HP Project and Portfolio Management Center

Software Version: 9.10

System Requirements and Compatibility Matrix

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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:

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Why version number 9.10?

PPM Center is an integrated part of the HP BTO Operations version 9 portfolio. Using this version number aligns PPM Center with other products that are releasing in the same time frame. PPM Center 9.10 builds on PPM Center 8.0x and is an extension of that product version family. Product releases within the HP BTO Operations version 9 portfolio will feature shared technology, common platforms, integrations, solutions, upgrade tools, and professional services offerings.

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You can visit the HP Software Support Web site at:

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- Review information about available services

- Enter into discussions with other software customers

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Contents

1 Introduction

About This Guide

Welcome to HP Project and Portfolio Management Center (PPM Center). The 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 this version of PPM Center. 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 *Installation and Administration Guide* for details about the available system configuration options.

Figure 1-1. PPM Center architecture

Chapter 2, *Client-Side Products and Environments,* on page 14 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 19 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 content
management components. Documents can be associated with various PPM
Center entities using one of these mechanisms:

● **Attachments.** This limited functionality is an integral portion of the
product and does not require additional software installation or hardware.

- **Document Management solution.** This software provides enhanced content management functionality within PPM Center and requires additional software that is available (free of charge) from HP.

- **Documentum integration.** PPM Center can be integrated with a separate (standalone) deployment of EMC Documentum. This approach can provide more seamless content management across your enterprise. The software to enable this integration can be purchased from HP.

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 80 details the third-party software supported for the PPM Center Extensions and Migrators.

Chapter 5, *Using PPM Center with HP Software and Other Software,* on page 87 details support requirements for the PPM Center integration products.

Chapter 6, *Platforms and Products Desupported in This Version,* on page 89 provides details on the platforms and products that have been desupported with the release of this software version.

An Overview of Language Support

The PPM Center software must be installed (or upgraded) and maintained on servers relying on either an English-language or Japanese-language operating system. Installation of language packs provide the appropriate language content for the principal areas of the PPM Center user interface and entities. PPM Center clients should use one of the languages deployed on the PPM Center instance.

The following language packs are available with the initial release of the product and are included in the installation bundle:

- English (en)
- Russian (ru)
- Portuguese (pt_BR)
- Spanish (es)
- Chinese (zh_CN)
- German (de)
- French (fr)
- Korean (ko)
- Turkish (tr)
- Italian (it)
- Japanese (ja)
- Dutch (nl)

Language codes (abbreviations) may need to be used when generating fiscal periods, translating customized entities, or identifying language-specific paths on the PPM Server. Make sure that you use the language codes shown in parentheses in the previous list and that the specified language is installed on PPM Center.

Related Information

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

- *Installation and Administration Guide*

  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 both the Document Management solution and the Documentum integration.

- *HP Solution Integrations Guide.*

  This document describes how to configure and use integrations of PPM Center with other HP products.

- *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
  - Microsoft Windows XP Professional SP2 (64-bit)
  - Microsoft® Windows® XP Professional SP3 (both 32- and 64-bit)
  - Microsoft® Vista® Business Edition SP2 (both 32- and 64-bit)
  - Microsoft® Vista® Enterprise Edition SP2 (both 32- and 64-bit)
  - Microsoft® Windows® 7 Enterprise Edition (both 32- and 64-bit)
- Mobile operating system
  - Windows Mobile 6.1
  - Blackberry OS 4.6.0.167
  - Symbian OS 9.3

- Hardware
  - 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
  - Microsoft Internet Explorer 7.0
    - Enable native XMLHTTP support

    Access this setting using **Tools > Internet Options > Advanced Tab > Security (Section).**
  - Microsoft Internet Explorer 8.0
    - Enable native XMLHTTP support

    Access this setting using **Tools > Internet Options > Advanced Tab > Security (Section).**
  - Mozilla Firefox 3.5
  - Mozilla Firefox 3.6

➤ In relation to Microsoft's desupport of Internet Explorer 6.0 (July 2010), PPM 9.10 is deprecating Internet Explorer 6.0 support. PPM utilizes new features and technologies that are not supported by IE 6.0. While most PPM features will work without issue in IE 6.0, customers may experience problems relating to browser performance, layout, and general functionality. HP recommends and fully supports customers using IE 7.0 and IE 8.0. In order to receive support, customers must be able to demonstrate the problem in a fully supported browser version.

Multilingual User Interface Support

To support the languages listed in Chapter 1, *Introduction,* on page 9, clients should be configured with at least one of the languages as that installed on the PPM Center instance.

For example, if your PPM Center instance has only 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_07 or later (32-bit only)

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 this version of PPM Center.

Microsoft Project

HP Project Management supports the following versions of Microsoft Project:

- Microsoft Project Standard 2003 SP3

- Microsoft Project Professional 2003 SP3
  (single-user or connected to Microsoft Office Project Server 2003)

- Microsoft Office Project Standard 2007 SP2

- Microsoft Office Project Professional 2007 SP2
  (single-user or connected to Microsoft Office Project Server 2007)

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

Visual Studio Tools for Office (VSTO)

- Version 2005 SE for Microsoft Project 2003

- Version 3.0 for Microsoft Project 2007

Microsoft Excel

The following versions of Microsoft Excel are supported:

- Microsoft Office Excel 2003 SP3

- Microsoft Office Excel 2007 SP1

Microsoft .NET Framework

- Microsoft .NET Framework version 3.5 or later

Language Support

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

For example, if your PPM Center instance has the French language pack installed, clients with a French session language should use French for their optional software products.

Do not attempt to use PPM Center with software products that have a mix of languages, such as a PPM Center instance supporting English, Korean, and French interacting with a German client having an Italian version of Excel software. All the software products used in your PPM Center client should rely on the same language, and this language must also be supported on the PPM Center instance.

3 Server-Side Products and Environments

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.

  o Standard Edition One, as well as the Standard and Enterprise Editions of the Oracle database versions are supported.

- 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 a stand-alone instance of PPM Center on a machine that hosts your Oracle database, be aware that HP supports use of 64-bit JVM for the Oracle database, but not for PPM Center.

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.

  - On x86 platforms, the distinction is made whether HP supports the 32- or 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

  - Where VMware ESX Server (on x86 platforms) is supported, this version of PPM Center 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).

- Language Support

  o The language for the operating system used for both the PPM Server and database must be either English or Japanese regardless of the languages deployed on the PPM Center instance.

  o Implementation of the various languages on the PPM Center instance may require additional configuration and maintenance.

  o National language support is available for the Managing Application Change integration software and the Migrators and Extensions on a limited basis—see the appropriate product documentation for details.

PPM Server Platforms

Microsoft Platforms

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

Operating System	Requirements	Additional Information
Platform (without either the Document Management solution or Documentum integration)		
One of the following: • Microsoft Windows Server 2003, Standard and Enterprise Edition (both 32- and 64-bit) • Microsoft Windows Server 2003 SP1, Standard and Enterprise Edition (32-bit only) • Microsoft Windows Server 2003 SP2, Standard and Enterprise Edition (both 32- and 64-bit) • Microsoft Windows Server 2003 R2, Standard and Enterprise Edition (both 32- and 64-bit) • Microsoft Windows Server 2003 R2 SP2, Standard and Enterprise Edition (both 32- and 64-bit) • Microsoft Windows Server 2008, SPs 1 through 2, Standard, Enterprise, and Datacenter 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. • PPM requires 32-bit JDK on 64-bit operating systems. • See *Hardware Sizing Estimates on page 44* for additional considerations.

Operating System	Requirements	Additional Information
When installed on an x86 VMware ESX Server version 3.5.0 or 4.0.0 partition, one of the following: • All Microsoft operating systems previously identified in this table	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 Software Support (hp.com/go/hpsoftwaresupport).
Platform (with Document Management solution)		
One of the following: • Microsoft Windows Server, 2008 SP1 (both 32- and 64-bit) • Microsoft Windows Server, 2008 SP2 (both 32- and 64-bit) • Microsoft Windows Server, 2008 R2 (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. • To integrate with Documentum Enterprise Edition 6.5, DFC 6.5 SP2 is required on PPM Server. It is recommended to have the latest SP of DFC.
JDK Software		
All Microsoft operating systems previously identified in this table	The following: • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (32-bit only) (available from Sun)	

Operating System	Requirements	Additional Information
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	
Secure Communications Software		
For: ● All previously identified Microsoft Windows Server 2003-based versions	One of the following: ● OpenSSH version 4.5p1, (included in Cygwin) ● OpenSSH version 4.6p1, (included in Cygwin) ● OpenSSH version 4.7p1, (included in Cygwin) ● OpenSSH version 4.9p1, (included in Cygwin) ● OpenSSH version 5.1p1, (included in Cygwin) ● VanDyke (VShell Server) version 2.6 ● Van Dyke (VShell Server) version 3.0 ● Van Dyke (VShell Server) version 3.5 ● Van Dyke (VShell Server) version 3.6.2	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

Operating System	Requirements	Additional Information
For: ● All previously identified Microsoft Windows Server 2008-based versions	One of the following: ● OpenSSH version 4.5p1, (included in Cygwin) ● OpenSSH version 4.6p1, (included in Cygwin) ● OpenSSH version 4.7p1, (included in Cygwin) ● OpenSSH version 4.9p1, (included in Cygwin) ● OpenSSH version 5.x, (included in Cygwin) ● VanDyke (VShell Server) version 2.6 ● Van Dyke (VShell Server) version 3.0 ● Van Dyke (VShell Server) version 3.5 ● Van Dyke (VShell Server) version 3.6.2	

Terminal Emulation Software

All Microsoft operating systems previously identified in this table	One of the following: ● "Dumb" mode ● VT100 mode ● VT220 mode	

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

Operating System	Requirements	Additional Information
Other Software		
All Microsoft operating systems previously identified in this table	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. • Oracle Java virtual machine (OracleJVM) must be enabled for PPM Center. For more information, see the *Installation and Administration Guide* or the *Upgrade Guide*.
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 *Email Server Requirements* 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 either the Document Management solution or Documentum integration)		
One of the following: • Sun Solaris 9, Updates 1 through 7 (Sparc) • Sun Solaris 10, Updates 1 through 8 (Sparc)	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 Management solution)		
The following: • 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. • To integrate with Documentum Enterprise Edition 6.5, DFC 6.5 SP2 is required on PPM Server. It is recommended to have the latest SP of DFC.
JDK Software		
All Sun operating systems previously identified in this table	The following: • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (32-bit only) (available from Sun)	

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

Operating System	Requirements	Additional Information
Secure Communications Software		
For: • All previously identified Sun Solaris 9-based versions	One of the following: • SSH-2.0_Sun_SSH_1.0 • OpenSSH version 4.6p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	
For: • All previously identified Sun Solaris 10-based versions	One of the following: • SSH-2.0_Sun_SSH_1.1 • OpenSSH version 4.6p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	

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

Operating System	Requirements	Additional Information
Terminal Emulation Software		
All Sun operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	
Other Software		
All Sun operating systems previously identified in this table	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. • Oracle Java virtual machine (OracleJVM) must be enabled for PPM Center. For more information, see the *Installation and Administration Guide* or the *Upgrade Guide*.
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 *Email Server Requirements* 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 either the Document Management solution or Documentum integration)		
One of the following: • HP-UX 11i v2 • HP-UX 11i v3	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.
When using the Integrity VM, one of the following: • HP-UX 11i v2 • HP-UX 11i v3	All of the following: • Itanium 2 (1.4 GHz) • 2 GB RAM • 600 MB disk space • 400 MB temp space • 300 MB on root partition (for installation only	
Platform (with Document Management solution)		
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. • To integrate with Documentum Enterprise Edition 6.5, DFC 6.5 SP2 is required on PPM Server. It is recommended to have the latest SP of DFC.

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 (except HP-UX 11i v2, PA-RISC)	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)	
HP-UX 11i v2, PA-RISC	The following: • HP-UX Java Development Kit (JDK) for the Java 2 Platform Standard Edition 6 (Java SE 6) version 6.0.03 (32-bit only) (available from HP)	
Secure Communications Software		
All HP operating systems previously identified in this table	One of the following: • OpenSSH version 4.2p1 • OpenSSH version 4.3p2 • OpenSSH version 4.4p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	
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	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. ● Oracle Java virtual machine (OracleJVM) must be enabled for PPM Center. For more information, see the *Installation and Administration Guide* or the *Upgrade Guide*.
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 *Email Server Requirements* 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 either the Document Management solution or Documentum integration)		
The following: • IBM AIX 5L version 5.3 • IBM AIX 5L version 6.1	All of the following: • POWER4/POWER5 (32-bit only) • 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 solution)		
The following: • IBM AIX 5L version 5.3 TL9	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. • To integrate with Documentum Enterprise Edition 6.5, DFC 6.5 SP2 is required on PPM Server. It is recommended to have the latest SP of DFC.
JDK Software		
All IBM operating systems previously identified in this table	The following: • Java(TM) SE Runtime Environment (build pap3260sr7-20091215_02(SR7)) IBM J9 VM (build 2.4, JRE 1.6.0 IBM J9 2.4 AIX ppc-32 jvmap3260sr7-20091214_49398	

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

Operating System	Requirements	Additional Information
Secure Communications Software		
For: • IBM AIX 5L version 5.3 • IBM AIX 5L version 6.1	One of the following: • OpenSSH version 4.1p1 • OpenSSH version 4.3p2 • OpenSSH version 4.4p1 • OpenSSH version 4.5p1 • OpenSSH version 4.6p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	
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	One 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. • Oracle Java virtual machine (OracleJVM) must be enabled for PPM Center. For more information, see the *Installation and Administration Guide* or the *Upgrade Guide*.
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 *Email Server Requirements* on page 44 for details.

Red Hat Platforms

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

Operating System	Requirements	Additional Information
Platform (without either the Document Management solution or Documentum integration)		
One of the following: • Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) • Red Hat Enterprise Linux AS 5.0, Updates 1 through 5 (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 version 3.5.0 or 4.0.0 partition, one of the following: • Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) • Red Hat Enterprise Linux AS 5.0, Updates 1 through 5 (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 Software Support (hp.com/go/hpsoftwaresupport)

Table 3-5. PPM Server requirements on Red Hat platforms (page 2 of 4)

Operating System	Requirements	Additional Information
Platform (with Document Management solution)		
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 • 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. • To integrate with Documentum Enterprise Edition 6.5, DFC 6.5 SP2 is required on PPM Server. It is recommended to have the latest SP of DFC. **Note:** For information about Red Hat Enterprise Linux patch level support for Documentum, see your EMC Documentum product documentation or the Powerlink website (http://powerlink.EMC.com).
JDK Software		
All Red Hat operating systems previously identified in this table	The following: • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (32-bit only) (available from Sun)	

Table 3-5. PPM Server requirements on Red Hat platforms (page 3 of 4)

Operating System	Requirements	Additional Information
Secure Communications Software		
For: ● Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit)	One of the following: ● OpenSSH version 4.3p1 ● OpenSSH version 4.3p2 ● OpenSSH version 4.4p1 ● OpenSSH version 4.5p1 ● OpenSSH version 4.6p1 ● OpenSSH version 4.7p1 ● OpenSSH version 4.9p1 ● Reflection for Secure IT for Unix v7.1	
For: ● Red Hat Enterprise Linux AS 5.0, Updates 1 through 5 (both 32- and 64-bit)	One of the following: ● OpenSSH version 4.3p2 (included with the product bundle from Red Hat, Inc.) ● OpenSSH version 4.4p1 ● OpenSSH version 4.5p1 ● OpenSSH version 4.6p1 ● OpenSSH version 4.7p1 ● OpenSSH version 4.9p1 ● Reflection for Secure IT for Unix v7.1	
Terminal Emulation Software		
All Red Hat operating systems previously identified in this table	One of the following: ● "Dumb" mode ● VT100 mode ● VT220 mode	

Table 3-5. PPM Server requirements on Red Hat platforms (page 4 of 4)

Operating System	Requirements	Additional Information
Other Software		
All Red Hat operating systems previously identified in this table	One 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. • Oracle Java virtual machine (OracleJVM) must be enabled for PPM Center. For more information, see the *Installation and Administration Guide* or the *Upgrade Guide*.
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 *Email Server Requirements* on page 44 for details.

SUSE Platforms

Table 3-6. PPM Server requirements on SUSE platforms (page 1 of 4)

Operating System	Requirements	Additional Information
Platform (without either the Document Management solution or Documentum integration)		
One of the following: ● SUSE Linux Enterprise Server 9, SPs1 through 4 (both 32- and 64-bit) ● SUSE Linux Enterprise Server 10, SPs 1 through 3 (both 32- and 64-bit) ● SUSE Linux Enterprise Server 11 (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 3.5.0, or 4.0.0 partition, one of the following: ● All SUSE Linux operating systems previously identified in this table	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 Software Support (hp.com/go/hpsoftwaresupport)

Table 3-6. PPM Server requirements on SUSE platforms (page 2 of 4)

Operating System	Requirements	Additional Information
Platform (with Document Management solution)		
The following: • SUSE Linux Enterprise Server 10 SP2	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. • To integrate with Documentum Enterprise Edition 6.5, DFC 6.5 SP2 is required on PPM Server. It is recommended to have the latest SP of DFC.
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_07 (32-bit only) (available from Sun)	
Secure Communications Software		
For: • SUSE Linux Enterprise Server 9, SPs1 through 4 (both 32- and 64-bit)	One of the following: • OpenSSH version 4.3p1 • OpenSSH version 4.3p2 • OpenSSH version 4.4p1 • OpenSSH version 4.5p1 • OpenSSH version 4.6p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	

Table 3-6. PPM Server requirements on SUSE platforms (page 3 of 4)

Operating System	Requirements	Additional Information
For: • SUSE Linux Enterprise Server 10 (both 32- and 64-bit)	One of the following: • OpenSSH version 4.1p1 • OpenSSH version 4.3p1 • OpenSSH version 4.3p2 • OpenSSH version 4.4p1 • OpenSSH version 4.5p1 • OpenSSH version 4.6p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	
For: • SUSE Linux Enterprise Server 10, Updates 1 through 3 (both 32- and 64-bit) • SUSE Linux Enterprise Server 11 (both 32- and 64-bit)	One of the following: • OpenSSH version 4.2p1 • OpenSSH version 4.3p1 • OpenSSH version 4.3p2 • OpenSSH version 4.4p1 • OpenSSH version 4.5p1 • OpenSSH version 4.6p1 • OpenSSH version 4.7p1 • OpenSSH version 4.9p1 • Reflection for Secure IT for Unix v7.1	
Terminal Emulation Software		
All SUSE Linux operating systems previously identified in this table	One of the following: • "Dumb" mode • VT100 mode • VT220 mode	

Table 3-6. PPM Server requirements on SUSE platforms (page 4 of 4)

Operating System	Requirements	Additional Information
Other Software		
All SUSE Linux operating systems previously identified in this table	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. • Oracle Java virtual machine (OracleJVM) must be enabled for PPM Center. For more information, see the *Installation and Administration Guide* or the *Upgrade Guide*.
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 *Email Server Requirements* 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 Software 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 *Installation and Administration Guide.*

PPM Center Database Platforms

Microsoft Platforms

Table 3-7. PPM Center database requirements on Microsoft platforms

Component	Requirements	Additional Information
Platform		
One of the following: • Microsoft Windows Server 2003, Standard and Enterprise Edition (64-bit only) • Microsoft Windows Server 2003 R2, Standard and Enterprise Edition (64-bit only) • Microsoft Windows Server 2003 R2 SP2, Standard and Enterprise Edition (64-bit only) • Microsoft Windows Server 2008, Datacenter, Standard, and Enterprise Edition (64-bit only)	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 supported version of the platform.
Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 supported database version.

Sun Platforms

Table 3-8. PPM Center database requirements on Sun platforms

Component	Requirements	Additional Information
Platform		
One of the following: • Solaris 9, Updates 1 through 7 • Solaris 10, Updates 1 through 8	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 supported version of the platform.
Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 supported database version.

HP Platforms

Table 3-9. PPM Center database requirements on HP platforms (page 1 of 2)

Component	Requirements	Additional Information
Platform		
One of the following: • HP-UX 11i v2 • HP-UX 11i v3	All of the following: • PA-RISC (1 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 supported version of the platform.
Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 supported database version.

Component	Requirements	Additional Information
Platform		
One of the following: • HP-UX 11i v2 • HP-UX 11i v3	All of the following: • Itanium 2 (1.4 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 supported version of the platform.
Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 supported database version.

IBM Platforms

Table 3-10. PPM Center database requirements on IBM platforms

Component	Requirements	Additional Information
Platform		
One of the following: • IBM AIX 5L version 5.3 • IBM AIX 5L version 6.1	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 supported version of the platform.
Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 supported database version.

Red Hat Platforms

Table 3-11. PPM Center database requirements on Red Hat platforms

Component	Requirements	Additional Information
Platform		
One of the following: ● Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) ● Red Hat Enterprise Linux AS 5.0, Updates 1 through 5 (both 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, 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 supported version of the platform.
Database Software		
One of the following:		
● Oracle 11.1.0.7 ● Oracle 11.1.0.7 RAC ● Oracle 11.2.0.1.0 ● Oracle 11.2.0.1.0 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 supported database version.

SUSE Platforms

Table 3-12. PPM Center database requirements on SUSE platforms

Component	Requirements	Additional Information
Platform		
One of the following: ● SUSE Linux Enterprise Server 9, SPs1 through 4 (both 32- and 64-bit) ● SUSE Linux Enterprise Server 10, SP1 (both 32- and 64-bit) ● SUSE Linux Enterprise Server 11 (both 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 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 supported version of the platform.
Database Software		
One of the following:		
● Oracle 11.1.0.7 ● Oracle 11.1.0.7 RAC ● Oracle 11.2.0.1.0 ● Oracle 11.2.0.1.0 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 supported database version.

Database Character Sets

Table 3-13 lists the database character sets supported for English-language deployments of this version 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

You should also specify:

- AL32UTF8 for NLS_CHARACTERSET
- AL16UTF16 for NLS_NCHAR_CHARACTERSET

Document Management Solution

Document Management Servers

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

- Version 6.5 SP2 of the Documentum Foundation Classes

- Version 6.5 of the Documentum Content Server

- Version 6.5 of the Documentum Index Server

➤ For new Document Management deployments, HP recommends that you install the version 6.5 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 10.

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 Content Server Platform		
One of the following: • Microsoft Windows Server 2003 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 (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 59 for additional storage considerations.
Document Management Index Server Platform		
One of the following: • Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (32-bit) • Microsoft Windows Server 2003 SP2, Enterprise Edition (32-bit)	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 59 for additional storage considerations.

Sun Platforms

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

Component	Requirements	Additional Information
Document Management Content Server Platform		
The following: • Sun 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 59 for additional storage considerations.
Document Management Index Server Platform		
The following: • Sun 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 59 for additional storage considerations.

HP Platforms

Table 3-16. Document Management server requirements on HP platforms

Component	Requirements	Additional Information
Document Management Content Server Platform		
For: • HP-UX 11i v2 Update 2	One of the following processor options: • PA-RISC 2.0 (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	• 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 59 for additional storage considerations.
For: • HP-UX 11i v3 Update 1	All of the following: • Itanium 2 (1.4 GHz) • 512 MB RAM • 700 MB disk space (for installation only in addition to the minimum requirements for the operating system	
Document Management Index Server Platform		
For: • HP-UX 11i v2 Update 2	One of the following processor options: • PA-RISC 2.0 (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	• 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 59 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 5.3 TL9	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 59 for additional storage considerations.
Document Management Index Server Platform		
The following: • IBM AIX 5L version 5.3 TL9	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 59 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 4.0 • Red Hat Enterprise Linux AS 5.0	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 59 for additional storage considerations.
Document Management Index Server Platform		
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 • 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 59 for additional storage considerations.

> For information about Red Hat Enterprise Linux patch level support for Documentum, see your EMC Documentum product documentation or the Powerlink website (http://powerlink.EMC.com)..

SUSE Platforms

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

Component	Requirements	Additional Information
Document Management Content Server Platform		
The following: • SUSE Linux Enterprise Server 10 SP2	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 59 for additional storage considerations.
Document Management Index Server Platform		
The following: • SUSE Linux Enterprise Server 10 SP2	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 59 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 67 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 KB index size) x (4 versions) x (100,000 documents) = 12 GB

Document Management Database

Microsoft Platforms

Table 3-20. Document Management database requirements on Microsoft platforms

Component	Requirements	Additional Information
Document Management Database Server Platforms		
One of the following: • Microsoft Windows Server 2003 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 (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 supported version of the platform. See *Table 3-1 on page 22* for details. • See *Document Management Database Sizing Recommendations* on page 67 for additional storage considerations.
Document Management Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 database for the PPM Center database and the Document Management database, make sure that you select a supported database version. See *Table 3-7 on page 45* for details.

Sun Platforms

Table 3-21. Document Management database requirements on Sun platforms

Component	Requirements	Additional Information
Document Management Database Server Platforms		
One of the following: • 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 supported version of the platform. See *Table 3-2* on page 27 for details. • See *Document Management Database Sizing Recommendations* on page 67 for additional storage considerations.
Document Management Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 database for the PPM Center database and the Document Management database, make sure that you select a supported database version. See *Table 3-8* on page 46 for details.

HP Platforms

Table 3-22. Document Management database requirements on HP platforms

Component	Requirements	Additional Information
Document Management Database Server Platforms		
The following: • HP-UX 11i v3 Update 1	All of the following: • PA-RISC 2.0 (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 database and the Document Management database, make sure that you select a supported version of the platform. See *Table 3-3* on page 30 for details. • See *Document Management Database Sizing Recommendations* on page 67 for additional storage considerations.
For: • HP-UX 11i v2 Update 2	One of the following processor options: • PA-RISC 2.0 (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	
Document Management Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 database for the PPM Center database and the Document Management database, make sure that you select a supported database version. See *Table 3-9* on page 47 for details.

IBM Platforms

Table 3-23. Document Management database requirements on IBM platforms

Component	Requirements	Additional Information
Document Management Database Server Platforms		
One of the following: • IBM AIX 5L version 5.3 TL9	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 supported version of the platform. See *Table 3-4* on page 33 for details. • See *Document Management Database Sizing Recommendations* on page 67 for additional storage considerations.
Document Management Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 database for the PPM Center database and the Document Management database, make sure that you select a supported database version. See *Table 3-10* on page 49 for details.

Red Hat Platforms

Table 3-24. Document Management database requirements on Red Hat platforms

Component	Requirements	Additional Information
Document Management Database Server Platforms		
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) • 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 supported version of the platform. See *Table 3-5 on page 36* for details. • See *Document Management Database Sizing Recommendations* on page 67 for additional storage considerations. **Note:** For information about Red Hat Enterprise Linux patch level support for Documentum, see your EMC Documentum product documentation or the Powerlink website (http://powerlink.EMC.com).
Document Management Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 database for the PPM Center database and the Document Management database, make sure that you select a supported database version. See *Table 3-11 on page 50* for details.

SUSE Platforms

Table 3-25. Document Management database requirements on SUSE platforms

Component	Requirements	Additional Information
Document Management Database Server Platforms		
One of the following: • SUSE Linux Enterprise Server 10 SP2	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 supported version of the platform. See *Table 3-6 on page 40* for details. • See *Document Management Database Sizing Recommendations* on page 67 for additional storage considerations.
Document Management Database Software		
One of the following:		
• Oracle 11.1.0.7 • Oracle 11.1.0.7 RAC • Oracle 11.2.0.1.0 • Oracle 11.2.0.1.0 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 database for the PPM Center database and the Document Management database, make sure that you select a supported database version. See *Table 3-12 on page 51* for details.

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 59 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 59 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 60 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 KB) x (4 versions) x (100,000 documents) = 2 GB

Documentum Integration

In addition to HP version of EMC Documentum Content Server Enterprise Edition (EE) software bundled with PPM Center, you can also integrate PPM Center with a stand-alone instance of EMC Documentum Enterprise Edition.

Preparing to Integrate PPM Center with a Stand-Alone Instance of EMC Documentum Enterprise Edition

If your organization already has a stand-alone instance of EMC Documentum Content Server EE (version 6.5) installed, you can integrate PPM Center with that instance to implement HP document management. To do this, you must first purchase and download the HP PPM Center Documentum Connector software.

DFC Supported PPM Server Platforms

The integration with Documentum requires installation of DFC on PPM server. DFC is supported on the following PPM server platforms:

- Microsoft Platforms

  - Microsoft Windows Server 2003 R2 with SP2 (32-bit)

  - Microsoft Windows Server 2003 SP2 (32-bit)

  - Microsoft Windows Server 2008 (32-bit)

- Sun Platform

  - Solaris 10

- HP-UX Platform

  - HP-UX 11i v2

- IBM Platform

  - AIX 5.3

- Red Hat Platform

  - Red Hat Enterprise Linux 4.7

- SUSE Platforms

  - SUSE Linux Enterprise Desktop 10 SP2

For more information, see the Powerlink website (http://powerlink.EMC.com).

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 hardware 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 *Installation and Administration Guide*.

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

Operating System	Requirements
Microsoft Platforms	
For: • Microsoft Windows Server 2003 (both 32- and 64-bit) • Microsoft Windows Server 2003 SP2 (both 32- and 64-bit) • Microsoft Windows Server 2003 R2, SPs 1 through 2 (both 32- and 64-bit)	One of the following: • Microsoft IIS 6.0 (both 32- and 64-bit) • Apache HTTP 2.0 (32-bit only) • Apache HTTP 2.2 (32-bit only)
For: • Microsoft Windows Server 2008, SPs 1 through 2 (both 32- and 64-bit)	The following: • Microsoft IIS 7.0 (32-bit only)

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

Operating System	Requirements
For: • Microsoft Windows Server 2008, SPs 1 through 2 (64-bit only)	One of the following: • Apache HTTP 2.0 (32-bit only) • Apache HTTP 2.2 (32-bit only)
For: • Microsoft Windows Server 2008 R2 (both 32- and 64-bit)	Tthe following: • Microsoft IIS 7.5 (64-bit only)
Sun Platforms	
For: • Sun Solaris (SPARC-32)	One of the following: • Sun Java System Web Server 6.1 (GA and Updates 1 through 9) (32-bit only) • Sun Java System Web Server 7.0 (GA and Updates 1 through 2) (32-bit only) • Apache HTTP Server 2.0 (versions 2.0.48 or later) (32-bit only)
For: • Sun Solaris 9, Updates 1 through 7 (PA-RISC/Itanium) • Sun Solaris 10, Updates 1 through 8 (PA-RISC/Itanium)	One of the following: • Sun Java System Web Server 6.1 (GA and Updates 1 through 9) (64-bit only) • Sun Java System Web Server 7.0 (GA and Updates 1 through 2) (64-bit only) • Apache HTTP Server 2.0 (version 2.0.48 or later) (64-bit only)

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

Operating System	Requirements
HP Platforms	
For: ● HP-UX 11i v2 ● HP-UX 11i v3	One of the following: ● Apache HTTP Server 2.0 (version 2.0.48 or later) (both 32- and 64-bit) ● Apache HTTP Server 2.2 (32-bit only on 64-bit HP-UX)
IBM Platforms	
For: ● IBM AIX 5L version 5.3 ● IBM AIX 5L version 6.1	The following: ● IBM HTTP Server (IHS) version 6.1.0 (32-bit only) (available from IBM)
Red Hat Platforms	
For: ● Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) ● Red Hat Enterprise Linux AS 5.0, Updates 1 through 5 (both 32- and 64-bit)	One of the following: ● Apache HTTP Server 2.0 (version 2.0.50 or later) (both 32- and 64-bit) ● Apache HTTP Server 2.2 (both 32- and 64-bit)
SUSE Platforms	
For: ● SUSE Linux Enterprise Server 9, SPs 1 through 4 (both 32- and 64-bit) ● SUSE Linux Enterprise Server 10, SPs 1 through 3 (both 32- and 64-bit) ● SUSE Linux Enterprise Server 11 (both 32- and 64-bit)	The following: ● Apache HTTP Server 2.0 (version 2.0.50 or later) (both 32- and 64-bit) ● Apache HTTP Server 2.2 (both 32- and 64-bit)

Operational Reporting Solution

BusinessObjects Software

The Operational Reporting solution for PPM Center requires the following version of BusinessObjects software:

- BusinessObjects Enterprise XI 3.1 with Service Pack 2

  After successful installation of BusinessObjects Enterprise XI 3.1, upgrade the existing BO installation BO XI 3.1 to Service Pack 2 (BO XI 3.1 SP2).

BusinessObjects Server Requirements

BusinessObjects Enterprise XI 3.1 is supported for the following operating systems:

- Windows
- Linux
- HP-UX
- IBM AIX
- Sun Solaris

For more information on your hardware and software requirements, you can access the SAP documents from the SAP BusinessObjects Solution Portfolio Knowledge Center (help.sap.com/content/bobj/bobj/index.htm).

Table 3-27 provides server requirements on platforms that are also supported by PPM Center. If an independant machine is to be used to host BusinessObjects server, other versions of operating systems may also be used. For more details, see SAP documentation specific to your operating system.

Table 3-27. Business Object server requirements (page 1 of 5)

Component	Requirements	Additional Information
Microsoft Platforms		
One of the following: • Microsoft Windows Server 2003 SP1 (32-bit only) • Microsoft Windows Server 2003 SP2 (both 32- and 64-bit) • Microsoft Windows Server 2003 R2 (both 32- and 64-bit) • Microsoft Windows Server 2008 (both 32- and 64-bit)	All of the following: • 2.0 GHz Pentium 4-class processor • 2 GB RAM • 5.6 GB hard drive for BusinessObjects Enterprise complete install • 6.75 GB hard drive for BusinessObjects Enterprise patch install • 2 GB hard drive for BusinessObjects Enterprise Client patch install	• These are minimum requirements—faster processors and additional memory and storage are acceptable. • BusinessObjects Enterprise software is supported running on 32-bit versions of Windows running on x86 and x64 CPUs made by AMD and Intel. • BusinessObjects Enterprise software is supported running on 64-bit versions of Windows running on x64 CPUs made by AMD and Intel.

Table 3-27. Business Object server requirements (page 2 of 5)

Component	Requirements	Additional Information
Sun Platforms		
One of the following: ● Solaris 9 (SPARC) ● Solaris 10(SPARC)	All of the following: ● SPARC v8plus ● 1 GB RAM ● 5.25 GB hard drive for BusinessObjects Enterprise complete install ● 3.3 GB hard drive for BusinessObjects Enterprise patch install ● 2 GB for hard drive for BusinessObjects Enterprise Client patch install Solaris 9 minimum install plus the following packages: ● kernel patch 112233-11 or higher ● libc 112874-16 or higher ● C++ run-time 111711-11 or higher ● linker patch 112963-17 or higher ● zlib patch 115754-02 or higher ● libm.so.1 SUNW_1.1.1	● These are minimum requirements—faster processors and additional memory and storage are acceptable. ● The 32-bit compiled binaries of BusinessObjects Enterprise software is supported on 32-bit and 64-bit versions of the Solaris operating system. ● Higher patches beyond the specified minimum patch requirement may be used, but they may not be officially tested by BusinessObjects products.

Table 3-27. Business Object server requirements (page 3 of 5)

Component	Requirements	Additional Information
(continued from previous page)	Solaris 10 minimum install plus the following packages: • SUNWgzip • SUNWzlib • SUNWscpu • SUNWbash • SUNWbcp • SUNWxcu4 XCU4 Utilities • SUNWxwfnt • SUNWxwplt • SUNWlibC • SUNWeu8os - American English/ UTF-8 L10N For OS Environment User Files • SUNWeuluf - UTF-8 L10N For Language Environment User Files • SUNWuiu8 - Iconv modules for UTF-8 Locale • SUNWulcf - UTF-8 Locale Environment Common Files • SUNWmfrun • SUNWxwice	(continued from previous page)

Table 3-27. Business Object server requirements (page 4 of 5)

Component	Requirements	Additional Information
HP Platforms		
One of the following: • HP-UX 11.23 (IA-64) • HP-UX 11.31 (IA-64)	All of the following: • 2 GB RAM • 7 GB hard drive for BusinessObjects Enterprise complete install HP-UX 11.23 IA-64 minimum install plus the following patch packages: • HPUX11i-OE_B.11.23.0706 (HP-UX Foundation Operating Environment Component) • PHSS_35966 • PHSS_37201 • PHCO_37228 • PHCO_37543 HP-UX 11.31 IA-64 minimum install plus the following patch package: • HP-UX BOE (Base Operating Environment) from March 2008	• These are minimum requirements—faster processors and additional memory and storage are acceptable.
IBM Platforms		
One of the following: • AIX 5L 5.3	All of the following: • 2 GB RAM • 6.25 GB hard drive for BusinessObjects Enterprise complete install • 4.5 GB hard drive for BusinessObjects Enterprise patch install	• These are minimum requirements—faster processors and additional memory and storage are acceptable.

Table 3-27. Business Object server requirements (page 5 of 5)

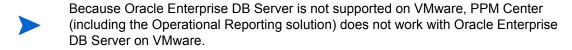| Component	Requirements	Additional Information
Red Hat Platforms		
One of the following: • Red Hat Linux Enterprise Server 4 • Red Hat Linux Advanced Server 4 • Red Hat Linux Enterprise Server 5 • Red Hat Linux Enterprise Advanced Platform Server 5	All of the following: • 2.0 GHz Pentium 4-class processor • 2 GB RAM • 5.5 GB hard drive for BusinessObjects Enterprise complete install • 3 GB hard drive for BusinessObjects Enterprise patch install Red Hat 4 minimum install plus: • compat-libstdc++-33-3.2.3-47.3.i386.rpm Red Hat 5minimum install plus: • RHBA-2007:0619-3	• These are minimum requirements—faster processors and additional memory and storage are acceptable. • BusinessObjects Enterprise software is supported running on 32-bit versions of Linux running on x86 (32-bit) and x64 CPUs (64-bit) made by AMD and Intel. • BusinessObjects Enterprise software is supported running on 64-bit versions of Linux running on x64 CPUs made by AMD and Intel
SuSE Platforms		
One of the following: • SuSE Linux Enterprise Server 9 SP3 • SuSE Linux Enterprise Server 10	All of the following: • 2.0 GHz Pentium 4-class processor • 2 GB RAM • 5.5 GB hard drive for BusinessObjects Enterprise complete install • 3 GB hard drive for BusinessObjects Enterprise patch install SuSE 9 minimum install plus: • XFree86-4.3.99.902-43.22 (XFree86) • XFree86-libs-4.3.99.902-43.22 (XFree86 Libs)	• These are minimum requirements—faster processors and additional memory and storage are acceptable. • BusinessObjects Enterprise software is supported running on 32-bit versions of Linux running on x86 (32-bit) and x64 CPUs (64-bit) made by AMD and Intel. • BusinessObjects Enterprise software is supported running on 64-bit versions of Linux running on x64 CPUs made by AMD and Intel

BusinessObjects Database Client Software

Requirements and recommendations for setting up the database for Operational Reporting are as follows:

- HP strongly recommends that you create an Oracle database specifically for Operational Reporting (independent of your PPM Center database instance).

- HP strongly recommends that you use the Enterprise Edition of Oracle Database for the Operational Reporting database. The advanced compression and partitioning featured in the Enterprise Edition significantly improve performance, especially if you report on a large and growing volume of data.

- Make sure that you configure the Operational Reporting database to use UTF-8 encoding, and add the following MLU database parameters:

  o NLS_LENGTH SEMANTICS = CHAR

  o NLS_CHARACTERSET = UTF8

  o NLS_NCHAR_CHARACTERSET = UTF8)

BusinessObjects Database

- Oracle 11.1.0.7 (RAC and Non-RAC)

- Oracle 11.2.0.1 (RAC and Non-RAC)

> Because Oracle Enterprise DB Server is not supported on VMware, PPM Center (including the Operational Reporting solution) does not work with Oracle Enterprise DB Server on VMware.

Check https://metalink.oracle.com for any necessary patches or configuration changes.

- Minimum requirement for SQL*Plus client on the BO instance

  - 11.1.0.7

- Oracle Client to be deployed on the BO server host machine

  - Recommend Oracle client Ver 11.x (although Ver 10.x is supported)

Other Software

- Browsers

  - Microsoft Internet Explorer 7.0

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 this version of PPM Center.

These supplemental products are available in English language only.

HP Migrators

Application Requirements

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

- 11

- 11i (11.5.1 through 11.5.10.2 (CU2))

- Release 12 (12.0.0 through 12.1.2)

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

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

Table 4-1. PPM Center versions supported with 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, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10
11.5.2–11.5.6	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10		7.5, 8.00, 8.00.01, 8.02, 9.10
11.5.7 Application Object Library: FND.E Applications DBA: AD.F Common Modules: AK.D Financials Suite: Family Pack A	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10		7.5, 8.00, 8.00.01, 8.02, 9.10
11.5.8 Application Object Library: FND.F Applications DBA: AD.G Common Modules: AK.E Financials Suite: Family Pack C	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10		7.5, 8.00, 8.00.01, 8.02, 9.10
11.5.9 [a] Application Object Library: FND.G Applications DBA: AD.H Common Modules: AK.F Financials Suite: Family Pack D	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10		7.5, 8.00, 8.00.01, 8.02, 9.10
11.5.10 with FND.H Mini Pack [b, d] Application Object Library: FND.H Applications DBA:AD.I Common Modules: AK.G Financials Suite: Family Pack F		7.5, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10		7.5, 8.00, 8.00.01, 8.02, 9.10
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, 8.00, 8.00.01, 8.02, 9.10	7.5, 8.00, 8.00.01, 8.02, 9.10		7.5, 8.00, 8.00.01, 8.02, 9.10

Table 4-1. PPM Center versions supported withOracle 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 12.0.0–12.1.2 [e] Applications Technology: R12.ATG_PF.A– R12.ATG_PF.B.DELTA.2 Applications DBA: R12.AD.A–R12.AD.B.DELTA.1			7.5, 8.00, 8.00.01, 8.02, 9.10		

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 patch 154770. See the HP Object Migrator Version 6.0 Database version 10G Compatibility Patch (#154770) readme for details.

e. HP Object Migrator version 7.5 requires patch PPMC_00090 in order to work with Oracle E-Business Suite Release 12.1.2.

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 *Archive Tables*, 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

This version of PPM Center 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

  - Applications DBA: AD.F

  - Common Modules: AK.D

  - Financials Suite: Family Pack A

- 11.5.8

  - Application Object Library: FND.F

  - Applications DBA: AD.G

  - Common Modules: AK.E

  - Financials Suite: Family Pack C

- 11.5.9

  - Application Object Library: FND.G

  - 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)

  - Application Object Library: FND.H

  - Applications DBA: AD.I.6

  - Common Modules: AK.G

  - Financials Suite: Family Pack F

- Release 12.0.0–12.1.2

  - Applications Technology: R12.ATG_PF.A–R12.ATG_PF.B.DELTA.2

  - Applications DBA: R12.A–R12.AD.B.DELTA.1

➤ 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

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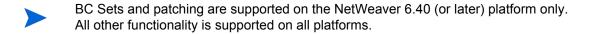Extension for Oracle Technology supports:

- 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

This version of PPM Center 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

  - APO 3.10

- Web Application Server 6.20

  - R/3 4.7

- NetWeaver 6.40

  - ECC 5.0.0

  - BW 3.50

  - CRM 4.0.0

  - EP 6.0

- NetWeaver 7.00

  - ECC 6.0.0

► BC Sets and patching are supported on the NetWeaver 6.40 (or later) platform only. All other functionality is supported on all platforms.

5 Using PPM Center with HP Software and Other Software

PPM Center supports integration with the following HP products and versions:

- HP Quality Center

  - 10.00 Patch 9 and later

  - 11.00

➤ PPM Center-Quality Center Integration Tool version 1.7.<*xxxx*> is required to integrate PPM Center with Quality Center version 10.00. This tool is not used to integrate PPM Center with Quality Center version 11.00 or later. The integration tool is provided with PPM Center software.

  The computer on which the integration tool runs must support Microsoft .NET Framework version 3.5 Service Pack 1.

- HP Release Control

  - 5.00

  - 9.10

- HP Service Manager when used to integrate PPM Center requests and Service Manager changes

➤ For this integration, HP supports integrating one PPM Center instance with multiple Service Manager instances at the same version.

  - 7.02 and later service packs

  - 7.10 and later service packs

  - 9.20

- HP Service Manager when used to integrate PPM Center tasks and Service Manager changes

  - 7.10 and later service packs

  - 9.20

- HP Universal CMDB when used for impact analysis of PPM Center requests

  - 8.00 and service packs

- HP Universal CMDB when used for service portfolio

  - 8.00 and service packs

- HP Center Management for Quality Center

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

  - PPM Center version 9.10 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).

    - Only Microsoft Internet Explorer 7.0 or 8.0 can be used.

  - HP Quality Center version 10.00

    - 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.

    - Only the English version of Quality Center is supported.

  - Oracle database version 11.1.0.7

6 Desupported Platforms and Products

Platforms and Products Desupported in This Version

The following products are no longer used with this version of PPM Center.

This information is relevant to customers upgrading to this version from version 8.00. 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 8.00, incremental upgrades are necessary (for example: version 7.1 to 7.5, followed by 7.5 to 8.00, and finally 8.00 to 9.10.). These interim upgrades potentially include their own collection of desupported platforms or products; therefore, consult the system requirements documents for these versions to ensure the best result for your overall upgrade process.

Server Environment

Desupported components of the PPM Server are listed in the following sections.

Platforms

The following platforms are no longer supported:

- Microsoft Windows Server 2003 SP1, Enterprise Edition (64-bit)
- HP-UX 11i v1

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 19 are supported in this version.

● Oracle version 11.1.0.6 or lower

Web Servers

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

● Sun Java System Web Server 5 on Solaris platforms

● IBM HTTP Server (IHS) version 2.0.47.1 for AIX platforms

● VMware ESX Server 2.5

● VMware ESX Server 3.0

SSH Software

The following versions of secure shell software are no longer supported on the specified platforms:

● OpenSSH version 4.2 and 4.3p2 for Microsoft platforms

● OpenSSH version 4.1p1 and 4.3p2 for Sun platforms

● OpenSSH version 4.1p1 for HP platforms

● OpenSSH version 4.1p1 on Red Hat AS4 platforms

● OpenSSH version 4.3p1 on Red Hat AS5 platforms

● OpenSSH version 4.1p1 for SUSE 9 platforms

Other Product

● Version 6.5 and version 6.5 SP1 of the Documentum Foundation Classes

Client Environment

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

Platforms

The following platform is no longer supported:

- Microsoft Vista Business and Enterprise Edition SP0
- Microsoft Vista Business and Enterprise Edition SP1

Browser

The following browser is no longer supported:

- Mozilla Firefox 2.2
- Mozilla Firefox 3.0
- Microsoft Internet Explorer 6.0

Microsoft Project

The following Microsoft Project products are no longer supported:

- Microsoft Office Project Standard 2007 SP1
- Microsoft Office Project Professional 2007 SP1
  (single-user or connected to Microsoft Office Project Server 2007)

Other Product

The following product is no longer supported:

- CA SiteMinder 5.5