



IBM Systems
IBM Director
Hardware and Software Support Guide

Version 5.10 Update 3

October 17, 2006





IBM Systems
IBM Director
Hardware and Software Support Guide

Version 5.10 Update 3

October 17, 2006

Note

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

Third Edition (June 2006)

This edition applies to version 5.10 update 3 of IBM Director and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright International Business Machines Corporation 1999, 2006. All rights reserved.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

About this book	v
Conventions and terminology	v
Related information	v
How to send your comments	viii
Chapter 1. Hardware requirements for IBM Director	1
Hardware requirements for Intel-compatible systems	1
Hardware requirements for servers running AIX	2
Hardware requirements for servers running Linux on POWER	2
Hardware requirements for System i products	3
Hardware requirements for IBM System z servers	3
Alert Standard Format-capable systems supported by IBM Director 5.10	4
Chapter 2. Supported hardware	5
IBM BladeCenter products	6
IBM eServer servers	6
IBM IntelliStation workstations	6
IBM iSCSI-attached System x servers	6
IBM Netfinity servers	7
IBM SurePOS point-of-sale systems	7
IBM System i, System p, and System z products	7
IBM System x3nnn servers	8
IBM System x options for System i products	8
IBM System Storage Network Attached Storage products	9
IBM xSeries servers	9
ThinkCentre, NetVista, and PC desktop computers	10
ThinkPad mobile computers	11
Chapter 3. Supported operating systems and software	13
Operating systems supported by IBM Director 5.10.3	13
Supported software	16
Supported Web browsers	16
Supported workgroup and enterprise systems-management software	17
Limitations and performance considerations	17
Appendix. Notices	19
Trademarks	20

About this book

This book provides the following information about IBM® Director 5.10 Update 3:

- Hardware requirements for running IBM Director components
- Supported IBM hardware
- Supported operating systems
- Supported workgroup and enterprise systems-management software
- Limitations and performance considerations

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.

Related information

Besides this documentation, there is additional information related to IBM Director.

IBM Director resources on the World Wide Web

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

IBM Director information center

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

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

IBM Director Web site on ibm.com®

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

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

Information on this site includes:

- Downloads and documentation for the following IBM Director releases:
 - IBM Director 5.10 Update 3 (5.10.3)
 - IBM Director 5.10 Update 2 (5.10.2)
 - IBM Director 5.10 Update 2 (5.10.2) UIMs
 - IBM Director 5.10 Update 1 (5.10.1)
 - IBM Director 5.10 Update 1 (5.10.1) UIMs
 - IBM Director 5.10
 - IBM Director 5.10 UIMs
 - IBM Director 4.22

- IBM Director 4.22 UIMs
- IBM Director 4.21
- IBM Director 4.20
- *IBM Director Hardware and Software Support Guide* document, which lists supported IBM systems and all supported operating systems. It is updated every 6 to 8 weeks.
- Printable documentation for IBM Director available in Portable Document Format (PDF) in several languages

IBM Director Software Developers Kit information center

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

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

IBM Systems Software information center

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

This Web page provides information about IBM Virtualization Engine™, IBM Director, External Application Launch Wizard, Virtual System Manager, and other topics.

IBM ServerProven® page

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

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

IBM Servers

www.ibm.com/servers/

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

- IBM BladeCenter
- IBM System i™
- IBM System p™
- IBM System x
- IBM System z™

IBM Virtualization Engine systems services fixes

www14.software.ibm.com/webapp/set2/sas/f/VirtualizationEngine/home2.html

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 correctly.

IBM forums

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

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

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

System x IBM Director forum

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

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

System x Server forum

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

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

IBM Director SDK forum

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

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

IBM Redbooks™ publications

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 IBM Director 5.10* (SG24-6188)
- *Integrating IBM Director with Enterprise Management Solutions* (SG24-5388)
- *Managing IBM TotalStorage® NAS with IBM Director* (SG24-6830)
- *Monitoring Redundant Uninterruptible Power Supplies Using IBM Director* (REDP-3827)

Remote Supervisor Adapter

Remote Supervisor Adapter overview

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

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

Remote Supervisor Adapter II overview

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

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

Other documents

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

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

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:

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

Chapter 1. Hardware requirements for IBM Director

To successfully install IBM Director, the system on which you install IBM Director components must meet certain minimum hardware requirements, depending on the components to be installed and the type of system on which they will be installed.

Because a system configured with the minimum requirements might perform poorly in a production environment, consider the following suggestions:

- Be sure that your system can accommodate the hardware requirements, keeping in mind that the microprocessor speed, memory, and disk-space minimum requirements are *additional* to the resources are necessary for the software already installed on the system.
- Conduct a performance analysis to ensure that the system has sufficient capacity to handle the additional requirements of functioning as a management server or a management console.

Hardware requirements for Intel-compatible systems

This topic lists the minimum microprocessor speed, random access memory (RAM), and disk space needed by the IBM Director components on Intel-compatible systems, including System i platforms, IntelliStation workstations, NetVista desktop computers, IBM ThinkCentre desktop computers, ThinkPad mobile computers, IBM System Storage™ Network Attached Storage (NAS) products, and IBM SurePOS™ point-of-sale systems.

When reviewing the hardware requirements, consider the following information:

- The disk space listed is the minimum requirement for an installation using the default selections.
- Requirements listed for IBM Director Server do not include the database program hardware requirements or the increased persistent storage for managed objects.
- The systems on which you install IBM Director Agent or IBM Director Server must meet the Wired for Management (WfM), version 2.0, specifications.
- System Management BIOS (SMBIOS) 2.1 or later is required for all systems in an IBM Director environment.

Table 1. Intel-compatible systems: Minimum hardware requirements

Requirements	IBM Director Core Services	IBM Director Agent	IBM Director Console	IBM Director Server
Microprocessor speed	Pentium-class processor	Pentium-class or Itanium® 2 processor	Pentium® 1.5 GHz	Pentium 1.5 GHz
Memory (RAM)	128 MB	128 MB	256 MB	512 MB (minimum) 1024 MB (recommended)
Disk space	40 MB (for Windows®) 100 MB (for Linux®)	110 MB (for Windows) 165 MB (for Linux)	170 MB	325 MB
Display	Not applicable	Not applicable	At least 256 colors	At least 256 colors

Hardware requirements for servers running AIX

This topic lists the minimum microprocessor speed, random access memory (RAM), and disk space needed by the IBM Director components on servers running AIX®, including System i and System p servers, and JS20 blade servers.

When reviewing the hardware requirements, consider the following information:

- The disk space listed is the minimum requirement for an installation using the default selections.
- Requirements listed for IBM Director Server do not include the database program hardware requirements or the increased persistent storage for managed objects.
- On systems that do not provide display capability, such as the JS20 blade server, you must export IBM Director Console using either the xhost command or SSH tunneling. The IBM Director Console requirements apply to the receiving system.

Table 2. Servers running AIX: Minimum hardware requirements

Requirements	IBM Director Agent	IBM Director Console	IBM Director Server
Microprocessor speed	Power4 or Power5 1.5 GHz	Power4 or Power5 1.5 GHz	Power4 or Power5 1.5 GHz
Memory (RAM)	512 MB (minimum)	512 MB (minimum)	512 MB (minimum) 1024 MB (recommended)
Disk space	75 MB (/opt) 1 MB (/usr)	170 MB (/opt) (Includes the disk space required for IBM Director Agent.) 2 MB (/usr)	325 MB (/opt) 2 MB (/usr)
Display	Not applicable	At least 256 colors	At least 256 colors

Hardware requirements for servers running Linux on POWER

This topic lists the minimum microprocessor speed, random access memory (RAM), and disk space needed by the IBM Director components on servers running Linux on POWER™, including System i and System p servers, and JS20 blade servers.

When reviewing the hardware requirements, consider the following information:

- The disk space listed is the minimum requirement for an installation using the default selections.
- Requirements listed for IBM Director Server do not include the database program hardware requirements or the increased persistent storage for managed objects.
- On systems that do not provide display capability, such as the JS20 blade server, you must export IBM Director Console using either the xhost command or SSH. The IBM Director Console requirements apply to the receiving system.

Table 3. Servers running Linux on POWER: Minimum hardware requirements

Requirements	IBM Director Core Services	IBM Director Agent	IBM Director Console	IBM Director Server
Microprocessor speed	Power4 or Power5 1.5 GHz	Power4 or Power5 1.5 GHz	Power4 or Power5 1.5 GHz	Power4 or Power5 1.5 GHz
Memory (RAM)	128 MB (minimum)	512 MB (minimum)	512 MB (minimum)	512 MB (minimum) 1024 MB (recommended)

Table 3. Servers running Linux on POWER: Minimum hardware requirements (continued)

Requirements	IBM Director Core Services	IBM Director Agent	IBM Director Console	IBM Director Server
Disk space	100 MB	165 MB	170 MB	325 MB
Display	Not applicable	Not applicable	At least 256 colors	At least 256 colors

Hardware requirements for System i products

This topic lists the minimum commercial processing workload (CPW), storage pool size, and disk space needed by IBM Director components installed on System i products.

When reviewing the hardware requirements, consider the following information:

- The disk space listed is the minimum requirement for an installation using the default selections.
- Requirements listed for IBM Director Server do not include the database program hardware requirements or the increased persistent storage for managed objects.
- When you install IBM Director on a System i platform running i5/OS®, you must use a Microsoft® Windows system to perform the installation. For successful installation, the system running Windows should have at least 3.10 GB of free disk space.

Table 4. System i products: Minimum hardware requirements

Requirements	IBM Director Agent	IBM Director Server
Relative system performance	75 CPW	150 CPW
Storage pool size	350 MB	500 MB
Disk space	300 MB	500 MB

Hardware requirements for IBM System z servers

This topic lists the minimum microprocessor speed, random access memory (RAM), and disk space needed by the IBM Director components.

The following System z servers are supported:

- IBM System z9™ (all models)
- IBM zSeries® (all models)
- IBM S/390® (Multiprise® 3, Generation 5 and Generation 6)

Table 5. Minimum hardware requirements for IBM Director on System z servers

Requirement	IBM Director Server (with or without CIM instrumentation for z/VM® manageability access point)	IBM Director Console	IBM Director Agent	IBM Director Agent with CIM instrumentation for z/VM manageability access point
Processor speed	All processor speeds provided by IBM System z servers are sufficient for IBM Director.			
Memory	1 GB	256 MB	256 MB	512 MB
Disk space	316 MB	168 MB	43-109 MB	215 MB
Display	Not applicable	At least 256 colors	Not applicable	Not applicable

The additional resources you require for the systems you want to provision with z/VM Center depend on the number and nature of the provisioned systems. The requirements of the provisioned systems, including networking requirements, are the same as if you were to set them up without z/VM Center. Refer to the z/VM Planning information for further details.

Alert Standard Format-capable systems supported by IBM Director

5.10

Alert Standard Format (ASF) defines remote control and alerting interfaces in an environment that does not have an operating system, on servers with ASF-capable network interface cards (NICs).

The following servers have ASF-capable network interface cards (NICs):

- xSeries® 206
- xSeries 226
- xSeries 235
- xSeries 255
- xSeries 306
- xSeries 335
- xSeries 345
- IntelliStation A10
- IntelliStation M20
- IntelliStation M30
- IntelliStation M40
- IntelliStation Z20

Chapter 2. Supported hardware

IBM Director Agent is licensed for use and supported in a large range of IBM systems and products.

These systems and products include:

- IBM BladeCenter and BladeCenter T chassis
- IBM blade servers
- IBM IntelliStation workstations
- IBM System i platforms (formerly, iSeries™ servers)
- IBM System p servers (formerly, pSeries® servers)
- IBM System x servers (System x3nnn, xSeries, and Netfinity® servers)
- IBM System z mainframes (formerly, zSeries servers)
- IBM System Storage Network Attached Storage (NAS) products
- IBM SurePOS point-of-sale systems
- ThinkCentre, NetVista, and PC desktop computers
- ThinkPad mobile computers

The degree of support that IBM Director Agent provides on these systems and products can vary.

Support

Most IBM products have support. All applicable features and functions that are available in the current version of IBM Director are supported on these products, if applicable. For example, if a system does not have a ServeRAID™ option installed, then ServeRAID Manager is not supported on that system.

Support with limitations

Occasionally, IBM Director supports an IBM product, but one or more features or functions might not work as intended. The affected features and functions are described in the *IBM Director Release Notes* for the current version of IBM Director.

Non-IBM-Hardware-Level support

For some systems and products, IBM Director provides basic systems-management capabilities. IBM Director Agent provides this level of support on non-IBM Intel-based or AMD-based systems with SMBIOS 2.1 or later that meet the Intel® Wired for Management (WfM) 2.0 specification. These functions and features include Asset ID™, CIM Browser, Discovery, File Transfer, Inventory (Software), Power Management, Process Management, Remote Control, Remote Session, Resource Monitors, SNMP events for SNMP Agent, SNMP Browser, and Software Distribution.

Notes:

1. IBM Director runs on IBM System i, System p, and System z products when the installed operating system is also supported by IBM Director. See *Operating systems supported by IBM Director* for support information on these products.
2. The IBM System Storage NAS products include an installation of IBM Director Agent.
3. Some systems and products might not be available in your area.

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, machine types 7981, 8832, and 8843
- HS21 blade server, machine types 7995 and 8853
- HS40 blade server, machine type 8839
- JS20 blade server, machine type 8842
- JS21 blade server, machine type 8844
- LS20 blade server, machine type 8850
- LS21 blade server, machine type 7971
- LS41 blade server, machine type 7972

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

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, 9229, 9237
- R-Pro – 6851
- Z-Pro – 6221, 6222, 6223, 6227, 6865, 6866, 9228

IBM iSCSI-attached System x servers

System i platform installations can use IBM iSCSI-attached System x servers. IBM Director Agent provides support for the operating system running on these System x servers.

iSCSI-attached servers are standard System x or IBM BladeCenter server models that have processors, memory, and expansion cards, but no hard disks. All of the disk space is in the System i product and managed in the same way as the following technology:

- Integrated xSeries Server (IXS)

- System x servers that are attached to the System i product using the Integrated xSeries Adapter (IXA)

iSCSI-attached System x servers are supported only on System i products running i5/OS V5R4.

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 (Only non-IBM-hardware-level support is provided.)
- Netfinity 7000 M10
- Netfinity 7100
- Netfinity 7600
- Netfinity 8500R

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 non-IBM-hardware-level support is provided.

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

IBM System i, System p, and System z products

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

See Operating systems supported by IBM Director 5.10.3 for information on these products.

IBM System x3nn servers

This topic lists the IBM System x3nn servers supported by IBM Director Agent.

IBM Director Agent supports the following models:

- x3105, machine types 4347 and 4348
- x3200, machine types 4362 and 4363
- x3250, machine types 4364 and 4365
- x3400, machine types 7973, 7974, 7975, and 7976
- x3455, machine types 7984 and 7986
- x3500, machine type 7977
- x3550, machine type 7978
- x3650, machine type 7979
- x3650 T, machine type 7980
- x3655, machine type 7985
- x3755, machine type 8877
- x3800, machine type 8866
- x3850, machine type 8863
- x3950, machine type 8872

IBM System x options for System i products

System i platform installations can use IBM System x options for System i products. IBM Director Agent provides support for the operating system running on these xSeries options.

System i platform installations can use the following System x options:

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

Using these System x options, you can install IBM Director Agent and IBM Director Core Services on the supported operating systems. Supported operating systems are those that are supported by both IBM Director and the System x option. For supported operating systems on IXS and IXA, see the System x option product documentation. For IBM Director supported operating systems, see the System x systems and Intel-compatible systems operating-system support information.

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 platform
- The System x server that is attached to the System i platform using the Integrated xSeries Adapter (IXA)
- The release of i5/OS or OS/400® installed on the System i platform

See *IBM Director Hardware and Software Support Guide* 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/.

IBM System Storage Network Attached Storage products

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

IBM Director Agent supports the following product models:

- IBM NAS 100 – 5190 NAS Model R12 (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

IBM xSeries servers

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

IBM Director Agent supports the following system models:

- 100 (Only non-IBM-hardware-level support is provided.)
- 200
- 200VL
- 205 (Alert Standard Format (ASF) and fan monitoring are not supported.)
- 206, 206m (ASF is not supported on AMD64 or EM64T operating systems.)
- 220
- 225 (ASF and fan monitoring are not supported.)
- 226
- 230
- 232 (Alert on LAN™ is not supported.)
- 235
- 236
- 240
- 250
- 255
- 260
- 300
- 305 (ASF is not supported.)
- 306, 306m (ASF is not supported on AMD64 or EM64T operating systems.)
- 330
- 335
- 336
- 340
- 342 (Alert on LAN is not supported.)
- 343 (Only non-IBM-hardware-level support is provided.)
- 345
- 346
- 350
- 360
- 365

- 366
- 370
- 440
- 445
- 450
- 455
- 460

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

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 3. 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.

Operating systems supported by IBM Director 5.10.3

IBM Director 5.10 Update 3 provides support for many operating systems. However, support varies depending on the selected hardware and IBM Director component.

This release of IBM Director Agent and IBM Director Core Services can be downloaded from the Web.

When preparing to install IBM Director, consider the following information:

- Unless stated otherwise, IBM Director provides Level-0 support for all operating systems.
- 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 Server and IBM Director Console can be installed on non-IBM hardware as long as the system meets the hardware requirements for running that component.
- IBM Director Agent for Intel Itanium systems running 64-bit Windows is only available 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/.

Table 6. Operating systems supported by IBM Director on System x systems and third-party Intel-based systems

Operating system	IBM Director Console	IBM Director Server	IBM Director Agent	IBM Director Core Services
Editions of Windows for 32-bit systems:				
Windows 2000 Professional Edition (Service Pack 3 required)	X		X	X
Windows 2000, Advanced Server and Server Editions (Service Pack 3 required)	X	X	X	X
Windows 2000 Datacenter Edition			X	X
Windows XP Professional Edition (supports Service Pack 2 and earlier)	X		X	X
Windows Server 2003 Datacenter Edition (supports Release 1, Service Pack 1, and Release 2)			X	X
Windows Server 2003, Enterprise, Standard, and Web Editions (supports Release 1, Service Pack 1, and Release 2)	X	X	X	X
Editions of Windows for 64-bit systems:				
Windows Server 2003 Datacenter Edition for Itanium systems (supports Release 2 and earlier)			X	
Windows Server 2003 Enterprise Edition for Itanium systems (supports Release 2 and earlier)			X	
Windows Server 2003 Datacenter x64 Edition (supports Release 2 and earlier)			X	X

Table 6. Operating systems supported by IBM Director on System x systems and third-party Intel-based systems (continued)

Operating system	IBM Director Console	IBM Director Server	IBM Director Agent	IBM Director Core Services
Windows Server 2003, Enterprise, Standard, and Web x64 Editions (supports Release 2 and earlier)	X	X	X	X
Windows XP Professional x64 Edition (supports Release 2 and earlier)			X	X
Versions of Linux for 32-bit systems:				
Red Hat Enterprise Linux AS and ES, version 3.0 (supports Update 7 and earlier) Note: (Level-2 and Level-1 support only) For systems that contain an AMD Opteron or Athlon64 processor, Update 5 or later is required.	X	X	X	X
Red Hat Enterprise Linux WS, version 3.0 (supports Update 7 and earlier) Note: (Level-2 and Level-1 support only) For systems that contain an AMD Opteron or Athlon64 processor, Update 5 or later is required.			X	X
Red Hat Enterprise Linux AS and ES, version 4.0 (supports Update 3 and earlier)	X	X	X	X
Red Hat Enterprise Linux WS, version 4.0 (supports Update 3 and earlier)			X	X
SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)	X	X	X	X
SUSE Linux Enterprise Server 9 for x86 (supports Service Pack 3 and earlier)	X	X	X	X
SUSE Linux Enterprise Server 10 for x86			X	X
<ul style="list-style-type: none"> • VMware ESX Server, version 2.1 Console • VMware ESX Server, version 2.5 Console • VMware ESX Server, version 2.5.1 Console • VMware ESX Server, version 2.5.2 Console • VMware ESX Server, version 2.5.3 Console • VMware ESX Server, version 2.5.4 Console • VMware ESX Server, version 3.0 Console 			X	X
<ul style="list-style-type: none"> • VMware ESX Server, version 2.1 guest operating systems • VMware ESX Server, version 2.5 guest operating systems • VMware ESX Server, version 2.5.1 guest operating systems • VMware ESX Server, version 2.5.2 guest operating systems • VMware ESX Server, version 2.5.3 guest operating systems • VMware ESX Server, version 2.5.4 guest operating systems • VMware ESX Server, version 3.0 guest operating systems Note: Supported guest operating systems are those that are supported by both IBM Director and the specified version of VMware. See the VMware product documentation for a list of supported operating systems.			X	X
VMware GSX Server, versions 3.1 and 3.2, guest operating systems Note: Supported guest operating systems are those that are supported by both IBM Director and the specified version of VMware. See the VMware product documentation for a list of supported operating systems.			X	X
VMware GSX Server, versions 3.1 and 3.2, host operating systems Note: Supported host operating systems are those that are supported by both IBM Director and the specified version of VMware. See the VMware product documentation for a list of supported operating systems.			X	X
Versions of Linux for 64-bit systems:				
Red Hat Enterprise Linux AS and ES, version 3.0, for AMD64 and EM64T			X	X
Red Hat Enterprise Linux WS, version 3.0, for AMD64 and EM64T			X	X

Table 6. Operating systems supported by IBM Director on System x systems and third-party Intel-based systems (continued)

Operating system	IBM Director Console	IBM Director Server	IBM Director Agent	IBM Director Core Services
Red Hat Enterprise Linux WS, version 4.0, for AMD64 and EM64T (supports Update 3 and earlier)			X	X
Red Hat Enterprise Linux AS and ES, version 4.0, for AMD64 and EM64T (supports Update 3 and earlier)	X	X	X	X
Red Hat Enterprise Linux AS, version 3.0, for Intel Itanium (supports Update 6 and earlier)			X	
Red Hat Enterprise Linux AS, version 4.0, for Intel Itanium (supports Update 3 and earlier)			X	
SUSE Linux Enterprise Server 8 for AMD64 (Service Pack 3 required)	X	X	X	X
SUSE Linux Enterprise Server 8 for Itanium Processor Family (Service Pack 3 required)			X	
SUSE Linux Enterprise Server 9 for AMD64 and EM64T (supports Service Pack 3 and earlier)	X	X	X	X
SUSE Linux Enterprise Server 9 for Itanium Processor Family (Service Pack 3 required)			X	
SUSE Linux Enterprise Server 10 for AMD64 and EM64T			X	X
SUSE Linux Enterprise Server 10 with Xen Kernel			X	X
Other operating systems supported by System x servers:				
Microsoft Virtual Server (guest operating system) Note: Supported guest operating systems are those that are supported by both IBM Director and the specified version of Microsoft. See the Microsoft product documentation for a list of supported operating systems.			X	X
NetWare, version 6.5 Note: Level-0 support is not provided.			X	

Table 7. Operating systems supported by IBM Director on System i and System p products

Operating system	IBM Director Console	IBM Director Server	IBM Director Agent	IBM Director Core Services
AIX 5L™, Version 5.2 (supports Rev M and earlier) Notes: 1. IBM Director 5.10.3 does not support this operating system. Use IBM Director 5.10.2 or earlier. 2. Level-0 support includes only Discovery, Remote Session and a limited subset of the Software Distribution task.			X	
AIX 5L, Version 5.3 (supports Rev E and earlier) Notes: 1. IBM Director 5.10.3 does not support this operating system. Use IBM Director 5.10.2 or earlier. 2. Level-0 support includes only Discovery, Remote Session and a limited subset of the Software Distribution task.	X	X	X	

Table 7. Operating systems supported by IBM Director on System i and System p products (continued)

Operating system	IBM Director Console	IBM Director Server	IBM Director Agent	IBM Director Core Services
<ul style="list-style-type: none"> i5/OS, Version 5 Release 3 i5/OS, Version 5 Release 4 <p>Note: Level-0 support includes only Discovery, Remote Session and a limited subset of the Software Distribution task.</p>		X	X	
Red Hat Enterprise Linux AS, version 3.3, for IBM POWER (supports Update 6 and earlier) Notes: <ol style="list-style-type: none"> IBM Director 5.10.3 does not support this operating system. Use IBM Director 5.10.2 or earlier. Update 3 is required to support Power 5 systems. 			X	X
Red Hat Enterprise Linux AS, version 4.0, for IBM POWER Notes: <ol style="list-style-type: none"> IBM Director 5.10.3 does not support this operating system. Use IBM Director 5.10.2 or earlier. Update 3 is required for the IBM BladeCenter JS21. 	X	X	X	X
SUSE Linux Enterprise Server 8 for IBM POWER Note: IBM Director 5.10.3 does not support this operating system. Use IBM Director 5.10.2 or earlier.			X	X
SUSE Linux Enterprise Server 9 for IBM POWER (supports Service Pack 3 and earlier) Notes: <ol style="list-style-type: none"> IBM Director 5.10.3 does not support this operating system. Use IBM Director 5.10.2 or earlier. Service Pack 3 is required for the IBM BladeCenter JS21. 	X	X	X	X

Table 8. Operating systems supported by IBM Director on System z systems

Operating system	IBM Director Console	IBM Director Server	IBM Director Agent	IBM Director Core Services
Red Hat Enterprise Linux AS, version 4.0, for IBM System z (supports Updates 1, 2, and 3)	X	X	X	X
SUSE Linux Enterprise Server 9 for IBM System z (supports Service Packs 1, 2, and 3)	X	X	X	X

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

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® 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 and the IBM Director Upward Integration Web page at www.ibm.com/servers/eserver/xseries/systems_management/ibm_director/upward/.

Limitations and performance considerations

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.

Appendix. Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
 MW9A/050
 5600 Cottle Road
 San Jose, CA 95193
 U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

AIX	Redbooks
Alert on LAN	S/390
Asset ID	ServeRAID
BladeCenter	Serverproven
e-business logo	SurePOS
eServer	System i
i5/OS	System p
IBM	System Storage

October 17, 2006

ibm.com	System x
IntelliStation	System z
iSeries	Tivoli
Multiprise	TotalStorage
Netfinity	Virtualization Engine
OS/400	xSeries
PC 300	z9
POWER	z/VM
Predictive Failure Analysis	zSeries
pSeries	

Intel, Itanium, and Pentium are trademarks of Intel Corporation in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.

Readers' Comments — We'd Like to Hear from You

IBM Systems
IBM Director
Hardware and Software Support Guide
Version 5.10 Update 3

Overall, how satisfied are you with the information in this book?

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

How satisfied are you that the information in this book is:

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to find	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Well organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applicable to your tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please tell us how we can improve this book:

Thank you for your responses. May we contact you? Yes No

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you. IBM or any other organizations will only use the personal information that you supply to contact you about the issues that you state on this form.

Name

Address

Company or Organization

Phone No.



Fold and Tape

Please do not staple

Fold and Tape



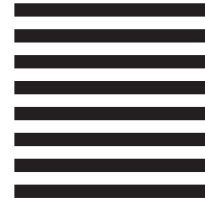
NO POSTAGE
NECESSARY
IF MAILED IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 40 ARMONK, NEW YORK

POSTAGE WILL BE PAID BY ADDRESSEE

International Business Machines Corporation
Dept. CGFA
PO Box 12195
Research Triangle Park, NC 27709-9990



Fold and Tape

Please do not staple

Fold and Tape



October 17, 2006
Printed in USA