



IBM Systems
IBM Director
Release Notes

Version 5.10 Update 2

April 2006





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Chapter 1. About this release

This document contains the release notes for IBM® Director 5.10 Update 2, also known as IBM Director 5.10.2.

See the IBM Director Web site for possible updates to these release notes and copies of the documents at www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/.

New in this release

This topic provides information about new features and enhancements in IBM Director 5.10 Update 2.

Additional hardware support

IBM Director 5.10 Update 2 provides new or reaffirmed support for the following hardware that can be managed using IBM Director.

IBM BladeCenter®

- IBM BladeCenter HS20 (Model 7981)
- IBM BladeCenter JS21
- IBM BladeCenter H Chassis
- IBM BladeCenter T Chassis

IBM IntelliStation®

- IBM IntelliStation A Pro Express
- IBM IntelliStation M Pro Express
- IBM IntelliStation Z Pro Express

IBM xSeries®

- IBM xSeries 100
- IBM xSeries 206m
- IBM xSeries 226
- IBM xSeries 306m
- IBM xSeries 3650T
- IBM xSeries 3800
- IBM xSeries 3850
- IBM xSeries 3950

Other hardware

- BladeCenter PCI I/O Expansion Unit II
- Brocade 4 GB Fibre Channel SAN Switch Module for BladeCenter
- Cisco® SFS 7008 InfiniBand Server Switch (ROHS compliant)
- Houston iSCSI daughtercard (ROHS compliant)

Additional operating systems supported for IBM Director Server and IBM Director Console installation

Notes:

IBM Director 5.10 Update 2 provides support for installing IBM Director Server and IBM Director Console on additional System i™, System p™, and xSeries servers.

1. IBM Director 5.10 Update 2 is not available for System z™; hence, no additional System z servers are supported in this release.
2. For a complete list of supported operating systems, see the following Web Pages:
 - IBM Systems Software Information Center: publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_r_requirements.html
 - IBM ServerProven®: www.ibm.com/servers/eserver/serverproven/compat/us/

xSeries servers

- Red Hat Enterprise Linux® AS and ES, version 3.0, for Intel® x86 (Update 6)

Note: For systems that contain an AMD Opteron or Athlon64 processor, Update 5 or later is required.

- Red Hat Enterprise Linux AS and ES, version 4.0, for AMD64 and EM64T (Updates 3 and 4)
- Red Hat Enterprise Linux AS and ES, version 4.0, for Intel x86 (Update 3)
- SUSE Linux Enterprise Server 9 for AMD64 and EM64T (Service Packs 2 and 3)
- SUSE Linux Enterprise Server 9 for x86 (Service Packs 2 and 3)
- Windows® Server 2003, Enterprise, Standard, and Web Editions (Release 2)
- Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Release 2)

System i servers

- i5/OS®, Version 5 Release 4
- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER™ (Update 3)
- SUSE Linux Enterprise Server 9 for IBM POWER (Service Pack 3)

System p servers

- i5/OS, Version 5 Release 4
- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER (Update 3)

Note: Update 3 is required for the IBM BladeCenter JS21.

- SUSE Linux Enterprise Server 9 for IBM POWER (Service Pack 3)

Note: Service Pack 3 is required for the IBM BladeCenter JS21.

Additional operating systems that can be managed by IBM Director

Unless stated otherwise, IBM Director 5.10 Update 2 provides Level-2 (IBM Director Agent), Level-1 (IBM Director Core Services), and Level-0 ("agentless") system management for the following additional operating systems.

Notes:

IBM Director 5.10 Update 2 provides support for installing IBM Director Server and IBM Director Console on additional System i, System p, and xSeries servers.

1. IBM Director 5.10 Update 2 is not available for System z; hence, no additional System z servers are supported in this release.
2. For a complete list of supported operating systems, see the following Web Pages:
 - IBM Systems Software Information Center: publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_r_requirements.html
 - IBM ServerProven: www.ibm.com/servers/eserver/serverproven/compat/us/

xSeries servers and Intel-compatible systems (32-bit operating systems)

- Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Updates 5 and 6)

Note: (Level-2 and Level-1 support only) For systems that contain an AMD Opteron or Athlon64 processor, Update 5 or later is required.

- Red Hat Enterprise Linux AS, ES, and WS, version 4.0 (Update 3)
- SUSE Linux Enterprise Server 9 for x86 (Service Packs 2 and 3)
- VMware ESX Server, version 2.5.2, with the following guest operating systems.

Note: IBM Director does not provide Level-0 or Level-1 support for these guest operating systems.

- Novell NetWare, version 6.5 (Service Pack 2 required)
- Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 5 required)
- Red Hat Enterprise Linux AS, ES, and WS, version 4.0 (Update 2 required)
- SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
- SUSE Linux Enterprise Server 9 for x86 (Service Pack 2 required)
- Windows 2000, Advanced Server and Server Editions (Service Pack 3 or later required)
- Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 required)
- Windows XP Professional Edition (Service Packs 1 and 2 required)
- Windows Server 2003, Datacenter, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for VMware ESX Server, version 2.1:
 - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Updates 5 and 6)
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for VMware ESX Server, version 2.5:
 - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Updates 5 and 6)
 - SUSE Linux Enterprise Server 9 for x86 (Service Packs 2 and 3)
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for VMware ESX Server, version 2.5.1:

- Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Updates 5 and 6)
- SUSE Linux Enterprise Server 9 for x86 (Service Packs 2 and 3)
- Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for VMware GSX Server, version 3.1:
 - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Updates 5 and 6)
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional host operating systems for VMware GSX Server, version 3.1:
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for VMware GSX Server, version 3.2:
 - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Updates 5 and 6)
 - Red Hat Enterprise Linux AS, ES, and WS, version 4.0 (Update 3)
 - SUSE Linux Enterprise Server 9 for x86 (Service Packs 2 and 3)
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional host operating systems for VMware GSX Server, version 3.2:
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for Microsoft® Virtual Server 2005:
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
- Additional guest operating systems for Microsoft Virtual Server 2005 (Service Pack 1):
 - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 2)
 - Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Service Pack 2)

xSeries servers and Intel-compatible systems (64-bit operating systems)

Note: IBM Director does not provide Level-1 support for Intel Itanium® operating systems.

- Red Hat Enterprise Linux AS, ES, and WS, version 3.0, for AMD64 and EM64T (Updates 1, 2, 3, 4, 5, and 6)
- **Level-0, Level-2 management only:** Red Hat Enterprise Linux AS, version 3.0, for Intel Itanium (Updates 1, 2, 3, 4, 5, and 6)
- Red Hat Enterprise Linux AS, ES, and WS, version 4.0, for AMD64 and EM64T (Updates 1, 2, 3, and 4)
- **Level-0, Level-2 management only:** Red Hat Enterprise Linux AS, version 4.0, for Intel Itanium (Updates 1, 2, 3, and 4)
- SUSE Linux Enterprise Server 9 for AMD64 and EM64T (Service Packs 1, 2, and 3)
- **Level-0, Level-2 management only:** SUSE Linux Enterprise Server 9 for Itanium Processor Family (Service Packs 1, 2, and 3)
- Windows Server 2003, Datacenter, Enterprise, Standard, and Web x64 Editions (Service Packs 1 and 2)
- **Level-0, Level-2 management only:** Windows Server 2003, Datacenter and Enterprise 64-bit Itanium Editions (Service Packs 1 and 2)

System i and System p servers

- **Level-0, Level-2 management only:** i5/OS, Version 5 Release 4

Note: Level-0 support includes Discovery, Remote Session and a limited subset of the Software Distribution task.

- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER (Update 3)
- SUSE Linux Enterprise Server 9 for IBM POWER (Service Pack 3)

Additional database versions supported for use with IBM Director

- Microsoft Data Engine (MSDE) 2000 Service Pack 4
- Microsoft SQL Server 2000 Service Pack 4

Note: Support for Service Pack 4 replaces the support previously provided for Service Pack 3a; users are encouraged to upgrade MSDE 2000 or Microsoft SQL Server 2000 to Service Pack 4.

Product fix history

This section describes the limitations and problems resolved by IBM Director 5.10 Update 2.

Authorized Program Analysis Reports

The following Authorized Program Analysis Reports (APARs) were resolved in IBM Director 5.10 Update 2:

IC48266

IBM Director Server does not gather inventory information for ServeRAID™ 8i controllers on xSeries servers running Windows.

IC48353

Powering on a virtual machine that has an attached disk with raw device mapping (RDM) fails while running IBM Director.

IC48414

Online help procedure for exporting resource monitors is incorrect.

IC48420

Software distribution fails when performed against multiple managed systems.

IC48594

The `Director.Topology.Online` event does not occur when encryption is enabled between IBM Director Server and IBM Director Agent.

IC48713

Sometimes IBM Director Server keeps open its connection to a BladeCenter Management Module, preventing access on the port by other applications, such as MPCLI and UpdateXpress.

BladeCenter chassis managed objects

The following limitations and problems affecting BladeCenter chassis managed objects were resolved in IBM Director 5.10 Update 2:

- Multicast discovery of chassis managed objects does not work on Linux systems.

Note: This function was fixed for Windows in IBM Director 5.10 Update 1.

- IBM Director does not discover or manage switches 5 - 10 in a BladeCenter H chassis managed object.
- The BladeCenter Configuration Manager task can sometimes cause IBM Director Console or IBM Director Server to hang.
- Applying a BladeCenter Configuration Profile to a switch fails when the switch does not already have an IP address and the profile attempts to change the IP address of the switch.
- A BladeCenter chassis managed object intermittently causes IBM Director Server to stop.

Discovery

The following limitations and problems affecting discovery of managed objects were resolved in IBM Director 5.10 Update 2:

- A Level-2 managed system with multiple network interface cards (NICs) is discovered as a single Level-0 managed system that cannot be promoted to Level-2 management with IBM Director. Manually adding a Level-2 managed system with multiple network interface cards (NICs) results in the managed system not being added, or being added incorrectly as a Level-0 or Level-1 managed system.
- Discovery of Level-0 managed systems might skip some addresses when a large number of addresses is specified by multiple unicast address ranges.
- Level-0 discovery and presence-check requests can trigger security policies on managed systems that disable accounts after failed login attempts.
- A Level-1 managed system running Windows Server 2003 appears in IBM Director Console as a Level-0 managed system and does not return inventory or hardware alerts.
- Adding a Level-2 managed system running Windows for Intel Itanium (64 bit) causes IBM Director Server running AIX® or Linux on a System i™ management server to stop.
- After adding a managed system that has a baseboard management controller (BMC), a physical platform managed object (PPMO) should be created for the BMC, but is not.

Documentation and online help

The following documentation and help problems were resolved in IBM Director 5.10 Update 2:

- Remote session help displays incorrect icon for Remote Session task.
- Missing help files for Profile Builder Mask Configuration.
- Incorrect help files displayed for Event Filter Builder windows.
- Incorrect help message is displayed for the Inventory Service Window.
- Event Action Plan Builder Customize Action help does not correctly list the actions.
- The IBM Director MPCLI documentation contains information about a command only available in the stand-alone version of MPCLI.
- The IBM Director MPCLI documentation does not inform users of the requirement to enclose negative-value operands (in other words, those preceded by a minus-sign) in quotation marks.

Hardware status

The following limitations and problems affecting hardware status reporting were resolved in IBM Director 5.10 Update 2:

- A power-supply failure event from a hardware management console (HMC) is listed only as "Hardware Problem."
- The fan status does not return to normal for some managed systems in IBM Director.

IBM Director Console

The following limitations and problems affecting IBM Director Console were resolved in IBM Director 5.10 Update 2:

- IBM Director Console incorrectly displays the "PMExeclDpw" error when Process Management is used to perform a command on a managed system with a nonexistent user ID.
- IBM Director Console stops when the user creates and saves a task under Process Management with no timeout value specified.
- Text color in Rack Manager does not change when the console text color is changed in the Console Preferences window.
- IBM Director Console takes a very long time to complete sign-on with IBM Director Server.

Inventory

The following limitations and problems affecting inventory operations were resolved in IBM Director 5.10 Update 2:

- Some inventory data is not collected for System z™ Level-1 managed systems.
- Inventory collection for Level-1 managed systems sometimes fails when inventory is being collected for multiple systems at the same time.
- The inventory task might perform slowly when collecting inventory on a Level-1 managed system running Linux on POWER.
- The Inventory task does not display the correct voltage regulator module (VRM) for managed systems running i5/OS.

Miscellaneous

The following additional limitations and problems were resolved in IBM Director 5.10 Update 2:

- The Event Action Plan Wizard incorrectly allows users to edit event action plans that were not created using the Event Action Plan Wizard.
- IBM Director Server sometimes has initialization problems after upgrading from IBM Director 4.22 to IBM Director 5.10.
- IBM Director returns an unhandled exception error when attempting to access a managed IBM TotalStorage® DS400 object.
- IBM Director leaves open numerous instances of the lsvpd process on Level-1 managed System p™ servers.
- Performing a manual presence check of a large number of managed objects simultaneously causes IBM Director Server on i5/OS or Windows management servers to shut down unexpectedly with an "out of memory" error.
- Events return a null system name for managed systems running Windows when the system name is longer than 14 characters.
- Requests to access Level-0 managed objects on a domain controller are very slow and can return failure messages before eventually succeeding.

- Creating a user password longer than 254 characters on a Level-2 managed system running Red Hat Linux causes IBM Director Agent to stop.
- Performing RAID configuration using ServeRAID Manager causes IBM Director Core Services to stop on a Level-1 managed system running VMware.

Chapter 2. Installation and upgrade information

General installation notes

This section provides general information about installing and upgrading to IBM Director Version 5.10 Update 2.

- You must download all upgrade packages for IBM Director Version 5.10 Update 2 from the IBM Director Web Site. This upgrade is not available on CD-ROM or other physical media. See “Obtaining upgrade packages” on page 10.
- IBM Director components that are upgraded to Version 5.10 Update 2 will have the version number 5.10.2.

See the *IBM Director Installation and Configuration Guide* for more installation information. Access this document from the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html.

Version compatibility of IBM Director components

As with previous versions of IBM Director, the following rules apply to the version compatibility of IBM Director components:

- The versions of IBM Director Server and IBM Director Console must be the same, even when they are installed on different systems.
- Components which are installed on the same system, such as IBM Director Console and IBM Director Agent, must have the same version.
- The version of IBM Director Server must always be equal or later than the version of any IBM Director Agent or IBM Director Core Services installed on managed systems.

These rules imply some practical consequences.

- If you upgrade to IBM Director Server 5.10 Update 2, you must upgrade all instances of IBM Director Console also.
- If you upgrade to IBM Director Agent 5.10 Update 2 or IBM Director Core Services 5.10 Update 2 on any managed system, you must upgrade both IBM Director Server and all instances of IBM Director Console.

Note: Since IBM Director Server on System z cannot be upgraded to 5.10 Update 2, you will not be able to manage IBM Director Agent 5.10 Update 2 or IBM Director Core Services 5.10 Update 2 using IBM Director Server on System z. Do not upgrade IBM Director Agent or IBM Director Core Services if management by IBM Director Server on System z is required.

- You *can* upgrade to IBM Director Server 5.10 Update 2 without necessarily upgrading all instances of IBM Director Agent or IBM Director Core Services.

See Table 1 on page 10 for a complete listing of compatible IBM Director component versions for each IBM Director 5.10 Update 2 component.

Table 1. Compatibility of IBM Director 5.10 Update 2 components with other component versions

| IBM Director 5.10 Update 2 component | Compatible versions of IBM Director Server | Compatible versions of IBM Director Console | Compatible versions of IBM Director Agent | Compatible versions of IBM Director Core Services |
|--------------------------------------|--|---|--|---|
| IBM Director Server 5.10.2 | N/A | 5.10.2 | 5.10.2, 5.10.1, 5.10, 4.22, 4.21, 4.20.2, 4.20, 4.12, 4.11, 4.10.2, 4.10 | 5.10.2, 5.10.1, 5.10 |
| IBM Director Console 5.10.2 | 5.10.2 | N/A | 5.10.2, 5.10.1, 5.10, 4.22, 4.21, 4.20.2, 4.20, 4.12, 4.11, 4.10.2, 4.10 | 5.10.2, 5.10.1, 5.10 |
| IBM Director Agent 5.10.2 | 5.10.2 and later | 5.10.2 and later | N/A | N/A |
| IBM Director Core Services 5.10.2 | 5.10.2 and later | 5.10.2 and later | N/A | N/A |

Other version configurations for IBM Director components are not supported.

Obtaining upgrade packages

Before beginning installation procedures, obtain the upgrade packages for all components that will be upgraded to Version 5.10 Update 2.

Note: IBM Director Console and IBM Director Server must always be the same version. When upgrading one, you must upgrade the other.

IBM Director Version 5.10 Update 2 is available on the following CD-ROM media:

- *IBM Director Version 5.10 Update 2 for Intel and AMD-based hardware*
- *IBM Director for AIX 5L™ Version 5.10 Update 2*
- *IBM Director for Linux on POWER Version 5.10 Update 2*

IBM Director Version 5.10 Update 2 is also available for download as described in the following sections.

Note: To upgrade an installation of IBM Director Console and IBM Director Agent together on management consoles running Linux, you must use the downloaded IBM Director Console installation package.

Downloading upgrade packages for System i and xSeries servers

Complete the following steps to download the upgrade packages for IBM Director 5.10 Update 2:

1. Navigate to the IBM Director Downloads Web Site at www.ibm.com/servers/eserver/xseries/systems_management/xseries_sm/dwnl.html.
2. Select **IBM Director 5.10 for xSeries and BladeCenter** from the list, complete the requested information, and click **Submit**.
3. Under the Current version heading, click **IBM Director 5.10 Update 2**.

- Click the link for the package you want to download.

Table 2. IBM Director upgrade packages available on the IBM Director 5.10 for xSeries and BladeCenter download site

| Component | Package file name |
|---|-------------------------------------|
| IBM Director Agent 5.10 Update 2 for i5/OS | dir5.10.2_agent_i5OS.zip |
| IBM Director Agent 5.10 Update 2 for Linux for xSeries | dir5.10.2_agent_linux.tar |
| IBM Director Agent 5.10 Update 2 for Linux for Intel Itanium (64 bit) | dir5.10.2_agent_linux64.tar |
| IBM Director Agent 5.10 Update 2 for NetWare | dir5.10.2_agent_netware.zip |
| IBM Director Agent 5.10 Update 2 for Windows (32 bit) | dir5.10.2_agent_windows.zip |
| IBM Director Agent 5.10 Update 2 for Windows for Intel Itanium (64 bit) | dir5.10.2_agent_windows64.zip |
| IBM Director Console 5.10 Update 2 for Linux for xSeries | dir5.10.2_console_linux.tar |
| IBM Director Console 5.10 Update 2 for Windows | dir5.10.2_console_patch_windows.zip |
| IBM Director Core Services 5.10 Update 2 for Linux for xSeries | dir5.10.2_coreservices_linux.tar |
| IBM Director Core Services 5.10 Update 2 for Windows | dir5.10.2_coreservices_windows.zip |
| IBM Director Server 5.10 Update 2 for i5/OS | dir5.10.2_server_patch_i5os.zip |
| IBM Director Server 5.10 Update 2 for Linux for xSeries | dir5.10.2_server_linux.tar |
| IBM Director Server 5.10 Update 2 for Windows | dir5.10.2_server_patch_windows.zip |

Downloading upgrade packages for System p servers

Complete the following steps to download the upgrade packages for IBM Director 5.10 Update 2:

- Navigate to the IBM eServer™ - IBM Virtualization Engine™ - IBM Director Web Site at www.ibm.com/servers/eserver/about/virtualization/enterprise/director.html.
- Click the **IBM Director downloads** link on the right side of the page.
- Sign in to the download site. If you have not already created a universal IBM user ID, create one and then sign in.
- Select the platform type you need and click **Continue**.
- Complete the requested information, read the license agreement, and click **I agree**.
- Navigate to the package you need and click **Download now**.

Table 3. IBM Director upgrade packages available on the IBM Director System p download site

| Component | Package file name |
|--|--|
| IBM Director Agent 5.10 Update 2 for AIX | Dir5.10.2_AIX.tar Dir5.10.2_AIX.iso |

Table 3. IBM Director upgrade packages available on the IBM Director System p download site (continued)

| Component | Package file name |
|---|--|
| IBM Director Agent 5.10 Update 2 for Linux on POWER | Dir5.10.2_LinuxonPower.tar Dir5.10.2_LinuxonPower.iso |
| IBM Director Console 5.10 Update 2 for AIX | Dir5.10.2_AIX.tar Dir5.10.2_AIX.iso |
| IBM Director Console 5.10 Update 2 for Linux on POWER | Dir5.10.2_LinuxonPower.tar Dir5.10.2_LinuxonPower.iso |
| IBM Director Core Services 5.10 Update 2 for Linux on POWER | Dir5.10.2_LinuxonPower.tar Dir5.10.2_LinuxonPower.iso |
| IBM Director Server 5.10 Update 2 for AIX | Dir5.10.2_AIX.tar Dir5.10.2_AIX.iso |
| IBM Director Server 5.10 Update 2 for Linux on POWER | Dir5.10.2_LinuxonPower.tar Dir5.10.2_LinuxonPower.iso |

Upgrading IBM Director Server

This section describes procedures for upgrading IBM Director Server to Version 5.10 Update 2.

Upgrading IBM Director Server on AIX

The IBM Director Server 5.10 Update 2 for AIX package performs a complete new installation or upgrades an existing installation of IBM Director Server 5.10 or IBM Director Server 5.10.1 to IBM Director Server 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on AIX to Version 5.10 Update 2:

1. Obtain the IBM Director Server 5.10 Update 2 for AIX installation package. See “Obtaining upgrade packages” on page 10.
2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstop
```
3. Install the Dir5.10.2_AIX.tar or Dir5.10.2_AIX.iso package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_server.html, substituting the new package file name for the file name given in the instructions.
4. Restart IBM Director Server. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstart
```

After upgrading IBM Director Server, you must also upgrade all instances of IBM Director Console on other systems to the same version. See “Upgrading IBM Director Console” on page 15.

Upgrading IBM Director Server on i5/OS

The IBM Director Server 5.10 Update 2 for i5/OS package upgrades an existing installation of IBM Director Server 5.10 or IBM Director Server 5.10.1 to IBM Director Server 5.10.2, preserving user configuration data.

Upgrading IBM Director Server on i5/OS using the RSTLICPGM command

If you are not using IBM Director in a Virtualization Engine environment, you can use the Restore Licensed Program (RSTLICPGM) command to upgrade IBM Director Server to Version 5.10 Update 2. Complete the following steps to upgrade IBM Director Server on i5/OS to Version 5.10 Update 2:

1. Extract the contents of the dir5.10.2_server_patch_i5os.zip file to a local directory. This archive contains the SAVDR100MM.sav file.
2. On the i5/OS system, type the following command and press **Enter** to create a save file for the SAVDR100MM.sav file:

```
CRTSAVF FILE(QGPL/SAVDR100MM)
```
3. From the directory into which you extracted the contents of the dir5.10.2_server_patch_i5os.zip file, start an FTP session to the i5/OS system and then type the following commands, pressing **Enter** after each:

```
binary
put FILES/SAVDR100MM.sav /qsys.lib/qgpl.lib/SAVDR100MM.file
```
4. Stop IBM Director Server by typing the following command from a command prompt and pressing **Enter**:

```
QSH CMD('/qibm/userdata/director/bin/twgend')
```
5. Verify that IBM Director Server has been stopped by typing the following command from a command prompt and pressing **Enter**:

```
QSH CMD('/qibm/userdata/director/bin/twgstat')
```
6. On the i5/OS system, type the following command and press **Enter** to install the upgrade:

```
RSTLICPGM LICPGM(5722DR1) DEV(*SAVF) SAVF(QGPL/SAVDR100MM)
```
7. Restart IBM Director Server by typing the following command from a command prompt and pressing **Enter**:

```
QSH CMD('/qibm/userdata/director/bin/twgstart')
```
8. Verify that IBM Director Server has been restarted by typing the following command from a command prompt and pressing **Enter**:

```
QSH CMD('/qibm/userdata/director/bin/twgstat')
```
9. To delete the SAVDR100MM.sav file, type the following command and press **Enter**:

```
DLTF FILE(QGPL/SAVDR100MM)
```

After upgrading IBM Director Server, you must also upgrade all instances of IBM Director Console on other systems to the same version. See “Upgrading IBM Director Console” on page 15.

Upgrading IBM Director Server on i5/OS using the Virtualization Engine Update Installer

If you are using IBM Director in a Virtualization Engine environment, you can use the Virtualization Engine Update Installer to upgrade IBM Director Server to Version 5.10 Update 2. Complete the following steps to upgrade IBM Director Server on i5/OS to Version 5.10 Update 2:

1. Obtain the IBM Director Server 5.10 Update 2 for i5/OS upgrade package. See “Obtaining upgrade packages” on page 10.
2. Create the /QIBM/UserData/VE2/Updates directory on the management server if it does not already exist, and move the upgrade package to the /QIBM/UserData/VE2/Updates directory.

3. Obtain the Virtualization Engine Update Installer and install it on the management server. See publib.boulder.ibm.com/infocenter/eserver/v1r2/index.jsp?topic=/veicinfo/eicarfixparent.htm for instructions.
4. After installing the Virtualization Engine Update Installer, type the following command to upgrade IBM Director Server:


```
java -jar /QOpenSys/QIBM/ProdData/ci/gmi/lib/gmi.jar
      -discriminant /QIBM/ProdData/VE2
      -mdvFile /QIBM/UserData/VE2/Updates/dir5.10.2_server_patch_i5os.zip
      -silent
```
5. Restart IBM Director Server by typing the following command from a command prompt and pressing **Enter**:


```
QSH CMD('/qibm/userdata/director/bin/twgstart')
```
6. Verify that IBM Director Server has been restarted by typing the following command from a command prompt and pressing **Enter**:


```
QSH CMD('/qibm/userdata/director/bin/twgstat')
```

After upgrading IBM Director Server, you must also upgrade all instances of IBM Director Console on other systems to the same version. See “Upgrading IBM Director Console” on page 15.

Upgrading IBM Director Server on Linux for xSeries

The IBM Director Server 5.10 Update 2 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Server Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Server 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on Linux for xSeries to Version 5.10 Update 2:

1. Obtain the IBM Director Server 5.10 Update 2 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 10.
2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:


```
/opt/ibm/director/bin/twgstop
```
3. Install the `dir5.10.2_server_linux.tar` package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricinfo/fqm0_t_installing_ibm_director_server.html, substituting the new package file name for the file name given in the instructions.
4. Restart IBM Director Server. From a command prompt, type the following command and press **Enter**:


```
/opt/ibm/director/bin/twgstart
```

When you install IBM Director Server Version 5.10 Update 2, IBM Director Console and IBM Director Agent are installed automatically on the management server. After upgrading IBM Director Server, you must also upgrade all instances of IBM Director Console on other systems to the same version. See “Upgrading IBM Director Console” on page 15.

Upgrading IBM Director Server on Linux on POWER

The IBM Director Server 5.10 Update 2 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Server 5.10 or Version 5.10.1 to IBM Director Server 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on Linux on POWER to Version 5.10 Update 2:

1. Obtain the IBM Director Server 5.10 Update 2 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 10.
2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstop
```
3. Install the Dir5.10.2_LinuxonPower.tar or Dir5.10.2_LinuxonPower.iso package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_server.html, substituting the new package file name for the file name given in the instructions.
4. Restart IBM Director Server. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstart
```

After upgrading IBM Director Server, you must also upgrade all instances of IBM Director Console on other systems to the same version. See “Upgrading IBM Director Console.”

Upgrading IBM Director Server on Windows

The IBM Director Server 5.10 Update 2 for Windows package upgrades an existing installation of IBM Director Server 5.10 or Version 5.10.1 to IBM Director Server 5.10.2.

Complete the following steps to upgrade IBM Director Server on Windows to Version 5.10 Update 2:

1. Obtain the IBM Director Server 5.10 Update 2 for Windows upgrade package. See “Obtaining upgrade packages” on page 10.
2. Extract the files from the dir5.10.2_server_patch_windows.zip package.
3. Run one of the upgrade files extracted from the upgrade package. This package includes both .exe and .msp files. Advanced users who are familiar with Windows Installer technology can use the .msp file; other users should use the .exe file.

After upgrading IBM Director Server, you must also upgrade all instances of IBM Director Console on other systems to the same version. See “Upgrading IBM Director Console.”

Upgrading IBM Director Console

This section describes procedures for upgrading IBM Director Console to Version 5.10 Update 2.

Upgrading IBM Director Console on AIX

The IBM Director Console 5.10 Update 2 for AIX package performs a complete new installation or upgrades an existing installation of IBM Director Console 5.10 or Version 5.10.1 to IBM Director Console 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Console on AIX to Version 5.10 Update 2:

1. Obtain the IBM Director Console 5.10 Update 2 for AIX installation package. See “Obtaining upgrade packages” on page 10.

2. Install the Dir5.10.2_AIX.tar or Dir5.10.2_AIX.iso package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_console.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Console on Linux for xSeries

The IBM Director Console 5.10 Update 2 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Console Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Console 5.10.2, preserving user configuration data.

Note: To upgrade an installation of IBM Director Console and IBM Director Agent together on management consoles running Linux, you must use the downloaded IBM Director Console installation package.

Complete the following steps to upgrade IBM Director Console on Linux for xSeries to Version 5.10 Update 2:

1. Obtain the IBM Director Console 5.10 Update 2 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 10.
2. Install the dir5.10.2_console_linux.tar package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_console.html, substituting the new package file name for the file name given in the instructions.

If IBM Director Agent is installed on the management console, this package also upgrades the IBM Director Agent installation to version 5.10.2. If IBM Director Agent is not already installed, this package only installs or upgrades IBM Director Console.

Upgrading IBM Director Console on Linux on POWER

The IBM Director Console 5.10 Update 2 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Console 5.10 or Version 5.10.1 to IBM Director Console 5.10.2, preserving user configuration data.

Note: To upgrade an installation of IBM Director Console and IBM Director Agent together on management consoles running Linux, you must use the downloaded IBM Director Console installation package.

Complete the following steps to upgrade IBM Director Console on Linux on POWER to Version 5.10 Update 2:

1. Obtain the IBM Director Console 5.10 Update 2 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 10.
2. Install the Dir5.10.2_LinuxonPower.tar or Dir5.10.2_LinuxonPower.iso package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_console.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Console on Windows

The IBM Director Console 5.10 Update 2 for Windows package upgrades an existing installation of IBM Director Console 5.10 or Version 5.10.1 to IBM Director Console 5.10.2.

Complete the following steps to upgrade IBM Director Console on Windows to Version 5.10 Update 2:

1. Obtain the IBM Director Console 5.10 Update 2 for Windows installation package. See “Obtaining upgrade packages” on page 10.
2. Extract the files from the dir5.10.2_console_patch_windows.zip package.
3. Run one of the upgrade files extracted from the upgrade package. This package includes both .exe and .msp files. Advanced users who are familiar with Windows Installer technology can use the .msp file; other users should use the .exe file.

Upgrading IBM Director Agent

This section describes procedures for upgrading IBM Director Agent to Version 5.10 Update 2.

Upgrading IBM Director Agent on AIX

The IBM Director Agent 5.10 Update 2 for AIX package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4.20, Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on AIX to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for AIX installation package. See “Obtaining upgrade packages” on page 10.
2. Stop IBM Director Agent. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstop
```
3. Install the Dir5.10.2_AIX.tar or Dir5.10.2_AIX.iso package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.
4. Restart IBM Director Agent. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstart
```

Upgrading IBM Director Agent on i5/OS

The IBM Director Agent 5.10 Update 2 for i5/OS package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on i5/OS to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for i5/OS installation package. See “Obtaining upgrade packages” on page 10.

2. Install the `dir5.10.2_agent_i5OS.zip` package using Software Distribution. See the instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_upgrading_ibm_director_agent_using_the_software_distribution_task.html. Substitute the new package file name for the file name given in the instructions.

Note: If you installed IBM Director Agent on your i5/OS managed system using the Restore Licensed Program (RSTLICPGM) command, see the instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_agent_using_rstlicpgm.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Agent on Linux for xSeries

The IBM Director Agent 5.10 Update 2 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Note: If IBM Director Agent is installed on the management console, you do not need to separately upgrade IBM Director Agent; applying the downloaded IBM Director Console upgrade package also upgrades the IBM Director Agent installation to version 5.10.2.

Complete the following steps to upgrade IBM Director Agent on Linux for xSeries to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 10.
2. Install the `dir5.10.2_agent_linux.tar` package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Agent on Linux on POWER

The IBM Director Agent 5.10 Update 2 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4.20, Version 4.21, Version 4.22, Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Note: If IBM Director Agent is installed on the management console, you do not need to separately upgrade IBM Director Agent; applying the downloaded IBM Director Console upgrade package also upgrades the IBM Director Agent installation to version 5.10.2.

Complete the following steps to upgrade IBM Director Agent on Linux on POWER to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 10.
2. Stop IBM Director Agent. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstop
```
3. Install the `Dir5.10.2_LinuxonPower.tar` or `Dir5.10.2_LinuxonPower.iso` package using the installation instructions found in the IBM Systems Software Information

Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.

4. Restart IBM Director Agent. From a command prompt, type the following command and press **Enter**:

```
/opt/ibm/director/bin/twgstart
```

Upgrading IBM Director Agent on Linux for Intel Itanium (64 bit)

The IBM Director Agent 5.10 Update 2 for Linux for Intel Itanium (64 bit) package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Note: This package is for Itanium 2 support only.

Complete the following steps to upgrade IBM Director Agent on Linux for Intel Itanium (64 bit) to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for Linux for Intel Itanium (64 bit) installation package. See “Obtaining upgrade packages” on page 10.
2. Install the `dir5.10.2_agent_linux64.tar` package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Agent on NetWare

The IBM Director Agent 5.10 Update 2 for NetWare package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 5.10 or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on NetWare to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for NetWare installation package. See “Obtaining upgrade packages” on page 10.
2. Install the `dir5.10.2_agent_netware.zip` package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Agent on Windows (32 bit)

The IBM Director Agent 5.10 Update 2 for Windows (32 bit) package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on Windows (32 bit) to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for Windows (32 bit) installation package. See “Obtaining upgrade packages” on page 10.
2. Install the `dir5.10.2_agent_windows.zip` package using the installation instructions found in the IBM Systems Software Information Center at

publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Agent on Windows for Intel Itanium (64 bit)

The IBM Director Agent 5.10 Update 2 for Windows for Intel Itanium (64 bit) package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases), Version 5.10, or Version 5.10.1 to IBM Director Agent 5.10.2, preserving user configuration data.

Note: This package is for Itanium 2 support only.

Complete the following steps to upgrade IBM Director Agent on Windows for Intel Itanium (64 bit) to Version 5.10 Update 2:

1. Obtain the IBM Director Agent 5.10 Update 2 for Windows for Intel Itanium (64 bit) installation package. See “Obtaining upgrade packages” on page 10.
2. Install the dir5.10.2_agent_windows64.zip package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installinglibm_director_agent.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Core Services

This section describes procedures for upgrading IBM Director Core Services to Version 5.10 Update 2.

Upgrading IBM Director Core Services on Linux for xSeries

The IBM Director Core Services 5.10 Update 2 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Core Services Version 5.10 or Version 5.10.1 to IBM Director Core Services 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Linux for xSeries to Version 5.10 Update 2:

1. Obtain the IBM Director Core Services 5.10 Update 2 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 10.
2. Install the dir5.10.2_coreservices_linux.tar package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_core_services.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Core Services on Linux on POWER

The IBM Director Core Services 5.10 Update 2 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Core Services Version 5.10 or Version 5.10.1 to IBM Director Core Services 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Linux on POWER to Version 5.10 Update 2:

1. Obtain the IBM Director Core Services 5.10 Update 2 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 10.

2. Install the Dir5.10.2_LinuxonPower.tar or Dir5.10.2_LinuxonPower.iso package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_core_services.html, substituting the new package file name for the file name given in the instructions.

Upgrading IBM Director Core Services on Windows

The IBM Director Core Services 5.10 Update 2 for Windows package performs a complete new installation or upgrades an existing installation of IBM Director Core Services Version 5.10 or Version 5.10.1 to IBM Director Core Services 5.10.2, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Windows to Version 5.10 Update 2:

1. Obtain the IBM Director Core Services 5.10 Update 2 for Windows installation package. See “Obtaining upgrade packages” on page 10.
2. Install the dir5.10.2_coreservices_windows.zip package using the installation instructions found in the IBM Systems Software Information Center at publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_core_services.html, substituting the new package file name for the file name given in the instructions.

Chapter 3. Known limitations, problems, and workarounds

This section provides information about known limitations, problems, and workarounds when using IBM Director 5.10 Update 2.

Limitations

IBM Director 5.10 Update 2 has the following limitations:

In-band management operations using the Baseboard Management Controller are not available on certain IBM eServer servers running SUSE LINUX Enterprise Server 9 (Service Packs 2 or 3) or Red Hat Enterprise Linux AS, version 4, Service Pack 3.

Certain management functions, such as hardware alerting, are dependent on in-band communications between IBM Director Agent and IBM Director Server. These functions will be unavailable for IBM eServer 325, IBM eServer 326, and IBM eServer 326m servers running SUSE LINUX Enterprise Server 9, Service Pack 2 (32-bit edition), SUSE LINUX Enterprise Server 9, Service Pack 3 (32-bit and 64-bit editions), or Red Hat Enterprise Linux AS, version 4, Service Pack 3 (32-bit and 64-bit editions).

A new driver for the Baseboard Management Controller (BMC) might eventually become available which will address this limitation. Check for updates at www.ibm.com/servers/eserver/support/xseries/index.html.

The Event Action Plan Builder does not allow you to enter event text to filter events.

When building a filter using the Event Action Plan Builder, the **Event Text** page does not permit entering text. This prevents you from creating a filter that uses event text as a filtering criterion.

A bad stripe error does not generate a hardware event (alert).

A hardware event (alert) is not generated when a bad stripe error is reported.

For Level-2 managed systems, the bad stripe error generates a Storage event that is recorded in the IBM Director Event Log. To implement an event action plan for bad stripe errors, the event action plan must be configured for the Storage > ServeRAID Controller > State > Bad Stripes event.

For Level-1 managed systems, the bad stripe error is not reported to IBM Director. If you require bad stripe error reporting, install IBM Director Agent on the managed system. Alternatively, on managed systems running Windows, you can manually check for bad stripe errors using the Windows Event Viewer.

Only one resource-monitor threshold value is allowed on each managed system for event action plans, even when multiple event action plans exist.

When the value is changed in the current plan, this limitation can lead to unexpected behavior and unwanted changes to the resource monitor threshold values in other event action plans.

IC46865: (Windows systems only) Using the reboot option in the Custom Package Editor with custom packages in categories can cause Software Distribution jobs to fail.

If you create a custom package for Windows using the Software Distribution task and you want to make that package part of a category, do not use the Restart Computer option in the Custom Package Editor. This option will cause the Software Distribution job to fail. Instead, use the reboot option in the Category Editor.

The Inventory Query Browser displays IBM Director Agent as IBM Director Core Services.

When Level 2: IBM Director Agent is installed, the Inventory Query Browser displays IBM Director Core Services.

The MPCLI setsmnetwork command fails for BladeCenter units with the Advanced Management Module.

For example, issuing the following command does not make the requested changes:

```
setsmnetwork -ipaddress 1,172.16.13.65
```

This command results in the following error message:

```
FAILURE: setsmnetwork -ipaddress 1,172.16.13.65 failed
```

The Management Module Web Interface Remote Control task must be started within 3 minutes of starting the Management Module Web Interface from IBM Director Console.

When you start the Management Module Web Interface from IBM Director Console, the Remote Control task will fail if it is not started within 3 minutes of starting the Management Module Web Interface. This task might also fail if another application (for example, VNC) is using one of the following ports: 1044, 1045, 2000, or 5900.

The Remote Control task requires the exclusive use of the following ports: 1044, 1045, 2000 and 5900. IBM Director attempts to reserve these ports when the Management Module Web Interface is started. If the Remote Control task is not started within three minutes, IBM Director closes the ports so as not to reserve these ports indefinitely. If another application has previously reserved any of these ports, or if you start the Remote Control task after the ports have been closed, the Remote Control task will fail.

This limitation affects only the starting of the Management Module Web Interface from IBM Director Console. The standalone Web Interface tool is unaffected.

Problems

IBM Director 5.10 Update 2 has the following known problems:

If Hyper-Threading is enabled, the Resource Monitors task displays two CPU Monitor resources even if only one CPU exists.

On some managed Windows systems with Hyper-Threading capability, resource attributes for two microprocessors (or CPUs) are displayed when you run the Resource Monitors task on a managed system and view the CPU Monitors resources, despite the fact that the system contains only one microprocessor. This

problem occurs if Hyper-Threading is enabled for the microprocessor. The Resource Monitor task draws data from the operating system, and the operating system interprets a single Hyper-Threaded microprocessor as two logical microprocessors.

Performing certain tasks on an AIX managed system that does not have a serial number defined for one hardware component of the managed system might cause the cimserver to fail.

In the rare event that a serial number is not defined for one hardware component, IBM Director tasks that request inventory information for the managed system might cause the cimserver service to fail.

To test your system to see if it might be affected, complete the following steps:

1. At a command prompt, type `lsvpd` and press **Enter**.
2. Review the command output to identify whether or not a serial number is returned for the first component listed. Individual components are separated by a line prefixed with `*FC`.

If a line beginning with `*SN` and containing data does not appear between the first two instances of the lines beginning with `*FC`, your system might be affected. See the examples in Table 4.

Table 4. Sample `lsvpd` output

| Output listing serial number for the first component (hardware not affected) | Output <i>not</i> listing serial number for the first component (hardware might be affected) |
|---|--|
| <pre>*VC 5.0 *TM IBM,7044-170 *SE IBM,01106878C *PI 0006878C *OS AIX 5.3.0.0 *FC ???????? *DS Processor Card *YL P1-C1 *PN 09P1493 *EC H10138 *SN L081277080 *FN 09P0272 *MN 1980 ...</pre> | <pre>*VC 5.0 *TM IBM,8844-3BZ *SE IBM,0223A0178 *PI 00CA0178 *OS AIX 5.3.0.0 *FC ???????? *DS System VPD *YL U8844.3BZ.23A0178 *RT VSYS *FG XXSV *SE 23A0178 *TM 8844-3BZ *MN IBM *MU 66502D165C5511DA9D86E5FC81D29EA7 *ET 11 *VK RS6K *FC ???????? *DS GPUL Blade Planar *YL U8844.3BZ.23A0178-P1 ...</pre> |

If your hardware is affected by this problem, complete the following steps to obtain and install the available efix package:

1. Go to <https://www14.software.ibm.com/webapp/iwm/web/reg/pick.do?source=dmp> and click **IBM Pegasus CIM Server and Providers for AIX**.
2. Download **Efix for IBM OS Providers 1.2.5.1** (Efix_542314.tar) and follow the installation instructions in the Pegasus2.5.0.1_OSProviders1.2.5.1_AIX.README.html file that is available on the Web site and in the tar file.

Workarounds

This section addresses problems you might encounter when using IBM Director 5.10 Update 2. For troubleshooting information about additional issues not listed here, see the Troubleshooting section of the IBM Director Information Center at http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_r_tbs_solving_problems.html.

The installation of IBM Director Server, IBM Director Agent, or IBM Director Core Services fails when OpenWBEM is running.

This problem affects IBM Director Server. It occurs on servers running SUSE Linux Enterprise Server 9, SUSE Linux Enterprise Server 10, or any application or CIMOM that uses ports 5988 and 5989.

Note: Although this problem has been specifically identified for OpenWBEM, any CIMOM or application that uses ports 5988 and 5989 might cause the problem described here. If this problem is caused by a port conflict with another application than OpenWBEM, modify the instructions accordingly to stop the conflicting application in order to make these ports available for the IBM Director CIMOM.

Problem

The installation of IBM Director Server, IBM Director Agent, or IBM Director Core Services hangs while displaying the following message:

```
Starting Pegasus CIMOM
```

Complete the following steps to verify that the problem you have encountered is the one described here:

1. Verify that the Pegasus CIMOM is not running. At the Linux command prompt, type the following command and press **Enter**:

```
ps -ef | grep cimservice
```

2. Attempt to restart the Pegasus CIMOM from the command line. At the Linux command prompt, type the following command and press **Enter**:

```
/etc/init.d/dacimom start
```

The following message should eventually appear:

```
PGS17000: THE CIMSERVICE COMMAND TIMED OUT WAITING FOR THE CIM SERVER TO START.
```

If the CIMOM is running, or can successfully be started, the problem described here is not applicable to your situation.

Investigation

If the Pegasus CIMOM cannot be started, the installation has failed. One reason it might have failed is because of a port conflict with the OpenWBEM CIMOM during installation. Complete the following steps to successfully install and start IBM Director services:

1. Determine if the OpenWBEM CIMOM is running. At the Linux command prompt, type the following command and press **Enter**:

```
/etc/init.d/owcimomd status
```

If the service is running, a message will display that fact.

Note: Alternatively, you can look for the `owcimomd` process. At the Linux command prompt, type the following command and press **Enter**:

```
ps -ef | grep owcimomd
```

2. If the OpenWBEM CIMOM is running, stop it. At the Linux command prompt, type the following command and press **Enter**:

```
/etc/init.d/owcimomd stop
```

A message will confirm that the OpenWBEM CIMOM Daemon has been stopped.

3. To prevent future occurrences of the port conflict, which can occur after the system is restarted, disable OpenWBEM. At the Linux command prompt, type the following commands, pressing **Enter** after each command:

```
/etc/init.d/owcimomd stop  
chkconfig owcimomd off
```

4. Uninstall and reinstall the IBM Director component (IBM Director Server, IBM Director Agent, or IBM Director Core Services) you attempted to install.

Server Configuration Manager and Management Processor Command-Line Interface fail for managed systems running VMware ESX Console, version 2.5.2 on certain hardware platforms.

On managed systems which have both a Baseboard Management Controller (BMC) and Remote Supervisor Adapter II installed (for example, certain xSeries servers such as the xSeries 366 and xSeries 460), when the managed system is running VMware ESX Console, version 2.5.2, IBM Director can only manage the system using the BMC because VMware ESX Console, version 2.5.2 does not support the Universal Serial Bus (USB) protocol. The BMC is represented as a physical platform in IBM Director Console. If discovery of all physical platforms is performed and the Remote Supervisor Adapter II adapter is connected to the network, the managed physical platform is changed from the BMC to the Remote Supervisor Adapter II. This causes the Server Configuration Manager and Management Processor Command-Line Interface to fail.

To avoid this problem, do not perform discovery of all physical platforms if you have managed systems in your environment which have both BMC and Remote Supervisor Adapter II installed and are running VMware ESX Console, version 2.5.2.

If this problem occurs, complete the following steps to correct the problem:

1. From IBM Director Console, delete the Remote Supervisor Adapter II physical platform managed object. Right-click the physical platform managed object, and then click **Delete**.
2. Stop and restart IBM Director Agent on the managed system. Type `/opt/IBM/director/bin/twgstop` and press **Enter**. Once IBM Director Agent has stopped, type `/opt/IBM/director/bin/twgstart` and press **Enter** to restart IBM Director Agent. The BMC physical platform managed object is created again in IBM Director Console.

The `fwupdate` command does not update Advanced Management Module firmware.

The format of the Advanced Management Module firmware update file has changed. The `CNETCMUS.pkt` file is not a true `pkt` format file, but instead is a tar archive containing two `pkt` format files (`CNETBRUS.pkt` and `CNETMNUS.pkt`).

Extract these two files from the CNETCMUS.pkt file and then use the fwupdate command to update the Advanced Management Module firmware.

The setalertrigger command fails when more than one alert ID is specified.

The setalertrigger command fails to enable or disable alerting when multiple alerts are specified on the command line.

To avoid this problem, do not issue setalertrigger commands which specify multiple alerts:

```
setalertrigger -enabled critical.temp, critical.voltage, critical.power_supply
```

Instead, issue multiple setalertrigger commands which each specify a single alert:

```
setalertrigger -enabled critical.temp
setalertrigger -enabled critical.voltage
setalertrigger -enabled critical.power_supply
```

The Management Processor Assistant Command Line Interface task fails for a Baseboard Management Controller managed object.

When you attempt to start the Management Processor Assistant Command Line Interface (MPCLI) from a Baseboard Management Controller (BMC) managed object in IBM Director Console, you are not logged on to the BMC managed object.

To log on to the BMC managed object, issue the MPCLI **logonip** command:

```
logonip -hostname IPhost -u IPuserid -p IPPassword -t ipmi
```

where

- *IPhost* is the domain name system (DNS) or IP address of the host.
- *IPuserid* is a user ID with administrative privileges.
- *IPpassword* is the password for the user ID.

For detailed information about the **logonip** command, see the *IBM Management Processor Command-Line Interface User's Guide*, which can be downloaded from http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_r_printable_pdf_files.html.

The system health task does not work for some xSeries servers running SUSE LINUX or Red Hat Linux.

The system health task might not work for some xSeries servers which are running either SUSE LINUX Enterprise Server 9, Service Pack 3 (32-bit and 64-bit editions) or Red Hat Enterprise Linux AS, version 4, Service Pack 3 (32-bit and 64-bit editions) and which have an installed Baseboard Management Controller. This problem affects the following xSeries servers: xSeries 236, xSeries 260, xSeries 336, xSeries 346, and xSeries 366.

To resolve the problem, download and install the latest OSA IPMI device drivers for your server from www.ibm.com/pc/support/site.wss/product.do?brandind=8&template=%2Fproductselection%2Flandingpages%2FdownloadsDriversLandingPage.vm&validate=true.

Chapter 4. Documentation updates

For IBM Director 5.10 Update 2, documentation updates that might not appear in the IBM Director 5.10 online help are available in the IBM Director Information Center at http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html. The IBM Director Information Center includes updates to both the printed and online documentation.

Users of translated information should consider these facts:

- The IBM Director Information Center updates for IBM Director 5.10 Update 2 are in English only and have not been translated into other languages.
- The English documentation has been approved by technical reviewers and is updated more frequently than the translated documentation; when discrepancies occur between translated documentation and the English documentation, you should rely on the English documentation.

This section includes documentation updates that might not appear in the IBM Director online help, IBM Director Information Center, or printed IBM Director publications that you might receive or access.

Enabling SNMP access and trap forwarding for VMware

IBM Director 5.10.2 supports SNMP access and trap forwarding on VMware ESX Server, and will inter-operate with the ucd-snmp versions that ship with VMware ESX Server version 2.5.2.

These instructions apply only to using IBM Director SNMP support on VMware ESX Server. SNMP configuration instructions for other Linux installations are provided in the *IBM Director Installation and Configuration Guide*.

Complete the following steps to enable SNMP access and trap forwarding for managed systems running VMware:

1. Download the net-snmp-5.2.1.tar.gz file from the Net-SNMP Web site at www.net-snmp.org/download.html.
2. Build and install the Net-SNMP libraries using the following steps.

Notes:

- This procedure does not perform a full installation of Net-SNMP, but installs only the Net-SNMP libraries, which are required for IBM Director Core Services SNMP functions.
 - Refer to the INSTALL and README files included in the net-snmp-5.2.1.tar.gz package for additional installation information.
- a. Untar the source files. Type the following command and press **Enter**.

```
tar -xvzf net-snmp-5.2.1.tar.gz
```
 - b. Change to the source directory. Type the following command and press **Enter**.

```
cd net-snmp-5.2.1
```
 - c. Build the Net-SNMP libraries with default options. Type the following commands (press **Enter** after each).

```
./configure --with-defaults  
make
```

- d. Install the Net-SNMP libraries only to /usr/local/lib. Type the following command and press **Enter**.

```
make installlibs
```

3. To enable trap forwarding, edit the /etc/init.d/dacimlist file and uncomment the following two lines two lines in the SNMP End Consumer section.

```
LD_LIBRARY_PATH=/usr/local/lib
export LD_LIBRARY_PATH
```

Note: The configuration changes will not take effect until you restart the cimlistener daemon in step 7.

4. To enable SNMP access, edit the /etc/init.d/dasmp file and uncomment the following two lines in the section regarding the location of the net-snmp libraries.

```
LD_LIBRARY_PATH=/usr/local/lib
export LD_LIBRARY_PATH
```

5. Using the VMware Management Interface, configure the SNMP daemon that ships with VMware to support AgentX agents. For details, see the VMware documentation at www.vmware.com/support/pubs/esx_pubs.html.
6. Create the file /usr/local/share/snmp/snmpd.conf to specify trapsink and trapcommunity settings. You might have to create the directory. This file should contain only settings for trapcommunity and trapsink.
- Specify a trap community value by adding a line containing the word trapcommunity followed by a space and the trapcommunity value, as in the following example.


```
trapcommunity public
```
 - Specify a trapsink value for each destination to which IBM Director will send SNMP traps. Add a line containing the word trapsink followed by a space and the trapsink value, as in the following example.


```
trapsink 192.168.1.1
```
7. Restart the cimlistener daemon by typing the following commands and pressing **Enter** after each:
- ```
/etc/init.d/dacimlist stop
/etc/init.d/dacimlist start
```
8. Restart the IBM Director AgentX subagent by typing the following commands and pressing **Enter** after each:
- ```
/etc/init.d/dasmp stop
/etc/init.d/dasmp start
```

Appendix A. Related information

This topic provides links to additional information related to IBM Director.

IBM Director resources on the World Wide Web

The following Web pages provide resources for understanding, using, and troubleshooting IBM Director and other system-management tools.

IBM Director information center

publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html

Updated periodically, the IBM Director information center contains the most recent documentation available on a wide range of topics.

IBM Director Web site on ibm.com[®]

www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/

The IBM Director Web site on ibm.com has links to downloads and documentation for all currently supported versions of IBM Director. Information on this site includes:

- Downloads and documentation for the following IBM Director releases:
 - IBM Director 5.10 Update 2 (5.10.2)
 - IBM Director 5.10 Update 1 (5.10.1)
 - IBM Director 5.10
 - IBM Director 4.22
 - IBM Director 4.22 Upward Integration Modules (UIMs)
 - IBM Director 4.21
 - IBM Director 4.20
- IBM Director Hardware and Software Compatibility document, which lists supported and IBM xSeries systems, as well as all supported operating systems. It is updated every 6 to 8 weeks.
- Printable documentation for IBM Director available in Portable Document Format (PDF) in several languages

IBM Director Software Developers Kit information center

publib.boulder.ibm.com/infocenter/dirinfo/toolkit/index.jsp

The IBM Director Software Developers Kit (SDK) information center provides information about the IBM Director SDK – a set of tools and documentation to help extend the capabilities of IBM Director by using the APIs and CLIs, creating tasks, and launching tools from the IBM Director user interface.

IBM Systems Software information center

www.ibm.com/servers/library/infocenter/

This Web page provides information about IBM Virtualization Engine, IBM Director, and other topics.

IBM ServerProven page

www.ibm.com/servers/eserver/serverproven/compat/us/

This Web page provides information about IBM xSeries, BladeCenter, and IntelliStation hardware compatibility with IBM Director.

IBM Servers

www.ibm.com/servers/

This Web page on ibm.com links to information, downloads, and IBM Director extensions such as Remote Deployment Manager, Capacity Manager, Systems Availability and Software Distribution (Premium Edition) for the following IBM servers:

- IBM BladeCenter
- IBM System i
- IBM System p
- IBM xSeries
- IBM System z

IBM Virtualization Engine systems services fixes

techsupport.services.ibm.com/server/VirtualizationEngine

This Web page provides information about the required fixes for the Virtualization Engine system services. The fixes include operating system fixes that are required for each system service as well as application-level fixes that are required for each system service to function properly.

IBM forums

www.ibm.com/developerworks/forums/dw_esforums.jsp

This Web page on ibm.com links to several forums, available as Web pages or using rich site summary (RSS) feeds, in which users can discuss technology issues relating to IBM servers.

Three of these forums are of particular interest to IBM Director users:

xSeries IBM Director forum

www.ibm.com/developerworks/forums/dw_forum.jsp?forum=759&cat=53

A forum for discussing any IBM Director topics. This Web page includes a link for obtaining the forum using an RSS feed.

xSeries Server forum

www.ibm.com/developerworks/forums/dw_forum.jsp?forum=740&cat=53

A forum for discussing xSeries server topics, including questions related to drivers, firmware, operating systems, clustering, and storage. This Web page includes a link for obtaining the forum using an RSS feed.

IBM Director SDK forum

www.ibm.com/developerworks/forums/dw_forum.jsp?forum=849&cat=53

A forum for discussing how to use the IBM Director SDK to extend the functionality of IBM Director to meet your specific needs. This Web page includes a link for obtaining the forum using an RSS feed.

IBM Redbooks™

You can download the following documents from the IBM Redbooks Web page. You can also search this Web page for documents that focus on specific IBM hardware; such documents often contain systems-management material.

Note: Be sure to note the date of publication and to determine the level of IBM Director software to which the Redbooks publication refers.

- *Creating a Report of the Tables in the IBM Director 4.1 Database* (TIPS0185)
- *IBM Director Security* (REDP-0417)
- *IBM BladeCenter Systems Management with IBM Director V4.1 and Remote Deployment Manager V4.1* (REDP-3776)
- *Implementing Systems Management Solutions using IBM Director* (SG24-6188)
- *Integrating IBM Director with Enterprise Management Solutions* (SG24-5388)
- *Managing IBM TotalStorage NAS with IBM Director* (SG24-6830)
- *Monitoring Redundant Uninterruptible Power Supplies Using IBM Director* (REDP-3827)

Remote Supervisor Adapter

Remote Supervisor Adapter overview

www.ibm.com/support/docview.wss?uid=psg1MIGR-4UKSML

This Web page includes links to the *Remote Supervisor Adapter User's Guide* and the *Remote Supervisor Adapter Installation Guide*.

Remote Supervisor Adapter II overview

www.ibm.com/support/docview.wss?uid=psg1MIGR-50116

This Web page includes information about the Remote Supervisor Adapter II.

Other documents

For planning purposes, the following documents might be of interest:

- *Planning and Installation Guide - IBM BladeCenter (Type 8677)*
- *IBM Management Processor Command-Line Interface (MPCLI) User's Guide version 5.10*

Appendix B. Contacting customer support

If you need help, service, technical assistance, or just want more information about IBM products, you can find a wide variety of sources available from IBM to assist you. This section contains information about sources for additional information about IBM and IBM products, what to do if you experience a problem with your system, and whom to call for service, if it is necessary.

Services available and telephone numbers listed are subject to change without notice.

Before you call for assistance

Some problems can be solved without outside assistance. Look in the online or printed documentation that is included with IBM Director, or consult the IBM Support home Web site. Also, be sure to read the information in any release notes and README files that accompany IBM Director.

You can solve many problems by following the troubleshooting procedures that IBM provides in the online help or in the publications that are provided with your system and software.

The information that is included with your system also describes the diagnostic tests that you can perform. Most hardware systems, operating systems, and programs include information that contains troubleshooting procedures and explanations of error messages and error codes. If you suspect a software problem, refer to the information for the operating system or program.

Getting help online

IBM maintains pages on the World Wide Web containing information about IBM products and services. These pages also provide the most recent technical information. Table 5 lists some of these pages.

Table 5. Support Web sites

| | |
|--|---|
| www.ibm.com/ | Main IBM home page |
| www.ibm.com/servers/ | IBM eServer home page |
| www.ibm.com/pc/support/ | IBM Support page |
| www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/ | IBM Director home page with links to user support and the technical forum |
| publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html | IBM Director information center |

Getting help by telephone

Through IBMSupport Line, you can obtain telephone assistance, for a fee, with usage, configuration, and software problems with xSeries servers, IntelliStation workstations, and appliances. For information about the products supported by Support Line in your country or region, go to www.ibm.com/services/sl/products/.

For more information about Support Line and other IBM services, go to www.ibm.com/services/, or to www.ibm.com/planetwide/ for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

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This section provides legal notices and trademark information.

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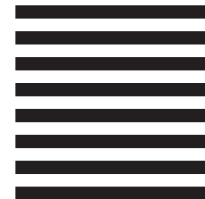
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