

Release Notes for Oracle's Fabric Manager, Version 4.1.0

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

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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 4.1.0. For information about the supported upgrade paths to Fabric Manager 4.1.0, see [Supported Upgrade Paths](#) on page 8.

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Overview

Oracle Fabric Manager is a GUI for managing one or more Fabric Interconnects, 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 through the Xsigo Technical Support web portal (<http://support.xsigo.com>). Oracle is fully committed to responding to all feedback regarding our product and greatly appreciates customer involvement. If you need to contact Oracle Technical Support, you can facilitate your interaction with Technical Support by first gathering some troubleshooting information. See [page 22](#).



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 6](#).

What's New in This Release

This release of Fabric Manager contains the following new features:

- Support for High Availability (HA) Fabric Manager. HA Fabric Manager is a system of two Fabric Manager servers (one passive server, and one active server) that work together to provide a highly available management platform for the Oracle Fabric Interconnect(s) and the physical hosts and virtual machines connected to them. With this new feature, in the unlikely event that the original active server goes offline, the passive server can be promoted to the active role to allow management and configuration of your network with minimal downtime. For more information, see the “High Availability Fabric Manager” chapter in the *Fabric Manager User's Guide, Release 4.1.0*.
- Enhancements were made to the SSL certification process for Fabric Manager servers. These enhancements provide a streamlined way of getting CSRs created and imported onto the Fabric Manager server(s) in your network. For more information, see the “High Availability Fabric Manager” chapter in the *Fabric Manager User's Guide, Release 4.1.0*.
- Beta support for Health Analyzer. This new feature provides a way of scanning the Fabric Manager server and Fabric Interconnects to determine errors or misconfigurations (if any), and report them in an easy-to-use format. Since this is the first version of Fabric Manager to support this new plug-in, be aware that if you downgrade Fabric Manager, or upgrade to a version of Fabric Manager lower than 4.1.0, this plug-in will not work. For information see, the *Fabric Manager Health Analyzer User Guide, Release 1.0.0*.
- Fabric Performance Monitoring has been updated with resource domain functionality. With this enhancement, the Fabric Performance Monitoring plug-in is now context-sensitive for individual domains you create instead of reporting for only one large domain. For information about the new functionality of Fabric Performance Monitoring, see the *Fabric Manager Performance Monitoring User Guide, Release 1.1.0*.
- The `xms.log` has been deprecated. In this release, the `xms.log` file is now named `xms.log.<num>`. If you need to consult the `xms.log` file for any reason, you should look for the largest numbered log which will be the most current. For example, you would want to look for `xms.log.9` which is more current than `xms.log.8`.

- Support for VMware Integrator plug-in. The VMware Integrator allows easy configuration and management of Xsigo vNICs in a VMware vSwitch. With this new plug-in, Fabric Manager seamlessly integrates with VMware's vCenter/vSphere management platform. For more information, see *Fabric Manager VMware Integrator User Guide, Release 1.0.0*.
- Fixes were added. See [Fixed Problems](#) on page 21.

System Requirements

This section documents system requirements for the Oracle Fabric Interconnect, 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 2.0 and later, with all cumulative security updates
- Microsoft Internet Explorer 7.0 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 4.1.0, 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 4.1.0 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 XMS 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 4.1.0 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 4.1.0. Configurations backed up in Fabric Manager 4.1.0 can be restored in Fabric Manager 4.1.0.

In some cases, you might need to restore the configuration—for example, in the unlikely event of an error during upgrade to Fabric Manager 4.1.0. In such a case, you would want to restore the previous configuration. If you need to restore a configuration backed up in a pre-4.1.0 version of Fabric Manager, follow this procedure:

- Step 1 If Fabric Manager 4.1.0 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 Manager 3.3.1 configuration, you would need to install Fabric Manager 3.3.1 software.
- Step 3 Restore the pre-4.1.0 configuration.
- Step 4 Upgrade Fabric Manager to the new version.

Secondary vNIC in an HA vNIC Stays up/resourceUnavailable in One Case

When creating an I/O Profile without actually attaching it to a server, Fabric Manager has a limitation that causes it to create HA vNICs in two different server profiles during the I/O Profile creation. However, while the I/O Profile is being

connecting to a server, there is only one server connection between server and chassis. As a result, only one server profile can be connected, and the other cannot, which in turn causes the second vNIC to not come up in a cloud that has the same chassis ports.

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.
- If phone-home (ProWatch) is used, 6522 for communication between the Fabric Manager Server and the Fabric Interconnect. HTTPS is not supported between the Fabric Manager Server and the Fabric Interconnect for phone home, but phone home data is encrypted in 64-bit DES through a proprietary mechanism. No keys are exchanged.

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 Interconnect and Fabric Manager are available on CD for shipments to new customers, and can be downloaded from the Xsigo Technical Support web portal.

The following Fabric Interconnect product documentation is available in PDF format:

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

You can download these manuals by logging in to the Xsigo Technical Support portal (www.xsigo.com/support) and clicking the “Documentation” tab on toolbar at the top of the page. You will need a login and password to access the Xsigo Technical Support portal. See [page 22](#).

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 Addition

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

For HA Fabric Managers, Configure the Same Backup Location for Both Servers

In a High Availability Fabric Manager setup, both the active and passive servers must point to the same backup location so that the backed up configuration is deposited to the same place that the passive node looks for it. If both servers use different backup locations, the same configuration will not be shared between both servers, thus eliminating the high availability functionality. Make sure to configure the same backup location for a pair of HA Fabric Manager servers.

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 4.1.0. 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 4.1.0. 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 4.1.0. 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 4.1.0. 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

For new shipments, the Fabric Manager software is included on a CD. For additional updates, you can download Fabric Manager software from the Xsigo Technical Support portal. To download Fabric Manager, you need access to the Xsigo support site. You can request a user name and password for the Xsigo Support Portal by contacting Xsigo Technical Assistance through any of methods documented in [Technical Support Contact Information](#) on page 22.



Certain upgrade paths are supported in this release of Fabric Manager. For information, see [Supported Upgrade Paths](#) on page 8.

This section contains documentation for either:

- [Upgrading to New Fabric Manager Software](#)
- [Known Problems](#)

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 1](#).

Time Up	Clean up completed jobs	Job Steps	Last Update	Username	Job Detail	State
2012-06-27 11:35:58.8...	0	55	2012-06-27 11:37:45.8...	root	Rescan for new servers	completed
2012-06-27 11:35:28.8...	1	0	2012-06-27 11:35:35.3...	root	Unmanage directors	completed
2012-06-15 11:41:00.9...	0	15	2012-06-15 11:45:38.4...	root	Scan the log files for all directors	completed
2012-06-15 11:40:03.5...	1	0	2012-06-15 11:40:11.9...	root	Manage directors	completed
2012-06-15 11:39:30.9...	1	0	2012-06-15 11:39:30.9...	root	Manage directors	failed
2012-06-15 11:39:20.7...	2	0	2012-06-15 11:39:22.5...	root	Manage directors	failed
2012-06-15 11:38:49.8...	4	0	2012-06-15 11:39:06.9...	root	Manage directors	failed
2012-06-15 11:38:10.3...	0	3	2012-06-15 11:38:10.5...	root	Rescan for new servers	completed

Figure 1 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.

Downloading Software

You can get software for this version of XgOS from [Oracle's Software Delivery Cloud](#).

Oracle's Software Delivery Cloud

You can download this version of XgOS through Oracle's Software Delivery Cloud (also called "edelivery").



Note

To access the Oracle Software Delivery Cloud, you will first need to get a user account and password. To get a user account and password, please follow the instructions on <https://edelivery.oracle.com> which is the Oracle Software Delivery Cloud website.

Software is available through this method, but not documentation. For release notes for this release, see [Getting Documentation](#).

To get the software:

- Step 1 Point your browser to <https://edelivery.oracle.com>.
- Step 2 Log in with your account name and password.
- Step 3 Accept the terms and conditions of usage (if prompted) and click **Continue** to display the Media Pack Search page as shown in [Figure 2](#).

Select a Product Pack ⓘ
Platform

Figure 2 Searching for Oracle Virtual Networking Software

- Step 4 From the *Select a Product Pack* dropdown menu, select Oracle Virtual Network.
- Step 5 From the *Platform* dropdown menu, select any value. For Fabric Manager software, the platform does not matter.
- Step 6 Click **Go** to display the result of your search.
- Step 7 On the resulting page, locate Oracle Fabric Manager - 4.1.0 and select either the Windows or Linux version (whichever is needed for your environment). [Figure 3](#) shows the downloadable Fabric Manager software for version 4.0.2 as an example.

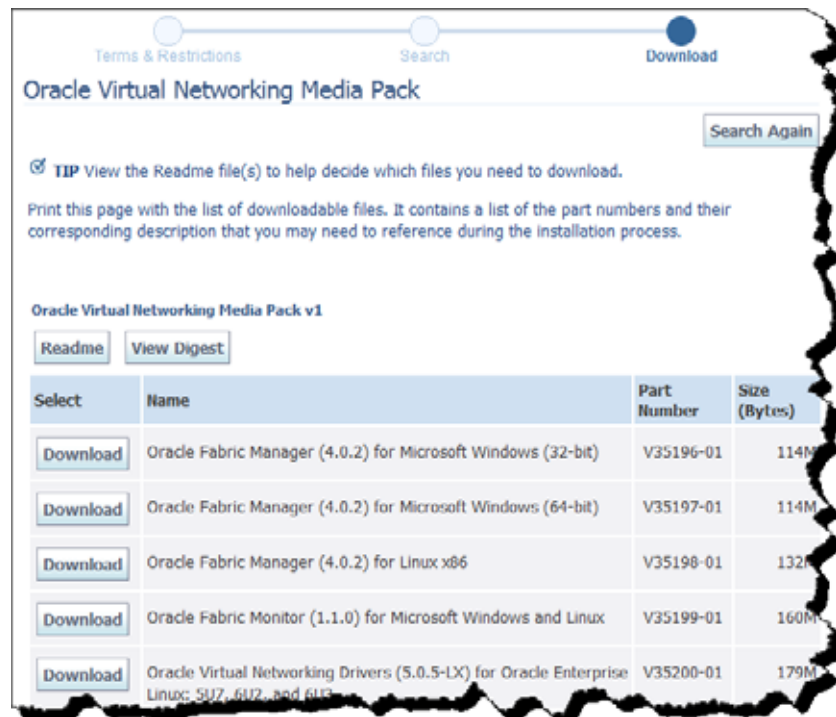


Figure 3 Oracle's eDelivery Cloud — Fabric Manager Software

- Step 8 Click the **Download** button to get the Fabric Manager software. Download it to a network-accessible node in your network.
- Step 9 Using file copy, SCP, or another file transfer protocol, copy the Fabric Manager software from the network-accessible node to the Fabric Manager server(s).
- Step 10 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*. (To download documentation, see [Getting Documentation](#).)

Getting Documentation

Xsigo documentation for this release is on the Xsigo ServiceWorks website. If you are looking for software, you will need to download it by using the procedure documented in either of the previous sections.

To download documentation:

- Step 1 Point your browser to <http://www.xsigo.com/supportdlc/>
- Step 2 On the left navigation panel, click the *Oracle – Xsigo Product Documentation* link as shown in figure [Figure 4](#).



Figure 4 Getting Documentation for Software

Step 3 On the resulting page, scroll down to the *Release Notes* section.

Step 4 Find the documentation for this version of software, and click the link to display the PDF.

Known Problems

This section documents the known problems.

- [Table 1](#) lists the known problems in this release of Fabric Manager.
- [Table 2](#) on page 20 lists the known problems in this release of Health Analyzer.
- [Table 3](#) on page 20 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 4.1.0

Number	Description
23084	A problem can cause Internet Explorer 7 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 Explorer 7 browser. IE 8 and later and Firefox browsers do not experience this problem.

Table 1 (continued) Known Problems in Fabric Manager 4.1.0

Number	Description
22996	<p>In larger deployments with one Fabric Director, using Fabric Manager to get log files from the Fabric Director times out with the following error message:</p> <pre>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.</pre> <p>This problem is seen when Fabric Manager is managing one Fabric Director and 100 or more servers.</p> <p>You can work around this issue by running the get-log-files command directly from the Fabric Director.</p>
22755	<p>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:</p> <pre>"Failed to connect to database: FATAL: nopg_hba.conf entry for host "<host IP>", user "<username>"</pre> <p>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:</p> <p>Step 1 Open C:\Program Files\PostgreSQL\9.1\data\pg_hba.conf</p> <p>Step 2 At the end of the file, add your subnet or the system IP that is trying to access the data base:</p> <ul style="list-style-type: none"> • 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, 192.168.1.12/24
22730	<p>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 <i>Apps</i> 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.</p> <p>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.</p>
22649	<p>If an HA vNIC is configured and terminated on the same Fabric Director, 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.</p>

Table 1 (continued) Known Problems in Fabric Manager 4.1.0

Number	Description
22438	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.
22375	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.
22362	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.
22315	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 4.1.0, 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 6.
22107	Fabric Manager 4.1.0 does not contain help text for the High Availability Fabric Manager feature. For information about this new feature, see the <i>Fabric Manager User Guide, Release 4.1.0</i> .
22106	The help text in Fabric Manager 4.1.0 contains help text for the previous release of the VMware Integrator tool. The new version of VMware Integrator is not included in the online help for Fabric Manager 4.1.0. For information about this new feature, see the <i>Fabric Manager User Guide, Release 4.1.0</i> .
22080	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.
21687	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.
21626	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.
21610	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.

Table 1 (continued) Known Problems in Fabric Manager 4.1.0

Number	Description
21604	<p>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.</p> <p>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.</p>
21594	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> For vNICs: <i>Server Resource Manager->Physical Server details->vNICs tab->Convert a pair of vNICs into an HA vNIC</i> For vHBAs: <i>Server Resource Manager->Physical Server details->vHBAs tab->Convert a pair of vHBAs into an HA vHBA</i>
21589	<p>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.</p> <p>You can avoid this problem by deleting a role and recreating it instead of editing the role.</p>

Table 1 (continued) Known Problems in Fabric Manager 4.1.0

Number	Description
21585	<p>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.</p> <p>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.</p> <p>If you will need to change the termination of an HA vNIC, create the HA vNIC as follows:</p> <p>Step 1 Add and connect the Server Profile on only one Director (for example, Director A).</p> <p>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.</p> <p>Step 2 Create two Network Clouds, one cloud with the ports from Director A and the cloud with ports from Director B.</p> <p>Step 3 Add the HA vNIC to the Network Cloud with ports from Director A.</p> <p>Step 4 Change the HA vNIC termination to the cloud for Director B. The primary and secondary vNICs both come online predictably.</p>
21579	<p>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.</p>
21502	<p>When an HA vHBA is created and deployed to a server, if then unmanage and remanage the Fabric Director, the HA vHBA is no longer truly an HA vHBA. When Fabric Manager is remanaged, the HA vHBA is split into two separate vHBAs.</p> <p>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.</p>

Table 1 (continued) Known Problems in Fabric Manager 4.1.0

Number	Description
21443	<p>There is currently no validation for the <i>Description</i> field. Because the text has no character limit, the <i>Description</i> field can be longer than the displayable area in the <i>Description</i> text box in the GUI. As a result, you might not be able to read the entire description in the <i>Description</i> text box. This issue occurs in the <i>Description</i> field on the following pages:</p> <ul style="list-style-type: none"> • resource domains • schedules • Storage Clouds • Network Clouds • gateways • server groups • I/O Templates • I/O Profiles
21430	<p>In the Fabric Manager GUI, names have been changed as documented in What's New in This Release on page 2. However, in the Fabric Manager file system, the term “xms” is still used. As a result, objects on the Fabric Manager server (for example directories) and command syntax will still use “xms.”</p>
21268	<p>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.</p> <p>If you encounter this rare occurrence, restarting the Fabric Manager service fixed the problem.</p>
21229	<p>If you create a Network QoS Profile from the XgOS CLI, that profile appears as <code>null</code> in the Fabric Manager Network QoS Summary.</p>
21227	<p>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. For more information, see Secondary vNIC in an HA vNIC Stays up/resourceUnavailable in One Case on page 4.</p>
19746	<p>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.</p>
19534	<p>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 <i>Next</i>, 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.</p> <p>You can avoid this problem by making sure that only compatible versions of Java and Fabric Manager are used.</p> <p>You can work around this issue by halting the installer, uninstalling the incompatible Fabric Manager and installing the compatible version of Fabric Manager.</p>

Table 1 (continued) Known Problems in Fabric Manager 4.1.0

Number	Description
19367	<p>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.</p> <p>You can work around the problem by deleting the old Fabric Manager entry from the registry:</p> <p>Step 1 Open the Registry Editor on the server, and select:</p> <p style="padding-left: 40px;">HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\</p> <p>Step 2 Delete the older Fabric Manager entry, making sure to keep the newest instance of Fabric Manager.</p>
18841	<p>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:</p> <p>You can work around this problem by:</p> <p>Step 1 Removing the Boot Profile from the server</p> <p>Step 2 Deleting the Boot Profile</p> <p>Step 3 Recreating the Boot Profile with the required changes</p> <p>Step 4 Re-assigning the new Boot Profile to the server</p>
18764	<p>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.</p> <p>You can work around this issue by using the following procedure to rename a Fabric Interconnect:</p> <p>Step 1 Unmanage the Fabric Interconnect.</p> <p>Step 2 Use the XgOS to set the new name.</p> <p>Step 3 Manage the chassis with the new name through Fabric Manager.</p>
18685	<p>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:</p> <ul style="list-style-type: none"> • 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 <p>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:</p> <ul style="list-style-type: none"> • 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 4.1.0

Number	Description
18542	<p>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:</p> <ul style="list-style-type: none"> 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. <p>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.</p> <p>You can avoid this problem by always specifying the Fabric Manager server's hostname as an FQDN when integrating Fabric Manager into vSphere.</p> <p>You can work around this problem by deleting the configuration, and re-integrating Fabric Manager by specifying a FQDN for the Fabric Manager Server.</p>
14286	<p>When installing Fabric Manager on a Windows server, one of the steps in the installer is to check the available space against the space required for Fabric Manager.</p> <p>If the available space is close to the required space, installation fails with following error message:</p> <pre>Can not create the directory</pre> <p>You can avoid this problem by making sure that your Windows Fabric Manager server contains an ample amount of memory—for example 100 MB or more.</p> <p>You can work around this problem by installing more memory in the server if it does not have enough.</p>

Risk Analyzer Known Problem

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
23125	<p>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 Director. 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.</p> <p>You can work around this problem by following this procedure:</p> <p>Step 1 Log in to each Fabric Director, and run the get-log-file command from the XgOS:</p> <pre>get-log-files healthanalyzer.tar -all -cores</pre> <p>Step 2 Gzip the healthanalyzer.tar file, and copy it to your local workstation:</p> <pre>scp <your-machine-name> healthanalyzer.tar.gz</pre> <p>Step 3 On your local workstation, browse to Fabric Manager's Health Analyzer and upload healthanalyzer.tar as an "Offline Scan"</p>
22349	<p>On Windows Fabric Manager servers, queries in Health Analyzer for information other than 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.</p>

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
22938	<p>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 <i>existing</i> vSwitches. Instead, in vSphere 5.1, you can create a MAC-based QoS entry only if you have <i>created</i> the vSwitch.</p>
22893	<p>On very rare occasions, the VMware Integrator plug-in loses the ESX Server list and its related data.</p> <p>To recover from this error, you must do a Load Data action on each ESX Server that is not displayed in the list.</p>

Fixed Problems

Table 4 lists the fixes in this release of Fabric Manager.

Table 4 Fixed Problems in Fabric Manager 4.1.0

Number	Description
22604	If you attempted to create multiple I/O Profiles from an I/O Template with numerous vNICs, HA vNICs, vHBAs, and HA vHBAs, and at the same time attempted multiple other functions in Fabric Manager—such as connect, disconnect and delete I/O profiles—vNICs and vHBAs sometimes were not created successfully on the I/O Profiles which are still the process of getting created. This problem is fixed in Fabric Manager 4.1.0.
21636	Internet Explorer 7 and 8 sometimes displayed an error when PVI vNICs were being created from the I/O Template Editor, the Physical Server page, or the I/O Profiles page. This problem is fixed in Fabric Manager 4.1.0.
21634	When an I/O Profile with multiple vNICs and vHBAs was disconnected from a server through the Physical Server Summary, often the disconnect job completed unrealistically fast (there was no “busy” state), and the Job Status showed the disconnect job as “complete” even though the I/O Profile was still actually bound to the server. This problem is fixed in Fabric Manager 4.1.0.
21628	<p>In Windows Fabric Manager servers, the XMS log file (<code>xms.log</code>) had a problem with rolling the log when it was full. The problem occurred due to a file locking problem that causes <code>xms.log</code> to appear to Windows as open when it actually was not.</p> <p>This problem is fixed in Fabric Manger 4.1.0 by revising the logging system and deprecating the old <code>xms.log</code> file is deprecated. Now, XMS log files are named with a numerical suffix (for example, <code>xms.log.1</code>, <code>xms.log.2</code>, and so on). Be aware that because of the numerical suffix, the newest log file for Fabric Manager always has the largest number (for example, <code>xms.log.12</code> is the newest, and <code>xms.log.11</code> is the next newest).</p>
21590	A problem caused scheduled backups to sometimes delete older backup files whenever a new backup ran at its scheduled time. When the scheduled backup occurred, it gathered all files with the <code>scheduled_</code> prefix in the backup file’s name. If more scheduled backups existed than the maximum number of backups specified when the schedule was created, older files were deleted. This problem is fixed in Fabric Manager 4.1.0.
21584	When a vHBA was configured through Fabric Manager, then you used the XgOS CLI to clear the vHBA’s interface (<code>set vhba <name> -if=none</code>), the <i>Change a vHBA’s Port Termination</i> button on the Storage Clouds vHBAs tab became disabled and you could not change the port termination for the vHBA through the Storage Cloud. This problem is fixed in Fabric Manager 4.1.0.
21475	On some occasions, while attempting to delete multiple alarms in the Alarm Summary a network error caused the Fabric Manager client to intermittently lose connection with the Fabric Manager Server. This problem is fixed in Fabric Manager 4.1.0.
21440	With two Fabric Interconnects managed by Fabric Manager, a problem causes replication of targets and LUNs in LUN Masks on both Fabric Interconnects. For example, if you use the XgOS CLI to create a unique LUN Mask on each Fabric Interconnect, then use Fabric Manager to edit the LUN Mask on one of the Fabric Interconnects and add a target and LUN, the same target and LUN are added to the second Fabric Interconnect. This problem is fixed in Fabric Manager 4.1.0.

Table 4 (continued) Fixed Problems in Fabric Manager 4.1.0

Number	Description
21398	When a Fabric Interconnect was rebooted while under management by Fabric Manager, sometimes 2 connections were displayed to the server. This issue did not affect the ability to carry traffic to or from the server, but it could be confusing. This problem is fixed in Fabric Manager 4.1.0.
21315	In previous versions, Fabric Manager backup does not store information from the VMware integration page. As a result, if you integrated Fabric Manager into VMware's management platform (vCenter or vSphere), then backed up the Fabric Manager configuration, deleted everything, and did an uninstall and re-install, then restored the backup, your VMware integration information was not brought back into Fabric Manager. This problem is fixed in Fabric Manager 4.1.0.
20916	After Fabric Manager has been running for a period of time, log files sometimes grew to a size that exceeded the max memory that an internal process accepted. When this situation occurred, the get log files operation issued from Fabric Manager threw an exception. This problem is fixed in Fabric Manager 4.1.0.
20552	In an HA Fabric Interconnect environment, if you created 2 LUN Masks (one on each Fabric Interconnect), a problem caused both to use the same name instead of a unique name for each. As a result, if you wanted to assign one of the LUN Masks to a vHBA, you did not know which chassis' LUN Mask you were assigning because they both had the same name. This problem is fixed in Fabric Manager 4.1.0.
20469	A problem in Fabric Manager caused the list of cookies exchanged between the Fabric Manager Server and the browser to grow to a size that eventually exceeded the <code>maxHTTPheadersize</code> supported by the browser. The problem prevented some pages from displaying information. After logging out, sometimes only the background was displayed on the Login page. This problem is fixed in Fabric Manager 4.1.0.
18555	If you selected an existing Fabric Manager configuration, then performed multiple jobs (for example, unbinding and binding servers), then saved and restored the configuration, sometimes the backup configuration's Job Status changed from complete to active.

Technical Support Contact Information

Xsigo customers may contact support via the Xsigo website, telephone or e-mail. In order to expedite troubleshooting, all new support requests must be submitted via the Xsigo self-service portal at: <http://support.xsigo.com>. In addition to opening cases, the Xsigo Support Portal will allow you to update your support cases, download software, search for and view knowledge-base articles, and access technical documentation.

In order to access the customer support portal, you will need to have a Xsigo Support Portal login. Your account team will provide you with the necessary login information to access the support portal. If you need additional logins for your staff, please contact your account team for assistance.

For all Critical (P1) cases, please call the Xsigo support center at **866-974-4647** (toll free) or **1 408-736-3013** (international). Alternatively, you can email supportP1@xsigo.com and you will be responded to within 30 minutes.

Gathering Information for Xsigo Technical Support

If the Fabric Manager Server encounters a problem, please gather the following information from the affected Fabric Manager Server(s) before contacting Xsigo Technical Support or filing a case through the support website:

- Information from the log files on the Linux Fabric Manager Server, which are in `/opt/xsigo/xms/logs`
- Information from the log files on the Windows Fabric Manager Server, which are in `Program Files\Xsigo\xms\logs`