.vim.helps.doc/fsm_discovering_vmware_vcenter_and_managed_esxi_hosts.html

The IBM Flex System product documentation is also available on the IBM Flex System Manager management node. To access the installed documentation, click Information Center from the IBM Flex System Manager Home page and then navigate to: IBM Flex System information→Management devices and solutions→IBM Flex System Manager management node→ Managing resources→Managing virtualized resources→VMControl→Managing virtual servers