



IBM Systems

IBM Director

Hardware and Software Compatibility

*Version 5.10 Update 2*

May 26, 2006

**Note**

Before using this information and the product it supports, read the information in the Appendix, "Notices."

**Second Edition (May 2006)**

This edition applies to version 5.10 update 2 of IBM Director and to all subsequent releases and modifications until otherwise indicated in new editions.

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## About this book

This book provides the following information about IBM® Director 5.10 Update 2:

- Supported IBM hardware
- Supported operating systems
- Supported workgroup and enterprise systems-management software
- Limitations and performance considerations

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## Conventions and terminology

These notices are designed to highlight key information:

**Note:** These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

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## 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 available on a wide range of topics.

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

[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 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 IBM hardware, 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® page**

[www.ibm.com/servers/eserver/serverproven/compat/us/](http://www.ibm.com/servers/eserver/serverproven/compat/us/)

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

#### **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 System i™
- IBM System p™
- IBM System x and xSeries
- IBM System z™

#### **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 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 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 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](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. This Web page includes a link for obtaining the forum using an RSS feed.

## IBM Redbooks™ publications

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

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## How to send your comments

Your feedback is important in helping to provide the most accurate and highest quality information. If you have any comments about this book or any other IBM Director publication, use the form for reader's comments is provided at the back of this publication. If the form has been removed, you may address your comments to:

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Design & Information Development  
Department CGFA  
PO Box 12195  
Research Triangle Park, NC 27709-9990  
U.S.A.

## Chapter 1. Supported hardware

IBM Director Agent is licensed for use and supported on the following IBM systems and products:

- IBM BladeCenter and BladeCenter T chassis
- IBM blade servers
- IBM IntelliStation workstations
- IBM SurePOS™ point-of-sale systems
- IBM System i servers
- IBM System p servers
- IBM System x, xSeries, and Netfinity® servers
- IBM System z servers
- IBM System Storage™ Network Attached Storage (NAS) products
- ThinkCentre, NetVista, and PC desktop computers
- ThinkPad mobile computers

IBM Director Agent is supported on non-IBM Intel® or AMD based systems with SMBIOS 2.1 or later that meet the Intel Wired for Management (WfM) 2.0 specification.

### Notes:

1. IBM Director runs on IBM System i, System p, and System z servers when the installed operating system is also supported by IBM Director. See Supported operating systems and software for IBM Director operating-system support information on these servers.
2. The IBM System Storage NAS products come with IBM Director Agent installed.
3. Some models might not be available in your area.

Some systems and products are supported only in compatibility mode. *Compatibility mode* means that IBM Director provides only basic systems-management capabilities, such as system discovery, inventory collection, and the display of basic system information. Hardware-specific features are not supported, although they might be included in a later release of IBM Director. Hardware-specific features can include the following IBM Director tasks:

- Alert Standard Format (ASF)
- Asset ID™
- Hardware Status
- Rack Manager
- ServeRAID™ Manager

Hardware-specific features also include Predictive Failure Analysis® (PFA) alerts for memory and processors, as well as environmental sensor monitoring, such as temperature, fan, voltage, power-supply status, and chassis-intrusion detection.

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## IBM BladeCenter products

This topic lists the BladeCenter chassis and blade servers supported by IBM Director Agent.

IBM Director Agent supports the following products:

- BladeCenter chassis
- BladeCenter H chassis
- BladeCenter T chassis
- HS20 blade server
- HS40 blade server
- LS20 blade server
- JS20 blade server
- JS21 blade server

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## IBM eServer servers

This topic lists the eServer™ products supported by IBM Director Agent.

IBM Director Agent supports the following system models:

- 325
- 326
- 326m

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## IBM IntelliStation workstations

This topic lists the IntelliStation workstations supported by IBM Director Agent.

IBM Director Agent supports the following system models and machine types:

- A-Pro – 6224, 6217
- E-Pro – 6204, 6214, 6216, 6226, 6836, 6846, 6867, 6893
- M-Pro – 6218, 6219, 6220, 6225, 6229, 6230, 6231, 6233, 6849, 6850, 6868, 6878, 6889, 6898, 9237
- R-Pro – 6851
- Z-Pro – 6221, 6222, 6223, 6227, 6865, 6866

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## IBM Netfinity servers

This topic lists the Netfinity servers supported by IBM Director Agent.

IBM Director Agent supports the following system models:

- Netfinity 1000
- Netfinity 3000
- Netfinity 3500
- Netfinity 3500 M10
- Netfinity 3500 M20
- Netfinity 4000R
- Netfinity 4500
- Netfinity 4500R

- Netfinity 5000
- Netfinity 5100
- Netfinity 5500
- Netfinity 5500 M10
- Netfinity 5500 M20
- Netfinity 5600
- Netfinity 6000
- Netfinity 6000R
- Netfinity 7000 (**Note:** Only compatibility-mode support is provided.)
- Netfinity 7000 M10
- Netfinity 7100
- Netfinity 7600
- Netfinity 8500R

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## IBM SurePOS point-of-sale systems

This topic lists the SurePOS point-of-sale systems supported by IBM Director Agent.

IBM Director Agent supports the following system models and machine types. However, only compatibility-mode support is provided.

- SurePOS 4694
- SurePOS 500 / 600 – 4840
- SurePOS 700 – 4800

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## IBM System i, System p, and System z servers

IBM Director runs on IBM System i, System p, and System z servers when the installed operating system is also supported by IBM Director.

See Supported operating systems for IBM Director operating-system support information on these servers.

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## IBM System x servers

This topic lists the System x servers supported by IBM Director Agent.

IBM Director Agent supports the following system models:

- x3500
- x3550
- x3650
- x3650 T
- x3800
- x3850
- x3950

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## IBM System Storage Network Attached Storage products

This topic lists the IBM System Storage Network Attached Storage products supported by IBM Director Agent.

IBM Director Agent supports the following product models:

- IBM NAS 100 – 5190 NAS Model R12 (**Note:** Alert Standard Format (ASF) is not supported.)
- IBM NAS 200 – 5194 NAS Models 200, 201, 225, 226
- IBM NAS 300 – 5195 NAS Models 325, 326
- IBM NAS 300G – 5196 NAS Model G00, G01, G25, G26

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## IBM xSeries servers

This topic lists the xSeries servers supported by IBM Director Agent.

IBM Director Agent supports the following system models:

- xSeries 100 (**Note:** Only compatibility-mode support is provided.)
- xSeries 200
- xSeries 200VL
- xSeries 205 (**Note:** Alert Standard Format (ASF) and fan monitoring are not supported.)
- xSeries 206, 206m (**Note:** ASF is not supported on AMD64 or EM64T operating systems.)
- xSeries 220
- xSeries 225 (**Note:** ASF and fan monitoring are not supported.)
- xSeries 226
- xSeries 230
- xSeries 232 (**Note:** Alert on LAN™ is not supported.)
- xSeries 235
- xSeries 236
- xSeries 240
- xSeries 250
- xSeries 255
- xSeries 260
- xSeries 300
- xSeries 305 (**Note:** ASF is not supported.)
- xSeries 306, 306m (**Note:** ASF is not supported on AMD64 or EM64T operating systems.)
- xSeries 330
- xSeries 335
- xSeries 336
- xSeries 340
- xSeries 342 (**Note:** Alert on LAN is not supported.)
- xSeries 343 (**Note:** Only compatibility-mode support is provided.)
- xSeries 345
- xSeries 346
- xSeries 350

- xSeries 360
- xSeries 365
- xSeries 366
- xSeries 370
- xSeries 440
- xSeries 445
- xSeries 450
- xSeries 455
- xSeries 460

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## ThinkCentre, NetVista, and PC desktop computers

This topic lists the ThinkCentre, NetVista, and PC desktop computers supported by IBM Director Agent.

IBM Director Agent supports the following system models and machine types:

- ThinkCentre A30 – 2296, 8191, 8198, 8199, 8316, 8434
- ThinkCentre A50 – 8320, 8419
- ThinkCentre A50p – 8192, 8193, 8194, 8195, 8196, 8197, 8432, 8433
- ThinkCentre A51 – 8424, 8425, 8428
- ThinkCentre A51p – 8420, 8421, 8422, 8423, 8426, 8427
- ThinkCentre A52 – 8287, 8288
- ThinkCentre M50 – 8185, 8186, 8187, 8188, 8189, 8190, 8413, 8414, 8415
- ThinkCentre M51 – 8141, 8142, 8143, 8144, 8145, 8146
- ThinkCentre M52 – 8099, 8153
- ThinkCentre S50 – 8183, 8184, 8416, 8417, 8418, 8429
- ThinkCentre S51 – 8171, 8172, 8173
- NetVista A20 – 6266, 6269, 6270, 6279, 6286
- NetVista A21 and A22 – 6339, 6341, 6342, 6346, 6347, 6348
- NetVista A22p – 6343, 6349, 6350, 6825
- NetVista A30 – 8313, 8314, 8315
- NetVista A30 – 6826
- NetVista A30p – 8309, 8310, 8311, 8312
- NetVista A40 – 6058, 6568, 6578, 6648, 6830, 6831, 6840, 6841, 6842, 6881
- NetVista A40p – 6579, 6837, 6847
- NetVista A60 – 6838, 6833
- NetVista S40 – 6644, 6645
- NetVista M41 – 6790, 6791, 6792, 6793, 6794, 6795
- NetVista M41 Slim – 6843, 6844
- NetVista M42 – 6290, 8301, 8303, 8304, 8305, 8306, 8307, 8308
- NetVista M42 Slim – 6290
- NetVista S40p – 6646
- NetVista S42 – 8317, 8318, 8319
- NetVista X40 – 6643
- NetVista X41 – 6274
- PC 300® – 6344, 6345

- PC 300GL – 6263, 6268, 6272, 6275, 6277, 6278, 6282, 6284, 6285, 6287, 6288, 6338, 6561, 6563, 6564, 6574, 6591
- PC 300PL – 6562, 6565, 6584, 6592, 6594, 6595, 6862, 6871, 6892
- PC 300XL – 6588
- PC 710 – 6870

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## ThinkPad mobile computers

This topic lists the ThinkPad mobile computers supported by IBM Director Agent.

IBM Director Agent supports the following system models and machine types.

**Note:** *x* represents the last number in a ThinkPad series model name.

- A2*x* – 2628, 2629, 2633, 2655
- A3*x* – 2652, 2653, 2654
- G4*x* – 2384, 2387, 2388, 2389
- R3*x* – 2656, 2657, 2658, 2659, 2676, 2677
- R4*x* – 2681, 2682, 2683, 2684, 2722, 2723, 2724
- R5*x* – 1829, 1830, 1831, 1832, 1833, 1834, 1836, 1840, 1841, 1842, 1843, 1844, 1845, 1853, 1858, 1859, 1860, 1861, 1862, 1863, 2687, 2688, 2689
- R60 – 9460
- S3*x* – 2639
- T2*x* – 2647, 2648
- T3*x* – 2366, 2367
- T4*x* – 2373, 2374, 2375, 2376, 2378, 2379, 2668
- T60 – 2007
- X2*x* – 2660, 2661, 2662, 2881, 2884, 2885, 2890
- X3*x* – 2672, 2673
- X4*x* – 1866, 2369, 2370, 2371, 2372, 2381, 2382, 2386
- X60 – 1706
- Z60m – 2531
- Z60t – 2511
- TransNote – 2675
- 240
- 380XD, 380Z
- 390, 390X, 390E
- 560X, 560Z
- 570, 570E
- 600, 600E, 600X
- 770, 770E, 770ED, 770X, 770Z

## Chapter 2. Supported operating systems and software

This section lists the operating systems on which IBM Director Server, IBM Director Console, IBM Director Agent, and IBM Director Core Services are supported. Also, supported software required by IBM Director features as well as IBM Director product limitations and performance considerations are discussed.

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### Operating systems supported by IBM Director Server

This topic lists the operating systems on which you can install IBM Director Server.

Depending on your server model, you can install IBM Director Server on the following operating systems.

#### System x and xSeries servers

You can install IBM Director Server on System x and xSeries systems that run the following operating systems:

- Red Hat Enterprise Linux<sup>®</sup> AS and ES, version 3.0, for Intel x86 (Updates 1, 2, 3, 4, 5, and 6 supported)

**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 1, 2, 3, and 4 supported)
- Red Hat Enterprise Linux AS and ES, version 4.0, for Intel x86 (Updates 1, 2, and 3 supported)
- SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
- SUSE Linux Enterprise Server 9 for AMD64 and EM64T (Service Packs 1, 2, and 3 supported)
- SUSE Linux Enterprise Server 9 for x86 (Service Packs 1, 2, and 3 supported)
- Windows<sup>®</sup> 2000, Advanced Server and Server Editions
- Windows Server 2003, Enterprise, Standard, and Web Editions (Release 1, Service Pack 1, and Release 2 supported)
- Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Release 1 and 2 supported)

#### System i servers

You can install IBM Director Server on System i systems that run the following operating systems:

- AIX 5L<sup>™</sup>, Version 5.3
- i5/OS<sup>®</sup>, Version 5 Release 3
- i5/OS, Version 5 Release 4
- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER<sup>™</sup> (Update 3 and earlier supported)
- SUSE Linux Enterprise Server 9 for IBM POWER (Service Pack 3 and earlier supported)

## System p servers

You can install IBM Director Server on System p systems that run the following operating systems:

- AIX 5L, Version 5.3
- i5/OS, Version 5 Release 3
- i5/OS, Version 5 Release 4
- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER (Update 3 and earlier supported)

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

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

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

## System z servers

You can install IBM Director Server on System z systems that run the following operating systems:

- Red Hat Enterprise Linux AS, version 4.0, for IBM System z
- SUSE Linux Enterprise Server 9 for IBM System z

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## Operating systems supported by IBM Director Console

This topic lists the operating systems on which you can install IBM Director Console. If you are installing IBM Director Console on the same system as IBM Director Server, see the operating systems supported by IBM Director Server.

IBM Director Console can be installed on non-IBM hardware as long as the system meets the hardware requirements for running IBM Director Console. You can install IBM Director Console on the following operating systems:

- AIX 5L, Version 5.3
- Red Hat Enterprise Linux AS and ES, version 3.0, for Intel x86 (Update 1, 2, 3, 4, 5, and 6 supported)

**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 (Update 1, 2, 3, and 4 supported)
- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER (Update 3 and earlier supported)

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

- Red Hat Enterprise Linux AS, version 4.0, for IBM System z
- Red Hat Enterprise Linux AS and ES, version 4.0, for Intel x86 (Update 1, 2, and 3 supported)
- SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
- SUSE Linux Enterprise Server 9 for AMD64 and EM64T (Service Pack 1, 2, and 3 supported)
- SUSE Linux Enterprise Server 9 for IBM POWER (Service Pack 3 and earlier supported)

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

- SUSE Linux Enterprise Server 9 for IBM System z
- SUSE Linux Enterprise Server 9 for x86 (Service Pack 1, 2, and 3 supported)
- Windows 2000, Advanced Server, Professional, and Server Editions
- Windows Server 2003, Enterprise, Standard, and Web Editions (Release 1, Service Pack 1, and Release 2 supported)
- Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Release 1 and 2 supported)
- Windows XP Professional Edition (Service Pack 1 and 2 supported)

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## Operating systems supported by Level-2, Level-1, and Level-0 managed systems

This topic lists the operating systems on which you can install IBM Director Agent and IBM Director Core Services, as well as the operating systems for which IBM Director provides Level-0 system-management support.

IBM Director Agent and IBM Director Core Services can be downloaded from the Web or are available on the following CDs:

- *IBM Director 5.10 for Windows and Linux on xSeries*
- *IBM Director 5.10 for Intel and AMD-based hardware*
- *IBM Director Agents for AIX 5L , i5/OS, Windows, Linux on xSeries, System z and POWER*

See the installation instructions for each operating-system environment for information about the applicable CD or the file that can be downloaded from the Web.

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

Unless stated otherwise, IBM Director provides Level-2 (IBM Director Agent), Level-1 (IBM Director Core Services), and Level-0 (agentless) system management for System x and xSeries systems and Intel-compatible systems that run these 32-bit operating systems:

- Novell NetWare, version 6.5

**Note:** IBM Director does not provide Level-0 or Level-1 support for NetWare.

- Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 1, 2, 3, 4, 5, and 6 supported)

**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 1, 2, and 3 supported)
- SUSE Linux Enterprise Server 8 for x86
- SUSE Linux Enterprise Server 9 for x86 (Service Pack 1, 2, and 3 supported)
- VMware ESX Server, version 2.1, with the following guest operating systems:
  - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 1, 2, 3, 4, 5, and 6 supported)
  - SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 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, Service Pack 2 supported)
- VMware ESX Server, version 2.5, with the following guest operating systems:
  - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 3 required, Update 4, 5, and 6 supported)
  - SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
  - SUSE Linux Enterprise Server 9 for x86 (Service Pack 1, 2, and 3 supported)
  - 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, Service Pack 2 supported)
  - Windows XP Professional Edition (Service Packs 1 and 2 required)
- VMware ESX Server, version 2.5.1, with the following guest operating systems:
  - Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 4, 5, or 6 required)
  - SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
  - SUSE Linux Enterprise Server 9 for x86 (Service Pack 1 required, Service Pack 2 and 3 supported)
  - 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, Service Pack 2 supported)
  - Windows XP Professional Edition (Service Packs 1 and 2 required)
- 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 (Release 1, Service Pack 1, and Release 2 supported)
- Windows XP Professional Edition (Service Packs 1 and 2 required)
- VMware GSX Server, version 3.1, with the following support:

Guest operating systems	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 4 required, Update 5 and 6 supported)</li> <li>• SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)</li> <li>• Windows 2000, Advanced Server and Server Editions (Service Pack 3 or later required)</li> <li>• Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 required, Service Pack 2 supported)</li> </ul>
Host operating systems supported on 32-bit systems	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Stock 2.4.21-4, Update 2.4.21-9, 2.4.21-9.0.1, 2.4.21-15, 2.4.21-27.EL kernels required)</li> <li>• SUSE Linux Enterprise Server 8 for x86 (Stock 2.4.19, Update 2.4.21-138, 2.4.21-143, 2.4.21-215 and Patch 3 kernels required)</li> <li>• Windows 2000, Advanced Server and Server Editions (Service Packs 3 or later required)</li> <li>• Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 required, Service Pack 2 supported)</li> </ul>

Host operating systems supported on 64-bit systems	Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Service Pack 1 required, Service Pack 2 supported)
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- VMware GSX Server, version 3.2, with the following support:

Guest operating systems	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Update 3, 4, 5, or 6 required)</li> <li>• Red Hat Enterprise Linux AS, ES, and WS, version 4.0 (Updates 1 and 2 required, Update 3 supported )</li> <li>• SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)</li> <li>• SUSE Linux Enterprise Server 9 for x86 (Service Pack 1 required, Service Pack 2 and 3 supported)</li> <li>• Windows 2000, Advanced Server and Server Editions (Service Pack 3 or later required)</li> <li>• Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 required, Service Pack 2 supported)</li> <li>• Windows XP Professional Edition (Service Packs 1 and 2 required)</li> </ul>
Host operating systems supported on 32-bit systems	<ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux AS, ES, and WS, version 3.0 (Stock 2.4.21-4, Update 2.4.21-9, 2.4.21-9.0.1, 2.4.21-15, 2.4.21-27.EL kernels required)</li> <li>• Red Hat Enterprise Linux AS, ES, and WS, version 4.0 (Stock 2.6.9-5.EL kernel required)</li> <li>• SUSE Linux Enterprise Server 8 for x86 (Stock 2.4.19, Update 2.4.21-138, 2.4.21-143, 2.4.21-215 and Patch 3 kernels required)</li> <li>• SUSE Linux Enterprise Server 9 for x86 (Stock 2.6.5-7.97 kernel, Service Pack 1 2.6.5-7.139 kernel required)</li> <li>• Windows 2000, Advanced Server and Server Editions (Service Packs 3 or later required)</li> <li>• Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 required, Service Pack 2 supported)</li> </ul>
Host operating systems supported on 64-bit systems	Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Service Pack 1 required, Service Pack 2 supported)

- Microsoft® Virtual Server 2005 with the following guest operating systems:
  - Windows 2000, Advanced Server and Server Editions (Service Pack 3 or 4 required)
  - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 and 2 supported)
- Microsoft Virtual Server 2005 (Service Pack 1) with the following guest operating systems:
  - Windows 2000, Advanced Server and Server Editions (Service Pack 3 or 4 required)
  - Windows Server 2003, Enterprise, Standard, and Web Editions (Service Pack 1 and 2 supported)
  - Windows Server 2003, Enterprise, Standard, and Web x64 Editions (Service Pack 1 and 2 supported)
  - Windows XP Professional Edition (Service Pack 2 required)
  - Windows XP Professional x64 Edition
- Windows 2000, Advanced Server, Datacenter, Professional, and Server Editions
- Windows Server 2003, Datacenter, Enterprise, Standard, and Web Editions (Service Pack 1 and 2 supported)
- Windows XP Professional Edition (Service Pack 1 and 2 supported)

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

Unless stated otherwise, IBM Director provides Level-2, Level-1, and Level-0 system management for System x and xSeries systems and Intel-compatible systems that run these 64-bit operating systems:

- Red Hat Enterprise Linux AS, ES, and WS, version 3.0, for AMD64 and EM64T (Update 1, 2, 3, 4, 5, and 6 supported)
- Red Hat Enterprise Linux AS, ES, and WS, version 4.0, for AMD64 and EM64T (Update 1, 2, 3, and 4 supported)
- SUSE Linux Enterprise Server 8 for AMD64
- SUSE Linux Enterprise Server 9 for AMD64 and EM64T (Service Pack 1, 2, and 3 supported)
- Windows Server 2003, Datacenter, Enterprise, Standard, and Web x64 Editions (Release 1 and 2 supported)
- Windows XP Professional x64 Edition

Unless stated otherwise, IBM Director provides Level-2 and Level-0 system management for System x and xSeries systems and Intel-compatible systems that run these 64-bit operating systems.

### Notes:

1. IBM Director does not provide Level-1 support for Intel Itanium<sup>®</sup> operating systems.
  2. You can obtain IBM Director Agent version 5.10 for Intel Itanium systems running 64-bit Windows only by downloading it from the Web. Download the dir5.10\_agent\_windows64.zip file from the IBM Support Web site at [www.ibm.com/servers/eserver/xseries/systems\\_management/ibm\\_director/](http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/).
- Red Hat Enterprise Linux AS, version 3.0, for Intel Itanium (Update 1, 2, 3, 4, 5, and 6 supported)
  - Red Hat Enterprise Linux AS, version 4.0, for Intel Itanium (Update 1, 2, 3, and 4 supported)
  - SUSE Linux Enterprise Server 8 for Itanium Processor Family
  - SUSE Linux Enterprise Server 9 for Itanium Processor Family (Service Pack 1, 2, and 3 supported)
  - Windows Server 2003, Datacenter and Enterprise 64-bit Itanium Editions (Service Pack 1 and 2 supported)

## System i servers

IBM Director provides Level-2 support for the following operating systems. Level-0 support includes Discovery, Remote Session and a limited subset of the Software Distribution task.

- AIX 5L, Version 5.2
- AIX 5L, Version 5.3
- i5/OS, Version 5 Release 3
- i5/OS, Version 5 Release 4

IBM Director provides Level-2, Level-1, and Level-0 support for the following operating systems:

- Red Hat Enterprise Linux AS, version 3.0, for IBM POWER

- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER (Update 3 and earlier supported)
- SUSE Linux Enterprise Server 8 for IBM POWER
- SUSE Linux Enterprise Server 9 for IBM POWER (Service Pack 3 and earlier supported)

## System i servers with xSeries options

System i server installations can use the following xSeries options:

- Integrated xSeries Server (IXS)
- xSeries servers that are attached to the System i servers via the Integrated xSeries Adapter (IXA)

Using these xSeries options, you can install IBM Director Agent and IBM Director Core Services on the following operating systems.

**Note:** For information about the supported updates and service packs for these operating systems, see the xSeries systems and Intel-compatible systems operating-system support statement.

- Red Hat Enterprise Linux AS and ES, version 3.0, for Intel x86
- Red Hat Enterprise Linux AS and ES, version 4.0, for Intel x86
- SUSE Linux Enterprise Server 8 for x86
- SUSE Linux Enterprise Server 9 for x86
- Windows 2000, Advanced Server and Server Editions
- Windows Server 2003, Enterprise, Standard, and Web Editions

**Note:** Whether these operating systems are supported in your System i environment depends on the following criteria:

- The Integrated xSeries Server (IXS) installed in the System i server
- The xSeries server that is attached to the System i server via the Integrated xSeries Adapter (IXA)
- The release of i5/OS or OS/400<sup>®</sup> installed on the System i server

See *IBM Director Hardware and Software Compatibility* for any updates to this information. You can download the latest version of this document from [www.ibm.com/servers/eserver/xseries/systems\\_management/ibm\\_director/](http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/).

## System p servers

IBM Director provides Level-2 support for the following operating systems. Level-0 support includes Discovery, Remote Session and a limited subset of the Software Distribution task.

- AIX 5L, Version 5.2
- AIX 5L, Version 5.3
- i5/OS, Version 5 Release 3
- i5/OS, Version 5 Release 4

IBM Director provides Level-2, Level-1, and Level-0 support for the following operating systems:

- Red Hat Enterprise Linux AS, version 3.3, for IBM POWER
- Red Hat Enterprise Linux AS, version 4.0, for IBM POWER (Update 3 and earlier supported)

- Note:** Update 3 is required for the IBM BladeCenter JS21.
- SUSE Linux Enterprise Server 8 for IBM POWER

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

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

### System z servers

IBM Director provides Level-2, Level-1, and Level-0 support for System z systems that run the following operating systems:

- Red Hat Enterprise Linux AS, version 4.0, for IBM System z
- SUSE Linux Enterprise Server 9 for IBM System z

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## Supported software

This section lists the supported software required by IBM Director features.

### Supported Web browsers

The Web-based access feature requires that you use a supported Web browser.

If you choose to install the Web-based Access feature for IBM Director Agent, the following Web browsers are supported:

- Microsoft Internet Explorer, Version 4.1 or later
- Netscape Navigator, Version 4.7x or 7.01

### Supported workgroup and enterprise systems-management software

The Web-based access feature requires that you use a supported Web browser.

Using Upward Integration Modules, IBM Director Agent and IBM Director Core Services can be integrated with robust workgroup and enterprise management software from IBM (such as Tivoli<sup>®</sup> software), Computer Associates, Hewlett-Packard, Microsoft, NetIQ, and BMC Software. For more information, see the IBM Director 5.10 information center on the Web 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) and the IBM Director Upward Integration Web page at [www.ibm.com/servers/eserver/xseries/systems\\_management/ibm\\_director/upward/](http://www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/upward/).

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## Limitations and performance considerations

The Web-based access feature requires that you use a supported Web browser.

IBM Director 5.10 can manage up to 5000 systems with one management server.

The number of systems that IBM Director 5.10 can manage efficiently depends on the existing network load and the functions that you want to perform. System discovery, frequent presence checks, and alert usage can increase network traffic. Precise performance information must be ascertained in each individual environment.

When installing IBM Director Agent on a system, 128 MB of system memory is required. For more information about IBM Director limitations and performance considerations, see the IBM Director 5.10 information center on the Web 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).

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Version 5.10 Update 2

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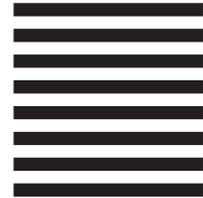
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