Release Notes for Oracle Fabric Manager, 4.1.1

These release notes document information about the current release of Oracle's Fabric Manager GUI interface. These notes contain the following sections:

- What's New in This Release on page 2
- System Requirements on page 2
- System Limitations and Restrictions on page 3
- Documentation Additions, Omissions, and Erratum on page 6
- Downloading Fabric Manager Software on page 14
- Known Problems on page 16
- Accessing Oracle Support on page 24


Note

Also, upgrade paths are supported from version 3.3.2 and later. If you want to upgrade from a version earlier than 3.3.2, upgrade to at least version 3.3.2, then upgrade to version 4.1.1. For information about the supported upgrade paths to Fabric Manager 4.1.1, see Supported Upgrade Paths on page 13.

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Overview

Oracle Fabric Manager is a GUI for managing one or more Fabric Managers, host servers, and virtual I/O. Fabric Manager is supported as either a standalone management platform or as a plug-in to VMware VirtualCenter or vSphere if Fabric Manager is integrated into the VMware product.

Customers and partners are requested to send comments and report bugs by filing a customer case. You can contact Oracle as documented in Accessing Oracle Support on page 24.


Note

You can configure and manage the Fabric Interconnect through either Fabric Manager or the XgOS CLI. The choice of using either Fabric Manager or XgOS is completely up to you. However, some considerations exist for using both XgOS and Fabric Manager to configure or manage certain features. For more information see, Fabric Manager Assumes Ownership of QoS, LUN Masks, and Default Gateways on page 5.

What's New in This Release

This release of Fabric Manager was enhanced to support multiple server HCA ports (GUIDs) per Fabric Interconnect. So, for example, only port per server an HA Fabric Interconnect environment, 4 or more ports per server are supported in an HA Fabric Interconnect environment. This enhancement allows high-end servers such as the Oracle T5 and M5 servers to take full advantage of processing power by supporting multiple HCA ports for the same server.

System Requirements

This section documents system requirements for the Oracle Fabric Manager, such as server operating systems and browsers that Fabric Manager supports.

Operating Systems

Fabric Manager is supported by loading the Fabric Manager software on a host server, which then acts as the Fabric Manager Server providing graphical management of Fabric Interconnects, servers, and virtual resources. Fabric Manager is supported on any of the following host server platforms.

- RHEL 5 Update 2 and later and equivalents, such as CentOS® 5 Update 2 through Update 6.
- Microsoft® Windows Server 2003 R2 with SP2 (32- or 64-bit architectures)
- Microsoft Windows Server 2008 (32- or 64-bit)
- Microsoft Windows Server 2008 R2

In addition to these hosts, Fabric Manager can run in a Linux or Windows virtual machine in a VMware ESX server.

Browsers Supported for Fabric Manager

For interoperability with Fabric Manager, supported browsers include:

- Mozilla® Firefox 11.0 and later, with all cumulative security updates
- Microsoft Internet Explorer 8 and later, with all cumulative security updates. Any version of Internet Explorer less than 7.0 is not supported.
- Java Runtime Environment (JRE) 1.6

For best results, a minimum screen resolution of 1280 x 900 DPI is recommended when using Fabric Manager 3.0.0 or later.

System Limitations and Restrictions

This section documents system limitations and restrictions for this release of Fabric Manager.

Health Analyzer and Performance Monitoring are not Backwards Compatible

The Performance Monitoring plug-in version 1.1.0 and the Health Analyzer plug-in version 1.0.0 are not backward compatible. As a result, if these plug-ins are installed in Fabric Manager 4.1.1, and you downgrade, or upgrade to a lower version of Fabric Manager, the GUI will not be able to locate the files since they do not exist in the object model.

If either, or both, of these plug-ins is installed in Fabric Manager 4.1.1 and you need to downgrade, or upgrade to a lower version of the GUI, you will need to follow this procedure:

Step 1 Take a manual backup of your Fabric Manager configuration, as documented in the Fabric Manager User's Guide.

Step 2 In the Installed Applications Summary, select the Health Analyzer and Performance Monitoring plug-ins and click Uninstall.

Step 3 Log in to the Fabric Manager server's OS.

Step 4 Delete the `xms/pluginstore/healthanalyzer` files and directories:

```
rm xms/pluginstore/healthanalyzer *
```

Step 5 Perform the downgrade of Fabric Manager.

Step 6 If required, install the plug-ins that are supported for that version of Fabric Manager (for example, Performance Monitoring 1.0.2 on Fabric Manager 4.0.x

Fabric Manager Can Restore Configurations Backed Up from the Same Version Only

Fabric Manager 4.1.1 contains new objects, which were not present in Fabric Manager version 3.3.1 and earlier. As a result of these new objects, any Fabric Manager configuration backed up in Fabric Manager 3.3.1 or earlier cannot be restored in Fabric Manager 4.1.1. Configurations backed up in Fabric Manager 4.1.1 can be restored in Fabric Manager 4.1.1.

In some cases, you might need to restore the configuration—for example, in the unlikely event of an error during upgrade to Fabric Manager 4.1.1. In such a case, you would want to restore the previous configuration. If you need to restore a configuration backed up in a pre-4.1.1 version of Fabric Manager, follow this procedure:

Step 1 If Fabric Manager 4.1.1 is currently installed, completely uninstall it.

Step 2 Install the version of Fabric Manager that matches the version of the backed up configuration. For example, for a Fabric Manger 3.3.1 configuration, you would need to install Fabric Manager 3.3.1 software.

Step 3 Restore the pre-4.1.1 configuration.

Step 4 Upgrade Fabric Manager to the new version.

With Domain Management, the Same User Cannot Belong to Multiple Domains

With Fabric Manager's Domain Manager feature, you can create domains out of the default domain. Each domain can be assigned to a specific group or function. For example, you could create a finance domain, an engineering domain, and so on. When domains are created through Fabric Manager, users and groups can be created, and roles can be assigned, with the net result being that access to each domain can be controlled.

Fabric Manager is designed so that the same user cannot belong to more than one domain. As a result, if you need to create a user in multiple accounts, that user must be different. For example, for the user Dave that needed to belong to the finance and engineering domains, you would need to create two different users for Dave, such as `DaveFin` and `DaveEng`.

Compatibility of XgOS and Fabric Manager 3.0.0 and Later

If an object is not understood by Fabric Manager 3.0.0 and later, Fabric Manager does not interpret and display that object. Fabric Manager 3.0.0 and later has been tested for backwards compatibility with Fabric Interconnects running XgOS version 2.8.2 and later. Do not use Fabric Manager 3.0.0 or later with any Fabric Interconnects running an XgOS version older than 2.8.2.

Fabric Manager 3.0.0 and later is forward compatible with XgOS versions greater than 2.8.2.

Some Objects Can Be Renamed in Fabric Manager, But Others Cannot

Some objects in Fabric Manager can be successfully renamed without causing any unpredictably in them or their related features. However, some features cannot be renamed. The following list shows the objects in Fabric Manager that can be successfully renamed. If Fabric Manager objects are not in this list, do not attempt to rename them:

Renamable objects are:

- Network or Storage Clouds
- I/O Templates
- Users
- Role Group Mappings
- Domain Group Mappings
- Boot Profiles

To Enable a LUN Mask, It Must Be Specified at vHBA Creation Time

If you want to enable a LUN Mask on a vHBA, you must make sure that the LUN Mask exists and is available to the vHBA at vHBA creation time. If a vHBA does not have a LUN Mask associated with it at the time the vHBA is created, the *Allow LUN Mask* option is disabled for that vHBA, which will prevent adding and enabling a LUN Mask on the vHBA later.

Fabric Manager Assumes Ownership of QoS, LUN Masks, and Default Gateways

When Fabric Manager is used to configure or manage virtual resources, it assumes ownership the following aspects of virtual resources by design:

- Network QoS
- SAN QoS
- LUN Masks
- Default Gateways
- Private vNICs

Therefore, if you attempt to configure or manage the listed features from the XgOS CLI, the changes will occur successfully on the Fabric Interconnect, but will not propagate to Fabric Manager. The end result is that you will not see the configuration changes if you are managing the Fabric Interconnect through Fabric Manager. If you will be using the listed features in your data center, it is strongly recommended that you use Fabric Manager to configure them if Fabric Manager is your virtual I/O management platform.

For vNICs, vHBAs, and all other features, you can mix configuration and management through the XgOS and Fabric Manager.

Fabric Manager Requires Specific Ports to be Available

Be aware that Fabric Manager requires the following ports to be open and available to Fabric Manager:

- 80 and 443 for communication between the Fabric Manager Server and Fabric Interconnects.
- 8880 and 8443 must be open and not assigned to another server in order to allow remote management through Fabric Manager.

If these ports are blocked or otherwise not available to Fabric Manager, configuration will not occur, and tables and other dialogs will not contain any data. For example, attempting to scan for Fabric Interconnects or servers will cause no Fabric Interconnects or servers to be displayed.

User Guides

User guides for the Fabric Manager are available as PDFs and can be downloaded from the Oracle Technical Network at: http://docs.oracle.com/cd/E38500_01/index.html.

The following product documentation is available for the Oracle Fabric Interconnect and Oracle Fabric Manager:

- *Fabric Interconnect Hardware and Host Drivers Installation Guide*
- *XgOS Software Upgrade Guide*
- *XgOS Command-Line User Guide*
- *Remote Boot Guide*
- *Fabric Manager User Guide*
- *Fabric Accelerator Quick Start Guide*
- *Fabric Performance Monitor User Guide*
- *XgOS vNIC Switching Configuration Guide*

Documentation Additions, Omissions, and Erratum

The following sections provide additional text, text for functionality that was accidentally omitted from documentation, or clarification of incorrect text.

Documentation Additions

The following text supplements the text in the latest version of the *Fabric Manager User Guide, 4.1.0*.

Fabric Manager 4.1.1 Enhancement for T5 and M5 Servers

In previous versions of Fabric Manager, the GUI assumed that one server profile per Fabric Interconnect would be connected to a server. This meant that in an HA Fabric Interconnect deployment, a maximum of two Server Profiles could be connected to server. And, Fabric Manager would no longer be able to attach any more Server Profiles to any subsequent HCA ports on that server.

However, with the release of Oracle's robust and powerful T5 and M5 servers, these high-powered hosts (and others like them) have the processing power to support more than 2 Server Profiles. If you attempted to connect more than 2 Server profiles on a T5 or M5 server, you could easily exhaust the bandwidth of the HCA port connection.

To support high-powered T5 and M5 servers in Fabric Manager, multiple server profiles per Fabric Interconnect for each server HCA port. To support this new feature, you must follow a special configuration procedure, which follows.

The procedure takes the follow phases:

1. Create one I/O Profile (either manually or through an I/O Template).
2. Connect the I/O Profile to a server with 4 ports.
3. Create one I/O Profile (either manually or through different I/O Template). It is critical that this I/O Profile is not connected to anything. This second I/O Profile must be created in `disconnected` state.

Note

You do not necessarily need to create a different I/O Template but you do need a second I/O Profile. What is important is that the vNICs and vHBAs are uniquely named in each of the I/O Profiles.

If you use the same I/O Template to create a second I/O Profile, make sure that the vNICs and vHBAs have different names in each I/O Profile.

4. Connect the second I/O Profile to the same server that has the first I/O Profile.

The specific procedure for this configuration is documented later in this section.

Considerations

Be aware of the following considerations with this new feature:

- Two I/O Profiles are required.
- Any vNICs and vHBAs in the two I/O Profiles must be uniquely named. The same vNIC or vHBA name cannot be used in both I/O Profiles.
- If you add another vNIC or vHBA from Fabric Manager after both I/O Profiles are merged, the new vNIC or vHBA will be added on either of the Server Profiles on that chassis where the vNIC or vHBA is terminated. As a result, vNIC and vHBAs are randomly assigned to either I/O Profile but cannot deterministically be assigned ed to a specific I/O Profile.

Procedure: Connecting a Server to Multiple HCA Ports

Assuming you have cabled a T5 or M5 server (or another server that has 4 or more server ports) to Fabric Manager, and that Fabric Manager sees the Fabric Interconnect and the server, you can connect the server as follows:

Note

This procedure assume that you are creating an I/O Profile from an I/O Template. If you will be creating the I/O Profile manually, you can start the procedure at Step 5 on page 8.

Step 1 In the Physical Server Summary, locate the server with multiple ports/GUIDs. It will be the server that has 4 or more IB ports displayed on the Fabric Interconnect—for example, Figure 1.

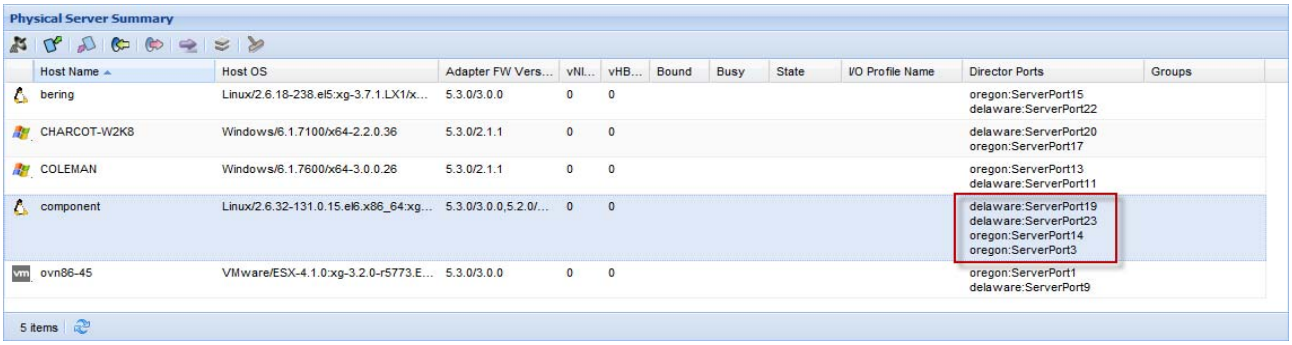

Figure 1 Locating the Server

Step 2 Under Server Resource Manager on the navigation pane, select I/O Templates to display the I/O Template Editor.

Step 3 In the *Name* field, enter the name for the I/O Template that you are creating. If the server will boot through PXE iSCSI or PXE SAN Boot, select the name of the iSCSI Boot or SAN Boot profile from the corresponding dropdown menu.

Step 4 Create the I/O Template for the I/O Profile. (For information about creating an I/O Template, see the *Fabric Manager User Guide, 3.8.0*.)

Note

When the I/O Template is created, click ***Save*** to save the template to the Fabric Manager server.

Step 5 Under Server Resource Manager on the navigation pane, select I/O Profiles to display the I/O Profile Summary.

Step 6 On the I/O Profile Summary, click the green plus sign (+) to display the Create I/O Profile dialog as shown in Figure 2.

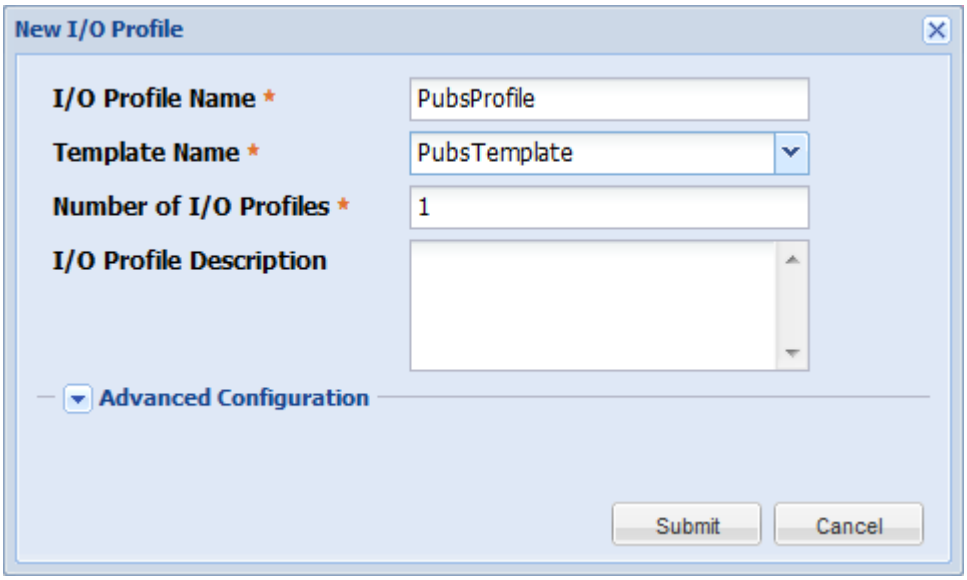

Figure 2 New I/O Profile Dialog

Step 7 In the *I/O Profile Name* field, enter the name for the I/O Profile that you are creating.

Step 8 From the *Template Name* dropdown menu, select the I/O Template you created earlier in this procedure.

Step 9 In the *Number of I/O Profiles* field, select the number of profiles that you want to be derived from this I/O Template.

Step 10 As an option, in the *Description* field, you can provide a description for the I/O Profile you are creating.

Step 11 When the I/O Profile parameters are specified, click ***Submit*** to finish creating the I/O Profile(s) which will appear in the I/O Profile Summary.

Step 12 On the I/O Profile Summary, select the I/O Profile you just created. This step activates the toolbar buttons. See Figure 3.

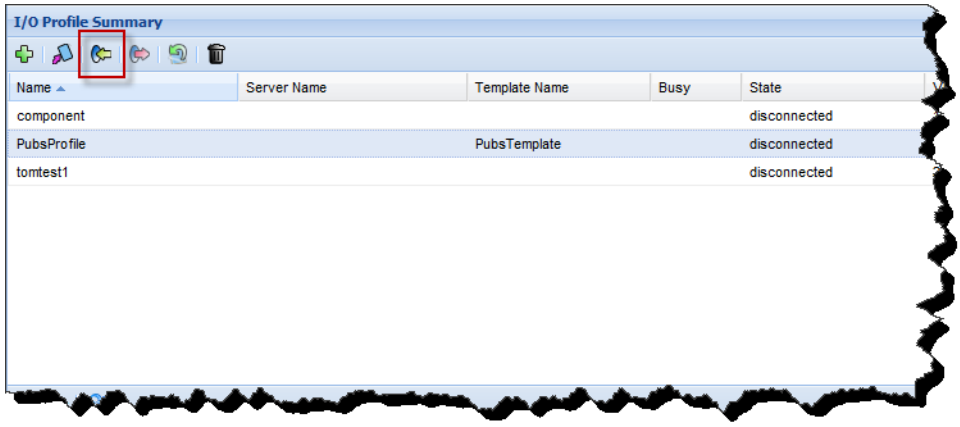

Figure 3 I/O Profile Summary

Step 13 On the toolbar, click ***Connect the Selected I/O Profile to a Physical Server***, as shown in Figure 3 to display the Choose a Server to Connect dialog. See Figure 4.

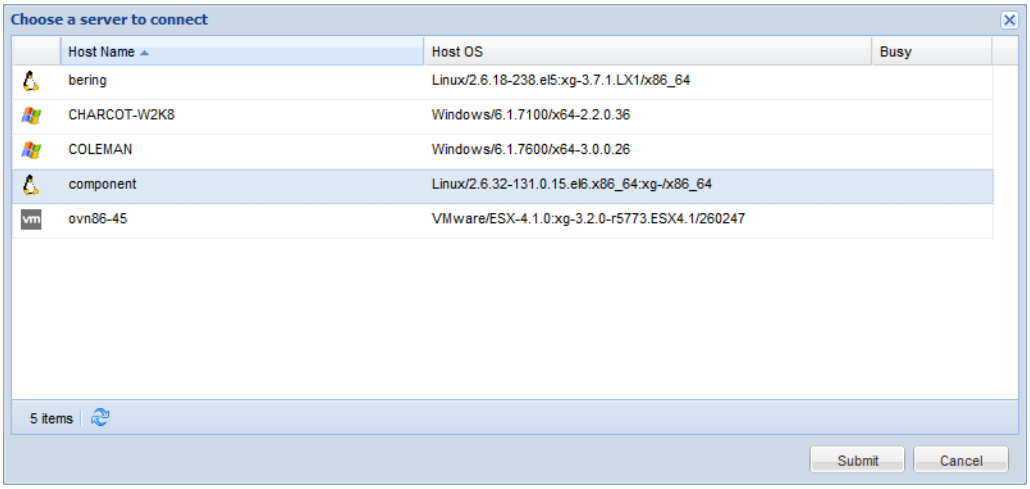

Figure 4 Choose a Server to Select

Step 14 On the Choose a Server to Connect dialog, select the T5/M5 server. This step activates the ***Submit*** button.

Step 15 Click ***Submit*** to push the I/O Profile to the selected server. When a confirmation dialog is displayed, click ***Yes*** to accept deploying the I/O Profile.

The first I/O Profile should be connected to the server as shown in Figure 5.

Figure 5 I/O Profile Summary — First I/O Profile Connected to T5/M5 Server

Step 16 Create the second I/O Profile by repeating Step 5 on page 8 through Step 10 on page 9. Figure 6 shows an example of creating the second I/O Profile from the same I/O Template.

Caution

When you create the second I/O Profile (either from the same I/O Template or a completely different one), make sure that the vNICs are named differently between the two I/O Profiles, and make sure that the vHBAs are named differently between the two I/O Profiles.

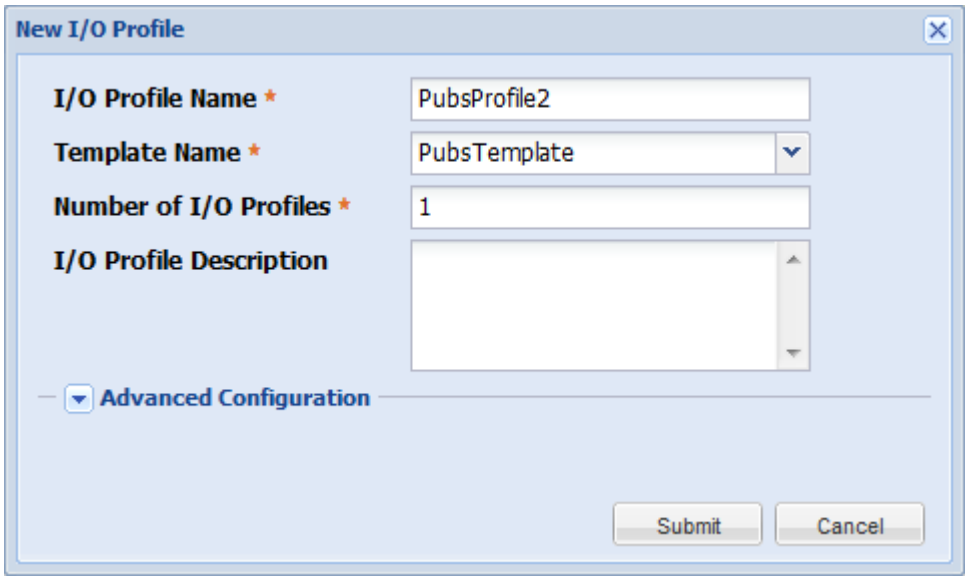

Figure 6 Creating the Second I/O Profile from the Second I/O Template

Step 17 When the parameters for the second I/O Profile are specified, click ***Submit*** to finish creating the I/O Profile(s).

The second I/O Profile appears in the I/O Profile Summary in `disconnected` state, which is correct and required to connect the second I/O Profile to the T5/M5 server. See Figure 7.

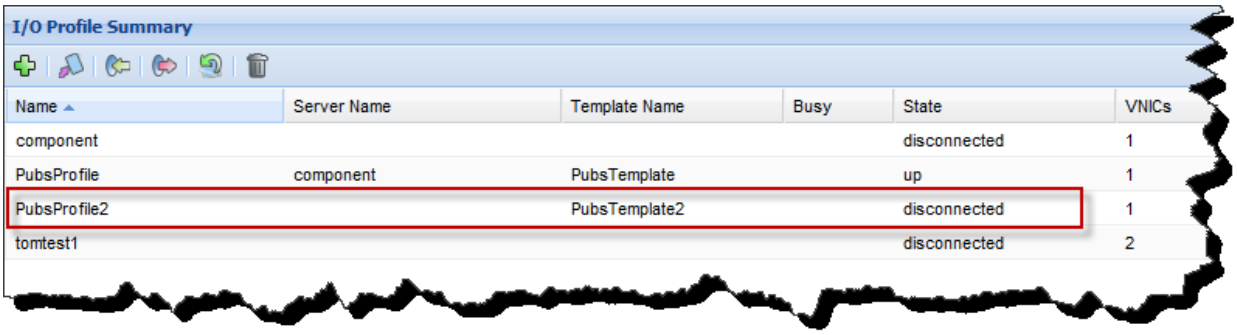

Figure 7 I/O Profile Summary — Second I/O Profile for the T5/M5 Server

Step 18 On the I/O Profile Summary, select the disconnected I/O Profile. This step activates the toolbar buttons.

Step 19 On the toolbar, click ***Connect the Selected I/O Profile to a Physical Server*** to display the Choose a Server to Connect dialog. See Figure 8.

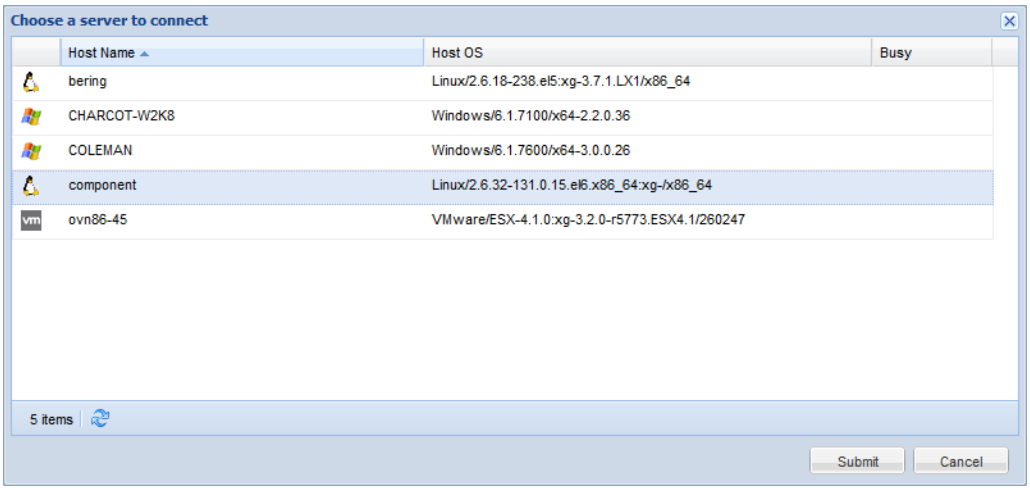

Figure 8 Choose a Server to Select

Step 20 Select the same T5/M5 server where the first I/O Profile was connected.

Step 21 Click ***Submit*** to connect the second I/O Profile to the T5/M5 server.

On the I/O Profile Summary, both I/O Profiles will be displayed for a short time. The second I/O Profile will transition through some state changes, typically from disconnected to down and down to up.

When the state changes are complete, the second I/O Profile will merge into the first so that only one I/O Profile shows connected to the server. The one I/O Profile will be in up state. See Figure 9.

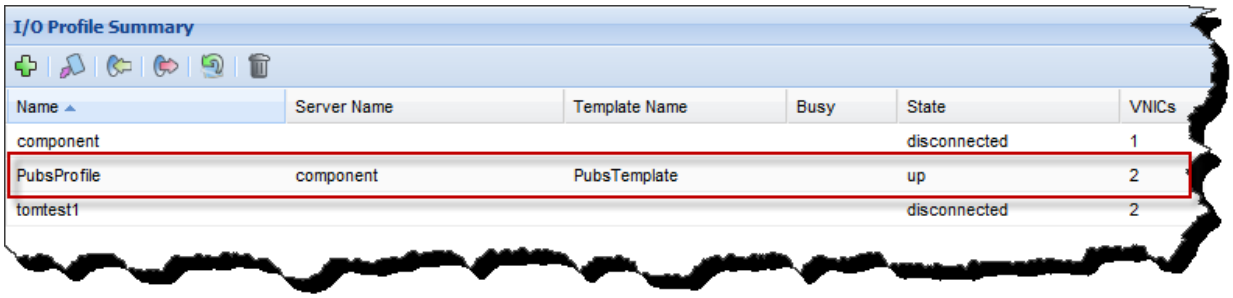

Figure 9 I/O Profile Summary — I/O Profiles Merged

You can verify that the two I/O Profiles merged by checking the vNICs and vHBAs columns on the I/O Profile Summary. The total shown should be the sum of the vNICs and vHBAs in each of the I/O Profiles.

Unmanage, then Manage a Fabric Interconnect Recovers Some Objects in Fabric Manager

In this version of Fabric Manager, unmanaging then managing a Fabric Interconnect recovers the following objects:

- Ports or LAGs are restored to the correct Network Cloud.
- I/O Template information is restored to its associated I/O Profile(s).
- vNICs and vHBAs are restored to the correct Network or Storage Cloud.
- HA vNICs or HA vHBAs are restored, but only if the I/O Profile that contains them is connected to a server at the time the Fabric Interconnect was unmanaged and remanaged.


Note

If you unmanage, then remanage a Fabric Interconnect in Fabric Manager, physical servers that were part of a Server Group are not put back into the Server Group when the Fabric Interconnect is remanaged.

Supported Upgrade Paths

The following upgrade paths are supported in this release of Fabric Manager software:

- From version 3.3.2 to 4.1.1. This upgrade path is also supported with Performance Monitor 1.0.1 upgraded to Performance Monitoring 1.0.2.
- From version 4.0.0 to 4.1.1. This upgrade path is also supported with Performance Monitor 1.0.2 upgraded to Performance Monitoring 1.1.0.
- From version 4.0.1 to 4.1.1. This upgrade path is also supported with Performance Monitor 1.0.1 upgraded to Performance Monitoring 1.0.2.
- From version 4.0.2 Beta to 4.1.1. This upgrade path is also supported with Performance Monitor 1.0.1 upgraded to Performance Monitoring 1.0.2.

All upgrade paths are supported on the following operating systems:

- Windows Server 2003 (32- and 64-bit architectures).
- Windows Server 2008 (32- and 64-bit architectures).
- Windows Server 2008 R2
- Red Hat Enterprise Linux 5 (32-bit and 64-bit distributions)
- Red Hat Enterprise Linux 6 (32-bit and 64-bit distributions)


Note

When upgrading from an older version of Fabric Manager to a newer version, clean up any completed jobs from the Job Summary in the old version of Fabric Manager software before upgrading. For more information, see Upgrading to New Fabric Manager Software.

Downloading Fabric Manager Software

You can download Fabric Manager software from the Oracle Support portal. To download Fabric Manager, you need access to the Oracle support site. You can request a user name and password for the Oracle Support Portal by contacting Oracle Technical Assistance through any of methods documented in Accessing Oracle Support on page 24.

Note

Certain upgrade paths are supported in this release of Fabric Manager. For information, see Supported Upgrade Paths on page 13.

This section contains documentation for:

- Upgrading to New Fabric Manager Software
- Downloading Software
- Getting Documentation

Downloading Software

You can get software for this version of XgOS from My Oracle Support:

Step 1 Point your browsers to support.oracle.com and log in to display the MOS Dashboard.

Step 2 On the Dashboard, click the Patches and Updates tab.

Step 3 In the Patch Search tab, click Search->Product or Family to display the search dialog. See Figure 10.

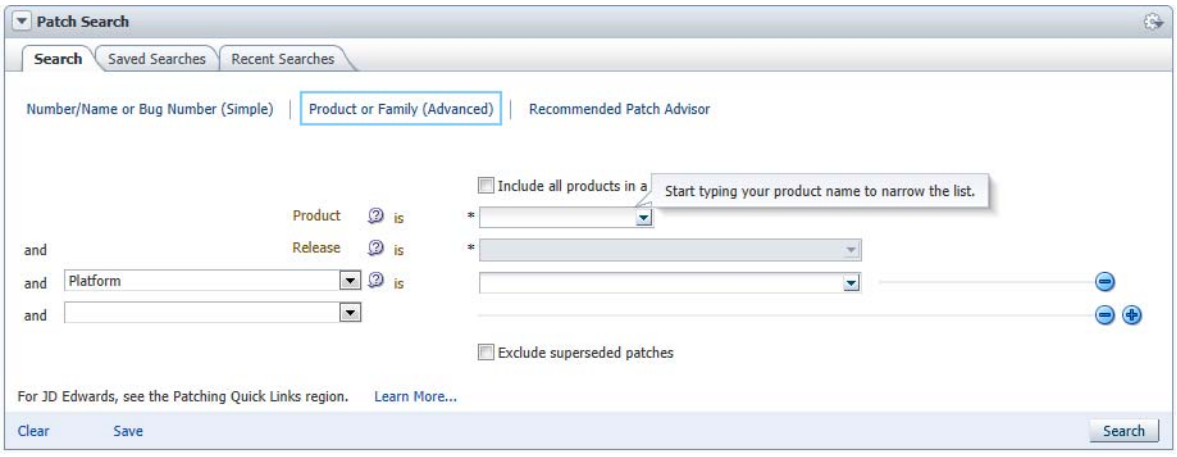

Figure 10 My Oracle Support — Searching to Find Product

Step 4 In the *Product is* field, enter “Oracle Fabric Manager.” This field will auto-fill when enough characters are entered to make the string unique.

Step 5 In the *Release* is field, enter “4.1.1”. This field will auto-fill when enough characters are entered to make the string unique.

Step 6 When these fields contain the product and release, click Search.

Step 7 On the resulting table, click the row containing the 4.1.1 software and select ***Download*** the software onto the Fabric Manager server.

Step 8 When the new Fabric Manager software is on the Fabric Manager server(s), install it by running the **`rpm -ivh`** command (Linux), or double-clicking the setup.exe (Windows). Additional information can be found in the "Installation" chapter of the *Fabric Manager User Guide, Release 4.1.0*.

Upgrading to New Fabric Manager Software

If you are upgrading from a previously installed version of Fabric Manager to the current version, it is a best practice to delete any old jobs from the Jobs Status summary before upgrading to the newer version. Doing so ensure removes them from the database and ensures a streamlined upgrade.

Step 1 In the older version of Fabric Manager, display the Jobs Summary (***General->Jobs Status->Clean up Completed Jobs***) as shown in Figure 11.

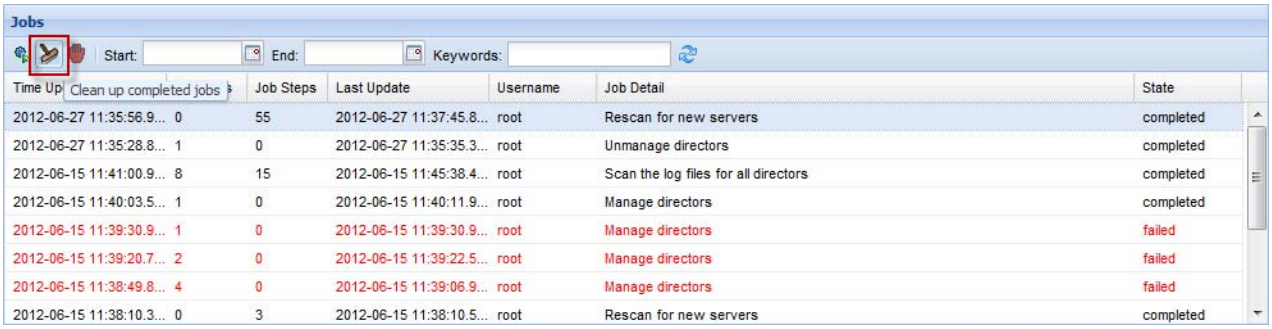

Figure 11 Clean Up Completed Jobs in "Old" Fabric Manager Before Upgrading to "New" Fabric Manager

Step 2 When all jobs are cleaned up, log out of Fabric Manager.

Step 3 Proceed to the next section to download the Fabric Manager software.

Getting Documentation

Oracle Fabric Manager documentation is available as PDF files on the Oracle Technical Network (OTN) at http://docs.oracle.com/cd/E38500_01/index.html.

On that web site, scroll down until you find the document that you need, then click the ***Download*** button to pull the document to your web browser.

Known Problems

This section documents the known problems.

- Table 1 lists the known problems in this release of Fabric Manager.
- Table 2 lists the known problems in this release of Health Analyzer.
- Table 3 lists the known problems in this release of VMware Integrator Plug-in.

For Performance Monitoring known problems and fixes, see *Release Notes, Fabric Performance Monitoring, 1.1.0*.

Fabric Manager Known Problems

This release of Fabric Manager has the following known problems.

Table 1 Known Problems in Fabric Manager 4.1.1

Number	Description
17155908	If the Fabric Manager Server is busy connecting an I/O Profile to a server, the user interface still shows the same server as available for more operations even though it is busy. User interface objects also show that the server is available even though it is really busy and cannot accept additional operations, such as connecting another I/O Profile, until the current job has completed. Oracle recommends waiting for 10 seconds or more after each I/O Profile connect operation before attempting a new operation.
17086315	If you have created two I/O Profiles and connected them to a dual-port HCA, Fabric Manager merges them together into one I/O Profile. When you backup the current configuration, the merged I/O Profile is saved. However, when you restore the backed up configuration, a problem causes the two I/O profiles to split apart into two separate I/O profiles. Also, any HA vNICs or Ha vHBAs in the I/O Profile become unpaired and are represented as single vNICs or vHBAs. After restoring a configuration with merged I/O Profiles, be aware that you will need to reconnect those I/O Profiles to the dual-port HCA so that the I/O Profiles are re-merged.
17067098	When you create an HA vNIC through Fabric Manager, a cosmetic problem causes the HA vNICs to appear as “active” on both Fabric Interconnects. The actual functionality of the HA vNICs is not affected, and traffic flows as expected. Also, the secondary vNICs shows the auto-switchover state when this flag is set on the primary vNIC only.
17059047	For servers with dual HCA cards, Fabric Manager allows you to create and apply one I/O Profile with and iSCSI Boot Profile and one I/O Profile with a SAN Boot Profile. In this case, Fabric Manager should allow only one I/O Profile type to be attached to the server, but a problem allows both the iSCSI and SAN Boot Profiles to be attached. Because Fabric Manager does not allow only one I/O Profile type to be attached, you can boot off of either, which can make the server’s boot source and OS image not consistent.

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
17049268	If you were running Fabric Manager 4.1.0 that has Network QoS configured for a Network Cloud attached to a server, a problem causes that Network Cloud to show the QoS as disabled after an upgrade to Fabric Manager 4.1.1. This problem is cosmetic only because the Network QoS policing is actually still enforced even though Fabric Manager (and the XgOS on the Fabric Interconnect) show QoS as disabled.
16338208	A problem can cause Internet Explorer 8 browser to post a page error sometimes when you attempt to log in after a failed apply template job. If a template apply fails, and you log out of Fabric Manager, when you attempt to log back in a page error occurs on the Performance Board. The problem prevents the speedometer on the dashboard and Topology pages from displaying speeds for network and storage traffic. This issue occurs only when Fabric Manager is used through an Internet Explorer8 browser. IE 8 and later and Firefox browsers do not experience this problem.

16338120	In larger deployments with one Fabric Interconnect, using Fabric Manager to get log files from the Fabric Interconnect times out with the following error message:
	`Time Created:2012-11-19 15:18:05.134`
	`Last Updated:2012-11-19 15:23:18.713`
	`Job Name:GetLogFiles`
	`Job Detail:Get log files from director 192.168.1.1`
	`State:failed`
	`Detail Status:Failed to get log files 2012.11.19.15.18.05-xsigo-logs-192.168.1.1.tar.gz.`
	
	This problem is seen when Fabric Manager is managing one Fabric Interconnect and 100 or more servers.
	
	You can work around this issue by running the get-log-files command directly from the Fabric Interconnect.

16337880	The Fabric Manager servers can sometimes fail to connect to the PostgreSQL database when using IP address and host name. If you are seeing an error message similar to the following, you will need to allow remote connections to the PostgreSQL server database: `“Failed to connect to database: FATAL: nopg_hba.conf entry for host “<host IP>”, user “<username>”’` To ensure that Fabric Manager can connect to PostgreSQL predictably, set the database server to accept remote connections. Either get your security admin to configure this functionality, or follow this procedure which is the same for a Linux or Windows Fabric Manager server: **Step 1** Open C:\Program Files\PostgreSQL\9.1\data\pg_hba.conf **Step 2** At the end of the file, add your subnet or the system IP that is trying to access the data base: • For the DATABASE option, set “all” • For the USER option, set “all” • For the ADDRESS option, set the IP address and mask of the Fabric Manager server(s)—for example, 192.1.68.1.12/24

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
16337855	If Fabric Performance Monitoring 1.0.2 or earlier is installed on a Fabric Manager 4.0.2 (or earlier) server, and you then upgrade to Fabric Manager 4.1, the Fabric Performance Monitoring 1.0.2 software is uninstalled from the *Apps* folder in the navigation frame, and the Installed Apps Summary shows the software present, but with a "version mismatch" in the Status column. At this point, Fabric Performance Monitoring 1.0.2 is unusable. You can work around this issue by uninstalling the Fabric Performance Monitoring 1.0.2 software and installing the Performance Monitoring 1.1.0 software.
16337774	If an HA vNIC is configured and terminated on the same Fabric Interconnect, attempting to migrate it from one server to another can operate unpredictably. When you attempt to migrate resources, a problem sometimes causes about half of the selected virtual resources to be migrated, but the rest remain on the original server(s) and are not migrated.
16337563	If you have an I/O Template with 6 or more different PVI vNICs and each is terminated on its own PVI cloud, a problem can prevent successful creation of an I/O Profile from that template. In rare circumstances when that template issued to create an I/O Profile, one of the PVI vNICs does not get the right PVI network termination and the I/O Profile creation job is listed as failed.
16337500	In a High Availability Fabric Manager setup with Fabric Performance Monitoring installed, both of the HA servers must be configured with the same time zone. If not, the gathering and display of statistics (which are based on internal timestamps) can become unpredictable.
16337487	In a Fabric Manager High Availability setup, if you want to upgrade the plug-ins on the passive node, you must first set the passive node to "active." However, when this state change happens, the last backup is restored on the newly active server, which can lead to version incompatibilities. Whenever you restore a backup (either explicitly or implicitly by promoting a passive server to active), you must first make sure that the same version of Fabric Manager and plug-ins are installed on both of the HA partners.
16337441	The Performance Monitoring plug-in version 1.1.0 and the Health Analyzer plug-in version 1.0.0 are not backward compatible. As a result, if these plug-ins are installed in Fabric Manager 4.1.1, and you downgrade, or upgrade to a lower version of Fabric Manager, the GUI will not be able to locate the files since they do not exist in the object model. As a result, you will need to perform a specific procedure to downgrade your Fabric Manager server. For information, see Fabric Manager Assumes Ownership of QoS, LUN Masks, and Default Gateways on page 5.
16337234	Fabric Manager 4.1.1 does not contain help text for the High Availability Fabric Manager feature. For information about this new feature, see the *Fabric Manager User Guide, Release 4.1.0*.
16337207	In a High Availability Fabric Manager setup, both the active and passive servers must point to the same backup location. However, the user interface does not prevent configuring a different backup location for the active server and the passive server. If both servers use different backup locations, the same configuration will not be shared by the active and passive servers, sync up will not occur between them, and the high availability functionality will not work.
16336818	Domain enforcement should allow only the super user (root account) to be supported across multiple domains. However, a problem in Fabric Manager allows domain users to access other domains in which they should not have permissions.

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
16336757	If a PVI is `up/up` when a Fabric Interconnect is unmanaged, Fabric Manager does not display the PVI with a red X to indicate that the PVI is no longer managed. Be aware that this behavior is different than for other objects that become unmanaged, such as I/O Templates.
16336741	When a large number of a single I/O Profile exist, connecting some of the higher numbered I/O Profiles sometimes fail. For example, if you have created 17 I/O Profiles from the same I/O Template, and you then attempt to connect the 17th I/O Profile to a server, sometimes the connection attempt fails.
16336735	In Server Cloud view of the Fabric Manager Topology, a problem can cause not all Sever Groups to be displayed after a Fabric Interconnect is unmanaged, then remanaged. This problem occurs when no servers are present in the Server Group. If you will be unmanaging, then remanaging a Fabric Interconnect when Server Groups are configured, make sure to note the server groups before unmanaging a Fabric Interconnect. After the Fabric Interconnect is remanaged, you can then recreate any missing server group.
16336725	In a single chassis, single server connection deployment, if an I/O Profile with HA vNICs or HA vHBAs is created from an I/O Template, Fabric Manager attempts to connect the I/O Profile but cannot. As a result, some of the I/O Profiles will get assigned and some will not because HA connectivity is not supported on a single chassis with a single server connection which introduces a possible single point of failure. You can work around this issue by creating two separate vNICs and two separate vHBAs directly from the physical server instead of from the I/O Template, then merging them into an HA vNIC and an HA vHBA: • For vNICs: *Server Resource Manager->Physical Server* details->*vNICs* tab->*Convert a pair of vNICs into an HA vNIC* • For vHBAs: *Server Resource Manager->Physical Server* details->*vHBAs* tab->*Convert a pair of vHBAs into an HA vHBA*
16336720	A bug in the Group Role Mapping feature accidentally allows the storage role to added to storage, compute, or network roles. The problem occurs when network, storage, or compute roles are configured then edited. Whichever role you edit first is added to the next role groups, even if you do not change anything in the first role. For example, assume you have network, storage, and compute roles configured. If you click ***Edit*** and unlock the storage role, then cancel without making any changes, the storage role is added to network or compute if then edit them. Be aware that the first role opened for editing is added to other roles that are opened for editing. You can avoid this problem by deleting a role and recreating it instead of editing the role.

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
16336716	In an HA Fabric Interconnect environment, a problem prevents the correct re-termination of HA vNICs if a server's I/O Profiles were created through the XgOS CLI. Consider the following scenario. You create and connect a Server Profile on Director A and Director B through each director's CLI for server "twister". Then, through Fabric Manager, you create an HA vNIC and terminate it on a Network Cloud that has ports only from Director A. In this scenario, if you attempt to change the HA vNIC's cloud termination to ports on Director B, the HA vNIC will not be correctly re-terminated. In this scenario, only the primary vNIC comes online. The secondary does not, and as a result, you do not have an HA network connection for the server. If you will need to change the termination of an HA vNIC, create the HA vNIC as follows: **Step 1** Add and connect the Server Profile on only one Director (for example, Director A). In this case, only one Server Profile connection exists (Director A). Because Director B does not have a Server Profile connection at this point, the HA vNIC to will connect and come up correctly after it is re-terminated onto the cloud for Director B. **Step 2** Create two Network Clouds, one cloud with the ports from Director A and the cloud with ports from Director B. **Step 3** Add the HA vNIC to the Network Cloud with ports from Director A. **Step 4** Change the HA vNIC termination to the cloud for Director B. The primary and secondary vNICs both come online predictably.
16336710	When Storage and Network Clouds have been created and contain at least one port, if you unmanage and remanage the Fabric Interconnect that contains those ports, sometimes additional ports are added back to the clouds when the Fabric Interconnect is remanaged.
16336633	When an HA vHBA is created and deployed to a server, if then unmanage and remanage the Fabric Interconnect, the HA vHBA is no longer truly an HA vHBA. When Fabric Manager is remanaged, the HA vHBA is split into two separate vHBAs. You can work around this problem by selecting the two individual vHBAs on the physical server, then merging them back into an HA vHBA through the ***Merge vHBAs into an HA vHBA*** toolbar button on the Physical Servers *vHBAs* tab.

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
16336574	There is currently no validation for the *Description* field. Because the text has no character limit, the *Description* field can be longer than the displayable area in the *Description* text box in the GUI. As a result, you might not be able to read the entire description in the *Description* text box. This issue occurs in the *Description* field on the following pages: • resource domains • schedules • Storage Clouds • Network Clouds • gateways • server groups • I/O Templates • I/O Profiles
16336399	During testing, on one occasion Fabric Manager and Fabric Interconnects it was managing got out of sync while I/O Profiles were being deleted and at least one of the Fabric Interconnects Fabric Manager was managing was being rebooted. If you encounter this rare occurrence, restarting the Fabric Manager service fixed the problem.
16336360	If you create a Network QoS Profile from the XgOS CLI, that profile appears as `null` in the Fabric Manager Network QoS Summary.
16336358	If a Network Cloud has the same ports, a secondary vNIC in an HA vNIC will not come online successfully if the I/O Profile for that HA vNIC is not attached to a server at the time it was created.
16334877	In this release, the Windows version of Fabric Manager has not been digitally signed. As a result, when you run the Windows Fabric Manager installer, you are prompted with a security warning that notifies you that the package being installed might be untrusted.
16334665	The Windows installer for Fabric Manager allows incompatibility between 32/64 bit Java and 32/64 bit Fabric Manager. If the incompatibility exists (for example, 32-bit Java and 64-bit Fabric Manager installer), the installer hangs.The failure is deceptive because the installer appears to complete because it runs through Step 5, and the progress bars show “Finished.” At this point, you will think that the software is installed successfully. However, when you click ***Next***, the installer hangs at the Setup Shortcuts dialog, and you cannot progress to the end of the installer; you can only quit. In addition, there is no compatibility check between the architecture of Java and Fabric Manager, so there is no warning that incompatibility exists between Fabric Manager and its underlying Java. You can avoid this problem by making sure that only compatible versions of Java and Fabric Manager are used. You can work around this issue by halting the installer, uninstalling the incompatible Fabric Manager and installing the compatible version of Fabric Manager.

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
16334498	For Fabric Manager running on 64-bit Windows Server 2008 servers, if you use the Windows server's Install or Change Programs option to upgrade Fabric Manager (for example, ***Control Panel->Programs and Features->Uninstall or Change a Program***), any previously installed version of Fabric Manager remains. This problem occurs because the Fabric Manager registry information is not getting cleaned up, and as a result, the older versions of Fabric Manager will still be present after the upgrade. You can work around the problem by deleting the old Fabric Manager entry from the registry: **Step 1** Open the Registry Editor on the server, and select: `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\` **Step 2** Delete the older Fabric Manager entry, making sure to keep the newest instance of Fabric Manager.
16333972	After a template with a SAN Boot or iSCSI Boot is assigned to a server, there is no way to edit the boot properties of the Boot Profile: You can work around this problem by: **Step 1** Removing the Boot Profile from the server **Step 2** Deleting the Boot Profile **Step 3** Recreating the Boot Profile with the required changes **Step 4** Re-assigning the new Boot Profile to the server
16333895	If a Fabric Interconnect is discovered and managed in Fabric Manager, and you change the Fabric Interconnect's system hostname through the XgOS, Fabric Manager can no longer track or display statistics for that Fabric Interconnect. You can work around this issue by using the following procedure to rename a Fabric Interconnect: **Step 1** Unmanage the Fabric Interconnect. **Step 2** Use the XgOS to set the new name. **Step 3** Manage the chassis with the new name through Fabric Manager.
16333816	With the Group Role Mapping feature, a problem allows you to successfully complete the following management operations, when in fact should not be allowed to: • add multiple Group Role Mappings with the same group • add different security roles to same group • add the same group with the same security roles multiple times With the Group Domain Mapping feature, a problem allows you to successfully complete the following management operations, when in fact should not be allowed to: • add multiple Group Domain Mappings with the same group • add different domains and to same group • add the same domains to the same group multiple times.

Table 1 (continued) Known Problems in Fabric Manager 4.1.1

Number	Description
16333673	When integrating Fabric Manager into VMware vSphere, it is possible for the integration to silently fail if the Fabric Manager server's hostname is not entered as a fully qualified domain name (FQDN) for DNS. When you encounter the problem, two conditions occur: • the Fabric Manager plug-in is shown as successfully integrated when it actually is not. • Fabric Manager displays no message that the integration failed because the hostname could not be resolved. Due to these conditions, you have no way of knowing that the Fabric Manager server has not been integrated into vSphere. When you log into vSphere, Fabric Manager is not present, and you will not easily be able to determine why it is missing. You can avoid this problem by always specifying the Fabric Manager server's hostname as an FQDN when integrating Fabric Manager into vSphere. You can work around this problem by deleting the configuration, and re-integrating Fabric Manager by specifying a FQDN for the Fabric Manager Server.

Health Analyzer Known Problems

This release of Health Analyzer is the first release. This release contains the following known problem.

Table 2 Known Problems in Risk Analyzer 1.0

Number	Description

16338249	In a multi-Director environment, running Health Analyzer can take longer than 5-minutes to gather log information off depending on the amount of vNICs and vHBAs configured on each Fabric Interconnect. This length of time triggers a 5-minute timer in the system which terminates the command. As a result, the Health Analyzer fails scanning. This problem has been observed rarely, but it is possible.
	You can work around this problem by following this procedure:
	Step 1 Log in to each Fabric Interconnect, and run the get-log-file command from the XgOS:
	`get-log-files healthanalyzer.tar -all -cores`
	Step 2 Gzip the healthanalyzer.tar file, and copy it to your local workstation:
	`scp <your-machine-name> healthanalyzer.tar.gz`
	Step 3 On your local workstation, browse to Fabric Manager's Health Analyzer and upload `healthanalyzer.tar` as an "Offline Scan"

16337475	On Windows Fabric Manager servers, queries in Health Analyzer for information other that versions, are not displayed after scanning logs. This problem occurs because Gzip is a requirement for the log scanner utility, and Gzip does not ship with the Windows OS on which the Fabric Manager is running. Because Gzip is not shipped with Windows, be aware that some query results will be different between Windows and Linux Fabric Manager servers.

VMware Integrator Plug-In Known Problems

This release of VMware Integrator plug-in is the first release. This release contains the following known problems.

Table 3 Known Problems in VMware Integrator Plug-In 1.0

Number	Description
16338062	In vSphere 5.1, if a distributed vSwitch already exists, you cannot create MAC-based QoS entry for a VM adapter that is terminated on Port Groups in the dvSwitch. In vSphere 4.1 and 5.0 this is supported, but in vSPhere 5.1 you cannot create a MAC-based entry for *existing* vSwitches. Instead, in vSPhere 5.1, you can create a MAC-based QoS entry only if you have *created* the vSwitch.
16338017	On very rare occasions, the VMware Integrator plug-in loses the ESX Server list and its related data. To recover from this error, you must do a Load Data action on each ESX Server that is not displayed in the list.

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