

HP Insight Control for Linux 7.1 Update 1 Support Matrix

Abstract

This document describes the minimum requirements for software, firmware, and hardware components supported for use with HP Insight Control for Linux (Insight Control for Linux).

This document is intended for use by system engineers, system administrators, sales personnel, support personnel, and others interested in hardware and software requirements for Insight Control for Linux.



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HP will replace defective delivery media for a period of 90 days from the date of purchase. This warranty applies to all Insight Management products.

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1 Insight Control for Linux

Insight Control for Linux is an essential server management tool that unlocks the management capabilities built into your HP ProLiant servers. Insight Control for Linux delivers integrated toolsets for system administrators to manage business-critical Linux environments in both enterprise and scale-out environments.

The robust toolset integrates the best of open source and HP technologies on HP Systems Insight Manager (SIM), running on Linux, for:

- discovery
- imaging and provisioning
- rapid deployment
- health and performance management
- remote management
- virtualization
- power management.

Lifecycle management is complemented by multisystem scaling, thermal and power management, and direct-to-the-hardware control. Furthermore, Insight Control for Linux is backed by the Linux expertise of HP and global HP Support.

Insight Control for Linux provides an integrated solution with the following capabilities:

- HP SIM (on Linux) organizes and displays server, storage and networking information for easy use.
- Bare-metal discovery.
- Server deployment lets you schedule and customize:
 - script execution
 - firmware updates
 - OS image capture and deployment
 - OS installations
 - agent installation

including the capability to install Microsoft Windows interactively on iLO-based servers.

- Health and performance management that provides for scale-optimized control of large environments using performance dashboards, open source-based monitoring tools, and an extensible Nagios interface for connecting to industry-common plug-ins.
- Virtual machine management to enable host and guest environment management using XEN or VMware ESX.
- Remote management, which includes a license for HP Integrated Lights Out (iLO) Advanced, provides secure lights-out remote access and server control with virtual media support and out-of-band hardware monitoring.
- Power management to provide Dynamic Power Capping, Datacenter Power Control, and Intelligent Power Discovery for precise power and thermal management with facilities integration.
- An installer that assists with integrated component capabilities.
- HP Software Technical Support and Update Service (24 x 7) is included for one year.

Your Linux operating systems can be selected from HP-supported Red Hat (RHEL) or SuSE Linux (SLES) distributions, supported hypervisors, or you can select community-supported distributions from the wider community. Insight Control for Linux does not include a Linux distribution.

Insight Control for Linux runs on a Central Management Server (CMS) in the SIM environment. From there, it can discover servers (with or without operating systems), and install operating systems and agents on them, transforming them into managed systems; these managed systems can then be monitored and managed with Insight Control for Linux.

Insight Control for Linux is the type of management solution that Linux administrators would design for themselves, given the opportunity. This solution brings the full expertise of HP's management investments from UNIX and Windows to the Linux environment, while providing flexibility and productivity to fulfill the variety of usual management tasks.

For more information, see the Insight Control for Linux website:

<http://www.hp.com/go/ic-linux>

The remaining chapters detail the specifications for the CMS, managed systems, HP ProLiant servers, and so on.

2 Central management server requirements

The HP Systems Insight Manager (HP SIM) Central Management Server (CMS) is the server on which HP SIM and the HP Insight Control for Linux (Insight Control for Linux) software is installed.

2.1 HP SIM CMS requirements

Table 1 CMS requirements

Component	Requirement
Processor architecture	<ul style="list-style-type: none">• x86• x86_64 (Intel and AMD)
HP server model	HP ProLiant c-Class blade servers, DL series servers, and SL series servers. For specific hardware model numbers, see “Supported servers and enclosures” (page 12).
Processor	2.0 GHz (single processor) or higher HP recommends that you add one processor for every additional 100 nodes monitored.
Memory (minimum required)	1-32 nodes 4 GB
	33-64 nodes 6 GB
	65-128 nodes 12 GB
	128 or more nodes 16 GB
Disk space	Minimum of 27 GB, comprised of: <ul style="list-style-type: none">• 5 GB for the Insight Control management software.• 10 GB for the Repository (<code>/opt/repository</code>) <p>NOTE: The amount of disk space required varies with the needs of your installation. This amount is based on two Linux operating systems, two captured Linux images, two ProLiant Support Packs, several shell scripts, and several installation configuration files.</p> <ul style="list-style-type: none">• 12 GB for storage of log files (<code>/hptc_cluster</code>) if monitoring is enabled.
File system type	<ul style="list-style-type: none">• ext2• ext3• ext4• JFS• ReiserFS• XFS• Logical Volume Manager (LVM)
Linux OS	<p>Red Hat Enterprise Linux (RHEL):</p> <ul style="list-style-type: none">• RHEL 5 Update 7• RHEL 5 Update 8• RHEL 6• RHEL 6 Update 1• RHEL 6 Update 2• RHEL 6 Update 3 <p>SUSE Linux Enterprise Server (SLES):</p> <ul style="list-style-type: none">• SLES 10 SP3• SLES 10 SP4• SLES 11 SP1¹• SLES 11 SP2 <p>IMPORTANT: Not all operating systems listed in this table are supported on all ProLiant G6, G7, and Gen8 servers. See the table entry for your server in Chapter 4 (page 12) for exceptions.</p>
Virtualization OS	Insight Control for Linux can be installed in a Xen or KVM virtual guest, running a supported OS, with the exception of DOM0 on Xen.

Table 1 CMS requirements (continued)

Component	Requirement
	<p>IMPORTANT: Not all virtualization operating systems listed in this table are supported on all ProLiant G6, G7, and Gen8 series servers. See the table entry for your server in Chapter 4 (page 12) for exceptions.</p>
HP SIM Database	<ul style="list-style-type: none"> • PostgreSQL • Oracle 10g Release 2 (10.2.0.3) • Oracle 11g Enterprise Edition Release 2 <p>IMPORTANT: HP recommends using an Oracle database if you plan to manage 500 or more nodes (in this instance, nodes are defined as servers, management processors, enclosures, onboard administrators, switches, and the like) on your CMS.</p>

¹ Installing this operating system on any Gen8 server or on any G7 (AMD Opteron 6200) server requires a driver kit ISO image (KISO) provided by SUSE. For information on obtaining the KISO, see the section titled “Copying SLES 10 SP4 or SLES 11 SP1 (KISO) into the repository” in the *HP Insight Control for Linux User Guide*.

2.2 Upgrade path to this release

The CMS must run Insight Control for Linux version 7.1 or to upgrade to Insight Control for Linux Version 7.1 Update 1.

NOTES:

In general, it is a good practice to upgrade HP SIM and Insight Control for Linux together, and HP recommends doing so. It is possible that backward compatibility issues might occur if you upgrade HP SIM without upgrading Insight Control for Linux as well.

Before upgrading, ensure that the CMS is running a supported operating system version.

Table 2 Installation script actions when HP SIM or Insight Control for Linux software is detected

Software	Detected version	Script action	Comments
HP SIM	Version 7.1 Update 1	Reinstalls HP SIM Version 7.1 Update 1	HP SIM Version 7.1 Update 1 is the current supported version of HP SIM. If the script detects HP SIM 7.1 Update 1, it prompts you to reinitialize HP SIM. Reinitialization, which clears the HP SIM database, is only necessary if you want to re-create the HP SIM configuration or if the HP SIM installation process failed previously.
	Version 7.1	Upgrades HP SIM to Version 7.1 Update 1 and continues with the Insight Control for Linux installation.	
	Earlier than 7.1	Exits the upgrade process	Use the HP SIM documentation to manually install or upgrade the HP SIM CMS to HP SIM Version 7.1, then upgrade to Version 7.1 Update 1.
	None	Exits the upgrade process.	Use the instructions in the <i>HP Insight Control for Linux Installation Guide</i> to perform a full installation of Insight Control for Linux Version 7.1, then upgrade to Version 7.1 Update 1.
Insight Control for Linux	Versions 7.1	Starts the upgrade to Insight Control for Linux Version 7.1 Update 1.	Follow the upgrade instructions in the <i>HP Insight Control for Linux Installation Guide</i> .
	Earlier than 7.1	Exits the upgrade process.	Use the instructions in the <i>HP Insight Control for Linux Installation Guide</i> to perform a full

Table 2 Installation script actions when HP SIM or Insight Control for Linux software is detected
(continued)

Software	Detected version	Script action	Comments
			installation of Insight Control for Linux Version 7.1, then upgrade to Version 7.1 Update 1.
	None	Exits the upgrade process.	Use the instructions in the <i>HP Insight Control for Linux Installation Guide</i> to perform a full installation of Insight Control for Linux Version 7.1, then upgrade to Version 7.1 Update 1.

3 Managed system requirements

Managed systems are HP ProLiant servers monitored and managed by Insight Control for Linux.

Table 3 Managed system requirements

Component	Requirement
Processor architecture	<ul style="list-style-type: none"> x86 x86_64 (Intel and AMD)
HP server model	HP ProLiant c-Class blade servers, DL series servers, ML series, and SL series servers are supported for use as managed systems. See Chapter 4 (page 12) for specific hardware model numbers and minimum firmware versions.
File system type	<ul style="list-style-type: none"> ext2 ext3 ext4 Logical Volume Manager (LVM) JFS ReiserFS XFS Extended partitions of types 0x5, 0xf, and 0x85
Linux OS	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Red Hat Enterprise Linux (RHEL):</p> <ul style="list-style-type: none"> RHEL 5 Update 3 (Server) RHEL 5 Update 4 (Server) RHEL 5 Update 5 (Server) RHEL 5 Update 6 RHEL 5 Update 7 RHEL 5 Update 8 RHEL 6 RHEL 6 Update 1 RHEL 6 Update 2 RHEL 6 Update 3 </div> <div style="width: 45%;"> <p>SUSE Linux Enterprise Server (SLES):</p> <ul style="list-style-type: none"> SLES 10 SP3¹ SLES 10 SP4¹ SLES 11 SP1² SLES 11 SP2² </div> </div> <p>IMPORTANT: Not all operating systems listed in this table are supported on all ProLiant G6 and G7 series servers. Additionally, some operating systems, although supported, require a customized <code>initrd</code> file, which HP provides, to modify the drivers for specific operating systems. See the table entry for your server in Chapter 4 (page 12) for exceptions to OS support on G6, G7, and Gen8 series servers.</p>
Virtualization OS	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>VMware ESX³:</p> <ul style="list-style-type: none"> ESX 4.0 Update 2 ESX 4.0 Update 3 ESX 4.0 Update 4⁴ ESX 4.1 Update 1 ESX 4.1 Update 2 ESX 4.1 Update 3⁴ <p>Xen on:</p> <ul style="list-style-type: none"> RHEL 5 Update 3 RHEL 5 Update 4 RHEL 5 Update 5 </div> <div style="width: 45%;"> <p>VMware ESXi:⁵</p> <ul style="list-style-type: none"> ESXi 4.0 Update 2 ESXi 4.0 Update 3 ESXi 4.0 Update 4⁴ ESXi 4.1 Update 1 ESXi 4.1 Update 2 ESXi 4.1 Update 3⁴ ESXi 5.0 (stateful mode only)^{6,7,8} ESXi 5.0 Update 1 (stateful mode only) <p>KVM on:¹⁰</p> <ul style="list-style-type: none"> RHEL 5 Update 4 RHEL 5 Update 5 RHEL 5 Update 6 </div> </div>

Table 3 Managed system requirements *(continued)*

Component	Requirement
	<ul style="list-style-type: none"> • RHEL 5 Update 6 • RHEL 5 Update 7 • RHEL 5 Update 8 • SLES 10 SP3⁹ • SLES 10 SP4 • SLES 11 SP1 • SLES 11 SP2
	<ul style="list-style-type: none"> • RHEL 5 Update 7 • RHEL 5 Update 8 • RHEL 6 • RHEL 6 Update 1 • RHEL 6 Update 2 • RHEL 6 Update 3 • SLES 11 • SLES 11 SP1 • SLES 11 SP2

IMPORTANT: Not all virtualization operating systems listed in this table are supported on all ProLiant G6, G7, and Gen8 series servers. See the table entry for your server in [Chapter 4 \(page 12\)](#) for exceptions.

¹ Software RAID is not supported on any SLES 10 operating systems.

² Installing this operating system on any Gen8 server or on any G7 (AMD Opteron 6200) server requires a driver kit ISO image (KISO) provided by SUSE. For information on obtaining the KISO, see the section titled "Copying SLES 10 SP4 or SLES 11 SP1 (KISO) into the repository" in the *HP Insight Control for Linux User Guide*.

³ Network installation of an ESX virtualization operating system is not supported by Insight Control for Linux if the server requires a "driver CD". This includes servers with a ServerEngines NIC.

⁴ HP is not releasing a customized image for this hypervisor, therefore, it cannot be installed from Insight Control for Linux. If an HP ProLiant server requires an HP customized image, then you must first install the customized image for the previous version of the hypervisor, then you must manually upgrade to this version using the ESX/ESXi update package. For ESX/ESXi 4.0 Update 4, first install the HP customized image for ESX/ESXi 4.0 Update 2 or ESX/ESXi 4.0 Update 3.

For ESX/ESXi 4.1 Update 3, first install the HP customized image for ESX/ESXi 4.1 Update 2.

The web address for VMware ESX/ESXi downloads is: <https://my.vmware.com/web/vmware/downloads>

For more information, see the VMware release notes: http://www.vmware.com/support/vsphere4/doc/vsp_esx40_u4_rel_notes.html

⁵ PXE booting of the ESXi 4.1 and ESXi 5.0 installer is only supported when performing an unattended (also known as scripted) installation. If you need to install ESXi 4.1 or ESXi 5.0 interactively, you must use virtual media which is available on iLO-based servers. For more information on performing an installation using virtual media, see the *HP Insight Control for Linux User Guide*. Insight Control for Linux provides enablement for performing an interactive network installation of ESXi 4.0 Update 2 using PXE, but VMware may choose not to support an installation done in this manner because it is not their recommended way for installing ESXi operating systems.

⁶ For installations on a SLES 10 CMS using PXE, this virtualization operating system, because of the size of boot files, might require `tftp` (instead of `atftp`).

⁷ This virtualization operating system is not supported on HP ProLiant G7 servers that have only one processor, for example, the ML110 G7.

⁸ **IMPORTANT:** Only the ESXi 5.0 image customized by HP is supported; the image provided by VMware lacks necessary drivers for certain servers. For information on which servers are supported, see the following website:

<http://h18004.www1.hp.com/products/servers/vmware/supportmatrix/hpvmware.html>

For information on VMware from HP, see the following website:

<http://h18004.www1.hp.com/products/servers/software/vmware/index.html>

⁹ Novell supports Xen-PAE kernel only in SLES 10 SP3 x86 Host, but Novell supports both Xen and Xen-PAE kernels in the SLES 10 SP3 x86_64 host. Insight Control virtual machine management is tested on the corresponding supported kernel.

¹⁰ Although the KVM virtualization operating system is not supported by HP Insight Control virtual machine management, Insight Control for Linux supports the installation and management of KVM hosts.

NOTE: Managed systems can run other, non-supported variants of Linux, such as CentOS and Debian GNU/Linux. For more information, see the following white papers:

- *Using CentOS 5.4 with Insight Control for Linux*
- *Deploying Debian GNU/Linux with Insight Control for Linux*
- *Setting up Managed Systems in Insight Control for Linux without the ProLiant Support Pack*

To view or download these Insight Control for Linux white papers, see the instructions in [Section 7.7 \(page 24\)](#).

4 Supported servers and enclosures

This chapter lists supported HP ProLiant servers and enclosures.

Operating system considerations

For a list of HP ProLiant servers that support RHEL operating systems, see the Linux certification and support matrix - HP ProLiant servers website:

<http://h18004.www1.hp.com/products/servers/linux/hplinuxcert.html>

For a list of HP ProLiant servers that support SLES operating systems, see the following certification and support website:

<http://h18004.www1.hp.com/products/servers/linux/hplinuxcert-novell.html>

To find the minimum supported Red Hat updates or Novell service packs for a particular server, go to the appropriate website, locate the server, and select it. An individual web page for that server will appear with the minimum supported OS information.

Insight Control virtual machine management

For a list of HP ProLiant servers that support VMware, see the VMware from HP for ProLiant website and select the tab for 4.X servers or 3.X servers as needed:

<http://h18004.www1.hp.com/products/servers/vmware/supportmatrix/hpvmware.html>

For additional information on ESX and ESXi compatibility, see the *VMware Compatibility Guide*:

<http://www.vmware.com/resources/compatibility>

ⓘ **IMPORTANT:**

For certain server/operating system combinations, the drivers supplied with the operating system need to be modified by replacing the `initrd` file (the `initrd` file is the boot RAM disk) supplied with the operating system with a customized `initrd` that HP provides. When a server needs to be modified in this way, there will be a note in the entry for the server. For information on obtaining the `initrd` file, see the table titled "Download web address for customized `initrd` files" in the *HP Insight Control for Linux User Guide*.

Insight Control power management

The tables in this chapter indicate general power management support for each server. For specific Insight Control power management server requirements and capabilities, see the appendix titled "Hardware requirements and supported capabilities for Insight Control power management" in the *HP Insight Management Support Matrix* at the following website:

<http://www.hp.com/go/insightmanagement>

4.1 Management processors

Table 4 Management processor firmware versions

Management processor ¹		Minimum Firmware Version
ProLiant Lights Out-100	LO100i	4.22
HP iLO 2	iLO 2	2.07
HP iLO 3	iLO 3	1.26
iLO 4 ²	iLO 4	1.10

¹ For information on which management processor your server features, see the QuickSpecs for your server.

² For more information on iLO 4 agentless management on Gen8 servers, see the white paper titled *HP Systems Insight Manager 7.0 and HP Agentless Management overview* at the following website:

NOTE:

Virtual media functions only on servers with iLO-based management processors.

4.2 Obtaining updated firmware

You can obtain updated firmware:

- From the Support Pack for ProLiant
- From the HP Support Center website: <http://www.hp.com/go/hpsc>

4.3 Enclosures

Table 5 lists the supported HP BladeSystem enclosures and the minimum firmware version for the Onboard Administrator (OA).

Table 5 Supported BladeSystem enclosures

BladeSystem enclosure model	OA firmware version
c3000 enclosure	3.56
c7000 enclosure	3.56

4.4 HP BladeSystem c-Class ProLiant Server Blades

The c-Class server blades feature iLO 2, iLO 3, and iLO 4 management processors.

Table 6 Supported ProLiant c-Class server blades

Model number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?
BL2x220c G5		Yes	Yes	Yes
BL2x220c G6		Yes	Yes	Yes
BL2x220c G7		Yes	Yes	Yes
BL260c G5		Yes	Yes	Yes
BL280c G6		Yes	Yes	Yes
BL420c Gen8	1	Yes	Yes	Yes
BL460c		Yes	Yes	Yes
BL460c G5		Yes	Yes	Yes
BL460c G6		Yes	Yes	Yes
BL460c G7		Yes	Yes	Yes
BL460c Gen8		Yes	Yes	Yes
BL465c		Yes	Yes	Yes
BL465c G5		Yes	Yes	Yes
BL465c G6		Yes	Yes	Yes
BL465c G7	2	Yes	Yes	Yes
BL465c G7 (AMD Opteron 6200)	2	Yes	Yes	Yes
BL465c Gen8		Yes	Yes	Yes

Table 6 Supported ProLiant c-Class server blades (continued)

Model number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?
BL480c		Yes	Yes	Yes
BL490c G6		Yes	Yes	Yes
BL490c G7		Yes	Yes	Yes
BL495c G5	2	Yes	Yes	Yes
BL495c G6		Yes	Yes	No
BL620c G7		Yes	Yes	Yes
BL660c Gen8	3	Yes	Yes	Yes
BL680c G5		Yes	Yes	Yes
BL680c G7		Yes	Yes	Yes
BL685c		Yes	Yes	Yes
BL685c G5		Yes	Yes	Yes
BL685c G6		Yes	Yes	Yes
BL685c G7	2	Yes	Yes	Yes
BL685c G7 (AMD Opteron 6200)	2	Yes	Yes	Yes
WS460c G6	4	Yes	Yes	Yes

¹ A customized `initrd` is required to install RHEL or SLES operating systems on this server if it is configured with a B320i RAID controller.

² Installing SLES 10 SP3 on this server over the network requires a modified `initrd` file. For information on obtaining the `initrd` file, see the table titled "Download web address for customized `initrd` files" in the *HP Insight Control for Linux User Guide*.

³ This server only 64-bit operating systems.

⁴ This workstation blade server is supported only as a blade server.

4.5 HP ProLiant DL series rack mount servers

Except for Gen8 servers, DL100 series servers feature LO100i management processors. DL100 Gen8 servers, DL300 series servers, DL500 series servers, and DL700 series servers feature iLO2, iLO3, and iLO4 management processors.

Table 7 Supported ProLiant DL series servers

Model number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?	(DL100 series) Minimum System ROM (BIOS) version ¹
DL120 G7		Yes	Yes	No	3/5/2011
DL160 G5		Yes	Yes	No	012 01/31/2008
DL160 G5p		Yes	Yes	No	013 03/11/2008
DL160 G6	2	Yes	Yes	No	2/19/2009
DL160 SE G6		Yes	Yes	No	2/19/2009

Table 7 Supported ProLiant DL series servers (continued)

Model number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?	(DL100 series) Minimum System ROM (BIOS) version ¹
DL160 Gen8		Yes	Yes	No	N/A
DL165 G5	3	Yes	Yes	No	O13 03/11/2008
DL165 G5p	3	Yes	Yes	No	08/15/2008
DL165 G6	4	Yes	Yes	No	02/26/2010
DL165 G7		Yes	Yes	No	05/01/2010
DL165 G7 (AMD Opteron 6200)		Yes	Yes	No	05/01/2010
DL170e G6		Yes	Yes	No	O34 09/21/2010
DL170h G6		Yes	Yes	No	O34 06/08/2009
DL2x170h G6		Yes	Yes	No	O34 06/08/2009
DL4x170h G6		Yes	Yes	No	O34 06/08/2009
DL180 G5	5	Yes	Yes	No	10/02/2008
DL180 G6	2	Yes	Yes	No	05/19/2010
DL180 SE G6		Yes	Yes	No	02/09/2009
DL185 G5	3	Yes	Yes	No	O16 03/11/2008
DL320 G5		Yes	Yes	No	N/A
DL320 G5p		Yes	Yes	No	N/A
DL320 G6		Yes	Yes	Yes	N/A
DL320e Gen8	6	Yes	Yes	No	N/A
DL360 G4p		Yes	Yes	No	N/A
DL360 G5		Yes	Yes	Yes	N/A
DL360 G6		Yes	Yes	Yes	N/A
DL360 G7		Yes	Yes	Yes	N/A
DL360e Gen8	7	Yes	Yes	Yes	N/A
DL360p Gen8		Yes	Yes	Yes	N/A
DL365		Yes	Yes	Yes	N/A
DL365 G5		Yes	Yes	Yes	N/A
DL370 G6	6	Yes	Yes	Yes	N/A
DL380 G5		Yes	Yes	Yes	N/A
DL380 G6		Yes	Yes	Yes	N/A
DL380 G7		Yes	Yes	Yes	N/A
DL380e Gen8	7	Yes	Yes	Yes	N/A
DL380p Gen8		Yes	Yes	Yes	N/A
DL385 G2		Yes	Yes	Yes	N/A

Table 7 Supported ProLiant DL series servers *(continued)*

Model number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?	(DL100 series) Minimum System ROM (BIOS) version ¹
DL385 G5		Yes	Yes	Yes	N/A
DL385 G5p		Yes	Yes	Yes	N/A
DL385 G6		Yes	Yes	No	N/A
DL385 G7		Yes	Yes	Yes	N/A
DL385 G7 (AMD Opteron 6200)		Yes	Yes	Yes	N/A
DL385p Gen8		Yes	Yes	Yes	N/A
DL560 Gen8	8	Yes	Yes	Yes	N/A
DL580 G4		Yes	Yes	No	N/A
DL580 G5		Yes	Yes	No	N/A
DL580 G7		Yes	Yes	No	N/A
DL585 G2		Yes	Yes	No	N/A
DL585 G5		Yes	Yes	No	N/A
DL585 G6		Yes	Yes	No	N/A
DL585 G7		Yes	Yes	No	N/A
DL585 G7 (AMD Opteron 6200)		Yes	Yes	No	N/A
DL785 G5		Yes	Yes	No	N/A
DL785 G6		Yes	Yes	No	N/A
DL980 G7		Yes	Yes	Yes	N/A

¹ This column applies only to DL100 series servers.

² SLES11.SP1 Xen is not supported on this server if it contains a Xeon E5504 2.00GHz (4 Cores) processor.

³ This server requires System ROM (BIOS) version 10/23/2008 or greater.

⁴ Although the DL165 G6 is able to function as a CMS, Nagios is unable to collect its sensor and system event log data. The AMD-based DL165 G6 uses G5 firmware, which does not provide HP SIM with the serial number needed to associate the CMS and its management processor. However, all other Nagios services function properly.

⁵ By default, the DL180 G5 server ships without an LO100 Management Card. To achieve full Insight Control for Linux functionality on the DL180 G5 server, it must be configured with an HP LO100c Remote Management Card, Part # 445513-B21. See the DL180 G5 *QuickSpecs* for more information.

⁶ This server requires a modified `initrd` file. For information on obtaining the `initrd` file, see the table titled "Download web address for customized `initrd` files" in the *HP Insight Control for Linux User Guide*.

⁷ A customized `initrd` is required to install RHEL or SLES operating systems on this server if it is configured with a B320i RAID controller.

⁸ This server only 64-bit operating systems.

4.6 HP ProLiant ML series expandable tower servers

ML series servers feature iLO2, iLO3, and iLO4 management processors.

Table 8 Supported ProLiant ML series servers

Model number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?
ML110 G7	1	No	Yes	Yes
ML310 G5		No	Yes	No
ML310 G5p		No	Yes	No
ML310e Gen8	2	No	Yes	Yes
ML330 G6		No	Yes	Yes
ML350 G5		No	Yes	Yes
ML350 G6		No	Yes	Yes
ML350e Gen8	2	No	No	Yes
ML350p Gen8		No	Yes	Yes
ML370 G5		No	Yes	Yes
ML370 G6		No	Yes	Yes

¹ The minimum System ROM (BIOS) version for this server is 3/5/2011.

² A customized initrd is required to install RHEL or SLES operating systems on this server if it is configured with a B120i or BL320i RAID controller.

4.7 HP ProLiant SL series scalable system servers

The SL series servers feature LO100i and iLO4 management processors.

Table 9 Supported ProLiant SL series servers

Model Number	See Note at end of table	Supported as CMS?	Supported as managed system?	Insight Control power management support on managed systems?
SL160s G6		Yes	Yes	No
SL160z G6		Yes	Yes	No
SL165s G7		Yes	Yes	No
SL165z G6		Yes	Yes	No
SL165z G7		Yes	Yes	No
SL170s G6		Yes	Yes	No
SL170z G6		Yes	Yes	No
SL2x170z G6		Yes	Yes	No
SL230 Gen8	1	Yes	Yes	No
SL250 Gen8	1	Yes	Yes	No
SL270 Gen8	2, 3	Yes	Yes	Yes
SL335s G7		Yes	Yes	No
SL390s G7		Yes	Yes	No
SL4540 Gen8		Yes	Yes	Yes
SL4545 G7		Yes	Yes	Yes

- ¹ This server only supports 64-bit operating systems.
- ² This server only 64-bit operating systems.
- ³ A customized initrd is required to install RHEL or SLES operating systems on this server if it is configured with a B120i or BL320i RAID controller.

5 Supported versions of HP partner products

5.1 HP Systems Insight Manager

Supported version: 7.1 Update 1

Insight Control for Linux Version 7.1 Update 1 is based on HP Systems Insight Manager (HP SIM). You do not need to preinstall HP SIM on the Central Management Server (CMS) before you install Insight Control for Linux.

HP SIM Version 7.1 Update 1 is bundled with the Insight Control for Linux distribution medium and is installed (or upgraded) as part of the Insight Control for Linux installation process if necessary.

5.2 Insight Control virtual machine management

Supported version: 7.1

Insight Control virtual machine management is bundled with the Insight Control for Linux distribution media. Insight Control virtual machine management is installed (or upgraded) automatically as part of the Insight Control for Linux installation.

Table 3 (page 9) lists virtualization operating systems for managed systems.

For the VMware support matrix, see the VMware from HP for ProLiant website. Select the tab for 4.X servers or 3.X servers as needed.

<http://h71028.www7.hp.com/enterprise/cache/505363-0-0-0-121.html>

For more information on Insight Control virtual machine management, see <http://www.hp.com/go/insightcontrol>.

5.3 Insight Control power management

Supported version: 7.1

Insight Control for Linux incorporates the Insight Control power management plug-in to HP SIM. Insight Control power management is an integrated power monitoring and management application that provides centralized control of server power consumption and thermal output, sets power regulation policies for groups of servers, and optimizes and controls usage of data center power and cooling facilities.

Insight Control power management is bundled with the Insight Control for Linux distribution media and is installed (or upgraded) automatically as part of the Insight Control for Linux installation.

Insight Control power management does not support all the servers that Insight Control for Linux supports. See Chapter 4 (page 12) for the list of servers supported by Insight power management.

For more information on Insight Control power management, see <http://www.hp.com/go/insightcontrol>.

5.4 Service Pack for ProLiant

Supported version: 2012.08.0

HP encourages the use of SPPs for HP ProLiant servers.

You can download the supported version of the SPP from the HP Service Pack for ProLiant Download website:

<http://www.hp.com/go/spp/download>

5.5 ProLiant Support Pack

Supported versions: 9.20

-
- ⓘ **IMPORTANT:** HP encourages the use of SPPs for HP ProLiant servers. However, if you need to use the ProLiant Support Pack, you can still download the PSP from the HP Support & Drivers website:

<http://welcome.hp.com/country/us/en/support.html>.

In some cases, it is possible to configure a managed system without PSP software. For more information, see the white paper titled *Setting up Managed Systems in Insight Control for Linux without the ProLiant Support Pack*. To obtain this white paper, see [Section 7.7 \(page 24\)](#).

6 Web browser and client requirements

6.1 Web browser requirements

Browser		Browser platform
Mozilla	Firefox 9.x	Linux, Windows, HP-UX
	Firefox 10.x ESR	Linux, Windows, HP-UX
Microsoft	Internet Explorer 8.x	Windows
	Internet Explorer 9.x	Windows

6.2 Client requirements

You can use a client-hosted web browser interface to establish a Secure Sockets Layer (SSL) session with Insight Control for Linux.

For client interface requirements, see the *HP Systems Insight Manager User Guide*.

7 Support and other resources

7.1 Information to collect before contacting HP

Be sure to have the following information available before you call contact HP:

- Software product name
- Hardware product model number
- Operating system type and version
- Applicable error message
- Third-party hardware or software
- Technical support registration number (if applicable)

7.2 How to contact HP

Use the following methods to contact HP technical support:

- See the Contact HP worldwide website:
<http://www.hp.com/go/assistance>
- Use the Contact hp link on the HP Support Center website:
<http://www.hp.com/go/hpsc>
- In the United States, call +1 800 334 5144 to contact HP by telephone. This service is available 24 hours a day, 7 days a week. For continuous quality improvement, conversations might be recorded or monitored.

7.3 Registering for software technical support and update service

Insight Control for Linux and select Insight Management products include one year of 24 x 7 HP Software Technical Support and Update Service. This service provides access to HP technical resources for assistance in resolving software implementation or operations problems.

The service also provides access to software updates and reference manuals in electronic form as they are made available from HP. Customers who purchase an electronic license are eligible for electronic updates.

With this service, HP Insight Control for Linux and Insight Management customers benefit from expedited problem resolution as well as proactive notification and delivery of software updates. For more information about this service, see the following website:

<http://www.hp.com/services/insight>

Registration for this service takes place following online redemption of the license certificate.

7.3.1 How to use your software technical support and update service

As HP releases updates to software, the latest versions of the software and documentation are made available to you. The Software Updates and Licensing portal gives you access to software, documentation and license updates for products on your HP software support agreement.

You can access this portal from the HP Support Center:

<http://www.hp.com/go/hpsc>

After creating your profile and linking your support agreements to your profile, see the Software Updates and Licensing portal at <http://www.hp.com/go/hpssoftwareupdatesupport> to obtain software, documentation, and license updates.

7.3.2 Warranty information

HP will replace defective delivery media for a period of 90 days from the date of purchase. This warranty applies to all Insight Management products.

7.4 HP authorized resellers

For the name of the nearest HP authorized reseller, see the following sources:

- In the United States, see the HP U.S. service locator website:
http://www.hp.com/service_locator
- In other locations, see the Contact HP worldwide website:
<http://www.hp.com/go/assistance>

7.5 Documentation feedback

HP welcomes your feedback. To make comments and suggestions about product documentation, send a message to:

docsfeedback@hp.com

Include the document title and manufacturing part number in your message. All submissions become the property of HP.

7.6 New and changed information in this edition

- The following information was added:
 - Support for additional ProLiant servers as the CMS and managed systems, unless otherwise noted:
 - ProLiant BL series servers:
BL660c Gen8
 - ProLiant DL series server:
 - DL320e Gen8
 - DL560 Gen8
 - ProLiant ML series server:
 - ML310e Gen8
 - ProLiant SL series server:
 - SL270 Gen8
 - SL4540 Gen8
 - SL4545 G7
 - Support for the RHEL 6.3 operating system on the CMS and on managed systems.
- The following information was changed:
 - The tables in “HP BladeSystem c-Class ProLiant Server Blades” (page 13), “HP ProLiant DL series rack mount servers” (page 14), “HP ProLiant ML series expandable tower servers” (page 16), and “HP ProLiant SL series scalable system servers” (page 17) were updated.
 - The supported SPP version is 2012.08.0.
 - The supported PSP version is 9.20.
 - The supported version of Insight Control power management is Version 7.1.

- The supported version of Insight Control virtual machine management is Version 7.1.

7.7 Related information

7.7.1 Documents

- **HP Insight Control for Linux Documentation Set**
 - *HP Insight Control for Linux Release Notes*

Describes new features introduced in this release, lists issues addressed in this release, and provides late-breaking information about Insight Control for Linux that is not documented elsewhere.
 - *HP Insight Control for Linux Support Matrix*

Describes the minimum requirements for the software, firmware, and hardware components supported for use with this release of Insight Control for Linux.
 - *HP Insight Control for Linux Installation Guide*

Describes how prepare the Central Management Server, how to install Insight Control for Linux, and how to configure HP Systems Insight Manager (HP SIM) to interoperate with Insight Control for Linux.
 - *HP Insight Control for Linux User Guide*

Describes how to set up and use Insight Control for Linux to discover, monitor, and manage HP ProLiant servers that are licensed for Insight Control for Linux.

You can view or download the latest Insight Control for Linux documentation whenever you need it.

Download from the Insight Control Information Library website

For your convenience, the documentation set for this release of Insight Control for Linux is available from the Insight Control Information Library website. To view or download the documentation from this website, follow these steps:

1. Open a web browser to the following website:
<http://www.hp.com/go/insightcontrol/docs>
2. Locate the **Product Documentation** section.
3. Click the **Insight Control for Linux** tab.

The Insight Control for Linux documentation screen is displayed.
4. Find the title of the manual or white paper you want, and click on it to view the PDF file online or download it to your computer.

Download from the Insight Control for Linux product website

The Insight Control for Linux product website contains links to the Insight Control for Linux documentation set and white papers, a link to the Insight Control for Linux *QuickSpecs*, license information, product registration information, and many other related topics. To view or download documentation from the Insight Control for Linux product website, follow these steps:

1. Open a web browser to the following website:
<http://www.hp.com/go/ic-linux/>
2. On the right side of the page, select **Product Documentation (All Versions)**.
3. Find the title you want, and select it to view the PDF file online or download the PDF file to your computer.

- **HP Systems Insight Manager**

Documentation for Systems Insight Manager is available at the Systems Insight Manager Information Library website:

<http://www.hp.com/go/insightmanagement/sim/docs>

- **HP Insight Control**

Documentation for HP Insight Control, including documentation for Insight Control virtual machine management and Insight Control power management, is available from the Insight Control Information Library website:

<http://www.hp.com/go/insightcontrol/docs>

- **HP ProLiant Servers**

Information about HP ProLiant servers is available at the following websites:

- ProLiant BL series BladeSystems:

<http://www.hp.com/go/blades>

- ProLiant DL series rack mount servers:

<http://www.hp.com/servers/dl>

- ProLiant ML series expandable tower servers:

<http://www.hp.com/servers/ml>

- ProLiant SL series scalable system servers:

<http://h18004.www1.hp.com/products/servers/sl/index.html>

7.7.2 Websites

- **HP Support Center (for SPPs and PSPs)**

You can find and download the Service Pack for ProLiant (SPP) or ProLiant Support Pack (PSP) that is appropriate for your ProLiant server and Linux OS from the following website:

<http://www.hp.com/go/hpsc>

The SPP is a complete and bootable ISO image file that must be copied to the Insight Control for Linux repository.

The PSP download file is a compressed tar file, which must not be unzipped before copying to the Insight Control for Linux repository.

For complete information on downloading the SPP or PSP and copying it to the repository, see the chapter titled *Managing the Insight Control for Linux repository* in the *HP Insight Control for Linux User Guide*.

- **Linux vendors**

The following are links to Linux vendor websites. Linux vendors are not limited to the vendors shown in this list. The address of each website or link to a particular topic is subject to change without notice by the website provider.

- <http://www.redhat.com>

Home page for Red Hat®, distributors of Red Hat Enterprise Linux (RHEL).

- <http://www.novell.com/linux>

Home page for Novell, distributors of SUSE Linux Enterprise Server (SLES).

- <http://www.linux.org/docs/index.html>
The website for the Linux Documentation Project (LDP) contains guides that describe aspects of working with Linux, from creating your own Linux system from scratch to `bash` script writing. This site also includes links to Linux HowTo documents, frequently asked questions (FAQs), and manpages.
- <http://www.linuxheadquarters.com>
A website that provides Linux documents and tutorials. Documents contain instructions for installing and using applications for Linux, configuring hardware, and a variety of other topics.
- <http://www.gnu.org>
Home page for the GNU Project. This site provides online software and information for many programs and utilities that are commonly used on GNU/Linux systems. Online information include guides for using the `bash` shell, `emacs`, `make`, `cc`, `gdb`, and more.
- **Third-party open source software products**
The following are useful links to third-party open source software products that were integrated into Insight Control for Linux. The location of each website or link to a particular topic is subject to change without notice by the site provider.
 - <http://www.nagios.org>
Home page for Nagios, a system and network monitoring application that provides monitoring capabilities for Insight Control for Linux. Nagios watches specified hosts and services and issues alerts when problems occur and when problems are resolved.
 - <http://oss.oetiker.ch/rrdtool>
Home page of RRDtool, a round-robin database tool and graphing system. Insight Control for Linux uses RRDtool with Nagios to provide a graphical view of system status.
 - <http://supermon.sourceforge.net>
Home page for Supermon, a high-speed cluster monitoring system that emphasizes low perturbation, high sampling rates, and an extensible data protocol and programming interface. Supermon works in conjunction with Nagios to provide system monitoring data.
 - <https://computing.llnl.gov/linux/pdsh.html>
Home page for the parallel distributed shell (`pdsh`), which executes commands across managed systems in parallel.
 - <http://www.balabit.com/products/syslog-ng>
Home page for `syslog-ng`, a tool that is used for consolidated logging.
 - <http://www.virt-manager.org>
Home page for the `virt-manager` tool.
 - <http://www.vmware.com/products/esx/index.html>
Home page for VMware ESX.
 - <http://www.vmware.com/products/esxi/>
Home page for VMware ESXi.
 - <http://www.linux-kvm.org>
Home page for KVM.

- <http://www.xen.org>
Home page for Xen.

7.7.3 Troubleshooting resources

The *HP Insight Control for Linux Installation Guide* and *HP Insight Control for Linux User Guide* each contain a chapter that describes troubleshooting hints and techniques.

7.8 Typographic conventions

<i>Book title</i>	The title of a book. On the web, this can be a hyperlink to the book itself.
Command	A command name or command phrase, for example <code>ls -a</code> .
IMPORTANT	An alert that calls attention to essential information.
NOTE	An alert that contains additional or supplementary information.

A Functionality based on MP license

The following table correlates functionality with the presence or absence of the LO100i management processor license; the management processor is required for all capabilities of Insight Control for Linux

In general, LO100i-based servers are DL100¹ and SL100 series servers. See the Quickspecs for details for a specific server.

Table 10 Insight Control for Linux functionality for supported servers with LO100i MPs

Insight Control for Linux Functionality	LO100i Advanced License	Note
Power On/Off/Reset Server	Supported without license	IPMI capability through <code>ipmitool</code>
Bare Metal Discovery (PXE)	Supported without license	IPMI capability through <code>ipmitool</code>
Install (PXE)	Supported without license	IPMI capability through <code>ipmitool</code>
Capture (PXE)	Supported without license	IPMI capability through <code>ipmitool</code>
Deploy (PXE)	Supported without license	IPMI capability through <code>ipmitool</code>
Monitoring (health and performance)	Supported without license	IPMI capability through <code>ipmitool</code>
Remote Management Console (text-based)	Available without license	Used by the Insight Control for Linux console monitoring facility (<code>cmfd</code>).
Remote Management Console (web-based, GUI)	License required for availability	LO100i Advanced license required for web-based management console. Insight Control for Linux does not use or provide this capability.
Virtual Media	Not supported	LO100/vMedia does not support any programmatic interfaces.
Firmware updates (through HP SUM)	Supported without license	HP SUM supports DL100 and SL100 series servers.

The following table correlates functionality with the presence or absence of the iLO Advanced License for iLO-based servers.

In general, iLO-based servers are the BL series, DL300, DL500, and DL700 series, and the ML series servers. See the Quickspecs for details for a specific server.

Table 11 Insight Control for Linux functionality for supported iLO-based servers

Insight Control for Linux Functionality	iLO Advanced License	Note
Power On/Off/Reset Server	Supported without license	
Bare metal discovery (PXE)	Supported without license	
Bare metal discovery (Virtual media)	License required for support	
Install (PXE)	Supported without license	
Install (Virtual media)	License required for support	
Capture (PXE)	Supported without license	
Capture (Virtual media)	License required for support	
Deploy (PXE)	Supported without license	
Deploy (Virtual media)	License required for support	
Monitoring (health and performance)	Supported without license	

1. For full Insight Control for Linux functionality, the DL180 G5 server should be configured with the HP LO100c Remote Management Card.

Table 11 Insight Control for Linux functionality for supported iLO-based servers *(continued)*

Insight Control for Linux Functionality	iLO Advanced License	Note
Remote Management Console (text-based)	Available without license	Used by the Insight Control for Linux console monitoring facility (cmfd).
Remote Management Console (web-based, GUI)	Available without license	Insight Control for Linux does not use or provide this capability.
Firmware updates (through HP SUM)	Supported without license	HP SUM is integrated in Insight Control for Linux

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