HP Project and Portfolio Management Center

Software Version: 7.5

System Requirements and Compatibility Matrix



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Documentation Updates

This manual's title page contains the following identifying information:

- Software version number, which indicates the software version
- Document release date, which changes each time the document is updated
- Software release date, which indicates the release date of this version of the software

To check for recent updates, or to verify that you are using the most recent edition of a document, go to: h20230.www2.hp.com/selfsolve/manuals.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

The following table indicates changes made to this document.

Publication Date	Summary of Changes	
June 19, 2008 (SP1)	 Added support for HP Service Manager version 7.00 in the Managing Application Change integration suite 	
September 30, 2008 (SP2)	 Added Russian language support Added Microsoft Internet Explorer requirements Added national language support for HP Service Manager version 7.00 in the Managing Application Change integration suite Added support for HP Universal CMDB version 7.50 in the Managing Application Change integration suite Updated HP Deployment Management Extension for Oracle E-Business Suite and Object Migrator support 	
October 9, 2008 (documentation update)	 Added support for HP Release Control version 4.00 in the Managing Application Change integration suite 	
January 15, 2009 (SP3)	 Added Oracle 10.2.0.4 support for the PPM Center database Added VMware ESX Server 3.5 support for selected PPM Center platforms HP-UX 11i v1 support documented 	
June 1, 2009 (SP4)	 Added support for Documentum 5.3 SP6 Added support for HP Quality Center version 10.0 in the HP Center Management for Quality Center integration suite; Added support for HP Service Manager version 7.10 in the HP Managing Application Change integration suite Added Mobility Access Service supported email servers and mobile operating systems 	

Publication Date	Summary of Changes	
October 30, 2009 (SP5)	 Added support for Microsoft Internet Explorer 8.0 Added support for Microsoft Windows Server 2008 SP1 Added support for Java 6 and desupport for Java 5.0 Added Oracle 11g (11.1.0.6 and 11.1.0.7) support for the PPM Center database and Document Management database Added support for HP Universal CMDB versions 8.0, 8.01, and 8.02 in the Managing Application Change integration suite Added support for HP Service Manager version 7.11 in the HP Managing Application Change integration suite Added support for version-controlled projects in the HP Center Management for Quality Center integration suite when working with HP Quality Center 10.0 patch 6 or higher Addes support for Oracle E-Business Suite 12.1.1 	
December 17, 2009 (SP6)	 Added support for SiteMinder 5.5 integration to PPM Center 7.5 Added support for OpenSSH version 5.1 Added support for Service Manager 7.11 for SM RFC on PPM Center 7.5 Added support for Firefox 3.5 	
July 15, 2010 (SP6)	 Added clarification that only 32-bit JDK is supported for all platforms Added clarification for JKD version support on IBM AIX platforms 	
November 5, 2010 (SP7)	 Added support for Microsoft Windows 7 Enterprise Edition (both 32- and 64-bit) Added Oracle 11.2.0.1 (RAC and non-RAC) support Added VMWare ESX Server 4.0.0 support Added HP Service Manager version 9.20 integration support for SM RFC and ALM Added Firefox 3.6 support 	



The change bars in the left margins reflect the modifications made in the *most recent* version of the guide—these change bars are not cumulative.

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1 Introduction

About This Guide

Welcome to HP Project and Portfolio Management Center (PPM Center). This goal of this document is to provide you with the details that will allow you to understand the hardware and software options available for your deployment of PPM Center.

This document provides the details about the environments and products supported by HP for version 7.5. Additionally, this guide identifies required third-party software as well as software that can be used to enable optional features, functionality, and topologies.

An Overview of the PPM Center Architecture

PPM Center employs a three-tier, client-server architecture as shown in the following conceptual diagram (*Figure 1-1*). Refer to the *System Administration Guide and Reference* for details about the available system configuration options.

Chapter 2, *Client-Side Products and Environments*, on page 15 provides details about the requirements and optional software used in the client tier. These components are identified in the client-side (left) portion of *Figure 1-1*.

Chapter 3, *Server-Side Products and Environments*, on page 21 focuses on the hardware and software requirements for the application and database tiers. The major components of these tiers are identified the server-side (right) portion of *Figure 1-1*.

In addition the application and database tier components, the server-side chapter also provides details about the optional Web server and Document Management components (also shown in *Figure 1-1*).

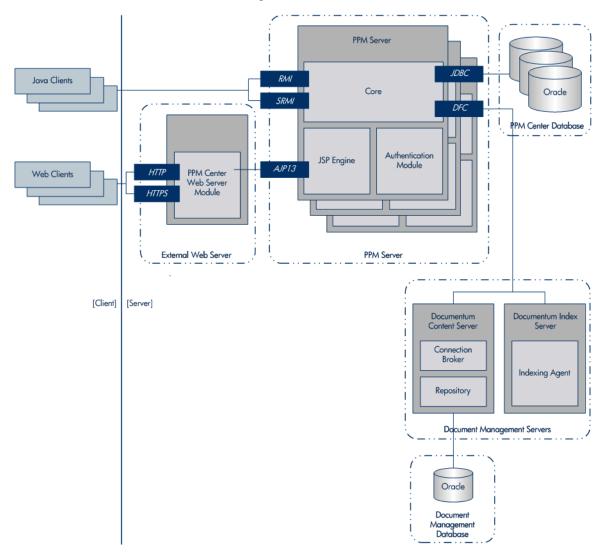


Figure 1-1. PPM Center architecture

Although not shown in the previous figure, PPM Center is able to integrate with most industry standard single sign-on systems such as CA SiteMinder version 6.0.



HP will support single sign-on integration to the extent that the HP API is used for this purpose. HP will provide logging information so that customers and third-party vendors can troubleshoot the integration themselves. HP will not set up the third-party system for debugging purposes. HP does not commit to changing any HP-produced code should the integration fail.

Chapter 4, *HP Migrator and Extension Products and Environments*, on page 93 details the third-party software supported for the PPM Center Extensions and Migrators.

Chapter 5, *Using PPM Center with HP and Other Software*, on page 101 details support requirements for the PPM Center integration products.

Chapter 6, *Desupported Platforms and Products*, on page 105 provides details on the platforms and products that have been desupported with the release of this software version

An Overview of National Language Support

The principal areas of the PPM Center user interface are available with translations for the following languages:

- Brazilian Portuguese
- French
- German
- Italian
- Korean
- Russian (support starting with SP2)
- Spanish
- Turkish

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These language packs are installed (or upgraded) and maintained on English-language instances of PPM Center. For each language, see the corresponding Release Notes for additional system requirements as well as details about the installation of any required Service Packs.

Related Information

Selected information from the following documents can assist you with your planning and deployment activities:

System Administration Guide and Reference

This guide includes initial product installation procedures as well as configuration, operation, maintenance, migration, and performance information.

In particular, this guide provides an overview of the PPM Center architecture and optional configurations—this information can help you determine the optimal configuration of your deployment.

Document Management Guide and Reference

This guide provides additional details about the hardware and software requirements used to support HP Document Management. Implementation of this functionality has notable topological impact.

Release Notes

These documents provide late-breaking information that may affect your installation and deployment of PPM Center.

These guides include initial product installation procedures as well as configuration, operation, maintenance, migration, and performance information.



Before any installation, read the Release Notes for the version you are installing.

2 Client-Side Products and Environments

Overview of Client-Side Support

The following sections provide information about Web client environment requirements for both the PPM Center standard interface and the PPM Workbench as well as support for optional, third-party, client-based products.

Platform and Browser Requirements

Client requirements include the following:

- Operating system
 - o Microsoft® Windows® XP Professional SP1 (32-bit)
 - o Microsoft® Windows® XP Professional SP2 (both 32- and 64-bit)
 - o Microsoft® Windows® XP Professional SP3 (32-bit)
 - o Microsoft Vista Business Edition (both 32- and 64-bit)
 - o Microsoft Vista Enterprise Edition (both 32- and 64-bit)
 - o Microsoft® Windows® 7 Enterprise Edition (both 32- and 64-bit)

- Hardware
 - o 1.0 GHz (or faster) processor
 - RAM
 - At least 512 MB
 - For PPM Workbench, at least 1 GB
- Adobe Acrobat Reader 5.0 (or later)
- Browser
 - Mozilla Firefox 2.0.x
 - Mozilla Firefox 3.5
 - Mozilla Firefox 3.6

Double-click is disabled when editing a portlet's preferences in Firefox 3.x. Double-click in Firefox 3.x will bring out error messages. This is a Firefox limitation.

Workaround: Users can single-click the **Edit** button, or simply select the portlet in the tree pane.

Microsoft Internet Explorer 6.0 SP2

The following security settings must be enabled for the zone in which PPM Center is run:

- Run ActiveX controls and plug-ins
- Script ActiveX controls marked safe for scripting

Access these settings using Tools > Internet Options > Security Tab.

HP recommends using the default settings for the Internet zone.

• Microsoft Internet Explorer 7.0

The ActiveX security settings required for Microsoft Internet Explorer 6.0 SP2 are not required for Microsoft Internet Explorer version 7.0 provided the following setting is enabled:

Enable native XMLHTTP support

Access this setting using **Tools > Internet Options > Advanced** tab **> Security** (section).

Microsoft Internet Explorer 8.0

The ActiveX security settings required for Microsoft Internet Explorer 6.0 SP2 are not required for Microsoft Internet Explorer version 8.0 provided the following setting is enabled:

• Enable native XMLHTTP support

Access this setting using **Tools > Internet Options > Advanced** tab **> Security** (section).

National Language Support

To support the languages listed in Chapter 1, *Introduction*, on page 11, clients must be configured with the same language as that installed on the PPM Center instance

For example, if your PPM Center instance has the French language pack installed, all clients that access this instance should be configured to use French.

PPM Workbench Requirements

Java Plug-In Requirements

Access to the PPM Workbench requires an appropriate version of the Sun Java plug-in installed.

Supported versions include:

• 1.6.0

The Java plug-in is automatically installed the first time a user accesses the PPM Workbench.

Disk Space Requirements

User machines that access the PPM Workbench require 40 MB of disk space more than is required by the browser. This space is required to store client-side Java files.

Optional Products

This section lists the optional products that can be used with PPM Center version 7.5.

Microsoft Project

HP Project Management supports the following versions of Microsoft Project:

- Microsoft Project 2002 Standard Edition
- Microsoft Project 2002 Professional Edition
- Microsoft Project Standard 2003
- Microsoft Project Professional 2003 (single-user or connected to Microsoft Office Project Server 2003)
- Microsoft Office Project Standard 2007
- Microsoft Office Project Professional 2007 (single-user or connected to Microsoft Office Project Server 2007)

For More Information

For more information about using Microsoft Project with HP Project Management, see the HP Project Management User's Guide.

Microsoft Excel

The following versions of Microsoft Excel are supported:

- Microsoft Excel 2002 Standard Edition
- Microsoft Office Excel 2003
- Microsoft Office Excel 2007

Language Support for Non-English Applications

The optional products should use the corresponding language of the clients (and PPM Center instance).

For example, if your PPM Center instance has the French language pack installed, all clients (used to access this instance), along with these optional products, should use French.



Do not attempt to use PPM Center with software products that have a mix of languages, such as a French PPM Center instance with a German client and an Italian version of Excel software. All the software products used in your PPM Center deployment should rely on the same language.

3 Server-Side Products and Environments

HP PPM Center Software Platform Support

Support is limited to the software and versions specifically mentioned in this document unless otherwise noted.

Third Party Software Platform Support



Third party platform support information provided in this document does NOT supersede anything provided by the third party vendors. Please make sure that all third party software and platform combinations used in conjunction with PPM Center are supported by the respective vendors, and that the combinations are supported by HP. HP is not responsible for any discrepancies involving support platforms for third party products.

Overview of Server-Side Support

The following sections list the requirements for the PPM Center server-side components. Details specific to each component are documented in their own section. For your convenience the information is further categorized by platform and each section includes additional important information and considerations, if necessary.

Important Considerations

Carefully consider each of the following during your planning and deployment phases of PPM Center:

Oracle Support

- o All installed Oracle® versions should include the most recent patches and follow the guidelines provided in the latest *Critical Patch Update*. This information is available from https://metalink.oracle.com.
 - Throughout this guide, any Oracle patches or similar updates that are critical for PPM Center support are noted.
- Standard Edition One as well as the Standard and Enterprise Editions of the Oracle database versions are supported.
- o HP supports 32-bit and 64-bit Oracle for the versions and operating systems supported by PPM Center. These are subject to the hardware and operating system requirements established by Oracle. If you install PPM Center on a single server machine sharing both the application server and database, be aware that HP may not support use of 64-bit JVMs. (See details in *Table 3-1* through *Table 3-12*.)

Operating System Support

- Support for each operating system version assumes that the appropriate patch or patches have been applied to support the Java JDK installation on that system.
- o On x86 platforms, the distinction is made whether HP supports the 32or 64-bit version of the operating system (Windows or Linux). On other platforms such as Sun SPARC, IBM Power4/5, and HP PA-RISC or Itanium, HP does support their respective 64-bit UNIX operating system.

VMware Support

- Starting with SP3, VMware ESX Server 3.5 is supported for selected platforms.
- O Where VMware ESX Server (on x86 platforms) is supported, PPM Center version 7.5 is expected to function properly in virtual environments for which HP has explicitly stated support; however, there may be functional and performance implications. HP will not require customers to re-create and troubleshoot every issue in a non-VMware environment; however, HP does reserve the right to

request that customers diagnose certain issues in a native supported operating system environment without the virtual environment. HP will only make this request when there is reason to believe that the virtual environment is a contributing factor to the issue. If the issue cannot be reproduced in a supported non-virtual environment, customers will need to refer their issues to VMware. VMware-specific problems must be handled by the customer and VMware.

HP Integrity Virtual Machine

o HP Project and Portfolio Management Center for HP-UX 11i Integrity is binary compatible to run within an HP Integrity Virtual Machine (VM).

National Language Support

- o All components of a PPM Center instance must be installed on English-language operating systems. Unless otherwise specified, all PPM Center server-side components must use English-language software or configurations—the only non-English software (or interface) must be provided through the PPM Center language packs.
- o Implementation of the various languages requires additional configuration and maintenance. The most up-to-date details are found in the Release Notes that accompany each of the language packs.
- National language support is *not* available for the Document Management module, Managing Application Change, and the Migrators and Extensions.

Microsoft Platforms

Table 3-1. PPM Server requirements on Microsoft platforms (page 1 of 5)

Operating System	Requirements	Additional Information
Platform (without Document Management)		
 One of the following: Microsoft Windows Server 2003 SP1, Standard Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Standard Edition (both 32- and 64-bit) Microsoft Windows Server 2003 SP1, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2008 SP1, Enterprise Edition (both 32- and 64-bit) 	All of the following: • x86 and compatible chip architectures (1.5 GHz) • 2 GB RAM • 600 MB disk space	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations.
 When installed on an x86 VMware ESX Server 2.5 partition, one of the following: Microsoft Windows Server 2003 SP1, Standard Edition (32-bit only) Microsoft Windows Server 2003 SP1, Enterprise Edition (32-bit only) 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 600 MB disk space for installed files 400 MB temporary space for installation files 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. Remote Management of ESX is required. For system sizing impact, contact HP support (hp.com/go/hpsoftwaresupport).

Table 3-1. PPM Server requirements on Microsoft platforms (page 2 of 5)

Operating System	Requirements	Additional Information
 When installed on an x86 VMware ESX Server 3.5.0 or 4.0.0 partition, one of the following: Microsoft Windows Server 2003 SP1, Standard Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Standard Edition (both 32- and 64-bit) Microsoft Windows Server 2003 SP1, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (both 32- and 64-bit) Microsoft Windows Server 2008 SP1, Enterprise Edition (both 32- and 64-bit) 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 600 MB disk space for installed files 400 MB temporary space for installation files 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. Remote Management of ESX is required. For system sizing impact, contact HP support (hp.com/go/hpsoftwaresupport).

Table 3-1. PPM Server requirements on Microsoft platforms (page 3 of 5)

Operating System	Requirements	Additional Information
Platform (with Document Management)		
The following: • Microsoft Windows Server 2003 R2, Enterprise Edition (32-bit only) • Microsoft Windows Server 2008 SP1, Enterprise Edition (both 32- and 64-bit)	All of the following: • x86 and compatible chip architectures (1.5 GHz) • 2 GB RAM • 600 MB disk space	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. DFC version 5.3 SP5 (or 5.3 SP6) must be installed for version 5.3 SP5 Documentum Content and Index Servers; DFC version 5.3 SP6 must be installed for version 5.3 SP6 Documentum Content and Index Servers.
JDK Software		
All Microsoft operating systems previously identified in this table	The following: Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0 (32-bit only) (available from Sun) Note: Starting with Service Pack Java 2 Platform, Standard Edition 5.0 (J2SE 5.0) JDK 1.5.x (from Sun) has been desupported.	
Communications Software		
All Microsoft operating systems previously identified in this table	One of the following: Microsoft Windows Services for UNIX® version 3.0 Microsoft Windows Services for UNIX version 3.5 Microsoft Telnet Services	

Table 3-1. PPM Server requirements on Microsoft platforms (page 4 of 5)

Operating System	Requirements	Additional Information
Secure Communications Software		
All Microsoft operating systems previously identified in this table	One of the following: VanDyke (VShell Server) version 2.6 OpenSSH version 4.2 (included in Cygwin) OpenSSH version 4.3p2 (included in Cygwin) OpenSSH version 5.1 (included in Cygwin)	During Cygwin installation, use the following settings: Select All Users for the Install For field Select Dos/text for the Default Text File Type field
Terminal Emulation Software		•
All Microsoft operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	
Other Software		
All Microsoft operating systems previously identified in this table	All of the following: • SQL*Net • SQL*Plus	 The Oracle client version should correspond to the version of the database used with the PPM Center instance. SQL*Net must be configured to recognize the connection string of the Oracle database that contains the PPM Center database schema.

Table 3-1. PPM Server requirements on Microsoft platforms (page 5 of 5)

Operating System	Requirements	Additional Information
All Microsoft operating systems previously identified in this table	(Optional) The following: Email application configuration	If you are planning to use notifications, an email application is needed. See <i>Email Server Requirements</i> on page 44 for details.
All Microsoft operating systems previously identified in this table	The following: • Bourne shell	 This software is included in the Cygwin utilities. The Bourne shell (bash) must be available on both the source and destination servers.

Sun Platforms

Table 3-2. PPM Server requirements on Sun platforms (page 1 of 3)

Operating System	Requirements	Additional Information
Platform (without Document Management)		
One of the following: Sun Solaris 9Sun Solaris 10	All of the following: UltraSPARC III (1050 MHz) 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only)	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations.
Platform (with Document A	Management)	
One of the following: • Sun Solaris 9 • Sun Solaris 10	All of the following: UltraSPARC III (1050 MHz) 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. DFC version 5.3 SP5 (or 5.3 SP6) must be installed for version 5.3 SP5 Documentum Content and Index Servers; DFC version 5.3 SP6 must be installed for version 5.3 SP6 Documentum Content and Index Servers.

Table 3-2. PPM Server requirements on Sun platforms (page 2 of 3) $\,$

Operating System	Requirements	Additional Information
JDK Software		
All Sun operating systems previously identified in this table	The following: Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0 (32-bit only) (available from Sun) Note: Starting with Service Pack 5, Java 2 Platform, Standard Edition 5.0 (J2SE 5.0) JDK 1.5.x (from Sun) has been desupported.	
Secure Communications S	oftware	
For: • Sun Solaris 9	One of the following: SSH-2.0_Sun_SSH_1.0 AttachmateWRQ (Reflection for Secure IT) version 6.1 (formerly F-Secure SSH) OpenSSH version 4.1p1 OpenSSH version 4.3p2	
	OpenSSH version 5.1	
For: • Sun Solaris 10	 One of the following: SSH-2.0_Sun_SSH_1.1 AttachmateWRQ (Reflection for Secure IT) version 6.1 (formerly F-Secure SSH) 	
	OpenSSH version 4.1p1OpenSSH version 4.3p2OpenSSH version 5.1	
Terminal Emulation Softwo	are	
All Sun operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	

Table 3-2. PPM Server requirements on Sun platforms (page 3 of 3)

Operating System	Requirements	Additional Information
Other Software		
All Sun operating systems previously identified in this table	All of the following: SQL*Net SQL*Plus	 The Oracle client version should correspond to the version of the database used with the PPM Center instance. SQL*Net must be configured to recognize the connection string of the Oracle database that contains the PPM Center database schema.
All Sun operating systems previously identified in this table	(Optional) The following: • Email application configuration	If you are planning to use notifications, an email application is needed. See <i>Email Server Requirements</i> on page 44 for details.

HP Platforms

Table 3-3. PPM Server requirements on HP platforms (page 1 of 3)

Operating System	Requirements	Additional Information	
Platform (without Document Management)			
One of the following: HP-UX 11i v1 HP-UX 11i v2 HP-UX 11i v3	One of the following processor options: Itanium® 2 (1.4 GHz) (HP-UX 11i v2 and v3 only) PA-RISC (1 GHz) Plus all of the following: 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. 	
Platform (with Document A	Management)		
The following: • HP-UX 11i v2 Update 2	One of the following processor options: Itanium 2 (1.4 GHz) PA-RISC (1 GHz) Plus all of the following: 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. DFC version 5.3 SP5 (or 5.3 SP6) must be installed for version 5.3 SP5 Documentum Content and Index Servers; DFC version 5.3 SP6 must be installed for version 5.3 SP6 Documentum Content and Index Servers. 	

Table 3-3. PPM Server requirements on HP platforms (page 2 of 3)

Operating System	Requirements	Additional Information
JDK Software		
All HP operating systems previously identified in this table	The following: • HP-UX Java Development Kit (JDK) for the Java 2 Platform Standard Edition 6 (Java SE 6) version 6.0.02 (32-bit only) (available from HP) Note: Starting with SP5, HP-UX Java Development Kit (JDK) for the Java 2 Platform Standard Edition (J2SE) version 5.0.07 (from HP) has been desupported.	
Secure Communications Software		
All HP operating systems previously identified in this table	 One of the following: AttachmateWRQ (Reflection for Secure IT) version 6.1 (formerly F-Secure SSH) OpenSSH version 4.1p1 OpenSSH version 4.3p2 OpenSSH version 5.1 	
Terminal Emulation Software		
All HP operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	

Table 3-3. PPM Server requirements on HP platforms (page 3 of 3)

Operating System	Requirements	Additional Information
Other Software		
All HP operating systems previously identified in this table	All of the following: SQL*Net SQL*Plus	 The Oracle client version should correspond to the version of the database used with the PPM Center instance. SQL*Net must be configured to recognize the connection string of the Oracle database that contains the PPM Center database schema.
All HP operating systems previously identified in this table	(Optional) The following: • Email application configuration	If you are planning to use notifications, an email application is needed. See <i>Email Server Requirements</i> on page 44 for details.

IBM Platforms

Table 3-4. PPM Server requirements on IBM platforms (page 1 of 3)

Operating System	Requirements	Additional Information
Platform (without Document Management)		
One of the following: IBM AIX 5L version 5.2 IBM AIX 5L version 5.3	 All of the following: POWER4/POWER5 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations.
Platform (with Document Management)		
One of the following: IBM AIX 5L version 5.2 TL9 IBM AIX 5L version 5.3 TL5	All of the following: POWER4/POWER5 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. DFC version 5.3 SP5 (or 5.3 SP6) must be installed for version 5.3 SP5 Documentum Content and Index Servers; DFC version 5.3 SP6 must be installed for version 5.3 SP6 Documentum Content and Index Servers.

Table 3-4. PPM Server requirements on IBM platforms (page 2 of 3) $\,$

Operating System	Requirements	Additional Information
JDK Software		
All IBM operating systems previously identified in this table	The following: Java 6 (32-bit only) (available from IBM) Note: Starting with SP5, IBM SDK for AIX Java 2 Technology Edition, version 5 (IBM AIX build Xj9 version j9vmap3223-20070201) (from IBM) has been desupported.	
Secure Communications Software		
All IBM operating systems previously identified in this table	One of the following: AttachmateWRQ (Reflection for Secure IT) version 6.1 (formerly F-Secure SSH) OpenSSH version 4.1p1 OpenSSH version 4.3p2 OpenSSH version 5.1	
Terminal Emulation Software		
All IBM operating systems previously identified in this table	One of the following: "Dumb" mode VT100 mode VT220 mode	

Table 3-4. PPM Server requirements on IBM platforms (page 3 of 3)

Operating System	Requirements	Additional Information
Other Software		
All IBM operating systems previously identified in this table	All of the following: SQL*Net SQL*Plus	 The Oracle client version should correspond to the version of the database used with the PPM Center instance. SQL*Net must be configured to recognize the connection string of the Oracle database that contains the PPM Center database schema.
All IBM operating systems previously identified in this table	(Optional) The following:Email application configuration	If you are planning to use notifications, an email application is needed. See <i>Email Server Requirements</i> on page 44 for details.

Red Hat Platforms

Table 3-5. PPM Server requirements on Red Hat platforms (page 1 of 3)

Operating System	Requirements	Additional Information
Platform (without Document Management)		
 One of the following: Red Hat Enterprise Linux AS 4.0 (both 32- and 64-bit) Red Hat Enterprise Linux AS 5.0 (both 32- and 64-bit) 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations.
When installed on an x86 VMware ESX Server 2.5.2 partition, the following: Red Hat Enterprise Linux AS 4.0 (32-bit only)	 All of the following: x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 600 MB disk space for installed files 400 MB temporary space for installation files 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. Remote Management of ESX is required. For system sizing impact, contact HP support (hp.com/go/hpsoftwaresupport)
 When installed on an x86 VMware ESX Server 3.5.0 or 4.0.0 partition, one of the following: Red Hat Enterprise Linux AS 4.0 (both 32-and 64-bit) Red Hat Enterprise Linux AS 5.0 (both 32-and 64-bit) 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 600 MB disk space for installed files 400 MB temporary space for installation files 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. Remote Management of ESX is required. For system sizing impact, contact HP support (hp.com/go/hpsoftwaresupport)

Table 3-5. PPM Server requirements on Red Hat platforms (page 2 of 3)

Operating System	Requirements	Additional Information
Platform (with Document	Management)	
The following: Red Hat Enterprise Linux AS 4.0 Update 4	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. DFC version 5.3 SP5 (or 5.3 SP6) must be installed for version 5.3 SP5 Documentum Content and Index Servers; DFC version 5.3 SP6 must be installed for version 5.3 SP6 Documentum Content and Index Servers.
JDK Software		
All Red Hat operating systems previously identified in this table	 Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0 (32-bit only) (available from Sun) Note: Starting with Service Pack 5, Java 2 Platform, Standard Edition 5.0 (J2SE 5.0) JDK 1.5.x (from Sun) has been desupported. 	
Secure Communications S	oftware	
For: • Red Hat Enterprise Linux AS 4.0	 One of the following: AttachmateWRQ (Reflection for Secure IT) version 6.1 (formerly F-Secure SSH) OpenSSH version 3.9p1 (included with the product bundle from Red Hat, Inc.) OpenSSH version 4.1p1 OpenSSH version 4.3p2 OpenSSH version 5.1 	

Table 3-5. PPM Server requirements on Red Hat platforms (page 3 of 3)

Operating System	Requirements	Additional Information
For: • Red Hat Enterprise Linux AS 5.0	One of the following: OpenSSH version 4.3p1 OpenSSH version 4.3p2 (included with the product bundle from Red Hat, Inc.) OpenSSH version 5.1	
Terminal Emulation Softw	are	
All Red Hat operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	
Other Software		
All Red Hat operating systems previously identified in this table	All of the following: SQL*Net SQL*Plus	 The Oracle client version should correspond to the version of the database used with the PPM Center instance. SQL*Net must be configured to recognize the connection string of the Oracle database that contains the PPM Center database schema.
All Red Hat operating systems previously identified in this table	(Optional) The following: Email application configuration	If you are planning to use notifications, an email application is needed. See <i>Email Server Requirements</i> on page 44 for details.

SUSE Platforms

Table 3-6. PPM Server requirements on SUSE platforms (page 1 of 3)

Operating System	Requirements	Additional Information
Platform (without Document Management)		
 One of the following: SUSE Linux Enterprise Server 9 (32-bit only) SUSE Linux Enterprise Server 10 (32-bit only) 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations.
When installed on an x86 VMware ESX Server 2.5 partition, the following: SUSE Linux Enterprise Server 9 (32-bit only)	All of the following: • x86 and compatible chip architectures (1.5 GHz) • 3 GB RAM • 600 MB disk space • 400 MB temp space • 300 MB on root partition (for installation only	 These are minimum requirements—faster processors and additional memory and storage are acceptable. Remote Management of ESX is required. For system sizing impact, contact HP support (hp.com/go/hpsoftwaresupport)
When installed on an x86 VMware ESX Server 3.5.0 or 4.0.0 partition, the following: • SUSE Linux Enterprise Server 9 (32-bit only) • SUSE Linux Enterprise Server 10 (32-bit only)	All of the following: • x86 and compatible chip architectures (1.5 GHz) • 3 GB RAM • 600 MB disk space • 400 MB temp space • 300 MB on root partition (for installation only	 These are minimum requirements—faster processors and additional memory and storage are acceptable. Remote Management of ESX is required. For system sizing impact, contact HP support (hp.com/go/hpsoftwaresupport)

Table 3-6. PPM Server requirements on SUSE platforms (page 2 of 3)

Operating System	Requirements	Additional Information
Platform (with Document Management)		
One of the following: SUSE Linux Enterprise Server 9 SP3 SUSE Linux Enterprise Server 10	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 600 MB disk space 400 MB temp space 300 MB on root partition (for installation only 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 44 for additional considerations. DFC version 5.3 SP5 (or 5.3 SP6) must be installed for version 5.3 SP5 Documentum Content and Index Servers; DFC version 5.3 SP6 must be installed for version 5.3 SP6 Documentum Content and Index Servers.
JDK Software		
All SUSE Linux operating systems previously identified in this table	 The following: Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0 (32-bit only) (available from Sun) Note: Starting with Service Pack 5, Java 2 Platform, Standard Edition 5.0 (J2SE 5.0) JDK 1.5.x (from Sun) has been desupported. 	
Secure Communications S	oftware	•
All SUSE Linux operating systems previously identified in this table	 One of the following: AttachmateWRQ (Reflection for Secure IT) version 6.1 (formerly F-Secure SSH) OpenSSH version 4.1p1 OpenSSH version 4.3p2 OpenSSH version 5.1 	

Table 3-6. PPM Server requirements on SUSE platforms (page 3 of 3)

Operating System	Requirements	Additional Information
Terminal Emulation Softwo	are	
All SUSE Linux operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	
Other Software		
All SUSE Linux operating systems previously identified in this table	All of the following: SQL*Net SQL*Plus	 The Oracle client version should correspond to the version of the database used with the PPM Center instance. SQL*Net must be configured to recognize the connection string of the Oracle database that contains the PPM Center database schema.
All SUSE Linux operating systems previously identified in this table	(Optional) The following: Email application configuration	If you are planning to use notifications, an email application is needed. See <i>Email Server Requirements</i> on page 44 for details.

Hardware Sizing Estimates

The hardware specifications provided in this guide are the minimum requirements for a valid PPM Center production installation. The requirements as they apply to each installation will vary based on the number of users, volume of activity, and type of activity. HP will conduct hardware assessments for customers at appropriate stages of the implementation. Contact HP support (hp.com/go/hpsoftwaresupport) for a detailed assessment.

Email Server Requirements

An email server is required if you are planning to use notifications. PPM Center can send email notifications to identify pending actions or to notify users of status changes for various packages, requests, and tasks.

PPM Center can integrate with any SMTP-compliant mail server, including Microsoft Exchange, UNIX sendmail, and others.

To work with these third-party products, the PPM Server needs the IP address of the email server and the logon name of one or more valid users on the email server, which the PPM Server uses as "from" addresses for its notifications.

For More Information

For information about configuring the email server, see the *System Administration Guide and Reference*.

Mobility Access Service Supported Email Servers and Mobile Operating Systems

The Mobility Access Service enables you to take workflow actions from within your email inbox on an email client either on your local PC or on a supported handheld device.

The Mobility Access Service requires IMAP or POP3 access to an email account on an email server. In the Mobility Access Service configuration file, you need to configure the IP address or hostname of the email server, and the username and password of the email account. Your PPM Center instance should be able to connect to this email server.

The Mobility Access Service supports the following:

- Email Servers:
 - Microsoft Exchange Server 2007 (for email clients on PCs and handheld devices)
 - o Microsoft Exchange Server 2003 (for email clients on PCs only)
- Mobile Operating Systems (for handheld devices):
 - Windows Mobile 6.1
 - o BlackBerry OS 4.6.0.167
 - o Symbian OS 9.3

PPM Center Database

Microsoft Platforms

Table 3-7. PPM Center database requirements on Microsoft platforms (page 1 of 3)

Component	Requirements	Additional Information
Platform		
 One of the following: Microsoft Windows Server 2003 SP1, Standard Edition Microsoft Windows Server 2003 R2 SP2, Standard Edition Microsoft Windows Server 2003 SP1, Enterprise Edition (32- and 64-bit) Microsoft Windows Server 2003 R2, Enterprise Edition (32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (32- and 64-bit) Microsoft Windows Server 2008 SP1, Enterprise Edition (32- and 64-bit) 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 1 GB disk space (25 MB for CLOB and 100 MB for index) 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-14 on page 66 for information. Also see Document Management Database Sizing Recommendations on page 87.

Table 3-7. PPM Center database requirements on Microsoft platforms (page 2 of 3)

Component	Requirements	Additional Information
Database Software		
One of the following:		
Oracle 9.2.0.7Oracle 9.2.0.7 RAC		Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not
Oracle 9.2.0.8Oracle 9.2.0.8 RAC		work with Oracle Enterprise DB Server on VMware.
Oracle 10.1.0.3Oracle 10.1.0.3 RAC		If you plan to use the same database for the PPM Center database and the Document
Oracle 10.1.0.4Oracle 10.1.0.4 RAC	The following: • The value for the blank_trimming configuration parameter must be set to true in the initialization file (either init.ora or spfile.ora).	Management database, make sure that you select a suitable database version. See Table 3-20 on page 75 for information.
Oracle 10.1.0.5Oracle 10.1.0.5 RAC		
Oracle 10.2.0.2Oracle 10.2.0.2 RAC	The following: • Run the following command from an SQL*Plus session as sysdba. For details, refer to Oracle bug number 5455729. alter system set "_optimizer_connect_b y_cost_based"=false scope=both;	

Table 3-7. PPM Center database requirements on Microsoft platforms (page 3 of 3)

Component	Requirements	Additional Information
Oracle 10.2.0.3Oracle 10.2.0.3 RAC		Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not
Oracle 10.2.0.4Oracle 10.2.0.4 RAC		work with Oracle Enterprise DB Server on VMware.
(support starting with SP3)	database for the PPM Ce	If you plan to use the same database for the PPM Center
• Oracle 11.1.0.6		database and the Document
 Oracle 11.1.0.6 RAC 		Management database, make
Oracle 11.1.0.7		sure that you select a suitable database version. See
 Oracle 11.1.0.7 RAC 		Table 3-20 on page 75 for
(support starting with SP5)		information.
• Oracle 11.2.0.1	7	
 Oracle 11.2.0.1 RAC 		
(support starting with SP7)		

Sun Platforms

Table 3-8. PPM Center database requirements on Sun platforms (page 1 of 3)

Component	Requirements	Additional Information
Platform		
One of the following: • Solaris 9 • Solaris 10	All of the following: UltraSPARC III (1050 MHz) 2 GB RAM 1 GB disk space (25 MB for CLOB and 100 MB for index)	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-15 on page 67 for information. Also see Document Management Database Sizing Recommendations on page 87.
Database Software		
One of the following:		
Oracle 9.2.0.7Oracle 9.2.0.7 RACOracle 9.2.0.8Oracle 9.2.0.8 RAC		Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware.
Oracle 10.1.0.3Oracle 10.1.0.3 RAC		If you plan to use the same database for the PPM Center database and the Document
Oracle 10.1.0.4Oracle 10.1.0.4 RAC	The following: Install and apply Oracle patch 4458790.	Management database, make sure that you select a suitable database version. See <i>Table 3-21</i> on page 77 for information.

Table 3-8. PPM Center database requirements on Sun platforms (page 2 of 3)

Component	Requirements	Additional Information
Oracle 10.1.0.5Oracle 10.1.0.5 RAC		 Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See Table 3-21 on page 77 for information.
Oracle 10.2.0.1Oracle 10.2.0.1 RAC	All of the following: Install and apply Oracle patch 4458790. Install and apply Oracle patch 5089814.	
Oracle 10.2.0.2Oracle 10.2.0.2 RAC	All of the following: Install and apply Oracle patch 5089814. Run the following command from an SQL*Plus session as sysdba. For details, refer to Oracle bug number 5455729. alter system set "_optimizer_connect_by_c ost_based"=false scope=both;	

Table 3-8. PPM Center database requirements on Sun platforms (page 3 of 3)

Component	Requirements	Additional Information
• Oracle 10.2.0.3	All of the following:	Because Oracle Enterprise DB
• Oracle 10.2.0.3 RAC	 Install and apply Oracle patch 4467058. 	Server is not supported on VMware, PPM Center does not
	Install and apply Oracle patch 5872943.	work with Oracle Enterprise DB Server on VMware.
	Install and apply Oracle patch 4878299.	If you plan to use the same database for the PPM Center database and the Document
	 Install and apply Oracle patch 5487686. 	Management database, make sure that you select a suitable
	Install and apply Oracle patch 6085625.	database version. See Table 3-21 on page 77 for
• Oracle 10.2.0.4		information.
 Oracle 10.2.0.4 RAC 		
(support starting with SP3)		
Oracle 11.1.0.6		
 Oracle 11.1.0.6 RAC 		
• Oracle 11.1.0.7		
• Oracle 11.1.0.7 RAC		
(support starting with SP5)		
Oracle 11.2.0.1		
 Oracle 11.2.0.1 RAC 		
(support starting with SP7)		

HP Platforms

Table 3-9. PPM Center database requirements on HP platforms (page 1 of 3)

Component	Requirements	Additional Information
Platform		
One of the following: HP-UX 11i v1 HP-UX 11i v2 HP-UX 11i v3	One of the following processor options: Itanium 2 (1.4 GHz) (HP-UX 11i v2 and v3 only) PA-RISC (1 GHz) Plus all of the following: 2 GB RAM 1 GB disk space (25 MB for CLOB and 100 MB for index)	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-16 on page 68 for information. Also see Document Management Database Sizing Recommendations on page 87.
Database Software		
One of the following:		
Oracle 9.2.0.7Oracle 9.2.0.7 RAC	For HP-UX 11i v1 and v2 only	If you plan to use the same database for the PPM Center database and the Document
Oracle 9.2.0.8Oracle 9.2.0.8 RAC		Management database, make sure that you select a suitable database version. See <i>Table 3-22</i> on page 79 for information.
Oracle 10.1.0.3Oracle 10.1.0.3 RAC		
Oracle 10.1.0.4Oracle 10.1.0.4 RAC	The following: Install and apply Oracle patch 4458790.	

Table 3-9. PPM Center database requirements on HP platforms (page 2 of 3)

Component	Requirements	Additional Information
Oracle 10.1.0.5Oracle 10.1.0.5 RAC	The following: Install and apply HP patch PHKL_35936 (on HP-UX 11i v3 only)	If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See <i>Table 3-22</i> on page 79 for information.
Oracle 10.2.0.1Oracle 10.2.0.1 RAC	All of the following: Install and apply Oracle patch 4458790 (on PA-RISC only). Install and apply Oracle patch 5089814 (on Itanium only).	
 Oracle 10.2.0.2 Oracle 10.2.0.2 RAC 	 All of the following: Install and apply Oracle patch 5089814. Run the following command from an SQL*Plus session as sysdba. For details, refer to Oracle bug number 5455729. alter system set "_optimizer_connect_by_c ost_based"=false scope=both; Install and apply HP patch PHKL_35936 (on HP-UX 11i v3 only) 	

Table 3-9. PPM Center database requirements on HP platforms (page 3 of 3)

Component	Requirements	Additional Information
Oracle 10.2.0.3Oracle 10.2.0.3 RAC	 All of the following: Install and apply HP patch PHKL_35936 (on HP-UX 11i v3 only) Install and apply Oracle patch 4467058 (on PA-RISC only). Install and apply Oracle patch 5872943 (on PA-RISC only). Install and apply Oracle patch 5618040 (on Itanium only). Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	 Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See Table 3-22 on page 79 for information.
Oracle 10.2.0.4Oracle 10.2.0.4 RAC (support starting with SP3)		
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 		
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		

IBM Platforms

Table 3-10. PPM Center database requirements on IBM platforms (page 1 of 3)

Component	Requirements	Additional Information
Platform		
One of the following: IBM AIX 5L version 5.2 IBM AIX 5L version 5.3	All of the following: POWER4/POWER5 2 GB RAM 1 GB disk space (25 MB for CLOB and 100 MB for index)	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See <i>Table 3-17</i> on page 70 for information. Also see <i>Document Management Database Sizing Recommendations</i> on page 87.
Database Software		
One of the following:		
Oracle 9.2.0.7Oracle 9.2.0.7 RAC		If you plan to use the same database for the PPM Center database and the Document
Oracle 9.2.0.8Oracle 9.2.0.8 RAC		Management database, make sure that you select a suitable database version. See
Oracle 10.1.0.3Oracle 10.1.0.3 RAC		Table 3-23 on page 81 for information.
Oracle 10.1.0.4Oracle 10.1.0.4 RAC	The following: Install and apply Oracle patch 4458790.	

Table 3-10. PPM Center database requirements on IBM platforms (page 2 of 3)

Component	Requirements	Additional Information
Oracle 10.1.0.5Oracle 10.1.0.5 RAC		Because Oracle Enterprise DB Server is not supported on VMware, PPM Center
Oracle 10.2.0.2Oracle 10.2.0.2 RAC	All of the following: Install and apply Oracle patch 5089814. Run the following command from an SQL*Plus session as sysdba. For details, refer to Oracle bug number 5455729. alter system set "_optimizer_connect_by_c ost_based"=false scope=both;	does not work with Oracle Enterprise DB Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See Table 3-23 on page 81 for information.
Oracle 10.2.0.3Oracle 10.2.0.3 RAC	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 5618040. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	
Oracle 10.2.0.4Oracle 10.2.0.4 RAC (support starting with SP3)		
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 		

Table 3-10. PPM Center database requirements on IBM platforms (page 3 of 3)

Component	Requirements	Additional Information
• Oracle 11.2.0.1		
 Oracle 11.2.0.1 RAC 		
(support starting with SP7)		

Red Hat Platforms

Table 3-11. PPM Center database requirements on Red Hat platforms (page 1 of 3)

Component	Requirements	Additional Information
Platform		
One of the following: Red Hat Enterprise Linux AS 4.0 Red Hat Enterprise Linux AS 5.0	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 1 GB disk space (25 MB for CLOB, 100 MB for index) 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-18 on page 71 for information. Also see Document Management Database Sizing Recommendations on page 87.
Database Software		
One of the following:		
Oracle 9.2.0.7Oracle 9.2.0.7 RAC		If you plan to use the same database for the PPM Center database and the Document
Oracle 9.2.0.8Oracle 9.2.0.8 RAC		Management database, make sure that you select a suitable database version. See <i>Table 3-24</i> on page 83
Oracle 10.1.0.3Oracle 10.1.0.3 RAC		for information.
Oracle 10.1.0.4Oracle 10.1.0.4 RAC	The following: Install and apply Oracle patch 4458790 (on x86 only).	
Oracle 10.1.0.5Oracle 10.1.0.5 RAC		

Table 3-11. PPM Center database requirements on Red Hat platforms (page 2 of 3)

Component	Requirements	Additional Information
Oracle 10.2.0.1Oracle 10.2.0.1 RAC	 All of the following: Install and apply Oracle patch 4458790. Install and apply Oracle patch 5089814. 	If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See <i>Table 3-24</i> on page 83 for information.
Oracle 10.2.0.2Oracle 10.2.0.2 RAC	All of the following: Install and apply Oracle patch 5089814. Run the following command from an SQL*Plus session as sysdba. For details, refer to Oracle bug number 5455729. alter system set "_optimizer_connect_by_cost_based"=false scope=both;	
 Oracle 10.2.0.3 Oracle 10.2.0.3 RAC 	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 5618040. Install and apply Oracle patch 4878299. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	

Table 3-11. PPM Center database requirements on Red Hat platforms (page 3 of 3)

Component	Requirements	Additional Information
Oracle 10.2.0.4Oracle 10.2.0.4 RAC (support starting with SP3)		Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 		Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		database version. See Table 3-24 on page 83 for information.

SUSE Platforms

Table 3-12. PPM Center database requirements on SUSE platforms (page 1 of 3)

Component	Requirements	Additional Information
Platform		
One of the following: SUSE Linux Enterprise Server 9 SUSE Linux Enterprise Server 10	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 1 GB disk space (25 MB CLOB and 100 MB for index) 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-19 on page 72 for information. Also see Document Management Database Sizing Recommendations on page 87.
Database Software		
One of the following:		
Oracle 9.2.0.7Oracle 9.2.0.7 RAC		If you plan to use the same database for the PPM Center database and the Document
Oracle 9.2.0.8Oracle 9.2.0.8 RAC		Management database, make sure that you select a suitable database version. See <i>Table 3-25</i> on page 85
Oracle 10.1.0.3Oracle 10.1.0.3 RAC		for information.
Oracle 10.1.0.4Oracle 10.1.0.4 RAC	The following: Install and apply Oracle patch 4458790 (on x86 only).	
Oracle 10.1.0.5Oracle 10.1.0.5 RAC		

Table 3-12. PPM Center database requirements on SUSE platforms (page 2 of 3)

Component	Requirements	Additional Information
Oracle 10.2.0.1Oracle 10.2.0.1 RAC	 All of the following: Install and apply Oracle patch 4458790. Install and apply Oracle patch 5089814. 	If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See <i>Table 3-25</i> on page 85 for information.
Oracle 10.2.0.2Oracle 10.2.0.2 RAC	 All of the following: Install and apply Oracle patch 5089814. Run the following command from an SQL*Plus session as sysdba. For details, refer to Oracle bug number 5455729. alter system set 	
Oracle 10.2.0.3	"_optimizer_connect_by_ cost_based"=false scope=both;	
 Oracle 10.2.0.3 Oracle 10.2.0.3 RAC 	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 5618040. 	
 Install and apply Oracle patch 4878299. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 		

Table 3-12. PPM Center database requirements on SUSE platforms (page 3 of 3)

Component	Requirements	Additional Information
Oracle 10.2.0.4Oracle 10.2.0.4 RAC (support starting with SP3)		Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 		 Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		database version. See Table 3-25 on page 85 for information.

Database Character Sets

Table 3-13 lists the database character sets supported for English-language deployments of version 7.5 of PPM Center.

Table 3-13. Database character sets supported

Code	Description
US7ASCII	ASCII 7-bit U.S. America
WE8ISO8859P1	ISO 8859-1 Western Europe
WE8ISO8859P9	ISO 8859-9
WE8ISO8859P15	ISO 8859-15
WE8MSWIN1252	Microsoft Windows code page 1252 8-bit Western Europe
UTF8	Unicode 3.0 UTF-8
AL32UTF8	Unicode 3.0 UTF-8

For national language support, specify:

- AL32UTF8 for NLS_CHARACTERSET
- AL16UTF16 for NLS NCHAR CHARACTERSET

Document Management Servers

The optional Document Management module provided by HP for use with English language PPM Center instances includes:

- Version 5.3 SP5 of the Documentum Foundation Classes
- Version 5.3 SP5 of the Documentum Content Server
- Version 5.3 SP5 of the Documentum Index Server

Starting with Service Pack 4, support for the Document Management module has been enhanced to include the following:

- Version 5.3 SP6 of the Documentum Foundation Classes
- Version 5.3 SP6 of the Documentum Content Server
- Version 5.3 SP6 of the Documentum Index Server



For new Document Management deployments, HP recommends that you install the above version 5.3 SP6 Documentum components.

The Document Management module files are available from HP and can be obtained from the HP Software Updates Web site at: support.openview.hp.com/software_updates.jsp

For performance reasons, HP recommends that you install this software on separate servers and databases as shown in *Figure 1-1* on page 12.

For More Information

For information about the additional features and functionality available with Document Management module, see the *Document Management Guide and Reference*.

Microsoft Platforms

Table 3-14. Document Management server requirements on Microsoft platforms

Component	Requirements	Additional Information	
Document Management C	Document Management Content Server Platform		
One of the following: • Windows 2000 SP4 Update Rollup 1 • Windows Server 2003 R2 (32-bit only) • Windows Server 2008 SP1, Enterprise Edition (both 32- and 64-bit)	All of the following: x86 and compatible chip architectures (1.5 GHz)r 512 MB RAM 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 	
Document Management In	ndex Server Plattorm		
One of the following: • Windows 2000 SP4 Update Rollup 1 • Windows Server 2003 R2 (32-bit only)	 All of the following: x86 and compatible chip architectures (1.5 GHz)r 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 	

Sun Platforms

Table 3-15. Document Management server requirements on Sun platforms

Component	Requirements	Additional Information		
Document Management C	Document Management Content Server Platform			
One of the following: Sun Solaris 8Sun Solaris 9Sun Solaris 10	All of the following: UltraSPARC III (1050 MHz) 512 MB RAM 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 		
Document Management Index Server Platform				
One of the following: Sun Solaris 8Sun Solaris 9Sun Solaris 10	All of the following: UltraSPARC III (1050 MHz) 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 		

HP Platforms

Table 3-16. Document Management server requirements on HP platforms (page 1 of 2)

Component	Requirements	Additional Information	
Document Management C	Document Management Content Server Platform		
One of the following: • HP-UX 11 • HP-UX 11i v1	 All of the following: PA-RISC (1 GHz) 512 MB RAM 700 MB disk space (for installation only in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage 	
For: • HP-UX 11i v2 Update 2	One of the following processor options: PA-RISC (1 GHz) Itanium 2 (1.4 GHz) Plus all of the following: 512 MB RAM 700 MB disk space (for installation only in addition to the minimum requirements for the operating system	considerations.	

Table 3-16. Document Management server requirements on HP platforms (page 2 of 2)

Component	Requirements	Additional Information	
Document Management	Document Management Index Server Platform		
One of the following: HP-UX 11 HP-UX 11i v1	All of the following: PA-RISC (1 GHz) 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations 	
For: • HP-UX 11i v2	One of the following processor options: PA-RISC (1 GHz) Itanium 2 (1.4 GHz) Plus all of the following: 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system	on page 73 for additional storage considerations.	

IBM Platforms

Table 3-17. Document Management server requirements on IBM platforms

Component	Requirements	Additional Information	
Document Management Content Server Platform			
One of the following: IBM AIX 5L version 5.2 TL9 IBM AIX 5L version 5.3 TL5	All of the following: POWER4/POWER5 512 MB RAM 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 	
Document Management Index Server Platform			
One of the following: IBM AIX 5L version 5.2 TL9 IBM AIX 5L version 5.3 TL5	All of the following: POWER4/POWER5 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 	

Red Hat Platforms

Table 3-18. Document Management server requirements on Red Hat platforms

Component	Requirements	Additional Information		
Document Management Content Server Platform				
One of the following: Red Hat Enterprise Linux AS 3.0 Update 8 Red Hat Enterprise Linux AS 4.0 Update 4	 All of the following: x86 and compatible chip architectures (1.5 GHz) 512 MB RAM 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 		
Document Management In	Document Management Index Server Platform			
One of the following: Red Hat Enterprise Linux AS 3.0 Update 8 Red Hat Enterprise Linux AS 4.0 Update 4	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations. 		

SUSE Platforms

Table 3-19. Document Management server requirements on SUSE platforms

Component	Requirements	Additional Information
Document Management Content Server Platform		
One of the following: SUSE Linux Enterprise Server 9 SP3 SUSE Linux Enterprise Server 10	All of the following: • x86 and compatible chip architectures (1.5 GHz) • 512 MB RAM • 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations.
	HOLE SELVEL FIGUROTTI	
 One of the following: SUSE Linux Enterprise Server 9 SP3 SUSE Linux Enterprise Server 10 	 All of the following: x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. See Document Management Content Server and Index Server Sizing Recommendations on page 73 for additional storage considerations.

Document Management Content Server and Index Server Sizing Recommendations

In the HP document management environment, document storage consists of:

- The document itself, stored on the Document Management Content Server file system
- The document's full-text index stored on the Document Management Index Server file system
- The document's metadata (for example, author and description) stored in the Document Management database (see *Document Management Database Sizing Recommendations* on page 87 for those sizing details)

Use the following guidelines to provide a conservative estimate of the storage required for your document content and full-text indexes on the two Document Management servers:

- 1. Determine or estimate the average *number of documents*.
- 2. Determine or estimate the average *document size*.
- 3. Determine or estimate the average *number of versions* (of each document).
- 4. Estimate the average full-text *index size* my multiplying the average document size by 30%.
- 5. Estimate the document size as follows:

(document size) x (number of versions) x (number of documents)

6. Estimate the full-text index size as follows:

(index size) x (number of versions) x (number of documents)

Example

If you are planning for 100,000 documents, 100 KB in size (on average), with four versions (on average), then the amount of storage necessary for the content and indexes of these documents would be:

- On the Document Management Content Server:
 - (100 KB document size) x (4 versions) x (100,000 documents) = 40 GB
- On the Document Management Index Server:
 - $(30 \text{ KB index size}) \times (4 \text{ versions}) \times (100,000 \text{ documents}) = 12 \text{ GB}$

Document Management Database

Microsoft Platforms

Table 3-20. Document Management database requirements on Microsoft platforms (page 1 of 2)

Component	Requirements	Additional Information
Document Management Dat	abase Server Platforms	
One of the following: Windows 2000 SP4 Update Rollup 1 Windows Server 2003 R2 (32-bit only) Windows Server 2008 SP1, Enterprise Edition (both 32- and 64-bit)	 All of the following: x86 and compatible chip architectures (1.5 GHz) 512 MB RAM For installation and initial usage, HP recommends 180 MB for data and 180 MB for indexes in addition to the minimum requirements for the operating system. 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-1 on page 24 for details. See Document Management Database Sizing Recommendations on page 87 for additional storage considerations.

Table 3-20. Document Management database requirements on Microsoft platforms (page 2 of 2)

Component	Requirements	Additional Information	
Document Management Da	Document Management Database Software		
One of the following:			
 Oracle 9.2.0.8 Oracle 10.1.0.5 Oracle 10.2.0.3 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC 	Oracle requirements unknown—check https:// metalink.oracle.com for any necessary patches or configuration changes.	Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware. If you plan to use the same	
 Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) Oracle 11.2.0.1 Oracle 11.2.0.1 RAC 		database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See <i>Table 3-7</i> on page 46 for details.	
(support starting with SP7)			

Sun Platforms

Table 3-21. Document Management database requirements on Sun platforms (page 1 of 2)

Component	Requirements	Additional Information
Document Management D	atabase Server Platforms	
One of the following: Sun Solaris 8 Sun Solaris 9 Sun Solaris 10	All of the following: UltraSPARC III (1050 MHz) 512 MB RAM For installation and initial usage, HP recommends 180 MB for data and 180 MB for indexes in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-2 on page 29 for details. See Document Management Database Sizing Recommendations on page 87 for additional storage considerations.

Table 3-21. Document Management database requirements on Sun platforms (page 2 of 2)

Component	Requirements	Additional Information
Document Management Do	atabase Software	
One of the following:		
Oracle 9.2.0.8Oracle 10.1.0.5	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	 Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See <i>Table 3-8</i> on page 49 for details.
• Oracle 10.2.0.3	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 4878299. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		

HP Platforms

Table 3-22. Document Management database requirements on HP platforms (page 1 of 2)

Component	Requirements	Additional Information
Document Management Do	atabase Server Platforms	
One of the following: HP-UX 11 HP-UX 11i v1	 All of the following: PA-RISC (1 GHz) 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center
For: • HP-UX 11i v2	One of the following processor options: PA-RISC (1 GHz) Itanium 2 (1.4 GHz) Plus all of the following: 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system	database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-3 on page 32 for details. • See Document Management Database Sizing Recommendations on page 87 for additional storage considerations.

Table 3-22. Document Management database requirements on HP platforms (page 2 of 2)

Component	Requirements	Additional Information
Document Management Do	itabase Software	
One of the following:		
Oracle 9.2.0.8Oracle 10.1.0.5	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DE
• Oracle 10.2.0.3	All of the following: • For HP-UX 11 and HP-UX 11i v1 platforms only.	 Server on VMware. If you plan to use the same database for the PPM Center database and the Document
	 Install and apply Oracle patch 4467058 (on RA-RISC only). 	Management database, make sure that you select a suitable
	Install and apply Oracle patch 5872943 (on PA-RISC only).	database version. See Table 3-9 on page 52 for
	Install and apply Oracle patch 5618040 (on Itanium only).	details.
	Install and apply Oracle patch 5487686.	
	Install and apply Oracle patch 6085625.	
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		

IBM Platforms

Table 3-23. Document Management database requirements on IBM platforms (page 1 of 2)

Component	Requirements	Additional Information
Document Management Do	atabase Server Platforms	
One of the following: IBM AIX 5L version 5.2 TL9 IBM AIX 5L version 5.3 TL5	All of the following: POWER4/POWER5 512 MB RAM For installation and initial usage, HP recommends 180 MB for data and 180 MB for indexes in addition to the minimum requirements for the operating system	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-4 on page 35 for details. See Document Management Database Sizing Recommendations on page 87 for additional storage considerations.

Table 3-23. Document Management database requirements on IBM platforms (page 2 of 2)

Component	Requirements	Additional Information
Document Management Do	atabase Software	
One of the following:		
Oracle 9.2.0.8Oracle 10.1.0.5	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	 Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See Table 3-10 on page 55 for details.
• Oracle 10.2.0.3	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 5618040. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		

Red Hat Platforms

Table 3-24. Document Management database requirements on Red Hat platforms (page 1 of 2)

Component	Requirements	Additional Information
Document Management Da	tabase Server Platforms	
One of the following: Red Hat Enterprise Linux AS 3.0 Update 8 Red Hat Enterprise Linux AS 4.0 Update 4	 All of the following: x86 and compatible chip architectures (1.5 GHz) 512 MB RAM For installation and initial usage, HP recommends 180 MB for data and 180 MB for indexes in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-5 on page 38 for details. See Document Management Database Sizing Recommendations on page 87 for additional storage considerations.

Table 3-24. Document Management database requirements on Red Hat platforms (page 2 of 2)

Component	Requirements	Additional Information
Document Management Do	tabase Software	
One of the following:		
Oracle 9.2.0.8Oracle 10.1.0.5	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB
• Oracle 10.2.0.3	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 5618040. Install and apply Oracle patch 4878299. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	Server on VMware. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See Table 3-11 on page 58 for details.
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		

SUSE Platforms

Table 3-25. Document Management database requirements on SUSE platforms (page 1 of 2)

Component	Requirements	Additional Information
Document Management Do	atabase Server Platforms	
One of the following: SUSE Linux Enterprise Server 9 SP3 SUSE Linux Enterprise Server 10	 All of the following: x86 and compatible chip architectures (1.5 GHz) 512 MB RAM For installation and initial usage, HP recommends 180 MB for data and 180 MB for indexes in addition to the minimum requirements for the operating system 	 These are minimum requirements—faster processors and additional memory and storage are acceptable. If you plan to use the same database for the PPM Center database and the Document Management database, make sure that you select a suitable version of the platform. See Table 3-6 on page 41 for details. See Document Management Database Sizing Recommendations on page 87 for additional storage considerations.

Table 3-25. Document Management database requirements on SUSE platforms (page 2 of 2)

Component	Requirements	Additional Information
Document Management Do	atabase Software	
One of the following:		
Oracle 9.2.0.8Oracle 10.1.0.5	 For SUSE Linux Enterprise Server 9 SP3 platforms only. Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes. 	 Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DE Server on VMware. If you plan to use the same
• Oracle 10.2.0.3	 All of the following: Install and apply Oracle patch 4467058. Install and apply Oracle patch 5872943. Install and apply Oracle patch 5618040. Install and apply Oracle patch 4878299. Install and apply Oracle patch 5487686. Install and apply Oracle patch 6085625. 	database for the PPM Center database and the Document Management database, make sure that you select a suitable database version. See Table 3-12 on page 61 for details.
 Oracle 11.1.0.6 Oracle 11.1.0.6 RAC Oracle 11.1.0.7 Oracle 11.1.0.7 RAC (support starting with SP5) 	Oracle requirements unknown— check https://metalink.oracle.com for any necessary patches or configuration changes.	
Oracle 11.2.0.1Oracle 11.2.0.1 RAC (support starting with SP7)		

Document Management Database Sizing Recommendations

In the HP document management environment, document storage consists of:

- The document itself, stored on the Document Management Content Server file system (see *Document Management Content Server and Index Server Sizing Recommendations* on page 73 for those sizing details)
- The document's full-text index stored on the Document Management Index Server file system (see *Document Management Content Server and Index Server Sizing Recommendations* on page 73 for those sizing details)
- The document's metadata (for example, author and description) stored in the Document Management database

Use the following guidelines to provide a conservative estimate of the database storage required for your documents' metadata.

- 1. Determine or estimate the average *number of documents*.
- 2. Determine or estimate the average *number of versions* (of each document).
- 3. Estimate the metadata size as follows:

```
(5 KB) x (number of versions) x (number of documents)
```

Example

Continuing with the *Example* on page 74 where you were planning for 100,000 documents, 100 KB in size (on average), with four versions (on average), then the amount of storage necessary for your metadata would be:

• In the Document Management database:

```
(5 \text{ KB}) \text{ x } (4 \text{ versions}) \text{ x } (100,000 \text{ documents}) = 2 \text{ GB}
```

External Web Servers

PPM Center comes with an internal Web server to handle HTTP requirements in many implementations.

External Web servers are required in the following situations:

- PPM Center is deployed as a cluster configuration and you do not want to use a load balancer to distribute the load.
- HTTPS is required to access PPM Center.
- PPM Server is running on a UNIX platform and the HTTP port number must be lower than 1024.
- Integration with a single sign-on system that utilizes the PPM Center Web Server Module (such as CA SiteMinder) is desired.

An external Web server does not have to be installed on the same machine as the PPM Server. The optional Web servers supported by HP are listed in *Table 3-26*.

For More Information

For information about configuring an external Web server (as well as setting up a cluster environment), see the *System Administration Guide and Reference*.

Table 3-26. Web Server support (page 1 of 3)

Operating System	Requirements			
Microsoft Platforms				
 For: Microsoft Windows Server 2003 SP1, Standard Edition Microsoft Windows Server 2003 R2 SP2, Standard Edition 	The following: • Microsoft IIS 6.0			
 Microsoft Windows Server 2003 SP1, Enterprise Edition (32- and 64-bit) Microsoft Windows Server 2003 R2, Enterprise Edition (32- and 64-bit) Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (32- and 64-bit) 	One of the following: • Microsoft IIS 6.0 • Apache HTTP Server 2.0 (version 2.0.58 or later) • Apache HTTP Server 2.2 (version 2.2.4 or later)			
Sun Platforms				
For: Sun Solaris 9 Sun Solaris 10	One of the following: Sun Java System Web Server 6.1 (Service Pack 5 or later) Apache HTTP Server 2.0 (version 2.0.50 or later)			

Table 3-26. Web Server support (page 2 of 3)

Operating System	Requirements
HP Platforms	
For: • HP-UX 11i v1	The following: • Apache-based Web Server version 2.0.54.00 (available from HP)
For: • HP-UX 11i v2	The following: • Apache-based Web Server version 2.0.54.00 (available from HP)
For: • HP-UX 11i v3	The following: • Apache-based Web Server version 2.0.58.00 (available from HP)
IBM Platforms	
For: IBM AIX 5L version 5.2 IBM AIX 5L version 5.3	One of the following: IBM HTTP Server (IHS) version 2.0.47.1 (available from IBM) IBM HTTP Server (IHS) version 6.1 (available from IBM)
Red Hat Platforms	
For: Red Hat Enterprise Linux AS 4.0	One of the following: • Apache HTTP Server 2.0 (version 2.0.54 or later) • Apache HTTP Server 2.0 (version 2.0.58 or later)\
For: Red Hat Enterprise Linux AS 5.0	One of the following: • Apache HTTP Server 2.0 (version 2.0.59 or later) • Apache HTTP Server 2.2 (version 2.2.4 or later)

Table 3-26. Web Server support (page 3 of 3)

Operating System	Requirements
SUSE Platforms	
For: SUSE Linux Enterprise Server 9	The following: • Apache HTTP Server 2.2 (version 2.2.4 or later)
For: • SUSE Linux Enterprise Server 10	One of the following: • Apache HTTP Server 2.0 (version 2.0.59 or later) • Apache HTTP Server 2.2 (version 2.2.4 or later)

4 HP Migrator and Extension Products and Environments

Overview of HP Migrator and Extension Support

The system requirements provided in the following sections are in addition to the requirements for PPM Center version 7.5.

These supplemental products are available in English language only.

HP Migrators

Application Requirements

PPM Center version 7.5 used with HP Object Migrator supports the following Oracle E-Business Suite versions:

- 11
- 11i (11.5.1 through 11.5.10.2 (CU2)) (AD.I.6 support announced with SP2)
- Release 12 (12.0.0 through 12.0.4)
- Release 12 (12.0.5) (support announced with SP2)
- Release 12 (12.1.1) (support announced with SP5)

For additional version details, see *Table 4-1*.

Versions that are *not* supported on PPM Center version 7.5 are shown in the lightly shaded areas. Combinations shown in unshaded areas are supported for PPM Center version 7.5.

Table 4-1. Oracle E-Business Suite and HP Migrator versions supported on HP Deployment Management Extension for Oracle E-Business Suite (page 1 of 2)

Oracle E-Business Suite Version	Kintana Object* Migrator Version 5.1	Mercury Object Migrator Version 6.0	HP Object Migrator Version 7.5 °	Kintana GL* Migrator Version 2.0	Mercury GL Migrator Version 6.0
11–11.5.1	7.5.0	7.5.0	7.5.0	7.5.0	7.5.0
11.5.2–11.5.6	7.5.0	7.5.0	7.5.0		7.5.0
11.5.7 Application Object Library: FND.E Applications DBA: AD.F Common Modules: AK.D Financials Suite: Family Pack A	7.5.0	7.5.0	7.5.0		7.5.0
11.5.8 Application Object Library: FND.F Applications DBA: AD.G Common Modules: AK.E Financials Suite: Family Pack C	7.5.0	7.5.0	7.5.0		7.5.0
11.5.9 ^a Application Object Library: FND.G Applications DBA: AD.H Common Modules: AK.F Financials Suite: Family Pack D	7.5.0	7.5.0	7.5.0		7.5.0
11.5.10 with FND.H Mini Pack ^{a, b, d} Application Object Library: FND.H Applications DBA:AD.I Common Modules: AK.G Financials Suite: Family Pack F		7.5.0	7.5.0		7.5.0
11.5.10.2 (CU2) ^{c, d} Application Object Library:FND.H Applications DBA: AD.I.6 Common Modules: AK.G Financials Suite: Family Pack F		7.5.0	7.5.0		7.5.0

Table 4-1. Oracle E-Business Suite and HP Migrator versions supported on HP Deployment Management Extension for Oracle E-Business Suite (page 2 of 2)

Oracle E-Business Suite Version	Kintana Object* Migrator Version 5.1	Mercury Object Migrator Version 6.0	HP Object Migrator Version 7.5 °	Kintana GL* Migrator Version 2.0	Mercury GL Migrator Version 6.0
Release 12 12.0.0–12.0.5 Applications Technology: R12.ATG_PF.A- R12.ATG_PF.A.DELTA.4 Applications DBA: R12.AD.A- R12.AD.A.DELTA.4			7.5.0		
Release 12.1.1 Applications Technology: R12.ATG_PF.B Applications DBA: R12.B.1 Application Object Library: R12.FND.B			7.5.0		

- a. 11.5.8 with the FND.G Mini Pack is functionally equivalent to 11.5.9.
- b. 11.5.8-11.5.9 with the FND.H Mini Pack is functionally equivalent to 11.5.10 (for HP Object Migrator). 11.5.8-11.5.9 with the Financials Family Pack F is functionally equivalent to 11.5.10 (for HP GL Migrator).
- c. See the HP Object Migrator Oracle Apps Version 11.5.10.2 Compatibility Patch (#174141) readme for details.
- d. Support for the Oracle Applications E-Business Suite version 11.5.10 with the 10G database version requires installation of patch154770. See the HP Object Migrator Version 6.0 Database version 10G Compatibility Patch (#154770) readme for details.
- e. Support for Oracle E-Business Suite release 12.0.5 announced with SP2.
- f. Support for Oracle E-Business Suite release 12.1.1 announced with SP5.

File and Table Space Requirements

Table 4-2 lists the file and table space requirements for HP Object Migrator. The table space sizings may vary widely depending on your database version, configuration, and the number of entities you have under version control.

Table 4-2. HP Object Migrator file and table space requirements

Item	Required Space	Recommended Space	
Install bundle	30 MB (temporary)	35 MB (temporary)	
Install scripts	5 MB		
Programs (.rdf files)	1.5 MB per program 30 MB total		
Interface tables	30 MB	60 MB	
Indexes on interface tables	20 MB	30 MB	
Archive tables and indexes	30 MB* *See <i>Archive Tables</i> , following.	60 MB	

Archive Tables

When saving an object to the object archive, HP Object Migrator takes the entire definition of the entity and stores it in special archive tables. The growth of these archive tables directly corresponds to the number of objects and the number of versions put into these tables. For some objects, complexity and size may also be a factor.

If you plan to periodically store versions of entire groups of objects rather than only objects that change, then more table space will be required than the recommended 30 MB. HP recommends starting with a 30 MB allocation and then adding table space as needed.

HP Deployment Management Extension for Oracle E-Business Suite

PPM Center version 7.5 used with HP Deployment Management Extension for Oracle E-Business Suite supports the following Oracle E-Business Suite releases:

- 11–11.5.6
- 11.5.7
 - Application Object Library: FND.E
 - o Applications DBA: AD.F
 - Common Modules: AK.D
 - o Financials Suite: Family Pack A
- 11.5.8
 - Application Object Library: FND.F
 - o Applications DBA: AD.G
 - o Common Modules: AK.E
 - Financials Suite: Family Pack C
- 11.5.9
 - o Application Object Library: FND.G
 - o Applications DBA: AD.H
 - Common Modules: AK.F
 - Financials Suite: Family Pack D

- 11.5.10
 - Application Object Library: FND.H
 - Applications DBA:AD.I
 - Common Modules: AK.G
 - Financials Suite: Family Pack F
- 11.5.10.2 (CU2)
 - o Application Object Library: FND.H
 - o Applications DBA: AD.I.6 (support for AD.I.6 announced with SP2)
 - Common Modules: AK.G
 - Financials Suite: Family Pack F
- Release 12.0.0–12.0.4
 - Applications Technology: R12.ATG_PF.A-R12.ATG_PF.A.DELTA.4
 - o Applications DBA: R12.A–R12.AD.A.DELTA.4

Starting with PPM Center SP2, the HP Deployment Management Extension for Oracle E-Business Suite 7.5.0 support has been expanded to the following:

- Release 12.0.5
 - o Applications Technology: R12.ATG PF.A-R12.ATG PF.A.DELTA.4
 - o Applications DBA: R12.A–R12.AD.A.DELTA.4
- Release 12.1.1
 - Applications Technology: R12.ATG_PF.B
 - Applications DBA: R12.B.1
 - Application Object Library : R12.FND.B
- 11.5.8 with the FND.G Mini Pack is functionally equivalent to 11.5.9.
 11.5.8-11.5.9 with the FND.H Mini Pack is functionally equivalent to 11.5.10.

HP Deployment Management Extension for Oracle Technology

PPM Center version 7.5 used with HP Deployment Management Extension for Oracle Technology supports:

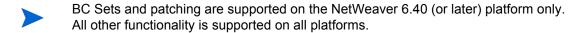
- Versions of Oracle tools that support Oracle database 8, 8i, 9i, or 10g
- Oracle Developer 2000, Developer 6i, or Developer 10i

The HP Deployment Management Extension for Oracle Technology has been updated to support migrating Oracle Forms 10G files and Oracle Reports 10G files from one Oracle instance to another.

HP Deployment Management Extension for SAP Solutions

PPM Center version 7.5 used with HP Deployment Management Extension for SAP Solutions supports the following:

- Basis 4.6B/4.6C
 - SAP R/3 4.6B/4.6C
- Basis 4.6D
 - o APO 3.10
- Web Application Server 6.20
 - o R/3 4.7
- NetWeaver 6.40
 - o ECC 5.0.0
 - o BW 3.50
 - o CRM 4.0.0
 - o EP 6.0
- NetWeaver 7.00
 - o ECC 6.0.0



5 Using PPM Center with HP and Other Software

Managing Application Change

In addition to the requirements for PPM Center version 7.5, the following requirements apply for the optional integrations:

- HP Quality Center version 9.0 at the latest patch level
- HP Quality Center version 9.2 patch 4 (or later)
- HP Change Control Management version 3.0
- HP Release Control version 4.00
- HP ServiceCenter version 6.2.4.1 (or later)
- HP Service Manager version 7.00 (support starting with SP1)
- Starting with SP2, the following languages are supported for both PPM Center and HP Service Manager 7.00: Brazilian Portuguese, French, German, Italian, Korean, Russian, and Spanish.
 - HP Service Manager version 7.10 (support starting with SP4)
 - HP Service Manager version 7.11 (support starting with SP5)
 - HP Service Manager version 7.11 for SM RFC on PPM Center 7.5 (support starting with SP6)
 - HP Service Manager version 9.20 for SM RFC on PPM Center 7.5 (support starting with SP7)

- HP Service Manager version 9.20 for Application Lifecycle Management (ALM) (support starting with SP7)
- BMC Remedy Action Request System version 5.0 with Remedy Help Desk
- For integration between Remedy and PPM Center, the PPM Server must be deployed on a Microsoft Windows platform only.
 - Mercury Application Mapping version 6.5
 - Mercury Application Mapping version 6.6
 - HP Universal CMDB (UCMDB) version 7.50 (support starting with SP2)
 - HP Universal CMDB (UCMDB) versions 8.0, 8.01, and 8.02 (support starting with SP5)

HP Center Management for Quality Center

The requirements for HP Center Management for Quality Center include the following:

- PPM Center version 7.5 with the following exceptions:
 - The PPM Server must be deployed on Microsoft Windows platforms only.
 - VMware deployments are supported.
 - Best Practices content must be installed on PPM Center.
 - If the Quality Center database uses Microsoft SQL Server, Oracle Windows interfaces must be installed (for example, Oracle Provider for OLE DB or Oracle ODBC).
 - o Only Microsoft Internet Explorer 6.0, 7.0 or 8.0 can be used.
- The following versions of HP Quality Center:
 - HP Quality Center version 9.0 or 9.2

o HP Quality Center version 10.0 (support starting with SP4)

In SP4, integration with HP Quality Center version 10.0 supports only non-version-controlled projects. Starting with SP5, projects that are version controlled are also supported when working with HP Quality Center version 10.0 Patch 6 or higher.



If you are using PPM Center to manage multiple Quality Center instances, all of the Quality Center instances must be at the same version and patch level.

6 Desupported Platforms and Products

Platforms and Products Desupported in Version 7.5

The following products are no longer used in support of version 7.5 of PPM Center.

This information is relevant to customers upgrading to version 7.5 from version 7.1. You will need to plan your upgrade such that replacements for any of these desupported platforms or products is completed prior to performing your PPM Center upgrade.

If you are upgrading from a version prior to version 7.1, incremental upgrades are necessary (for example: version 5.5 to 6.0, followed by version 6.0 to 7.1, and finally version 7.1 to 7.5). These interim upgrades potentially include their own collection of desupported platforms or products; therefore, consult the system requirements documents for these versions to ensure that your overall upgrade proceeds effectively and efficiently.

Server Environment

Components of the PPM Server that have been desupported are listed in the following sections.

Platforms

Red Hat Enterprise Linux AS 3.0 is no longer supported.

Databases

The following databases are no longer supported (or may never have been supported). Only the versions specified in Chapter 3, *Server-Side Products and Environments*, on page 21 are supported in this version.

- All Oracle versions 9.2.0.6 and earlier
- Oracle versions 10 through 10.1.0.2

JDK Software

The following Java Develop Kit versions are no longer supported:

- 1.4.2_12 (from Sun)
- 1.5.x (from Sun)
- 1.4.2_11 (from HP)
- 1.4.2.1 (from IBM)

Web Servers

The following Web servers are no longer supported on the specified platforms:

- Sun Java System Web Server 6.1
 - Red Hat Enterprise Linux AS 4.0
 - SUSE Linux Enterprise Server 9
- Apache HTTP Server 2.0 version 2.0.50
 - Red Hat Enterprise Linux AS 4.0
 - o SUSE Linux Enterprise Server 9

Document Management

Document Management version 5.3 SP2 is no longer supported.

Client Environment

Desupported products for the client environment are listed in the following sections.

Browsers

The following browser is no longer supported:

Mozilla Firefox 1.5.x

Java Plug-In Requirements

The following plug-in is no longer supported:

• 1.4.2

Optional Products

The following third-party software is not supported:

- Microsoft Project 2000 Standard Edition SP1
- Microsoft Excel 2000 Standard Edition

HP Extension and Migrator Environment

The following Extension is not supported in this version:

HP Deployment Management Extension for PeopleSoft Enterprise