

IBM Remote Deployment Manager 4.30



# Compatibility Guide



IBM Remote Deployment Manager 4.30



# Compatibility Guide

**Note:**

Before using this information and the product it supports, read the information in "Notices," on page 43.

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## About this book

This book provides hardware and software compatibility information for IBM® Remote Deployment Manager 4.30.

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## How this book is organized

Chapter 1, “IBM hardware and software support,” on page 1 contains information about the IBM Remote Deployment Manager support for IBM @server, BladeCenter®, System x and xSeries® servers, and for optional adapters.

Chapter 2, “Non-IBM hardware and software support,” on page 37 contains information about non-IBM servers and desktop computers supported by Remote Deployment Manager.

“Notices,” on page 43 contains important notice and trademark information.

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## Notices that are used in this book

This book contains the following notices 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 is placed just before the instruction or situation in which damage could occur.

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## RDM resources on the World Wide Web

The following Web pages provide resources for understanding, using, and troubleshooting RDM and other deployment and systems-management tools.

### **IBM Remote Deployment Manager page**

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

This Web page provides an overview of IBM Remote Deployment Manager. From this Web page, you can download the latest RDM documentation and white papers. The white papers provide a troubleshooting guide and information about using RDM.

### **IBM ServerGuide™ page**

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

This Web page provides an overview of the IBM ServerGuide™ program.

### **IBM ServerGuide Scripting Toolkit page**

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

This Web page provides an overview of IBM ServerGuide Scripting Toolkit and links to the latest version of the toolkit for download.

### **IBM UpdateXpress page**

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

This Web page provides an overview of IBM Update*Xpress*. It also contains links to pages from which you can download Update*Xpress*, order an Update*Xpress* CD, or purchase a subscription to Update*Xpress* updates.

**IBM ServerProven® page**

<http://www.ibm.com/servers/eserver/serverproven/compat/us/>

The ServerProven® Web page provides information about IBM System x™ (which includes IBM eServer™ xSeries, and IBM System x3nn servers), IBM BladeCenter™, and IBM IntelliStation® hardware compatibility with IBM systems-management tools.

**IBM Support page**

<http://www.ibm.com/pc/support/>

This is the IBM Support Web site for IBM hardware and systems-management software.

**IBM Systems Management Software: Download/Registration page**

[http://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)

Use this Web page to download IBM systems management software, including IBM Director.

**IBM System x Systems Management page**

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

This Web page presents an overview of IBM systems management and IBM Director. Click **IBM Director** for the latest information and documentation.

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## Chapter 1. IBM hardware and software support

This chapter contains information about IBM Remote Deployment Manager 4.30 support for IBM @server, BladeCenter, System x, and xSeries servers, Intellistations, Thinkpads, point of sales systems and desktop computers. It also contains information for optional adapters, and sections describing additional deployment procedures that are not covered in the IBM Remote Deployment Manager documentation.

**Note:** If you are using RDM 4.30 or later, Director 5.10 is required because it contains fixes for issues with recent hardware additions.

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### Installation support

This section lists the operating systems on which you can install IBM Remote Deployment Manager 4.30.

#### RDM 4.30 server

You can install RDM 4.30 Server on the following operating systems:

- Windows® 2000 Server (Service Pack 4 or later supported)
- Windows 2000 Advanced Server (Service Pack 4 or later supported)
- Windows Server 2003, Web Edition
- Windows Server 2003, Standard Edition
- Windows Server 2003, Enterprise Edition
- Red Hat Enterprise Linux® AS 4.0
- SUSE Linux Enterprise Server 9

#### Console

You can install RDM 4.30 Console on the following operating systems:

- Windows 2000 Professional (Service Pack 4 or later supported)
- Windows 2000 Server (Service Pack 4 or later supported)
- Windows 2000 Advanced Server (Service Pack 4 or later supported)
- Windows Server 2003, Web Edition
- Windows Server 2003, Standard Edition
- Windows Server 2003, Enterprise Edition
- Windows XP Professional (Service Pack 1 or later supported)
- Red Hat Enterprise Linux AS 4.0
- SUSE Linux Enterprise Server 9

## Deployment server

You can install RDM 4.30 Deployment server on the following operating systems:

- Windows 2000 Professional (Service Pack 4 or later supported)
- Windows 2000 Server (Service Pack 4 or later supported)
- Windows 2000 Advanced Server (Service Pack 4 or later supported)
- Windows Server 2003, Web Edition
- Windows Server 2003, Standard Edition
- Windows Server 2003, Enterprise Edition
- Windows XP Professional (Service Pack 1 or later supported)
- Red Hat Enterprise Linux AS 4.0
- SUSE Linux Enterprise Server 9

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## IBM servers

This section contains information about supported IBM servers. The BIOS code levels shown in the tables indicate the latest levels used during compatibility testing. For optimal performance, update your server to the indicated BIOS code level. To do this, navigate to the IBM Web support site listed below, and search for your server machine type and model, and obtain the latest BIOS code updates.

<http://www.ibm.com/pc/support/>

The information in this section is organized into the following three tables:

- “Maintenance support table”
- “Native installation support table” on page 4
- “Windows Clone Install support table” on page 7

Each table indicates the server model, and whether the feature is supported or is not supported for the cross-referenced operating system.

### Notes:

1. Currently, no support is available for the IBM BladeCenter JS20 Type 8842 or JS21 Type 8844.
2. Deployment for Red Hat Enterprise Linux AS 3.0 and SUSE Linux Enterprise Server (SLES) 8.0 is supported using a custom task. Refer to the procedures outlined in the *Installing Linux with RDM Custom Task* white paper, located for download here:

[ftp://ftp.software.ibm.com/pc/pccbbs/pc\\_servers\\_pdf/installinglinuxwithrdmcustomtask.pdf](ftp://ftp.software.ibm.com/pc/pccbbs/pc_servers_pdf/installinglinuxwithrdmcustomtask.pdf)

## Maintenance support table

Table 1 on page 3 illustrates the maintenance support for ISMP, CMOS and RAID updates.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for IBM servers” on page 9.

Table 1. Maintenance support for IBM servers

Server			Maintenance		
Machine Type	Model	BIOS level	ISMP/BMC update	CMOS update	RAID configuration
7967	BladeCenter	BRET85C	n/a	n/a	n/a
7981	BladeCenter HS20*	FEE106B	Yes	Yes	Yes
8677	BladeCenter	BRET85C	n/a	n/a	n/a
8678	BladeCenter HS20*	BRJT34A	Yes	No	Yes
8853	BladeCenter HS21	BCJT09A	Yes	Yes	Yes
8720	BladeCenter T - AC	BVET43B	n/a	n/a	n/a
8730	BladeCenter T - DC	BVET43B	n/a	n/a	n/a
8750	BladeCenter T - AC	BBET10A	n/a	n/a	n/a
8832	BladeCenter HS20*	BSJT24A	Yes	Yes	Yes
8839	BladeCenter HS40*	SBJT62A	Yes	Yes	Yes
8843	BladeCenter HS20*	BWJT21A	Yes*	Yes	Yes
8850	BladeCenter LS20*	BKJT18D	Yes	Yes	Yes
8852	BladeCenter H	BEPT14C	n/a	n/a	n/a
8835	@server 325	M1JT36A	Yes*	Yes	Yes
8848	@server 326	M2JT25A	Yes*	Yes	Yes
7969	@server 326m	P4E128A	Yes*	Yes	Yes
8486	xSeries 100	IJJT18A	n/a	Yes	Yes
8479	xSeries 200*	ZRJT22A	n/a	Yes	Yes
8480	xSeries 205	JPJT53A	n/a	Yes	Yes
8482	xSeries 206*	KEJT34A	n/a	Yes	Yes
8485	xSeries 206m*	PAJT24A	No	Yes	Yes
8645	xSeries 220	TUJT20A	n/a	Yes	Yes
8646	xSeries 220*	JJJT19A	n/a	Yes	Yes
8647	xSeries 225*	OPJT48A	n/a	Yes	Yes
8649	xSeries 225*	OQJT12A	n/a	Yes	Yes
8648	xSeries 226*	PMJT57A	n/a	Yes	Yes
8668	xSeries 232	QAJT33A	Yes	Yes	Yes
8671	xSeries 235*	GRJT57A	Yes	Yes	Yes
8841	xSeries 236	NRJT28A	Yes	Yes	Yes
8685	xSeries 255*	AVJT26A	Yes	Yes	Yes
8865	xSeries 260	ZUJT45A	Yes	Yes	Yes
8672	xSeries 300	ABJT20A	n/a	No	Yes
8673	xSeries 305	PLJT68A	n/a	Yes	Yes
8836/8849	xSeries 306*	KEJT34A	n/a	Yes	Yes
8849	xSeries 306m*	PAJT29A	Yes	Yes	Yes
8654	xSeries 330*	TTJT32A	n/a	Yes	Yes
8674	xSeries 330	EMJT13A	n/a	Yes	Yes
8676	xSeries 335	T2JT39A	Yes	Yes	Yes

Table 1. Maintenance support for IBM servers (continued)

Server			Maintenance		
Machine Type	Model	BIOS level	ISMP/BMC update	CMOS update	RAID configuration
8837	xSeries 336*	APJT25A	No	Yes	Yes
8669	xSeries 342	QAJT33A	Yes	Yes	Yes
8827	xSeries 344	SWE101B	No	No	Yes
8670	xSeries 345*	GEJT63A	Yes	Yes	Yes
8840	xSeries 346*	KPJT34A	Yes	Yes	Yes
8682	xSeries 350*	ARJT26A	n/a	Yes	Yes
8686	xSeries 360	RUE158B	n/a	Yes	Yes
8861	xSeries 365*	RDJT34A	n/a	Yes	Yes
8863	xSeries 366*	ZUJT45A	Yes	Yes	Yes
8687	xSeries 440	VIJT44A	n/a	Yes	Yes
8870	xSeries 445*	REJT49A	n/a	Yes	Yes
8872	xSeries 460*	ZUJT45A	Yes	Yes	Yes
7973	System x3400	SPJT28A	Yes	Yes	Yes
7977	System x3500	SPJT28A	Yes	Yes	Yes
7978	System x3550	GFE112A	Yes	Yes	Yes
7979	System x3650	GGE112A	Yes	Yes	Yes

## Native installation support table

Table 2 illustrates the native installation support available for the listed operating systems.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for IBM servers” on page 9.

Table 2. Native installation support for IBM servers

Server			Native Installation						
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003 Std, Windows Server 2003 Web	Windows Server 2003 Enterprise	Windows Server 2003 Std, Windows Server 2003 Ent 64-bit	Red Hat Linux 7.3 and 8.0	Red Hat Ent Linux AS 2.1	Vmware ESX Server 2.5x
7967	BladeCenter	BRET85C	n/a	n/a	n/a	n/a	n/a	n/a	No
7981	BladeCenter HS20*	FEE106B	Yes	Yes	Yes	n/a	No	No	No
8677	BladeCenter	BRET85C	n/a	n/a	n/a	n/a	n/a	n/a	No
8678	BladeCenter HS20*	BRJT34A	Yes	Yes	Yes	n/a	Yes	Yes	Yes
8853	BladeCenter HS21	BCJT09A	No	Yes	Yes	Yes	No	No	No

Table 2. Native installation support for IBM servers (continued)

Server			Native Installation						
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003 Std, Windows Server 2003 Web	Windows Server 2003 Enterprise	Windows Server 2003 Std, Windows Server 2003 Ent 64-bit	Red Hat Linux 7.3 and 8.0	Red Hat Ent Linux AS 2.1	Vmware ESX Server 2.5x
8720	BladeCenter T - AC	BVET43B	n/a	n/a	n/a	n/a	n/a	n/a	No
8730	BladeCenter T - DC	BVET43B	n/a	n/a	n/a	n/a	n/a	n/a	No
8750	BladeCenter T - AC	BBET10A	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8832	BladeCenter HS20*	BSJT24A	Yes	Yes	Yes	Yes	No	Yes	Yes
8843	BladeCenter HS20*	SBJT62A	Yes	Yes	Yes	Yes	No	No	No
8839	BladeCenter HS40*	BWJT21A	Yes	Yes	Yes	n/a	No	Yes	Yes
8850	BladeCenter LS20*	BKJT18D	Yes	Yes	Yes	Yes	No	No	Yes
8852	BladeCenter H	BEPT14C	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8835	@server 325	M1JT36A	No	Yes	Yes	Yes	No	No	Yes
8848	@server 326	M2JT25A	No	Yes	Yes	Yes	No	No	No
7969	@server 326m	P4E128A	No	Yes	Yes	Yes	No	No	No
8486	xSeries 100	IJJT18A	Yes	Yes	Yes	n/a	No	No	No
8479	xSeries 200	ZRJT22A	Yes	Yes	Yes	n/a	No	No	No
8480	xSeries 205	JPJT53A	Yes	Yes	Yes	n/a	No	Yes	No
8482	xSeries 206*	KEJT34A	Yes	Yes	Yes	Yes	No	Yes	No
8485	xSeries 206m*	PAJT24A	Yes	Yes	Yes	Yes	No	No	No
8645	xSeries 220	TUJT20A	Yes	Yes	Yes	n/a	Yes	No	No
8646	xSeries 220*	JJJT19A	Yes	Yes	Yes	n/a	Yes	No	No
8647	xSeries 225*	OPJT48A	Yes	Yes	Yes	n/a	No	Yes	No
8649	xSeries 225*	OQJT12A	Yes	Yes	Yes	n/a	No	Yes	No
8648	xSeries 226*	PMJT57A	Yes	Yes	Yes	Yes	No	No	No
8668	xSeries 232	QAJT33A	Yes	Yes	Yes	n/a	No	No	No

Table 2. Native installation support for IBM servers (continued)

Server			Native Installation						
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003 Std, Windows Server 2003 Web	Windows Server 2003 Enterprise	Windows Server 2003 Std, Windows Server 2003 Ent 64-bit	Red Hat Linux 7.3 and 8.0	Red Hat Ent Linux AS 2.1	Vmware ESX Server 2.5x
8671	xSeries 235*	GRJT57A	Yes	Yes	Yes	n/a	Yes	Yes	No
8841	xSeries 236	NRJT28A	Yes	Yes	Yes	Yes	No	No	No
8685	xSeries 255*	AVJT26A	Yes	Yes	Yes	n/a	Yes	Yes	No
8865	xSeries 260*	ZUJT45A	Yes	Yes	Yes	Yes	No	No	Yes
8672	xSeries 300	ABJT20A	Yes	Yes	Yes	n/a	Yes	Yes	No
8673	xSeries 305	PLJT68A	Yes	Yes	Yes	n/a	Yes	Yes	No
8836/ 8849	xSeries 306*	KEJT34A	Yes	Yes	Yes	Yes	No	Yes	No
8849	xSeries 306m*	PAJT29A	Yes	Yes	Yes	Yes	No	No	No
8654	xSeries 330*	TTJT32A	Yes	Yes	Yes	n/a	Yes	No	No
8674	xSeries 330	EMJT13A	Yes	Yes	Yes	n/a	Yes	Yes	No
8676	xSeries 335	T2JT39A	Yes	Yes	Yes	n/a	Yes	Yes	Yes
8837	xSeries 336*	APJT25A	Yes	Yes	Yes	Yes	No	Yes	Yes
8669	xSeries 342	QAJT33A	Yes	Yes	Yes	n/a	Yes	No	No
8827	xSeries 344	SWE101B	Yes	Yes	Yes	n/a	No	No	No
8670	xSeries 345*	GEJT63A	Yes	Yes	Yes	n/a	Yes	Yes	Yes
8840	xSeries 346*	KPJT34A	Yes	Yes	Yes	Yes	No	Yes	Yes
8682	xSeries 350*	ARJT26A	Yes	Yes	Yes	n/a	Yes	Yes	No
8686	xSeries 360	RUE158B	Yes	Yes	Yes	n/a	Yes	Yes	Yes
8861	xSeries 365*	RDJT34A	Yes	Yes	Yes	n/a	No	Yes	Yes
8863	xSeries 366*	ZUJT45A	Yes	Yes	Yes	Yes	No	No	Yes
8687	xSeries 440	VIJT44A	Yes	Yes	Yes	n/a	No	Yes	Yes
8870	xSeries 445*	REJT49A	Yes	Yes	Yes	n/a	No	Yes	Yes
8872	xSeries 460*	ZUJT45A	Yes	Yes	Yes	Yes	No	No	Yes
7973	System x3400	SPJT28A	Yes	Yes	Yes	Yes	No	No	No

Table 2. Native installation support for IBM servers (continued)

Server			Native Installation						
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003 Std, Windows Server 2003 Web	Windows Server 2003 Enterprise	Windows Server 2003 Std, Windows Server 2003 Ent 64-bit	Red Hat Linux 7.3 and 8.0	Red Hat Ent Linux AS 2.1	Vmware ESX Server 2.5x
7977	System x3500	SPJT28A	Yes	Yes	Yes	Yes	No	No	No
7978	System x3550	GFE112A	No	Yes	Yes	No	No	No	No
7979	System x3650	GGE112A	No	Yes	Yes	No	No	No	No

## Windows Clone Install support table

Table 3 illustrates the Windows Clone Install support available for the listed operating systems.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for IBM servers” on page 9.

Table 3. Clone installation support for IBM servers

Server			Clone Install			
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003, Std Windows Server 2003, Web	Windows Server 2003, Ent	Windows 2003 Server, Std & Ent 64-bit
7967	BladeCenter	BRET85C	n/a	n/a	n/a	n/a
7981	BladeCenter HS20*	FEE106B	Yes	Yes	Yes	n/a
8677	BladeCenter	BRET85C	n/a	n/a	n/a	n/a
8678	BladeCenter HS20*	BRJT34A	Yes	Yes	Yes	n/a
8853	BladeCenter HS21	BCJT09A	No	Yes	Yes	Yes
8720	BladeCenter T - AC	BVET43B	n/a	n/a	n/a	n/a
8730	BladeCenter T - DC	BVET43B	n/a	n/a	n/a	n/a
8750	BladeCenter T - AC	BBET10A	n/a	n/a	n/a	n/a
8832	BladeCenter HS20*	BSJT24A	Yes	Yes	Yes	Yes
8843	BladeCenter HS20*	SBJT62A	Yes	Yes	Yes	Yes
8839	BladeCenter HS40*	BWJT21A	Yes	Yes	Yes	n/a
8850	BladeCenter LS20*	BKJT18D	Yes	Yes	Yes	Yes
8852	BladeCenter H	BEPT14C	n/a	n/a	n/a	n/a
8835	@server 325*	M1JT36A	No	Yes	Yes	Yes
8848	@server 326	M2JT25A	No	Yes	Yes	Yes
7969	@server 326m	P4E128A	No	Yes	Yes	Yes

Table 3. Clone installation support for IBM servers (continued)

Server			Clone Install			
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003, Std Windows Server 2003, Web	Windows Server 2003, Ent	Windows 2003 Server, Std & Ent 64-bit
8486	xSeries 100	IJJT18A	Yes	Yes	Yes	n/a
8479	xSeries 200*	ZRJT22A	Yes	Yes	Yes	n/a
8480	xSeries 205	JPJT53A	Yes	Yes	Yes	n/a
8482	xSeries 206*	KEJT34A	Yes	Yes	Yes	Yes
8485	xSeries 206m*	PAJT24A	Yes	Yes	Yes	Yes
8645	xSeries 220	TUJT20A	Yes	Yes	No	n/a
8646	xSeries 220*	JJJT19A	Yes	Yes	Yes	n/a
8647	xSeries 225*	OPJT48A	Yes	Yes	Yes	n/a
8649	xSeries 225*	OQJT12A	Yes	Yes	Yes	n/a
8648	xSeries 226*	PMJT57A	Yes	Yes	Yes	Yes
8668	xSeries 232	QAJT33A	Yes	Yes	Yes	n/a
8671	xSeries 235*	GRJT57A	Yes	Yes	Yes	n/a
8841	xSeries 236	NRJT28A	Yes	Yes	Yes	Yes
8685	xSeries 255*	AVJT26A	Yes	Yes	Yes	n/a
8865	xSeries 260*	ZUJT45A	Yes	Yes	Yes	Yes
8672	xSeries 300	ABJT20A	Yes	Yes	Yes	n/a
8673	xSeries 305	PLJT68A	Yes	Yes	Yes	n/a
8836/8849	xSeries 306*	KEJT34A	Yes	Yes	Yes	Yes
8849	xSeries 306m*	PAJT29A	Yes	Yes	Yes	Yes
8654	xSeries 330*	TTJT32A	Yes	Yes	Yes	n/a
8674	xSeries 330	EMJT13A	Yes	Yes	Yes	n/a
8676	xSeries 335	T2JT39A	Yes	Yes	Yes	n/a
8837	xSeries 336*	APJT25A	Yes	Yes	Yes	Yes
8669	xSeries 342	QAJT33A	Yes	Yes	Yes	n/a
8827	xSeries 344	SWE101B	Yes	Yes	Yes	n/a
8670	xSeries 345*	GEJT63A	Yes	Yes	Yes	n/a
8840	xSeries 346*	KPJT34A	Yes	Yes	Yes	Yes
8682	xSeries 350*	ARJT26A	Yes	Yes	Yes	n/a
8686	xSeries 360	RUE158B	Yes	Yes	Yes	n/a
8861	xSeries 365*	RDJT34A	Yes	Yes	Yes	n/a
8863	xSeries 366*	ZUJT45A	Yes	Yes	Yes	Yes
8687	xSeries 440	VIJT44A	Yes	Yes	Yes	n/a
8870	xSeries 445*	REJT49A	Yes	Yes	Yes	n/a
8872	xSeries 460*	ZUJT45A	Yes	Yes	Yes	Yes
7973	System x3400	SPJT28A	Yes	Yes	Yes	Yes

Table 3. Clone installation support for IBM servers (continued)

Server			Clone Install			
Machine Type	Model	BIOS level	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003, Std Windows Server 2003, Web	Windows Server 2003, Ent	Windows 2003 Server, Std & Ent 64-bit
7977	System x3500	SPJT28A	Yes	Yes	Yes	Yes
7978	System x3550	GFE112A	No	Yes	Yes	Yes
7979	System x3650	GGE112A	No	Yes	Yes	Yes

## Linux Clone Install support

The RDM Linux Clone Install task is capable of imaging EXT2, EXT3, and swap partitions. See the *IBM Remote Deployment Manager User's Reference* for more information.

Operating system compatibility information for supported Linux distributions is available at [www.ibm.com/servers/eserver/serverproven/compat/us/index.html](http://www.ibm.com/servers/eserver/serverproven/compat/us/index.html).

## Special considerations for IBM servers

The following sections list special considerations for IBM servers.

### Special considerations for all servers

The following sections list general special considerations that refer to all servers listed in Table 1 on page 3, Table 2 on page 4, and Table 3 on page 7.

Changing the RDM Server Get and Put block sizes from the defaults can cause network communication issues on Broadcom adapters.

**BladeCenter unit Ethernet switch module:** Limited information about blades is collected by the management module. You must run RDM scan on the blade objects that IBM Director creates when you discover systems. Drag the blade objects to the built-in scan task. RDM will then collect all the required information and add it to those objects.

Regardless of which switch module is connected to the chassis, the blades are collected using the first Ethernet device seen in the BIOS, which is the Ethernet switch module in bay 2. If you have only one Ethernet switch module and it is installed in bay 1, the RDM cannot scan or manage the blade server, because you have an incorrect MAC address. Move the Ethernet switch module to bay 2 for proper operation.

**CMOS:** A user-modified `lccmos.bat` file is required to update CMOS code. This file must be modified if it contains either of the following lines:

```
cmosutil.exe - s %1
```

```
cmosutil.exe /s %1
```

If either line is located, replace it with the following line:

```
cmosutil.exe /R %1
```

**General information:** Any system where the cmosutil program uses - s to save and - r to restore, instead of /s and /r, requires a lccmos.bat file. Make note of what syntax the system uses when you create the .cms file initially. You must include one of the following commands in the batch file:

```
cmosutil.exe - r filename.cms
```

```
cmosutil.exe - r %1
```

Create the batch file on the BIOS update diskette; then, create a BIOS image as you normally would and a CMOS image with the BIOS code. The batch file appears as the executable in the CMOS image.

**PowerQuest:** RAID level 1 is not supported by PowerQuest with any DOS based ImageCenter versions. Although RAID 1 might work in this scenario, no support is available.

**RDM task processing:** Occasionally, RDM tasks running on systems using Fibre might have processing to do before they are ready for the systems to be turned on. If you want to manually turn on or wake a system, you must wait until the RDM task issues the WAKE command. You can view this process through the Execution History of the task.

**VMware ESX Server:** In certain cases, you might experience issues when deploying VMware ESX Server 2.1, 2.5 and 2.5.1 using Microsoft® IIS version 6.0 under Windows Server 2003 Standard Edition. You might experience download failures when VMware attempts to download the /VMware/base/netstg1.img file from the server.

**VMware ESX Server 2.1:** VMware ESX Server 2.1 cannot support SANboot, with the exception of SANboot being used as a data drive to hold the VMFS partitions.

**IBM iSCSI Server Adapter:** Before performing a Windows installation on a server that has an IBM iSCSI Server Adapter installed, you must add both the text mode and plug and play drivers for the adapter to the Windows Native Install driver repository.

### Special considerations for specific servers

The following sections list special considerations that refer to specific servers listed in Table 1 on page 3, Table 2 on page 4, and Table 3 on page 7.

**BladeCenter HS20 Type 7981:** Before performing a Windows Native Install on the 7981, update the LSI SAS driver and add it to the WNI repository. When you add it to the repository, enter 7981 in the **Model** field. Drivers can be downloaded from [www.ibm.com/pc/support](http://www.ibm.com/pc/support).

For more information about working with device drivers, see the *IBM Remote Deployment Manager User's Reference*.

**BladeCenter HS20 Type 8678:** The MTFTP Put Blocksize value should remain at the default value of 1024 bytes for the BladeCenter HS20 Type 8678 to scan in properly.

**BladeCenter HS20 Type 8832:** VMware ESX Server does not support the LSI MegaRAID IDEal RAID controller present in the BladeCenter HS20 8832.

Use the LSI utility to configure the RAID controller on this system.

You cannot flash a new onboard Service Processor (BMC, ISMP) image to both Type 8839 and Type 8832 machines using the same task. To update the BMC for these machine types, create a separate task for each type.

**BladeCenter HS20 Type 8843:** Before running a WNI task using a Windows 2000 Server image on an 8843 with a QLogic 4 GB Fibre Adapter installed, remove the "QLogic Fibre Channel Adapter for the W2k & W2k3" driver. Download the updated QLogic Fibre Channel Adapter driver from [www.ibm.com/pc/support](http://www.ibm.com/pc/support) and add it to the WNI repository.

For more information about working with device drivers, see the *IBM Remote Deployment Manager User's Reference*.

The 8843 BMC version BWBT16A and above are contained on two diskettes. In order to flash the BMC through RDM create a directory named BWBTxxA where xx is the version of the BMC in a location with enough space to hold the contents of both diskettes. Copy the contents of both diskettes to the directory you created and browse to this directory when importing the 8843 BMC into RDM.

**BladeCenter HS40 Type 8839:** To configure X Windows task support for native installs, you must run the XConfigurator after the install.

VMware ESX Server does not support the LSI MegaRAID IDEal RAID controller present in the BladeCenter HS40 8839.

Using iSCSI in the SANBoot configuration under VMware ESX Server or Red Hat via Linux Native Installation deployments is not supported.

VMware ESX Server 2.1 does not support SCSI RAID on the BladeCenter HS40 8839.

You cannot flash a new onboard Service Processor (BMC, ISMP) image to both Type 8839 and Type 8832 machines using the same task. To update the BMC for these machine types, create a separate task for each type.

RDM does not support the BladeCenter HS20 Type 8839 if a ServeRAID™ 6M Ultra320 SCSI controller is installed in an attached PCI expansion unit.

**xSeries 255 Type 8685:** To ensure the correct boot order, you must verify that the network is listed before the hard disk drive in the start options in the BIOS Setup/Configuration Utility.

**xSeries 200 Type 8479:** Using Service Pack 3 with the Windows 2000 installation on the xSeries 200 Type 8479 will cause the ASR driver to fail.

**xSeries 206 Type 8482:** You might encounter errors when deploying Red Hat Linux AS 2.1 to an IDE (including SATA) hard drive that is larger than 137 GB.

**xSeries 206m Type 8485:** The System Firmware Flash task cannot flash the BMC firmware for this system. You must create a custom task flash the BMC firmware.

**xSeries 220 Type 8646:** After you deploy a Windows Native Install task to the 8646, you must manually restart the computer before another task can be deployed to it.

**xSeries 225 Type 8647:** If an IBM ServeRAID adapter is installed and the integrated LSI controller is enabled on the server, the full version of DeployCenter will not work for cloning this server.

**xSeries 225 Type 8649:** To ensure the boot order, verify that the network is listed before the hard disk drive in the start options in the Setup/Configuration Utility.

**xSeries 226 Type 8648:** RDM does not currently support Windows Native Install on this system when the onboard ServeRAID 7e is configured for SATA HostRAID.

**xSeries 235 Type 8671:** BIOS code must be at least at level GRJT31A for Scan to detect the ISMP firmware level.

You might have to set the ServeRAID write-cache mode to the write-through setting to run the Secure Data Disposal task.

If an IBM ServeRAID adapter is installed and the integrated LSI controller is enabled on the server, the full version of DeployCenter will not work for cloning this server.

**xSeries 306 Type 8836:** On an xSeries 306 server, or any server that supports both SCSI HostRAID and SATA HostRAID, when switching from SCSI HostRAID to SATA HostRAID you must first disable SCSI HostRAID in the SCSISelect Utility:

1. When the server boots, press Ctrl-A to start the SCSISelect Utility.
2. Select the option to Configure/View SCSI Controller Settings.
3. The HostRAID setting is located near the bottom of the screen. Ensure that the HostRAID setting is disabled.

On the xSeries 306 Type 8836, use Ethernet Port 1 to PXE boot and deploy Linux from RDM. This helps avoid any issues when using the second port with Intel® driver 5.2.30.1 in RDM 4.20

You might encounter errors when deploying Red Hat Linux AS 2.1 to an IDE (including SATA) hard drive that is larger than 137 GB.

Deployment of Red Hat Linux AS 2.1 might hang intermittently if you select the Message and Web Tools package group (the group containing the Mozilla package) while creating a Linux Native Install task. If this occurs, redeploy the task or restart the target server before the timeout is reported by RDM.

Remote Storage tasks do not support the management of Brocade switches with the Red Hat AS 2.1 and SUSE SLES 8 operating systems because the Brocade Fabric Access API has dependencies on tools and libraries that do not exist on these older operating systems.

**xSeries 306m Type 8849:** Drivers must be added to the Windows installation if you are using SAS, SATA HostRAID, or SAS HostRAID.

To perform a Windows installation on ServeRAID 8i SAS storage you must add the text mode and plug and play drivers for the device to the Windows Native Install driver repository.

If an attempt to flash the BMC firmware of an xSeries 306m Type 8849 fails, you might need to change the diskette label before creating the RDM image. The third character in the diskette label must be a letter B. For example, if the diskette label is PAJ216A, you must change it to PABT16A and then create the RDM image.

**Note:** To modify the diskette label, right-click the diskette in Windows Explorer. Select **Properties > General** and make the change.

**@server 325 Type 8835:** If the System Firmware Flash task fails on the 8835, open the update.bat file on the BMC update diskette and add the following line of code to the :renew and :restore sections of the file: tool 20 18 01. Create the image again.

The modified file appears as follows:

```
@echo off
set reset_delay=8000
if exist fw162.exe set BMC_FW_UTY=TRUE
recvruty
set BMC_FW_UTY=
if errorlevel 255 goto fwtool
if errorlevel 254 goto fwutility
if errorlevel 3 goto fail
if errorlevel 2 goto renew
if errorlevel 1 goto restore

echo.
echo Firmware recovery tool is not exist.
goto end

:restore
echo.
echo Firmware updated OK.
echo MAC/IP/Subnet Restore successfully.
tool 20 18 01
goto end

:renew
echo.
echo Firmware updated OK.
tool 20 18 01
goto end

:fail
echo.
echo Firmware updated OK.
echo MAC/IP/Subnet Restore successfully.
echo Warning: Your MAC address is default setting,
echo please call IBM contact for support.
goto end

:fwutility
echo.
echo Firmware update utility is not exist.
goto end
:fwtool
echo.
echo Firmware tool is not exist.
goto end

:end
```

**@server 326 Type 8848:** If the System Firmware Flash task fails on the 8848, open the update.bat file on the BMC update diskette and add the following line of code to the :renew and :restore sections of the file: tool 20 18 01. Create the image again.

The modified file appears as follows:

```

@echo off
set reset_delay=8000
if exist fw162.exe set BMC_FW_UTILITY=TRUE
recvruty
set BMC_FW_UTILITY=
if errorlevel 255 goto fwtool
if errorlevel 254 goto fwutility
if errorlevel 3 goto fail
if errorlevel 2 goto renew
if errorlevel 1 goto restore

echo.
echo Firmware recovery tool is not exist.
goto end

:restore
echo.
echo Firmware updated OK.
echo MAC/IP/Subnet Restore successfully.
tool 20 18 01
goto end

:renew
echo.
echo Firmware updated OK.
tool 20 18 01
goto end

:fail
echo.
echo Firmware updated OK.
echo MAC/IP/Subnet Restore successfully.
echo Warning: Your MAC address is default setting,
echo please call IBM contact for support.
goto end

:fwutility
echo.
echo Firmware update utility is not exist.
goto end
:fwtool
echo.
echo Firmware tool is not exist.
goto end

:end

```

**@server 326m Type 7969:** If the System Firmware Flash task fails on the 7969, open the update.bat file on the BMC update diskette and add the following line of code to the :renew and :restore sections of the file: **tool 20 18 01**. Create the image again.

The modified file appears as follows:

```

@echo off
set reset_delay=8000
if exist fw162.exe set BMC_FW_UTILITY=TRUE
recvruty
set BMC_FW_UTILITY=
if errorlevel 255 goto fwtool
if errorlevel 254 goto fwutility
if errorlevel 3 goto fail
if errorlevel 2 goto renew
if errorlevel 1 goto restore

echo.

```

```

echo Firmware recovery tool is not exist.
goto end

:restore
echo.
echo Firmware updated OK.
echo MAC/IP/Subnet Restore successfully.
tool 20 18 01
goto end

:renew
echo.
echo Firmware updated OK.
tool 20 18 01
goto end

:fail
echo.
echo Firmware updated OK.
echo MAC/IP/Subnet Restore successfully.
echo Warning: Your MAC address is default setting,
echo please call IBM contact for support.
goto end

:fwutility
echo.
echo Firmware update utility is not exist.
goto end
:fwtool
echo.
echo Firmware tool is not exist.
goto end

:end

```

**xSeries 336 Type 8837:** If you disable the SCSI HostRAID controller on the xSeries 336 Type 8837, RDM is not supported.

**xSeries 345 Type 8670:** You might have to set the ServeRAID write-cache mode to the write-through setting to run the Secure Data Disposal task.

If an IBM ServeRAID adapter is installed and the integrated LSI controller is enabled on the server, the full version of DeployCenter will not work for cloning this server.

**xSeries 346 Type 8840:** The VMware Native Install (VNI) task is only supported in 32-bit mode on model 8840 . The onboard Adaptec 7902 Controller configured as RAID is not supported.

If an IBM ServeRAID adapter is installed and the integrated LSI controller is enabled on the server, the full version of DeployCenter will not work for cloning this server.

**xSeries 350 Type 8682:** The xSeries 350 Type 8682 does not support Wake on LAN®.

The xSeries 350 Type 8682 reboots instead of shutting down after completing an RDM task.

**xSeries 365 Type 8861:** If an IBM ServeRAID adapter is installed and the integrated LSI controller is enabled on the server, the full version of DeployCenter will not work for cloning this server.

To configure X Windows task support for a Linux Native Install, you must run the XConfigurator after the installation completes.

**xSeries 366 Type 8863:** BMC levels prior to 1.04 will appear in inventory as ZUBTFFA. You can use this inventory item to update the BMC level directly using a BMC flash type in the System Firmware Flash task.

If the System Firmware Flash task fails to flash the BMC, open the lcreflash.bat file on the BIOS diskette and add the following line of code after the call FLSHUPDT.BAT statement: sleep 2.

The modified file appears as follows:

```
mopac -d fullfw.cmt fullfw.mot
if errorlevel 1 goto FailMopac

echo Updating BMC Firmware
rem call update.bat -f
smbiosd /t=38 > NODELIST.TXT
FLSHMIGR 1.5!
call FLSHUPDT.BAT
sleep 2
goto end

:FailMopac
echo Unpacking failure encountered

:end
```

Save the file, create the image, and run the System Firmware Flash task again.

**xSeries 440 Type 8687:** If an IBM ServeRAID 6M Adapter and an IBM PRO/1000T Desktop Adapter by Intel are both installed on the server, the Windows Native Install of the server will fail.

**xSeries 445 Type 8870:** The xSeries 445 Type 8870 server requires BIOS level REJT35A, version 1.10 when using the optional RSA II EXA adapter.

The MTFTP Put Blocksize value should remain at the default value of 1024 bytes for the xSeries 445 Type 8870 to scan in properly.

If an IBM ServeRAID adapter is installed and the integrated LSI controller is enabled on the server, the full version of DeployCenter will not work for cloning this server.

**System x3500 Type 7977:** Drivers must be added to the Windows installation if you are using SAS hard drives.

---

## IBM workstations

Table 4 on page 17 lists the supported firmware and the operating systems that you can deploy on specific IBM workstations.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for IBM workstations” on page 17.

Table 4. Support for IBM workstations

System		Maintenance		Native Installs			Clone Installs		
Machine Type	Model	Tested BIOS level	CMOS Update	Windows 2000 Pro	Windows XP Pro	Windows XP Pro 64-bit	Windows 2000 Pro	Windows XP Pro	Windows XP Pro 64-bit
6218	IntelliStation M Pro*	B1JT30A	Yes	No	Yes	Yes	No	Yes	Yes
6220 6230	IntelliStation M Pro*	T6JT21A	Yes	Yes	Yes	n/a	Yes	Yes	n/a
6225	IntelliStation M Pro*	FIJT37A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6221	IntelliStation Z Pro*	OPJT47A	Yes	Yes	Yes	n/a	Yes	Yes	n/a
6223	IntelliStation Z Pro*	PMJT61A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9228	IntelliStation Z Pro*	C3JT22A	Yes	No	Yes	Yes	No	Yes	Yes
9237	IntelliStation M Pro	B6E128A	Yes	No	Yes	n/a	No	Yes	n/a

## Special considerations for IBM workstations

The following sections list special considerations for the IBM workstations.

### All IBM workstations

Changing the RDM Server Get and Put block sizes from the defaults can cause network communication issues on Broadcom adapters.

### IntelliStation M Pro Type 6218

When deploying a Windows Native Install task with a Windows XP image, you must increase the WNI timeout to 720 minutes to enable the task to complete.

### IntelliStation M Pro Type 6220

The IntelliStation M Pro Type 6220 does not support Wake on LAN after running the Microsoft SYSPREP utility to prepare the system for a Get Donor task.

To use the RAID Clone Configuration task to configure RAID 5 on the IntelliStation M Pro Type 6220 you must set the following values in your acu configuration file:

- method=clear
- wait=yes

### IntelliStation M Pro Type 6225

Microsoft Windows XP Professional x64 edition is not supported on the IntelliStation M Pro Type 6225 with SATA hard drive installed.

### IntelliStation M Pro Type 6230

The IntelliStation M Pro Type 6230 does not support Wake on LAN after running the Microsoft SYSPREP utility to prepare the system for a Get Donor task.

### IntelliStation Z Pro Type 6221

The network must precede the hard disk in the primary boot sequence so that RDM tasks work correctly.

## IntelliStation Z Pro Type 6223

The network must precede the hard disk in the primary boot sequence so that the Windows Native Install task works correctly.

To ensure the correct boot order, you must verify that the network is listed before the hard disk drive in the start options in the BIOS Setup/Configuration Utility.

RDM does not currently support Windows Native Install on this system when the onboard ServeRAID 7e is configured for SATA HostRAID.

## IntelliStation Z Pro Type 9228

If you attempt to update to BIOS level C3JT18A (version 1.18) or later using the Deploy latest system firmware task, and the 9228 is configured with SATA or SAS hard-disk support, the task might fail. If the task fails, complete the following steps to update the firmware:

1. Download the BIOS from the IBM support Web site at [www.ibm.com/pc/support](http://www.ibm.com/pc/support).
2. Save the BIOS to a diskette.
3. Open the lcreflash.bat file in a text editor and modify it so that it appears as follows:

```
***Begin lcreflash.bat***
phlash16.exe /X /P /S /EXIT flashfil.flis
sleep 2
***END***
```
4. Save the file.
5. Create the System Firmware Image in RDM.
6. Run the Deploy latest system firmware task.

---

## IBM desktop computers

Table 5 lists the supported firmware and the operating systems that you can deploy on specific IBM desktop computers.

Table 5. Support for IBM desktop computers

System		Maintenance			Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update	Asset ID™ support	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
6837 6847	NetVista A40p	WOKT14A	Yes	Yes	Yes	Yes	Yes	Yes
8319	NetVista S42	28KT26A	Yes	Yes	Yes	Yes	Yes	Yes
6792	NetVista M41	20KT44A	Yes	Yes	Yes	Yes	Yes	Yes
8191 8198	ThinkCentre A30	24KT54A	Yes	Yes	Yes	Yes	Yes	Yes

Table 5. Support for IBM desktop computers (continued)

System		Maintenance			Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update	Asset ID™ support	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
8174 8175 8176 8177 8178 8179 8084 8085 8147 8148 8149	ThinkCentre A50	2CKT15A	Yes	Yes	Yes	Yes	Yes	Yes
8105 8107 8109 8117 8119 8121	ThinkCentre A51	2GKT14A	Yes	No	Yes	Yes	Yes	Yes
8122 - 8124 8129 8131 - 8138 9212	ThinkCentre A51	2FKT23A	Yes	No	Yes	Yes	Yes	Yes
8420 8421 8422 8423 8426 8427	ThinkCentre A51p	2BKT30A	Yes	Yes	Yes	Yes	Yes	Yes
8153 - 8170	ThinkCentre A52	2EKT15A	Yes	No	Yes	Yes	Yes	Yes
8289	ThinkCentre A52	2HKT11A	Yes	Yes	Yes	Yes	Yes	Yes
8185	ThinkCentre M50	2AJT45A	Yes	Yes	Yes	Yes	Yes	Yes
8104 8106 8108 8118 8120	ThinkCentre M51	2GJT14A	Yes	No	Yes	Yes	Yes	Yes
8141 8142 8143 8144 8145 8146	ThinkCentre M51	1BJT47A	Yes	Yes	Yes	Yes	Yes	Yes
8110 - 8116 8211 - 8216 9210 - 9211	ThinkCentre M52	2EKT15A	Yes	No	Yes	Yes	Yes	Yes
8086	ThinkCentre S50	2DJT11A	Yes	Yes	Yes	Yes	Yes	Yes

Table 5. Support for IBM desktop computers (continued)

System		Maintenance			Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update	Asset ID™ support	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
8171 8172 8173	ThinkCentre S51	2BJT49A	Yes	Yes	Yes	Yes	Yes	Yes
8183	ThinkCentre S50*	2AKT49A	Yes	Yes	Yes	Yes	Yes	Yes

## Special considerations for IBM desktop computers

This section lists special considerations for IBM desktop computers.

### All IBM desktop computers

Changing the RDM Server Get and Put block sizes from the defaults can cause network communication issues on Broadcom adapters.

### ThinkCentre S50 Type 8183

Type 8183 machines have experienced intermittent configuration errors when connected to a KVM switch. This situation can be corrected by connecting the mouse directly to the machine, eliminating the switch.

After updating the BIOS level on these machines, they may reboot to their local hard drives rather than to the network.

During a Windows Native Install task, Type 8183 machines with DVD players installed may be unable to copy files to the C: drive due to an accessibility error.

---

## IBM ThinkPad computers

Table 6 lists the supported firmware and the operating systems that you can deploy on specific IBM ThinkPad computers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for IBM ThinkPad computers” on page 22.

Table 6. Support for IBM ThinkPad computers

System		Maintenance			Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update*	Asset ID support	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
1843	R51e	78ET57WW	Yes	Yes	Yes	Yes	Yes	Yes
1849	R52	76ET62WW	Yes	Yes	Yes	Yes	Yes	Yes
2511	Z60t	77ET42WW	Yes	Yes	Yes	Yes	Yes	Yes
2529	Z60m	77ET42WW	Yes	Yes	Yes	Yes	Yes	Yes
2652	A30	1EET71WW	Yes	Yes	Yes	Yes	Yes	Yes
2653	A31p	1GET36WW	Yes	Yes	Yes	Yes	Yes	Yes
2384	G40*	1XET43WW	Yes	Yes	No	No	Yes	Yes

Table 6. Support for IBM ThinkPad computers (continued)

System		Maintenance			Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update*	Asset ID support	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
2387 2388 2389	G40	1TET97WW	Yes	Yes	No	No	Yes	Yes
2656	R31	1FETF0WW	Yes	Yes	Yes	Yes	Yes	Yes
2658	R32	1MET96WW	Yes	Yes	Yes	Yes	Yes	Yes
2684 2681 2682 2722 2723 2896 2897	R40	1SET46WW	Yes	Yes	Yes	Yes	Yes	Yes
1829 1830 1831 1836	R50	1RETDGWW	Yes	Yes	Yes	Yes	Yes	Yes
1834	R50e	1WET63WW	Yes	Yes	Yes	Yes	Yes	Yes
1830	R51	1RETDGWW	Yes	Yes	Yes	Yes	Yes	Yes
1829 1830 1831	R51	1RETCDDW	Yes	Yes	Yes	Yes	Yes	Yes
2883 2887 2888 2889	R51	1VET45WW	Yes	Yes	Yes	Yes	Yes	Yes
2887	R51	1VET58WW	Yes	Yes	Yes	Yes	Yes	Yes
1834	R51e	1WET63WW	Yes	Yes	Yes	Yes	Yes	Yes
1859	R52	70ET63WW	Yes	Yes	Yes	Yes	Yes	Yes
8148	R52	76ET24WW	No	Yes	Yes	Yes	Yes	Yes
9455	R60	7CET49WW	Yes	Yes	Yes	Yes	Yes	Yes
2647	T21	KZET33WW	Yes	Yes	Yes	Yes	Yes	Yes
2366	T30	1IET67WW	Yes	Yes	Yes	Yes	Yes	Yes
2373	T40*	1RET84WW	Yes	Yes	Yes	Yes	Yes	Yes
2373	T41	1RET84WW	Yes	Yes	Yes	Yes	Yes	Yes
2373 2374	T41p	1RETDGWW	Yes	Yes	Yes	Yes	Yes	Yes
2384	T42*	1TET97WW	Yes	Yes	Yes	Yes	Yes	Yes
2373 2374	T42*	1RETB7WW	Yes	Yes	Yes	Yes	Yes	Yes
2373	T42	1RETDGWW	Yes	Yes	Yes	Yes	Yes	Yes

Table 6. Support for IBM ThinkPad computers (continued)

System		Maintenance			Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update*	Asset ID support	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
2373 2374 2375 2376 2378 2379	T42, T42p*	1RETB7WW	Yes	Yes	Yes	Yes	Yes	Yes
2668	T43	1YET42WW	Yes	Yes	Yes	Yes	Yes	Yes
2007	T60	79ET58WW	Yes	Yes	Yes	Yes	Yes	Yes
2662	X21	1ZET9DWW	Yes	Yes	Yes	Yes	Yes	Yes
2662	X23	1DET70WW	Yes	Yes	Yes	Yes	Yes	Yes
2672 2673 2884 2885	X31	1QET72WW	Yes	Yes	Yes	Yes	Yes	Yes
2369 2370 2371 2372 2382 2386	X40	1UETD1WW	Yes	Yes	Yes	Yes	Yes	Yes
2371	X40	1UETD1WW	Yes	Yes	Yes	Yes	Yes	Yes
814A-024	X41	75ET21WW	Yes	Yes	Yes	Yes	Yes	Yes
2525	X41	74ET30WW	Yes	Yes	Yes	Yes	Yes	Yes
2371	X42	1UET93WW	No	Yes	Yes	Yes	Yes	Yes
1709	X60	7BET44WW	Yes	Yes	Yes	Yes	Yes	Yes
1702	X60s	7BET44WW	Yes	Yes	Yes	Yes	Yes	Yes
0672	Z61e	7FET46WW	Yes	Yes	Yes	Yes	Yes	Yes

## Special considerations for IBM ThinkPad computers

The following sections list special considerations for IBM ThinkPad computers.

### CMOS task error

If you create a CMOS task, you might see the following error message: "No system firmware flash exist. Please cancel and create a system firmware image first."

If you have already created a firmware image, then the error might be caused because the firmware diskette did not contain the srcmos.exe utility. If this occurs, complete the following steps to solve the problem:

1. Download the srcmos.exe utility from <http://www.ibm.com/support/docview.wss?uid=psg1MIGR-41472>
2. Copy the srcmos.exe utility onto the BIOS diskette.
3. Delete the original system firmware image, and then re-create the system firmware image with the BIOS diskette onto which you copied the srcmos.exe utility.

### ThinkPad G40 Type 2384

Tasks requiring a lot of bandwidth (for example, Windows Native Install or Windows Clone Install) might not complete properly if the ThinkPad G40 Type 2384 is connected to a switch with a port speed greater than 10 Mbps. If you experience performance problems with this configuration, change the port speed to 10 Mbps and try the task again.

### ThinkPad T40 Type 2373

On IBM ThinkPad T40, the Get Donor task fails with various hubs due to response problems. To avoid these problems, change the CommandList file timeout value from 240 minutes to a higher value.

### ThinkPad T42/T42p and R51 computers

Complete the following steps to deploy system firmware on IBM ThinkPad T42/T42p and R51 computers with BIOS level 1RETb7WW:

1. Download the new BIOS 1RETb7WW.
2. Expand the image onto a diskette.
3. Modify the diskette label to read 1QETb7WW instead of 1RETb7WW.

**Note:** To modify the diskette label, right click on the diskette in Windows Explorer. Select **Properties > General** and change the diskette label.

4. Build a system firmware image in RDM; then, make a System Firmware task to deploy to your system.

---

## IBM Point of Sale computers

Table 7 lists the supported firmware and the operating systems that you can deploy on specific IBM Point of Sale (POS) computers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for IBM Point of Sale computers” on page 24.

Table 7. Support for IBM Point of Sale computers

System		Maintenance		Native Installs		Clone Installs	
Machine Type	Model	Tested BIOS level	CMOS Update	Windows 2000 Pro	Windows XP Pro	Windows 2000 Pro	Windows XP Pro
4810-33H	SurePOS™ 300	8BKT120	Yes	Yes	Yes	Yes	Yes
4810-310	SurePOS 300*	K.14	Yes	Yes	Yes	Yes	Yes
4810-331	SurePOS 300	8BKT120A	Yes	Yes	Yes	Yes	Yes
4840-553	SurePOS 500*	X5KT160	Yes	Yes	Yes	Yes	Yes
4840-573	SurePOS 500*	X5KT160	Yes	Yes	Yes	Yes	Yes
4800-722	SurePOS 700*	82KT110	Yes	Yes	Yes	Yes	Yes
4800-7x1	SurePOS 700 P3*	81KT130	Yes	Yes	Yes	Yes	Yes
4800-782	SurePOS 700*	82KT110	Yes	Yes	Yes	Yes	Yes
4800-7x1	SurePOS 700 P4*	81KT130	Yes	Yes	Yes	Yes	Yes
4836-x35	Anyplace Kiosk*	8AKT060	Yes	Yes	Yes	Yes	Yes
4836-x42	Anyplace Kiosk*	8AKT060	Yes	Yes	Yes	Yes	Yes
4836-132	Anyplace Kiosk*	8AKT060A	Yes	Yes	Yes	Yes	Yes

## Special considerations for IBM Point of Sale computers

The following sections list special considerations for the IBM Point of Sale computers.

### **SurePOS 300 Type 4810, Model 310**

The SurePOS 300 Type 4810, Model 310 must be manually turned on after running the Sysprep task.

The SurePOS 300 Type 4810, Model 310 must be manually shut down using the power button after running the Sysprep task.

### **SurePOS 500 Type 4840, Model 553**

For Windows Native Installation, you must add the non-Direct X video driver to the WNI template.

The SurePOS 500 Type 4840, Model 553 reboots instead of shutting down after receiving a shutdown command.

### **SurePOS 500 Type 4840, Model 573**

For Windows Native Installations, you must add the primary video driver for this model to the WNI template before deploying the task to this machine.

For BIOS level X5KT220 no label is included when creating a BIOS diskette. To flash a BIOS update, you must add the BIOS level and product type manually.

### **SurePOS 700**

SurePOS 700 system firmware levels 8xTK100 and 8xTK102 will not work in RDM. When updating firmware levels above 100, set the system firmware update condition to "Always flash" in RDM.

**Note:** To identify the firmware level, put the diskette into drive A, then list the directory in a command window. The label of the diskette is the firmware level.

When creating the Firmware Flash image, the system completes the task by turning off and reports an incomplete status. To repair this problem, remove the pwroff.com command from the end of the lcreflash.bat file.

The SurePOS 701 Type 4800 model 781 must be manually shut down using the power button after running the Sysprep task.

### **IBM Anyplace Kiosk Model 4836**

The IBM Anyplace Kiosk must be manually shut down after performing a Get Donor task.

## IBM Point of Sale system procedures

The following section contains instructions for updating and cloning BIOS code and configuration data specific to SurePOS systems.

### **Creating a BIOS update diskette for multiple SurePOS 700 systems**

Complete the following steps to create a BIOS update diskette with support for the SurePOS 700 Type 4800:

1. Download the applicable BIOS code from the IBM SurePOS site at <http://www2.clearlake.ibm.com/store/support/index.html>
2. Unpack the downloaded BIOS executable file onto a diskette in diskette drive A.

3. From the BIOS diskette, obtain the new BIOS level number. If your diskette has a readme file or a TXT file, open the file and find the version information.
4. Double-click the **My Computer** icon on your desktop. Right-click the diskette drive, and then click **Properties**. The Properties window opens.
5. If the value for the label is not the same as the BIOS files you want to update, change the label in the Properties window. For BIOS diskettes with multiple update files, you can change to the BIOS files you want to use.  
The disk should now be ready to create a system firmware image in RDM.
6. (Optional) Confirm that the newly created BIOS diskette has a file called lcreflash.bat. If the file lcreflash.bat is not available, create a new lcreflash.bat file.

### **Creating a CMOS update diskette for SurePOS 700 Type 4800-7x1 systems**

Complete the following steps to create a CMOS update diskette with support for the SurePOS 700 Type 4800:

1. Download the SurePOS 700 CMOS utility from the IBM SurePOS site at the following address: <http://www2.clearlake.ibm.com/store/support/html/surepos700.html>
2. Start the SurePOS 700 from the CMOS utility diskette.
3. To save the CMOS data, run the `cmos /b` command.
4. Copy the `cmos.exe` and the CMOS data file to the SurePOS 700 BIOS diskette.
5. Create a file named `lccmos.bat` on the diskette (or modify the existing `lccmos.bat` file). The file must contain only the following command:

```
CMOS /R
```

6. Create a file called `lctest.cms` on the diskette. The content of the file can be anything, including a few blank lines.
7. Create a SurePOS 700 CMOS image from this diskette.

### **Creating a SurePOS 300 Type 4810 BIOS image in RDM**

Complete the following steps to create a SurePOS 300 Type 4810 BIOS image:

1. Download the BIOS code for the applicable model from the IBM SurePOS site at <http://www2.clearlake.ibm.com/store/support/index.html>
2. Download the BIOS executable file onto a diskette.
3. Create a `lcreflash.bat` file, or use the one that has been created. The `lcreflash.bat` file must have the BIOS command to update the BIOS along with the unattended option, usually `/r`, for example, `4810prog /r`
4. Save the `lcreflash.bat` onto the diskette. The disk should now be ready to create a system firmware image in RDM.
5. Insert the BIOS diskette into diskette drive A of the RDM server. Make sure that the diskette does not contain any volume labels.
6. Create a BIOS image by clicking **Tasks>Remote Deployment Manager>Image Management>Create>System Firmware Flash**.
7. Type the image name and image description.
8. Click **Setup**.
9. Click **Read Diskette**.
10. Click **OK** to build the BIOS image.

### **Cloning CMOS settings for SurePOS 500 systems**

Complete the following steps to load a configuration on SurePOS 500 systems:

1. Obtain a BIOS diskette that contains the same BIOS level for the POS system to be cloned.
  2. Download the CMOS utility (SurePOS 500-xx3 and SurePOS 700-7x1, CMOS/BIOS Configuration Utility) under IBM SurePOS 700 Series from the IBM SurePOS site at <http://www2.clearlake.ibm.com/store/support>
  3. Start the system from this CMOS utility diskette and run the command `cmos /b` to save the data.
  4. Copy `cmos.exe` and the CMOS data file to the BIOS diskette.
  5. Create the `lccmos.bat` file with `CMOS /R` on the BIOS diskette.
  6. Create an empty `lctest.cms` file on the BIOS diskette.
  7. In Remote Deployment Manager, select **Tasks>Remote Deployment Manager>Image Management>Create and Modify Images>Create>System Firmware Flash** to create the BIOS image from the diskette.
  8. In Remote Deployment Manager, select **Tasks>Remote Deployment Manager>Image Management>Create and Modify Images>Create>CMOS Update** to create the CMOS Update image from the diskette.
- The CMOS task is ready to deploy.

### Cloning CMOS settings for SurePOS 300 Type 4810 Model 31x

The CS4810.EXE and CMOSSET.COM program pair must be used when configuring the SurePOS 300 Type 4810 Model 31x model or SurePOS 300 models with microprocessor upgrades.

You can run CS4810.EXE on the SurePOS 300. It is used to create a file, CS4810.DAT, which contains the new settings. Then, you must run the CMOSSET.COM file on the SurePOS 300 to update its CMOS settings.

Complete the following steps to clone CMOS settings for SurePOS 300 systems:

1. Obtain a BIOS diskette that contains the same BIOS level for the POS system to be cloned.
2. Download the CS4810.EXE CMOS utility from the IBM SurePOS site at <http://www2.clearlake.ibm.com/store/support/index.html>
3. Copy the CMOS utility to the BIOS diskette.
4. To save the CMOS settings from that system, start the BIOS diskette in that system and issue the following command:

```
CS4810 /b
```

The CS4810.EXE command creates a file called CS4810.DAT that contains the CMOS settings for the system.

5. Create a file named `lccmos.bat` on the diskette (or modify the existing `lccmos.bat` file). The file must contain only the following command:

```
CMOSSET.COM
```

**Note:** Make sure the CS4810.DAT file is in the same directory as CMOSSET.COM.

6. Create a file called `lctest.cms` on the diskette. The content of the file can be anything, including a few blank lines.
7. Create a CMOS image using the RDM Image Management tool, selecting the BIOS image you just created. The name of the image must have the format `ModelxxxLevel!`, for example, `Kxxx05!`.

**Note:** Delete the information in the **Executable parameter** field before clicking **OK** to build the CMOS image.

The CMOS task is ready to deploy.

## IBM storage servers

Table 8 lists the supported IBM storage servers.

Table 8. Support for IBM storage servers

Name	Model number
IBM TotalStorage® DS300 - Single Controller LC	1701-1RL
IBM TotalStorage DS300 - Single Controller	1701-1RS
IBM TotalStorage DS300 - Dual Controller	1701-2RD
IBM TotalStorage DS4100 (formerly FAStT100)	1724-100
IBM TotalStorage FAStT200 Storage Server	3542-1RU
IBM TotalStorage FAStT500 Storage Server	3552-1RU
IBM TotalStorage DS4300 (formerly FAStT600)	1722-1RU
IBM TotalStorage DS4400 (formerly FAStT700)	1742-1RU
IBM TotalStorage DS4500 (formerly FAStT900)	1742-90U
FAStT EXP500 Storage Expansion Unit	3560-1RU

## Supported adapters

RDM automatically recognizes most network adapters. Use the following links for updates and other networking information:

- For IBM adapters, go to <http://www.ibm.com/networking/support/>
- For Intel adapters, go to <http://www.intel.com>

## Ethernet adapters

Table 9 lists the supported Ethernet adapters and their support of the Preboot eXecution Environment (PXE) and the Wake on LAN (WoL) features.

Notes and considerations are listed below the table. If the name is marked with an asterisk (\*), refer to Special considerations for Ethernet adapters.

Table 9. Support for Ethernet adapters

Part number	FRU number	Name	Remote boot protocol	WoL
			PXE 2.0 or 2.1	
06P3601	06P3609	IBM 10/100 Ethernet Server Adapter	Yes	Yes
06P3801	06P3809	Intel PRO/100 SP™ Mobile Combo adapter	Yes	Yes
08K3124	08K3125	IBM 10/100 EtherJetminiPCI adapter with 56K modem (Intel current card)	Yes	Yes
08L2565, 08L2567	08L2566	IBM 10/100 EtherJet™ PCI Adapter with Wake on LAN1	Yes	Yes

Table 9. Support for Ethernet adapters (continued)

Part number	FRU number	Name	Remote boot protocol	WoL
			PXE 2.0 or 2.1	
09N3609	09N3609	10/100 EtherLink PCI Management Adapter by 3Com	Yes	Yes
09N9774	00N8117	IBM 10/100 EtherJet miniPCI adapter with 56K modem by 3Com	Yes	Yes
09N9901	09N9901	10/100 EtherLink Server Adapter by 3Com	Yes	Yes
22P4501	22P4509	Intel PRO/100S Desktop Adapter	Yes	Yes
22P4701	22P4709	Intel PRO/100S Low Profile Desktop Adapter	Yes	Yes
26P8039	26P8069	Ethernet Daughter Card	Yes	Yes
31P6301	31P6309	IBM NetXtreme 1000 T Ethernet Adapter	Yes	Yes
31P6401	31P6409	IBM NetXtreme 1000 T Dual Port Ethernet Adapter*	Yes	No
34L0201	30L5929	IBM 10/100 EtherJet PCI Adapter with Wake on LAN1	Yes	Yes
34L1101, 34L1110	34L1109	IBM 10/100 EtherJet PCI Adapter with Alert on LAN™ 2	Yes	Yes
34L1201, 34L1210	34L1209	IBM 10/100 EtherJet PCI Management Adapter	Yes	Yes
34L4401 (3DES US) 34L4410	34L4409	IBM 10/100 EtherJet Secure Management Adapter	Yes	Yes
34L4501 (DES non-US) 34L4510	not available	IBM 10/100 EtherJet Secure Management Adapter	Yes	Yes
85H9921, 85H9930	85H9928	IBM 10/100 EtherJet PCI Adapter with Wake on LAN1	Yes	Yes
85H9921, 85H9930	85H9928	IBM 10/100 EtherJet PCI Adapter with Wake on LAN1	Yes	Yes
Ships with system	not available	Intel Gigabit Copper (82543) PRO 1000 XT™	Yes	Yes
Ships with system	not available	Intel Gigabit Copper (82544) PRO 1000 XT	Yes	Yes
Ships with system	26P8100	IEEE 1394/LAN Combo Card	Yes	Yes
Ships with system	not available	On board Ethernet Adapter for ThinkPad R30	Yes	Yes

## Special considerations for Ethernet adapters

The following sections list special considerations for Ethernet adapters.

### IBM NetXtreme 1000 T Dual Port Ethernet adapter

The IBM NetXtreme 1000 T Dual Port Ethernet adapter does not support Wake on LAN.

---

## Token-ring adapters

Token-ring networks are no longer supported by RDM. However, by making the following changes to the RDM installation, it might be possible to use RDM on a token-ring network.

**Note:** No support calls will be fielded for token-ring network issues with RDM, because this configuration is not supported.

To use RDM with a token-ring network, you must modify three protocol.ini files and then recompile the DOS environment images. Complete the following steps:

**Note:** These instructions assume that RDM is installed in the default location. If you changed the installation location, you must modify the paths accordingly.

1. Using a text editor, open the protocol.ini file located in the c:\program files\rdm\local\env\b\net directory and modify the UDPRxBuffers and UDPRxBuffLen values as follows:

```
UDPRxBuffers = 8
UDPRxBuffLen = 3072
```

2. Save and close the file.

3. Using a text editor, open the protocol.ini file located in the c:\program files\rdm\local\env\71c\net directory and modify the UDPRxBuffers and UDPRxBuffLen values as follows:

```
UDPRxBuffers = 8
UDPRxBuffLen = 3072
```

4. Save and close the file.

5. Using a text editor, open the protocol.ini file located in the c:\program files\rdm\local\env\71f\net directory and modify the UDPRxBuffers and UDPRxBuffLen values as follows:

```
UDPRxBuffers = 2
UDPRxBuffLen = 3072
```

6. Save and close the file.

7. Run the mkimages.bat file located in the c:\program files\rdm\local\env directory.

**Note:** After setting the UDP Receive buffer size to 3072, you must not increase the value of MTFTP Get Blocksize to any value above the default value of 2560 bytes. To access the MTFTP Get Blocksize setting, open IBM Director Console and select **Tasks** → **Remote Deployment Manager Tools** → **Options** → **Change D-Server Options** and click the **MTFTP** tab.

---

## ServeRAID controllers

Table 10 lists the supported ServeRAID controllers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for ServeRAID controllers” on page 30.

Table 10. Support for ServeRAID controllers

Name	Part number	FRU number
ServeRAID-4Mx Ultra160 SCSI controller	06P5736	06P5737
ServeRAID-4Lx Ultra160 SCSI controller	06P5740	06P5741
ServeRAID-5i Ultra320 SCSI controller	25P3492	32P0016

Table 10. Support for ServeRAID controllers (continued)

Name	Part number	FRU number
ServeRAID-6M Ultra320 SCSI controller*	32P0033	02R0985
ServeRAID-4M Ultra160 SCSI controller	37L6080	37L7258
ServeRAID-4L Ultra160 SCSI controller	37L6091	09N9540
ServeRAID-4H Ultra160 SCSI controller	37L6889	37L6892
ServeRAID-6i Ultra320 SCSI controller	71P8595	71P8627
ServeRAID-7k Ultra320 SCSI controller*	71P8642	71P8644
ServeRAID-7t SATA controller*	71P8648	71P8650
ServeRAID-7e (Adaptec HostRAID)*	n/a	n/a
ServeRAID-8e*	n/a	n/a
ServeRAID-8k SAS controller	25R8064	25R8064

## Special considerations for ServeRAID controllers

The following sections list special considerations for the ServeRAID controllers.

### All ServeRAID controllers

You must import the latest ServeRAID device drivers before running any RDM tasks. These drivers can be found on the IBM ServeRAID Support CD for your controller or can be downloaded from the ServeRAID software matrix Web page at <http://www.ibm.com/pc/support/site.wss/document.do?Indocid=SERV-RAID>.

### ServeRAID Support CD 7.10

When using the ServeRAID Support CD 7.10, a maximum of two logical drives are supported for Windows Native Install tasks.

### ServeRAID 6M

RAID levels 00, 10, 1E0, and 50 are not supported by RDM on the ServeRAID 6M Ultra320 SCSI controller. If you are running one of these versions, download and install the Windows update package for IBM ServeRAID BIOS and Firmware version 7.10. The update is available at <http://www-1.ibm.com/support/docview.wss?uid=psg1MIGR-58335>.

### ServeRAID 7e (Adaptec HostRAID)

RAID custom task will only support specifying the entire controller. You cannot specify anything less than 100% of the controller.

### ServeRAID-7t

RAID custom task will only support specifying the entire controller. You cannot specify anything less than 100% of the controller.

To create multiple logical drives in the same array, or a logical drive smaller than the full size of the array, use RAID Clone task.

To use the RAID Clone Configuration task to configure RAID 5 you must set the following values in your acu configuration file:

- method=clear
- wait=yes

## ServeRAID-8e

The ServeRAID-8e SAS adapter may require that the timeout value for the Windows Native Install and Power Restore tasks be increased to 720 minutes. This can be done by adding the TIMEOUT 720 value to the task command list.

---

## LSI RAID controllers

Table 11 lists the supported onboard LSI RAID controllers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for LSI RAID controllers.”

Table 11. Support for LSI RAID controllers

Name	Part number
Single Channel LSI Ultra320 SCSI controller	LSI53C1020
Dual Channel LSI Ultra320 SCSI controller	LSI53C1030
LSI MegaRAID IDEal RAID controller*	LSI MegaRAID IDEal RAID

## Special considerations for LSI RAID controllers

The following sections list special considerations for the LSI RAID controllers.

### LSI MegaRAID IDEal RAID controller

RAID custom task will only support specifying the entire controller. You cannot specify anything less than 100% of the controller.

---

## Silicon Image controllers

Table 12 lists the supported onboard/integrated Silicon Image controllers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for Silicon Image controllers.”

Table 12. Support for Silicon Image controllers

Name	Part number
Silicon Image SATA Link 3512*	Sil3512CT128

## Special considerations for Silicon Image controllers

The following sections list special considerations for the Silicon Image controllers.

### Silicon Image SATA Link 3512

The Silicon Image SATA Link 3512 is currently not supported for Linux native installs.

---

## BladeCenter products

Table 13 on page 32 lists the supported BladeCenter products.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for BladeCenter products” on page 32.

Table 13. Support for BladeCenter products

Name	Part number	FRU number
IBM BladeCenter Optical Pass-thru Module	02R9080	02R9082
Cisco Gigabit Ethernet Switch module	13N2281	13N2285
Cisco Fiber Switch Module	13N2285	13N2286
IBM BladeCenter Advanced Management Module (AMM)	25R5778	25R5777
IBM BladeCenter PCI Expansion Unit (PEU)	25K8373	32R0753
IBM BladeCenter HS20 Fibre Channel Expansion Card - Short Form Factor	26K4841	26K4859
Brocade Entry SAN Switch Module for IBM BladeCenter	26K5601	90P0164
IBM BladeCenter 6-pt Fibre Channel Switch Module	26K6477	26K6481
Qlogic iSCSI Expansion Card for IBM BladeCenter	26K6487	26K6490
Nortel Copper L2/L3 Switch Module	26K6530	26K6526
Nortel Fibre L2/L3 Switch Module	26K6531	26K6529
QLogic 4 Gb Fibre Channel Switch Module	26R0883	26R0888
Brocade 20 Port FC switch module	32R1812	32R1820
IBM BladeCenter HS20 Fibre Channel Expansion Card	48P7061	59P6624
IBM BladeCenter 2-Port Fibre Channel Switch Module*	48P7062	59P6621
Myrinet Cluster Expansion Card for IBM BladeCenter*	73P6000	73P6001
IBM BladeCenter Copper Pass-Thru Module	73P6100	73P6098
IBM BladeCenter Gigabit Ethernet Expansion Card	73P9030	13N2306 (replaces 73P9031)
Nortel Network Layer 2-7 GbE Switch Module for IBM BladeCenter	73P9057	73P9004
Brocade Enterprise SAN Switch Module	90P0165	90P0164
Intel Copper Switch Module	90P3686	90P3776
IBM BladeCenter PCI Expansion unit (PEU)	90P3721	n/a

## Special considerations for BladeCenter products

The following sections list special considerations for BladeCenter products.

### BladeCenter SAN switches

By default, security is disabled on BladeCenter SAN switches from Qlogic, that is, SecurityEnabled=False. With security disabled, the userid/password combination set for the telnet sessions do not apply to the BladeCenter SAN utility or RDM Remote Storage tool, allowing access to the Fibre Channel switches.

Enable your security, that is, SecurityEnabled=True, if your network is not private or not set up for Virtual Private Networking. Security must be consistent for all switches in the Fibre Channel fabric. For additional information, refer to the Qlogic switch documentation.

### IBM BladeCenter 2-Port Fibre Channel Switch Module

The minimum firmware required by RDM is level 1.4.

## Myrinet Cluster Expansion Card

To successfully install the Myrinet Cluster Expansion Card for IBM BladeCenter while the machine is unattended, add the drivers to the RDM Windows driver repository.

The Myrinet Cluster Expansion Card for BladeCenter is not supported for Linux Native Installs.

---

## Fibre Channel adapters

Table 14 lists the supported Fibre Channel adapters.

Table 14. Support for Fibre Channel adapters

Name	Qlogic product name	Part number	FRU number
Netfinity® FAStT Host Adapter	QLA2200	00N6881	09N7292
IBM Total Storage FAStT FC-2 Host Bus Adapter	QLA2310	19K1246	19K1273
QLA2340 64-Bit PCI-X to 2-Gigabit Fibre Channel Adapter	QLA2340	24P0960	24P8174

## Special considerations for Fibre Channel adapters

Swapping fibre HBAs in active servers is not supported. Swapping HBAs can lead to loss of both HBA configuration and SAN configuration for one or both of the participating servers.

---

## SCSI adapters

Typically, RDM automatically supports SCSI adapters. On Windows 2000, RDM supports the adapters that are compatible with the operating system.

---

## Advanced Systems Management adapters

RDM cannot configure X Windows support for systems with the Remote Supervisor Adapter II. If you want X Windows support, you must configure it after the installation is complete. See the *IBM Remote Deployment Manager User's Reference* for more information.

Table 15 lists the supported Advanced Systems Management adapters.

Table 15. Support for Advanced Systems Management adapters

Part number	FRU number	Name
01K7209	24P6538	Netfinity Advanced System Management PCI Adapter
09N7585	36L9912	Remote Supervisor Adapter
59P2984	59P2998	Remote Supervisor Adapter II
73P9341	73P9324	Remote Supervisor Adapter II Slimline

---

## Enabling the Wake on LAN feature

When this option is enabled, the adapter can react to special wake-up packets and turn on the computer without user intervention. The following sections provide information for enabling the Wake on LAN feature on xSeries servers.

### Intel PRO/1000 XT and Intel PRO/1000 XF

The Intel PRO/1000 XT and Intel PRO/1000 XF and newer server adapters support the Intel Boot Agent, but come with Wake on LAN and PXE disabled. To enable these features, use the IBAUTIL.EXE utility in the BootAgnt directory on your device driver CD or in the root directory of your Web-downloaded image.

Complete the following steps to enable the Intel PRO/1000 XT adapter for the Wake on LAN features and PXE:

1. Navigate your browser to <http://www.intel.com> and search on Boot Agent.
2. Select the entry that contains the adapter that you want, in this case, Intel PRO/1000 Family of Gigabit desktop and server adapters.

**Note:** The Intel PRO/1000 XT Server and Intel PRO/1000 XF Server Adapters come with boot ROM onboard. Enable using IBAUTIL.EXE (at a DOS prompt, type IBAUTIL -NIC=X -FE).

3. Download PROBOOT.EXE, which is the boot agent image.
4. Run this program in a Windows 2000 environment to find the IBAUTIL.EXE file. Copy IBAUTIL.EXE to a diskette.
5. Insert the diskette into the client that has the PRO/1000 adapter.
6. Enter the following commands:

```
ibautil -FE  
ibautil -PXE  
ibautil -WOLE
```

**Note:** IBAUTIL is a utility program that changes the default settings of your Intel WfM-compatible adapter. Use IBAUTIL to enable or disable the Wake on LAN and Boot Agent capabilities, and to enable or disable some settings used by the Boot Agent.

### xSeries 220, Type 8645

To enable the Wake on LAN feature, the following conditions must be met:

- If you are using the onboard Ethernet controller, set the Advanced/Peripheral Configuration/LAN device to Enabled. If you are using an Ethernet adapter with Wake on LAN capability, set the Advanced/Peripheral Configuration/LAN device to Disabled.
- The Wake on LAN feature must be enabled in the Configuration/Setup Utility program. By default, it is not.
- The boot agent of the network adapter must have the Legacy OS wake-up support enabled, if supported.
- The onboard Ethernet controller must be disabled.
- PXE is the default for the network boot protocol and should not be changed.
- To ensure the boot order, verify that the network is listed before the hard disk drive on alternate boot.

- The Legacy OS wake-up support enables a non-Windows operating system to use adapter remote wake-up capability. The default is disabled. Enable it for RDM to use.
- The server is either turned off or shut down from an Advanced Configuration and Power Interface (ACPI) operating system. If you turn off the server by pressing the power button, the Wake on LAN feature will not work.

## **xSeries 300, Type 8672**

To enable the Wake on LAN feature, you must change the settings in the Configuration/Setup Utility program. Complete the following steps to change the settings.

1. Select **Power Management Setup > Automatic Power On**.
2. Enable Wake on PCIPME.
3. Enable Wake Up on LAN/Ring.



---

## Chapter 2. Non-IBM hardware and software support

This section provides tables of non-IBM servers and desktop computers supported by RDM version 4.30.

---

### OEM servers

Table 16 and Table 17 on page 38 list supported firmware and operating systems that you can deploy on specific OEM servers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for OEM servers” on page 38.

Table 16. Maintenance support for OEM servers

System		Maintenance		
Type	Model	Tested BIOS level	CMOS Updates	RAID Config
Dell	PowerEdge 1650*	A10	No	No
Dell	PowerEdge 1750*	A09	No	No
Dell	PowerEdge 2450	A04	No	No
Dell	PowerEdge 2600	A04	No	No
Dell	PowerEdge 2650	A10	No	No
Dell	PowerEdge 6650*	v0.9	No	No
Compaq	Proliant DL380*	P28	No	No
HP	Proliant DL560*	P28	No	No
HP	Proliant ML310*	D12	No	No
Compaq	Proliant ML330*	D10	No	No
Sun	Sun Fire v65	1236	No	No

Table 17. Native and clone installation support for OEM servers

System		Native Install				Clone Install	
Type	Model	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003 Std, Windows Server 2003 Ent, Windows Server 2003 Web	Red Hat Linux 7.3	Red Hat Linux Ent AS 2.1	Windows 2000 Server, Windows 2000 ADV Servers	Windows Server 2003 Std, Windows Server 2003 Ent, Windows Server 2003 Web
Dell	PowerEdge 1650*	No	Yes	No	No	Yes	Yes
Dell	PowerEdge 1750*	Yes	Yes	No	No	Yes	Yes
Dell	PowerEdge 2450	Yes	Yes	No	No	Yes	Yes
Dell	PowerEdge 2600	Yes	Yes	No	No	Yes	Yes
Dell	PowerEdge 2650	Yes	Yes	No	No	Yes	Yes
Dell	PowerEdge 6650*	Yes	Yes	No	No	Yes	Yes
Compaq	Proliant DL380*	Yes	Yes	No	No	Yes	Yes
HP	Proliant DL560*	Yes	Yes	No	No	Yes	Yes
HP	Proliant ML310*	Yes	Yes	No	No	Yes	Yes
Compaq	Proliant ML330*	Yes	Yes	No	No	Yes	Yes
Sun	Sun Fire v65*	Yes	Yes	No	No	Yes	Yes

## Special considerations for OEM servers

The following sections list special considerations for the OEM servers.

### Dell PowerEdge 1650

The Dell PowerEdge 1650 does not support Wake on LAN.

The Dell PowerEdge 1650 reboots instead of shutting down after receiving a shut down command.

### Dell PowerEdge 1750

The Dell PowerEdge 1750 does not support Wake on LAN.

The Dell PowerEdge 1750 reboots instead of shutting down after receiving a shut down command.

### Dell PowerEdge 6650

The Dell PowerEdge 6650 reboots instead of shutting down after receiving a shut down command.

### Compaq Proliant DL380

The Compaq Proliant DL380 reboots instead of shutting down after receiving a shut down command.

The Compaq Proliant DL380 does not support Wake on LAN.

### HP Proliant DL560

The HP Proliant DL560 reboots instead of shutting down after receiving a shut down command.

## HP Proliant ML310

The HP Proliant ML310 reboots instead of shutting down after receiving a shut down command.

## Compaq Proliant ML330

The Compaq Proliant ML330 reboots instead of shutting down after receiving a shut down command.

## Sun Sun Fire v65

Wake On LAN will not work after any RDM task.

---

## OEM switches

Table 18 lists supported OEM switches.

Table 18. Maintenance support for OEM switches

Name	Part number	FRU number
McData 6-port Fibre Channel Switch Module	32R1790	32R1792

## Special considerations for OEM switches

The following sections list special considerations for the OEM switches.

### McDATA 6-port Fibre Channel Switch Module for IBM BladeCenter

You must ensure that the McDATA InterOp mode and Default Zone settings are appropriate for your Storage Area Network configuration.

---

## OEM desktop computers

Table 19 lists the supported firmware and the operating systems that you can deploy on specific OEM desktop computers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for OEM desktop computers” on page 40.

Table 19. Support for OEM desktop computers

System		Maintenance		Native Install	Clone Install
Type	Model	Tested BIOS level	CMOS update	Windows 2000 Pro and Windows XP Pro 32-bit	Windows 2000 Pro and Windows XP Pro 32-bit
Compaq	iPAQ*	686J5 v 1.09	No	No	No
Compaq	EVO D510*	2.14	No	Yes	Yes
Compaq	Presario 6000*	3.14	No	Yes	Yes
Dell	Dimension 8400*	A05	No	No	No
Dell	GX260*	A07	No	Yes	Yes
Dell	Precision 340*	A10	No	Yes	Yes
Dell	Precision 360*	A08	No	Yes	Yes
Gateway	E-4400*	A05	No	Yes	Yes

## Special considerations for OEM desktop computers

The following sections list special considerations for the OEM desktop computers.

### Compaq iPAQ

The Compaq iPAQ does not support Wake on LAN.

### Compaq EVO D510

For RDM tasks to work correctly, the network must precede the hard disk in the primary boot sequence.

### Compaq Presario 6000

The Compaq Presario 6000 does not support Wake on LAN.

### Dell Dimension 8400

The Dell Dimension 8400 does not support Wake on LAN.

### Dell GX260

For RDM tasks to work correctly, the network must precede the hard disk in the primary boot sequence.

### Dell Precision 340

The Dell Precision 340 does not support Wake on LAN.

### Dell Precision 360

The Dell Precision 360 does not support Wake on LAN.

### Gateway E-4400

For RDM tasks to work correctly, the network must precede the hard disk in the primary boot sequence.

---

## OEM notebook computers

Table 20 lists the supported firmware and the operating systems that you can deploy on specific OEM notebook computers.

Notes and considerations are listed below the table. If the model is marked with an asterisk (\*), refer to “Special considerations for OEM notebook computers.”

Table 20. Support for OEM notebook computers

System		Maintenance		Native Install	Clone Install
Type	Model	Tested BIOS level	CMOS update	Windows 2000 Pro and Windows XP Pro 32-bit	Windows 2000 Pro and Windows XP Pro 32-bit
Compaq	Presario 2525*	KF.F.05	No	Yes	Yes
Dell	Precision M60*	A05	No	Yes	Yes

## Special considerations for OEM notebook computers

The following sections list special considerations for the OEM notebook computers.

### Compaq Presario 252

The Compaq Presario 252 does not support Wake on LAN.

### Dell Precision M60

The Dell Precision M60 reboots instead of shutting down after receiving a shut down command.

The Dell Precision M60 does not support Wake on LAN.



---

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## Important notes

Processor speeds indicate the internal clock speed of the microprocessor; other factors also affect application performance.

CD-ROM drive speeds list the variable read rate. Actual speeds vary and are often less than the maximum possible.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for approximately 1000 bytes, MB stands for approximately 1 000 000 bytes, and GB stands for approximately 1 000 000 000 bytes.

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