



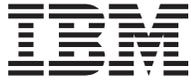
IBM Systems  
IBM Director  
Release Notes

*Version 5.10 Update 1*

February 2006







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IBM Director  
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## Chapter 1. About this release

This document contains the release notes for IBM® Director 5.10 Update 1, also known as IBM Director 5.10.1.

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/](http://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 1.

#### Hardware Status task for AIX®

The Hardware Status task is now available for AIX managed systems. Hardware-status events can be viewed in the Hardware Status window for AIX managed systems, and the most recent hardware-status events remain visible in IBM Director Console even when connection to the AIX managed system is lost.

#### Hardware Management Console extension support for Hardware Management Console Version 5 Release 2

The IBM Director Hardware Management Console extension supports management of Hardware Management Consoles running Version 5 Release 2. The Hardware Management Console extension is also available for Windows® and Linux® management servers and management consoles.

#### Support for Advanced Management Module

IBM Director Version 5.10 Update 1 adds support for the IBM @server BladeCenter® Advanced Management Module.

---

### Product fix history

This section describes the limitations and problems resolved by IBM Director 5.10 Update 1.

### Authorized Program Analysis Reports (APARs)

**Note:** The following APARs were resolved in IBM Director 5.10 but not previously documented:

#### IC46501

IBM Director minor upgrades on Windows might not upgrade locked files.

#### IC47034

A custom task extension needs to pull BladeCenter chassis Universal Unique Identifier (UUID) from an event.

**Note:** This fix was previously documented in the IBM Director 5.10 Release Notes listing only APAR IC46265.

#### IC47522

If the language is set to German on the IBM Director Server, the Distribution Preferences window can be opened and modified only

one time. A second attempt to open the Distribution Preferences window fails. This problem does not occur when the language is set to English.

**IC47540**

System time skips ahead on VMware host when CIM is enabled.

**IC47564**

Voltage sensor errors can occur on the following xSeries® managed systems: x225, x226, x300.

**IC47566**

The IntelliStation® Z Pro model 6223 fans become noisy with IBM Director 4.22.

**IC47872**

IBM Director Server 4.22 might experience the following unhandled Java™ exception when processing an SNMP trap:

Exception: java.lang.ArrayIndexOutOfBoundsException: 1

**IC47926**

False voltage alerts occur with IBM Director 4.22 on IntelliStation Z Pro model 6223.

**IC48140**

IBM Director Agent incorrectly reports critical power-supply errors on some xSeries managed systems that contain a Remote Supervisor Adapter I or Remote Supervisor Adapter II when no fault exists.

The following APARs were resolved in IBM Director 5.10 Update 1:

**IC47553**

Repeated unsuccessful IP connection attempts to a blade or service processor (for inventory, configuration management, or other tasks) can cause IBM Director Server to terminate with the following out of memory exception:

Exception: java.lang.OutOfMemoryError

**IC47844**

The Inventory task fails on VMware ESX Server versions 2.1 and 2.5 managed systems running on xSeries 445 model 8670 when using IBM Director Agent Versions 4.21 or 4.22.

**Note:** This fix applies only to Linux on xSeries and Linux on System p5 and pSeries®; it does not apply to AIX, Windows, or Linux for System z9 and zSeries®.

**IC47859**

On systems using Windows, an LM78 driver conflict can cause systems to stop responding.

**IC47887**

IBM Director Server sometimes stops with an unhandled Java Virtual Machine exception when a service processor on a managed object is offline.

**IC47910**

The wmicimserver service sometimes stops on Windows managed systems with IBM Director Agent.

**IC48111**

The Remote Session/Remote Control tasks do not correctly recognize some keys for national-language keyboards.

**IC48253**

The Pegasus Provider Adapter can stop on a Level-2 managed xSeries 345 server running Windows. This is not machine-specific or language-specific.

**IC48257**

A file handle leak causes TWGSRVW.exe to use an excessive number of file handles.

**IC48258**

The IBM Director Server startup process can take a very long time or can terminate with IBM Director Server in an error state.

**IC48266**

The Windows EM64t ServeRAID™ agent does not display inventory information for the ServeRAID 8i card.

**IC48294**

Genevent can cause IBM Director Agent to stop with a core dump on Linux and VMware ESX Server managed systems.

**IC48300**

IBM Director Agent on Linux managed systems sometimes generates the following unhandled Java exception when using the Process Monitor task to monitor processes on the Linux agent:

Exception: java.lang.NullPointerException

## BladeCenter Configuration Manager

- The multicast discovery of chassis managed objects does not work on Windows systems.
- A deleted Server Configuration Manager profile appears in the Select a Profile window when opening a profile.
- In the Configuration Manager Editor window: Switch component, the **Change default user name and password** check box is mislabeled.

**Note:** This check box is now labeled **Reset to factory defaults (note: creating new user accounts replaces any default accounts)**. Adding a new user account to a BladeCenter chassis in BladeCenter Configuration Manager overwrites the default account.

- An "Unsupported target" error message is displayed when applying a Configuration Manager profile to a switch in slot 1 of a BladeCenter chassis.
- Applying a Configuration Manager profile to a switch fails without explanation.
- Applying a Configuration Manager profile to a chassis successfully updates the IP addresses of switches, but does not update the switch IP addresses in IBM Director Console.
- The BladeCenter Chassis tab of the Discovery Preferences window does not appear when IBM Director Server is installed on AIX.
- Applying a Configuration Manager profile to a chassis does not set the enable/disable state of switch external ports.
- Applying a Configuration Manager profile which sets SNMP community 3 to the same community name used by either community 1 or 2 fails.

**Note:** The new behavior is to delete the settings from community 1 or 2 that have the same name before applying the changes to community 3.

- IBM Director is unable to discover, add, or manage a chassis if the chassis' Management Module is SSL-capable.
- The mmnetworkconfig plug-in does not restart the management module when applying Configuration Manager profile changes, so the new settings are not active.

## Command-line interface

- The **dircli native addsystem** command fails after 615 iterations.
- The **getfru** command does not complete correctly on some systems.

## Discovery

- Unicast discovery of Level-0 and Level-1 managed objects is very slow.
- Users can manually add a directory agent as a Level-1 managed object.

**Note:** With the fix, directory agents can only be added as Level-0 (agentless) managed objects.

- IBM Director can discover a Level-2 managed system as Level 1 if the managed system has multiple network interface cards (NICs).
- Level-2 discovery when specifying the IBM Director Server as a broadcast relay agent can cause IBM Director Server to stop. Although this is not a valid configuration of IBM Director Server, IBM Director has been updated to prevent this problem.
- Level-1 discovery sometimes fails to discover all Level-1 systems.

## Event Action Plan Wizard

- The Event Action Plan Wizard now disables the threshold event filters (CPU Utilization and Memory use) check boxes on the Event Filters page when the user has selected a group on the Systems page. Previously, these check boxes were enabled even though threshold event filters cannot be applied to groups.
- CPU Utilization and Memory use check boxes must now be selected to enable entry of threshold values.
- Entry of zero value for the CPU Utilization threshold event filter was not saved correctly.
- The Event Action Plan Wizard now populates the Available Systems on the Systems page even if the user does not have access to the "All Managed Objects" group. Previously, if the user did not have access to all managed systems, this was not populated.

## Hardware / Inventory

- IBM Director displays the incorrect secondary IP address for IBM eServer™ BladeCenter Advanced Management Module port.
- IBM Director Inventory task displays the type for IBM eServer BladeCenter Advanced Management Module incorrectly as Management Module.
- IBM Director Inventory task is missing information about a redundant Management Module.
- IBM Director Agent does not return inventory data for the CIM and Director Agent tables for Linux on System z9 and zSeries managed systems.
- Improve error handling for TIC providers on Linux on System z9 and zSeries.

- Renaming an inventory monitor task removes its associations with managed objects.
- Very high inventory monitoring load (e.g., fully monitored inventory runs every fifteen minutes interspersed with discoveries) will occasionally make IBM Director Server stop.
- Users can select **File > Export** in the Inventory Query Browser window of IBM Director Console when a category (not a query) is selected, causing IBM Director Console to stop.

## Hardware status

- **Edit > Enable** is disabled for ignored events.
- Selecting an event from the event table causes the event table to scroll off the screen in order to display the event details pane.
- IBM Director Console does not display system health icons in the Rack Manager Topology view.

## i5/OS

- When the AS400ProbeStoragePools and AS400ProbeSSTS0200 monitors are running on iSeries™ managed systems, the results of the CPU% utilization reported by the AS400ProbeSSTS0200 monitor can be inaccurate, potentially triggering Resource Monitor events.
- Disk Arm Utilization reports inaccurate results on iSeries servers.
- The list of managed systems running i5/OS® on the Servers page of the Process Management window is incomplete.
- i5/OS IBM Director Server does not collect inventory from supported Level-1 managed objects.

## Installation

- Installing IBM Director Server on AIX systems changes the owner and group IDs for the root and /opt directories.
- Fixes for DirectorCimCore delete existing data in the CIM repository.

## Management Processor Assistant

- IBM Director Server can stop when managing a blade chassis with two or more blade servers separated by an empty slot.
- The IP address for a physical platform managed object (PPMO) is not updated in IBM Director Console for SSL-capable service processors.
- The Remote Control task within the MPA Web Interface tool fails when started from within IBM Director Console.
- Physical platform managed objects (PPMO) running versions of IBM Director Agent prior to 5.10 appear unlocked in IBM Director Server 5.10 but cannot be connected for MPA tasks.

## Platform management

- When a physical platform managed object cannot be reached for connectivity or other reasons, the managed object is locked as though an invalid user ID/password combination were used.
- IBM Director incorrectly displays the TCP/IP address of an RSA managed object with curly brackets and quotation marks.
- IBM Director does not display the host name of an RSA managed object.

## Sensor

- Corrupt packet with a length of 1 or 0 sent by the integrated system management processor (ISMP) can cause a buffer overflow and stop the Pegasus Provider Adapter.
- SNMP-related application exception occurs on some reboots.
- The ibmasfsrv.exe process has a handle leak for IBM Director Server installed on systems with an integrated system management processor (ISMP). This could cause the ASF watchdog timer or the Pegasus Provider Adapter to run out of handles, resulting in unexpected failures.

## SNMP

- A specific malformed SNMP trap can cause an uncaught exception that crashes IBM Director Server.
- IBM Director does not support automatic compiling of new MIB files.

## Miscellaneous

- Closing the File Transfer window quickly after performing a file transfer can cause IBM Director Console to stop on slow systems.
- Performing the Virtualization Engine™ Console task without resources causes an exception.

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## Chapter 2. Installation and upgrade information

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### Installation notes

This section provides general information about installing and upgrading to IBM Director Version 5.10 Update 1.

- You must use the same release level of IBM Director Server and IBM Director Console. If you upgrade to IBM Director Server 5.10 Update 1, you must upgrade all instances of IBM Director Console also. If IBM Director Console and IBM Director Agent are installed on the same system, IBM Director Agent must also use the same release level as IBM Director Server.
- You must download all upgrade packages for IBM Director Version 5.10 Update 1 from the IBM Director Web Site. This upgrade is not available on CD-ROM or other physical media. See “Obtaining upgrade packages.”
- IBM Director components which are upgraded to Version 5.10 Update 1 will have the version number 5.10.1.

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](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html).

---

### Obtaining upgrade packages

Before beginning installation procedures, obtain the upgrade packages for all components that will be upgraded to Version 5.10 Update 1.

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

All upgrade packages for IBM Director Version 5.10 Update 1 must be downloaded. This upgrade is not available on CD-ROM or other physical media.

### Obtaining upgrade packages for iSeries, xSeries, and System z9 and zSeries servers

Complete the following steps to download the upgrade packages for IBM Director 5.10 Update 1:

1. Navigate to the IBM Director Downloads Web Site at [www.ibm.com/servers/eserver/xseries/systems\\_management/xseries\\_sm/dwnl.html](http://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 1**.
4. Click the link for the package you want to download.

*Table 1. 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 1 for i5/OS	dir5.10.1_agent_i5OS.zip
IBM Director Agent 5.10 Update 1 for Linux for xSeries	dir5.10.1_agent_linux.tar

Table 1. IBM Director upgrade packages available on the IBM Director 5.10 for xSeries and BladeCenter download site (continued)

Component	Package file name
IBM Director Agent 5.10 Update 1 for Linux for Intel® Itanium (64 bit)	dir5.10.1_agent_linux64.tar
IBM Director Agent 5.10 Update 1 for Linux for System z9 and zSeries	dir5.10.1_agent-linux-s390.tar
IBM Director Agent 5.10 Update 1 for NetWare	dir5.10.1_agent_netware.zip
IBM Director Agent 5.10 Update 1 for Windows (32 bit)	dir5.10.1_agent_windows.zip
IBM Director Agent 5.10 Update 1 for Windows for Intel Itanium® (64 bit)	dir5.10.1_agent_windows64.zip
IBM Director Console 5.10 Update 1 for Linux for xSeries	dir5.10.1_console_linux.tar
IBM Director Console 5.10 Update 1 for Linux for System z9 and zSeries	dir5.10.1_console-linux-s390.tar
IBM Director Console 5.10 Update 1 for Windows	dir5.10.1_console_patch_windows.zip
IBM Director Core Services 5.10 Update 1 for Linux for xSeries	dir5.10.1_coreservices_linux.tar
IBM Director Core Services 5.10 Update 1 for Linux for System z9 and zSeries	dir5.10.1_coreservices-agent-linux-s390.tar
IBM Director Core Services 5.10 Update 1 for Windows	dir5.10.1_coreservices_windows.zip
IBM Director Server 5.10 Update 1 for i5/OS	dir5.10.1_server_patch_i5os.zip
IBM Director Server 5.10 Update 1 for Linux for xSeries	dir5.10.1_server_linux.tar
IBM Director Server 5.10 Update 1 for Linux for System z9 and zSeries	dir5.10.1_server-linux-s390.tar
IBM Director Server 5.10 Update 1 for Windows	dir5.10.1_server_patch_windows.zip
IBM Director 5.10 Update 1 for the z/VM® CIM instrumentation that implements the z/VM management profile (full RPM installation package XML and shell script)	dir5.10.1_zvmmap-agent-linux-s390.tar

## Obtaining upgrade packages for System p5 and pSeries servers

Complete the following steps to download the upgrade packages for IBM Director 5.10 Update 1:

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

6. Navigate to the package you need and click **Download now**.

*Table 2. IBM Director upgrade packages available on the IBM Director System p5 and pSeries download site*

Component	Package file name
IBM Director Agent 5.10 Update 1 for AIX	Dir5.10.1_AIX.tar Dir5.10.1_AIX.iso
IBM Director Agent 5.10 Update 1 for Linux on POWER™	Dir5.10.1_LinuxonPower.tar Dir5.10.1_LinuxonPower.iso
IBM Director Console 5.10 Update 1 for AIX	Dir5.10.1_AIX.tar Dir5.10.1_AIX.iso
IBM Director Console 5.10 Update 1 for Linux on POWER	Dir5.10.1_LinuxonPower.tar Dir5.10.1_LinuxonPower.iso
IBM Director Core Services 5.10 Update 1 for Linux on POWER	Dir5.10.1_LinuxonPower.tar Dir5.10.1_LinuxonPower.iso
IBM Director Server 5.10 Update 1 for AIX	Dir5.10.1_AIX.tar Dir5.10.1_AIX.iso
IBM Director Server 5.10 Update 1 for Linux on POWER	Dir5.10.1_LinuxonPower.tar Dir5.10.1_LinuxonPower.iso

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## Upgrading IBM Director Server

This section describes procedures for upgrading IBM Director Server to Version 5.10 Update 1.

### Upgrading IBM Director Server on AIX

The IBM Director Server 5.10 Update 1 for AIX package performs a complete new installation or upgrades an existing installation of IBM Director Server 5.10 to IBM Director Server 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on AIX to Version 5.10 Update 1:

1. Obtain the IBM Director Server 5.10 Update 1 for AIX installation package. See “Obtaining upgrade packages” on page 7.
2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:  
`/opt/ibm/director/bin/twgstop`
3. Install the Dir5.10.1\_AIX.tar or Dir5.10.1\_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](http://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 12.

## Upgrading IBM Director Server on i5/OS

The IBM Director Server 5.10 Update 1 for i5/OS package upgrades an existing installation of IBM Director Server 5.10 to IBM Director Server 5.10.1.

Complete the following steps to upgrade IBM Director Server on i5/OS to Version 5.10 Update 1:

1. Obtain the IBM Director Server 5.10 Update 1 for i5/OS upgrade package. See “Obtaining upgrade packages” on page 7.
2. Create the /QIBM/UserData/VE2/Updates directory on the management server if it does not already exist, and save 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](http://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 commands to upgrade IBM Director Server:

```
java -jar /QOpenSys/QIBM/ProdData/ci/gmi/lib/gmi.jar
      -discriminant /QIBM/ProdData/VE2
      -mdvFile /QIBM/UserData/VE2/Updates/dir5.10.1_server_patch_i5os.zip
      -silent
cd /tmp
DirServerInstallFixpack.sh
```

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

```
/qibm/userdata/director/bin/twgstart
```

**Note:** 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 1:

1. Extract the contents of the dir5.10.1\_server\_patch\_i5os.zip file to a local directory. This archive contains the SAVDR100MM.sav file.
2. Use FTP to transfer SAVDR100MM.sav into a save file on the i5/OS system on which you want to upgrade IBM Director Server.
3. Use RSTLICPGM to install the product. In the following example, SAVDR100MM is the name of the save file to which SAVDR100MM.sav was transferred:
 

```
RSTLICPGM LICPGM(5722DR1) DEV(*SAVF) SAVF(QGPL/SAVDR100MM)
```
4. Restart IBM Director Server as instructed above.

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 12.

## Upgrading IBM Director Server on Linux for xSeries

The IBM Director Server 5.10 Update 1 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Server Version 4 (all releases) or Version 5.10 to IBM Director Server 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on Linux for xSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Server 5.10 Update 1 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 7.

2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:  

```
/opt/ibm/director/bin/twgstop
```
3. Install the `dir5.10.1_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/dirinfo/fqm0\\_t\\_installing\\_ibm\\_director\\_server.html](http://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
```

When you install IBM Director Server Version 5.10 Update 1, 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 12.

## Upgrading IBM Director Server on Linux for System z9 and zSeries

**Note:** If your target system is a z/VM manageability access point, follow the steps in “Upgrading a z/VM manageability access point” on page 19.

The IBM Director Server 5.10 Update 1 for Linux for System z9 and zSeries package upgrades an existing installation of IBM Director Server 5.10 to IBM Director Server 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on Linux for System z9 and zSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Server 5.10 Update 1 for Linux for System z9 and zSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:  

```
/opt/ibm/director/bin/twgstop
```
3. Install the `dir5.10.1_server-linux-s390.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\\_server.html](http://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 12.

## Upgrading IBM Director Server on Linux on POWER

The IBM Director Server 5.10 Update 1 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Server 5.10 to IBM Director Server 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Server on Linux on POWER to Version 5.10 Update 1:

1. Obtain the IBM Director Server 5.10 Update 1 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 7.
2. Stop IBM Director Server. From a command prompt, type the following command and press **Enter**:  

```
/opt/ibm/director/bin/twgstop
```
3. Install the Dir5.10.1\_LinuxonPower.tar or Dir5.10.1\_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](http://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 1 for Windows package upgrades an existing installation of IBM Director Server 5.10 to IBM Director Server 5.10.1.

Complete the following steps to upgrade IBM Director Server on Windows to Version 5.10 Update 1:

1. Obtain the IBM Director Server 5.10 Update 1 for Windows upgrade package. See “Obtaining upgrade packages” on page 7.
2. Extract the files from the dir5.10.1\_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 1.

## Upgrading IBM Director Console on AIX

The IBM Director Console 5.10 Update 1 for AIX package performs a complete new installation or upgrades an existing installation of IBM Director Console 5.10 to IBM Director Console 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Console on AIX to Version 5.10 Update 1:

1. Obtain the IBM Director Console 5.10 Update 1 for AIX installation package. See “Obtaining upgrade packages” on page 7.

2. Install the Dir5.10.1\_AIX.tar or Dir5.10.1\_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](http://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 1 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Console Version 4 (all releases) or Version 5.10 to IBM Director Console 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Console on Linux for xSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Console 5.10 Update 1 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Install the dir5.10.1\_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](http://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 5.10.1. If IBM Director Agent is not already installed, this package only installs or upgrades IBM Director Console.

## Upgrading IBM Director Console on Linux for System z9 and zSeries

**Note:** If your target system is a z/VM manageability access point, follow the steps in “Upgrading a z/VM manageability access point” on page 19.

The IBM Director Console 5.10 Update 1 for Linux for System z9 and zSeries package performs a complete new installation or upgrades an existing installation of IBM Director Console 5.10 to IBM Director Console 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Console on Linux for System z9 and zSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Console 5.10 Update 1 for Linux for System z9 and zSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Install the dir5.10.1\_console-linux-s390.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](http://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 on POWER

The IBM Director Console 5.10 Update 1 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Console 5.10 to IBM Director Console 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Console on Linux on POWER to Version 5.10 Update 1:

1. Obtain the IBM Director Console 5.10 Update 1 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 7.
2. Install the Dir5.10.1\_LinuxonPower.tar or Dir5.10.1\_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](http://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 1 for Windows package upgrades an existing installation of IBM Director Console 5.10 to IBM Director Console 5.10.1.

Complete the following steps to upgrade IBM Director Console on Windows to Version 5.10 Update 1:

1. Obtain the IBM Director Console 5.10 Update 1 for Windows installation package. See “Obtaining upgrade packages” on page 7.
2. Extract the files from the dir5.10.1\_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 1.

### Upgrading IBM Director Agent on AIX

The IBM Director Agent 5.10 Update 1 for AIX package performs a complete new installation or upgrades an existing installation of IBM Director Agent Versions 4.20 or 5.10 to IBM Director Agent 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on AIX to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for AIX installation package. See “Obtaining upgrade packages” on page 7.
2. Stop IBM Director Agent. From a command prompt, type the following command and press **Enter**:
 

```
/opt/ibm/director/bin/twgstop
```
3. Install the Dir5.10.1\_AIX.tar or Dir5.10.1\_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](http://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 1 for i5/OS package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases) or Version 5.10 to IBM Director Agent 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on i5/OS to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for i5/OS installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_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](http://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](http://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 1 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases) or Version 5.10 to IBM Director Agent 5.10.1, 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 IBM Director Console upgrade package also upgrades the IBM Director Agent installation to version 5.10.1.

Complete the following steps to upgrade IBM Director Agent on Linux for xSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_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](http://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 for System z9 and zSeries

**Note:** If your target system is a z/VM manageability access point, follow the steps in “Upgrading a z/VM manageability access point” on page 19.

The IBM Director Agent 5.10 Update 1 for Linux for System z9 and zSeries package performs a complete new installation or upgrades an existing installation of IBM Director Agent 5.10 to IBM Director Agent 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on Linux for System z9 and zSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for Linux for System z9 and zSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_agent-linux-s390.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](http://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 1 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Agent Versions 4.20 or 5.10 to IBM Director Agent 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on Linux on POWER to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 7.
2. Stop IBM Director Agent. From a command prompt, type the following command and press **Enter**:  

```
/opt/ibm/director/bin/twgstop
```
3. Install the `Dir5.10.1_LinuxonPower.tar` or `Dir5.10.1_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](http://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 1 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) or Version 5.10 to IBM Director Agent 5.10.1, 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 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for Linux for Intel Itanium (64 bit) installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_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](http://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 1 for NetWare package performs a complete new installation or upgrades an existing installation of IBM Director Agent 5.10 to IBM Director Agent 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on NetWare to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for NetWare installation package. See “Obtaining upgrade packages” on page 7.
2. Install the dir5.10.1\_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/diricino/fqm0\\_t\\_installinglibm\\_director\\_agent.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricino/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 1 for Windows (32 bit) package performs a complete new installation or upgrades an existing installation of IBM Director Agent Version 4 (all releases) or Version 5.10 to IBM Director Agent 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Agent on Windows (32 bit) to Version 5.10 Update 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for Windows (32 bit) installation package. See “Obtaining upgrade packages” on page 7.
2. Install the dir5.10.1\_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/diricino/fqm0\\_t\\_installinglibm\\_director\\_agent.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricino/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 1 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) or Version 5.10 to IBM Director Agent 5.10.1, 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 1:

1. Obtain the IBM Director Agent 5.10 Update 1 for Windows for Intel Itanium (64 bit) installation package. See “Obtaining upgrade packages” on page 7.
2. Install the dir5.10.1\_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/diricino/fqm0\\_t\\_installinglibm\\_director\\_agent.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricino/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 1.

## Upgrading IBM Director Core Services on Linux for xSeries

The IBM Director Core Services 5.10 Update 1 for Linux for xSeries package performs a complete new installation or upgrades an existing installation of IBM Director Core Services Version 5.10 to IBM Director Core Services 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Linux for xSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Core Services 5.10 Update 1 for Linux for xSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_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/diricinfo/fqm0\\_t\\_installing\\_core\\_services.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricinfo/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 for System z9 and zSeries

**Note:** If your target system is a z/VM manageability access point, follow the steps in “Upgrading a z/VM manageability access point” on page 19.

The IBM Director Core Services 5.10 Update 1 for Linux for System z9 and zSeries package performs a complete new installation or upgrades an existing installation of IBM Director Core Services 5.10 to IBM Director Core Services 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Linux for System z9 and zSeries to Version 5.10 Update 1:

1. Obtain the IBM Director Core Services 5.10 Update 1 for Linux for System z9 and zSeries installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_coreservices-agent-linux-s390.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\\_core\\_services.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricinfo/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 1 for Linux on POWER package performs a complete new installation or upgrades an existing installation of IBM Director Core Services 5.10 to IBM Director Core Services 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Linux on POWER to Version 5.10 Update 1:

1. Obtain the IBM Director Core Services 5.10 Update 1 for Linux on POWER installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `Dir5.10.1_LinuxonPower.tar` or `Dir5.10.1_LinuxonPower.iso` 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\\_core\\_services.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/diricinfo/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 1 for Windows package performs a complete new installation or upgrades an existing installation of IBM Director Core Services Version 5.10 to IBM Director Core Services 5.10.1, preserving user configuration data.

Complete the following steps to upgrade IBM Director Core Services on Windows to Version 5.10 Update 1:

1. Obtain the IBM Director Core Services 5.10 Update 1 for Windows installation package. See “Obtaining upgrade packages” on page 7.
2. Install the `dir5.10.1_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](http://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 a z/VM manageability access point

This topic describes how to upgrade the IBM Director components on a z/VM manageability access point. You are advised to create a backup of the Common Information Model Object Manager (CIMOM) data repository when upgrading the IBM Director components on a z/VM manageability access point.

A z/VM manageability access point is the Linux system that runs in a z/VM guest virtual machine and that implements the Common Information Model (CIM) profile for z/VM management (that is, the z/VM management profile). See [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0\\_c\\_map.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0_c_map.html) for more details on z/VM manageability access points.

The z/VM manageability access point always has at least IBM Director Agent installed. It can optionally have IBM Director Server installed.

Complete these tasks to upgrade the IBM Director components on a z/VM manageability access point:

1. Create a backup of the CIMOM data repository.
2. Upgrade IBM Director Agent or IBM Director Server, as applicable.
3. Upgrade the z/VM CIM instrumentation that implements the z/VM management profile.

If the upgrade fails, perform a new installation of IBM Director Agent or IBM Director Server and the z/VM CIM instrumentation that implements the z/VM management profile and restore the CIMOM data repository from the backup (see “Recovering from a failed upgrade” on page 20).

## Creating a backup of the CIMOM data repository

This section describes how to create a backup of the CIMOM data repository on a z/VM manageability access point.

From a terminal session on the z/VM manageability access point, complete the following steps to create a backup of the CIMOM data repository:

1. Type the following command and press **Enter** to ensure that CIMOM is not running:

```
/etc/init.d/dacimom stop
```

2. Type the following command and press **Enter** to create a tar file with a backup of the CIMOM data repository:

```
tar czf repository_backup.tgz -C inst_dir/cimom/repository .
```

*inst\_dir* is the directory in which IBM Director Server or IBM Director Agent has been installed on the z/VM manageability access point.

3. Type the following command and press **Enter** to restart CIMOM:

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

## Upgrading IBM Director Agent or IBM Director Server

This section describes how to upgrade IBM Director Agent or IBM Director Server on a z/VM manageability access point.

Complete the following steps to upgrade IBM Director Agent or IBM Director Server:

1. Obtain the installation packages for the z/VM CIM instrumentation that implements the z/VM management profile and for IBM Director Server or IBM Director Agent from the IBM Director site [www.ibm.com/servers/eserver/xseries/systems\\_management/ibm\\_director/](http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/). See Table 1 on page 7 for an overview of the available installation packages.

2. Install the IBM Director Server or IBM Director Agent upgrade.

If you are upgrading IBM Director Agent, follow the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0\\_t\\_installing\\_ibm\\_director\\_agent\\_level2\\_on\\_linux\\_for\\_zseries.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_agent_level2_on_linux_for_zseries.html).

If you are upgrading IBM Director Server, follow the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0\\_t\\_installing\\_ibm\\_director\\_server\\_on\\_linux\\_for\\_zseries.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_server_on_linux_for_zseries.html).

## Upgrading the z/VM CIM instrumentation that implements the z/VM management profile

To install the upgrade for the z/VM CIM instrumentation that implements the z/VM management profile, follow the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0\\_t\\_install\\_map\\_rpm.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0_t_install_map_rpm.html).

To obtain an RPM for installing or upgrading the z/VM CIM instrumentation, complete the following steps:

1. Navigate to the IBM Director Downloads Web Site at [www.ibm.com/servers/eserver/xseries/systems\\_management/xseries\\_sm/dwnl.html](http://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 1**. The download package is called `dir5.10.1_zvmmap-agent-linux-s390.tar`.

When you are satisfied that your upgrade has completed successfully and that z/VM Center works as required and without loss of data, you can optionally delete the backup of the CIMOM data repository; see step 7b on page 22 for directions. If the upgrade fails, proceed as described in “Recovering from a failed upgrade.”

## Recovering from a failed upgrade

This section describes how to use a backup of the CIMOM data repository to recover from a failed upgrade of IBM Director Agent or IBM Director Server on a z/VM manageability access point.

From a terminal session on the z/VM manageability access point, complete the following steps to recover from a failed upgrade:

1. Type the following command and press **Enter** to uninstall IBM Director:

```
/opt/ibm/director/bin/diruninstall
```

See [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0\\_t\\_uninstalling\\_ibm\\_director\\_on\\_linux.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_uninstalling_ibm_director_on_linux.html) for information on persistent data that is backed up during the uninstall process.

2. Install the upgraded IBM Director version.

For IBM Director Agent, follow the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0\\_t\\_installing\\_ibm\\_director\\_agent\\_level2\\_on\\_linux\\_for\\_zseries.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_agent_level2_on_linux_for_zseries.html).

For IBM Director Server, follow the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0\\_t\\_installing\\_ibm\\_director\\_server\\_on\\_linux\\_for\\_zseries.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_t_installing_ibm_director_server_on_linux_for_zseries.html).

3. Restore the persistent data that you have backed up during the uninstall process. See [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0\\_r\\_cli\\_twgrestore.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_r_cli_twgrestore.html).
4. For IBM Director Server, ensure that the file `inst_dir/proddata/ZvmCenter.properties` exists. If it does not exist, create it according to the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0\\_t\\_install\\_key.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0_t_install_key.html).

`inst_dir` is the directory in which you have installed IBM Director Server.

5. Install the z/VM CIM instrumentation that implements the z/VM management profile by following the steps in [publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0\\_t\\_install\\_map\\_rpm.html](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/vsd0_t_install_map_rpm.html).
6. Restore the backed up CIMOM data repository:

- a. Type the following command and press **Enter** to ensure that CIMOM is not running:

```
/etc/init.d/dacimom stop
```

- b. Type the following command and press **Enter** to rename the directory with the CIMOM data repository that was installed with the new installation:

```
mv inst_dir/cimom/repository inst_dir/cimom/new_repository_unused
```

`inst_dir` is the directory to which IBM Director Server or IBM Director Agent has been installed.

- c. Type the following command and press **Enter** to create a new directory for the CIMOM data repository:

```
mkdir inst_dir/cimom/repository
```

- d. Type the following command and press **Enter** to untar the backup to the new directory:

```
tar xzf repository_backup.tgz -C inst_dir/cimom/repository
```

- e. Type the following command and press **Enter** to restart CIMOM:

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

7. **(Optional)** When you are satisfied that IBM Director and z/VM Center work as required and without loss of data, you can clean up the backups of the old and the new CIMOM data repository.

- a. Type the following command and press **Enter** to remove the renamed new CIMOM data repository:

```
rm -rf inst_dir/cimom/new_repository_unused
```

- b. Type the following command and press **Enter** to remove the backup of the restored CIMOM data repository:

```
rm repository_backup.tgz
```

---

## Chapter 3. Known limitations, problems, and workarounds

This section provides information about known limitations, problems, and workarounds when using IBM Director 5.10 Update 1.

---

### Limitations

IBM Director 5.10 Update 1 has the following limitations:

**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.**

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

**The Asset ID™ task is not supported for managed systems running AIX.**

**On AIX, when using the Hardware Status task, the initial hardware status query is not supported.**

**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:

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

does not make the requested changes and results in the following error message:

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

---

### Problems

IBM Director 5.10 Update 1 has the following known problems:

**You might experience some latency when collecting inventory on a Level-1 managed system running Linux on POWER.**

**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 (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.

---

## Workarounds

This section includes solutions to problems you might encounter when using IBM Director 5.10 Update 1.

### 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.

On management servers that have an IPv6 stack (most current Linux systems), there is a Java Runtime Environment issue with the multicast Time to Live. If multicast is required (for example, to discover Level-1 systems or some chassis), perform the following steps:

1. Open the `/opt/ibm/director/bin/twgjava` file using a tab-preserving editor such as `vi`.
2. Change line 203 from:
 

```
JAVA_OPTIONS="$JAVA_OPTIONS -Djava.library.path=$JAVA_LIB_PATH"
```

 to:
 

```
JAVA_OPTIONS="$JAVA_OPTIONS -Djava.library.path=$JAVA_LIB_PATH
-Djava.net.preferIPv4Stack=true"
```
3. Save and close the `/opt/ibm/director/bin/twgjava` file.
4. Restart IBM Director Server.

### The fwupdate command does not update Advanced Management Module firmware

This problem occurs because 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 -enabled command fails when more than one alert ID is specified.

The workaround is to execute one command for each alert ID.

For example, instead of issuing this command:

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

issue these three commands:

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

This problem also exists for the `setalertrigger -disabled` command, and the workaround is the same.

## The Management Processor Assistant Command Line Interface (MPCLI) task fails for a Baseboard Management Controller (BMC) managed object.

When you attempt to start the MPCLI from a 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, use the MPCLI **logonip** command:

```
logonip -hostname IHost -u Iuserid -p Ipassword -t ipmi
```

where

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

For detailed information on the **logonip** command, see the *IBM Management Processor Command-Line Interface User's Guide*, which can be downloaded from [www.ibm.com/pc/support/site.wss/document.do?Indocid=MIGR-54214](http://www.ibm.com/pc/support/site.wss/document.do?Indocid=MIGR-54214).



## Chapter 4. Documentation updates

This section includes documentation updates that might not appear in the IBM Director 5.10 online help or the version of an online or printed IBM Director 5.10 publication that you might receive or access.

### Managing IBM Director: Discovering systems that use a mirrored image

If you have systems that are cloned or use a mirrored image, you must ensure, for Level-1 and Level-2 managed systems, that IBM Director has a unique identifier (UID) on each system. The Secure Shell (SSH) host key must also be unique for the mirrored systems, whether they are Level-0, Level-1, or Level-2 managed systems.

To discover cloned systems, complete the following steps:

1. If the mirrored system is a Level-0 managed system, go to step 3. If Level 1: IBM Director Core Services or Level 2: IBM Director Agent is installed on the mirrored system, delete the UID entry that was duplicated.

Platform	Location of UID entry
AIX, i5/OS, Linux	/etc/ibm/director/twgagent/twgagent.uid
Windows	Registry key:  HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ComputerName\ComputerName key  Value: TWGMachineID

2. Generate a new UID.

Platform	Instructions
AIX and Linux	Run the following command: <code>/opt/ibm/director/bin/genuid</code>
i5/OS	Restart IBM Director. In Qshell, complete the following commands: <code>/opt/ibm/director/bin/twgstop</code> <code>/opt/ibm/director/bin/twgstart</code>
Windows	From C:\Program Files\IBM\Director\bin, run GENUID.exe.

3. If the mirrored system does not use SSH, go to step 5 on page 28. If the mirrored system uses SSH, delete and regenerate the SSH host keys.

Platform	Instructions
AIX and Linux	Type the following commands: <code>rm /etc/ssh/ssh_host_rsa_key</code> <code>rm /etc/ssh/ssh_host_dsa_key</code> <code>/usr/bin/ssh-keygen -t rsa -f /etc/ssh/ssh_host_rsa_key</code> <code>/usr/bin/ssh-keygen -t dsa -f /etc/ssh/ssh_host_dsa_key</code>
i5/OS	Not Applicable

Platform	Instructions
Windows	Delete the following files:  C:\Program Files\OpenSSH\etc\ssh_host_rsa_key C:\Program Files\OpenSSH\etc\ssh_host_dsa_key  The SSH host keys are regenerated when you restart the SSH service.

4. Restart the SSH service.
5. In the IBM Director Console, click **Tasks** → **Discover Systems** → **System type** .

---

## Managing Systems

### Exporting threshold tasks

This topic describes how to export threshold tasks in IBM Director.

You can export a threshold task for use on another management console. Complete the following steps to export a threshold task:

1. In the IBM Director Console Tasks pane, expand the **Resource Monitors** task.
2. Double-click the **All Available Thresholds** task.
3. In the All Available Thresholds window, right-click the threshold that you want to export and click **Export to Task**.
4. In the “Export task” window, type a task name in the **Name** field, then click **OK**. The task is displayed under the Resource Monitors task.
5. Double-click the task you just created.
6. In the All Available Thresholds window, click **File** → **Export to File**.
7. In the Export to File window, complete the following steps:
  - a. Select a path for the file to be exported.
  - b. Type a file name in the **File Name** field. The correct extension (.thrshplan) is added automatically.
  - c. Click **OK**.

### Importing threshold tasks

This topic describes how to import threshold tasks in IBM Director.

You can import a threshold task from another management console. Complete the following steps to import a threshold task:

1. In the IBM Director Console Tasks pane, right-click the Resource Monitors task and click **Import Plan from File**.
2. In the Import Threshold Plan from File window, either type a file name in the **File Name** field or navigate to the file and click the file name.
3. Click **OK**.
4. In the Import Threshold Plan from File window, select the plan name to import and click **Action** → **Create New Task**. The new task appears in the Tasks pane under the Resource Monitors task.

## Licensing

Every IBM xSeries server and **@server** BladeCenter unit comes with an IBM Director Server license. This license includes authorizations for the following installations:

- One installation of IBM Director Server
- 20 installations of IBM Director Agent on non-IBM systems
- Unlimited installations of IBM Director Console

Most IBM Intel-compatible systems come with a license for IBM Director Agent. For a complete list of IBM Intel-compatible systems and **@server** JS20 blade servers that are entitled to an IBM Director Agent license, see the *IBM Director Hardware and Software Compatibility* document. You can download this PDF file from the IBM Director v5.10 - Publications Web page at [www.ibm.com/pc/support/site.wss/document.do?Indocid=MIGR-61788](http://www.ibm.com/pc/support/site.wss/document.do?Indocid=MIGR-61788).

You can purchase additional licenses for non-IBM systems, if needed. For more information, contact your IBM marketing representative.



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## 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](http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html)

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

#### IBM Director Web site on [ibm.com](http://ibm.com)<sup>®</sup>

[www.ibm.com/servers/eserver/xseries/systems\\_management/ibm\\_director/](http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/)

The IBM Director Web site on [ibm.com](http://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 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 [eServer](http://www.ibm.com) 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 Systems Software information center

[www.ibm.com/servers/library/infocenter/](http://www.ibm.com/servers/library/infocenter/)

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

#### IBM ServerProven<sup>®</sup> page

[www.ibm.com/pc/us/compat/index.html](http://www.ibm.com/pc/us/compat/index.html)

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

#### IBM Systems Management Software: Download/Electronic Support page

[www.ibm.com/servers/eserver/xseries/systems\\_management/ibm\\_director/](http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/)

Use this Web page to download IBM system-management software, including IBM Director. Check this Web page regularly for new IBM Director releases and updates.

#### IBM Servers

[www.ibm.com/servers/](http://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 iSeries
- IBM pSeries
- IBM xSeries
- IBM System z9 and [@server](#) zSeries

### **IBM Virtualization Engine systems services fixes**

[techsupport.services.ibm.com/server/VirtualizationEngine](http://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 [@server](#) forums**

[www.ibm.com/developerworks/forums/dw\\_esforums.jsp](http://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 [@server](#) servers.

Two 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](http://www.ibm.com/developerworks/forums/dw_forum.jsp?forum=759&cat=53)

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

#### **xSeries Server forum**

[www.ibm.com/developerworks/forums/dw\\_forum.jsp?forum=740&cat=53](http://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. The Web page includes a link for obtaining forum using an RSS feed.

### **IBM Redbooks™**

[www.ibm.com/redbooks/](http://www.ibm.com/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 system-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 eServer 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](http://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](http://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 eServer BladeCenter (Type 8677)*
- *IBM Management Processor Command-Line Utility User's Guide version 3.00*



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## 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 comes with your system also describes the diagnostic tests that you can perform. Most hardware systems, operating systems, and programs come with 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 3 lists some of these pages.

*Table 3. Support Web sites*

<a href="http://www.ibm.com/">www.ibm.com/</a>	Main IBM home page
<a href="http://www.ibm.com/servers/">www.ibm.com/servers/</a>	IBM eServer home page
<a href="http://www.ibm.com/pc/support/">www.ibm.com/pc/support/</a>	IBM Support page
<a href="http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/">www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/</a>	IBM Director home page with links to user support and the technical forum
<a href="http://publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html">publib.boulder.ibm.com/infocenter/eserver/v1r2/topic/dirinfo/fqm0_main.html</a>	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/](http://www.ibm.com/services/sl/products/).

For more information about Support Line and other IBM services, go to [www.ibm.com/services/](http://www.ibm.com/services/), or to [www.ibm.com/planetwide/](http://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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## Appendix C. Notices and Trademarks

This section provides legal notices and trademark information.

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IBM Systems  
IBM Director  
Release Notes  
Version 5.10 Update 1

Part Number 42C4806

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	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Overall satisfaction	<input type="checkbox"/>				

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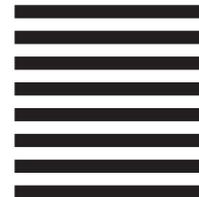
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