

HP Project and Portfolio Management Center

Software Version: 9.14

System Requirements and Compatibility Matrix

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The following table indicates changes made to this document.

| Publication Date | Summary of Changes |
|-------------------------|--|
| October 29, 2010 (9.11) | <ul style="list-style-type: none">• Added Universal CMDB versions 9.00 and 9.01 support for PPM Center integrations with Universal CMDB• Added CCRM 9.1 support |
| July 2011 (9.12) | <ul style="list-style-type: none">• Added support for Microsoft Windows Server 2008 R1 SP2, Standard and Enterprise Edition (both 32- and 64-bit) as PPM server platforms• Added clarification that Microsoft Windows Server, 2008 R2 (64-bit) is supported as PPM server platforms starting from PPM Center version 9.12• Added Oracle 11.2.0.2.0 (RAC and Non-RAC) support for all PPM server platforms• Added HP Service Manager version 9.21 support for PPM Center integrations with HP Service Manager (ALM and SM RFC)• Added HP Quality Center version 11.00 and HP Application Lifecycle Management 11.00 support for CMQC solution• Added support for HP Universal CMDB version 8.06, 9.02, and 9.03 when used for impact analysis of PPM Center requests (using ALM) and for service portfolio• Added support for Microsoft Office Project 2010• Added Visual Studio Tools for Office (VSTO) Version 3.0 as pre-requisites for Microsoft Project 2007 and 2010• Added support for Microsoft Office Primary Interop Assemblies for Microsoft Project (Version 2003 for Microsoft Project 2003, Version 2007 for Microsoft Project 2007, and Version 2010 for Microsoft Project 2010)• Added support for use of HP Deployment Management Extension for Oracle E-Business Suite with Oracle E-Business Suite Release 12.1.3 (requires patch PPMC_00097 for the Extension at version 8.00 or patch PPMC_00098 for the Extension at version 9.10)• Removed support for Kintana GL*Migrator version 2.0 and Oracle E-Business Suite Release 11 and Releases 11.5.1 through 11.5.6 (which are early releases of 11i)• Updated the Java Plug-In version required to access the PPM Workbench when using the Mozilla Firefox 3.6 browser. |

| Publication Date | Summary of Changes |
|--------------------------------------|--|
| July 2011, Second Edition (9.12) | <ul style="list-style-type: none"> Added certification of Microsoft Hyper-V support running Microsoft Windows 2008 SP2 Enterprise Edition (32-bit) and Red Hat Enterprise Linux AS 4.0 (64-bit) as virtualization server platform Added support information for JDK 64-bit for Microsoft 2008 R2 Enterprise Edition (64-bit) and Red Hat Enterprise Linux AS 5.0, Updates 1 through 6 (64-bit) |
| October 2011, Third Edition (9.12) | <ul style="list-style-type: none"> Added clarification of types of Oracle editions (Standard Edition and Enterprise Edition) supported for PPM Center on all operating platforms |
| March 2012 (9.14) | <ul style="list-style-type: none"> Added clarification that only 32-bit Microsoft Internet Explorer 7.0/8.0 and 32-bit Java Plug-ins are supported Added Microsoft Internet Explorer 9.0 (32-bit) support Added VMware ESX 4.1 support Added SAP BusinessObjects Portfolio (SBOP) Enterprise XI 3.1 Service Pack 4 Fix Patch 1 support for Operational Reporting solution Added support for HP Universal CMDB versions 9.04 and 9.05 when used for impact analysis of PPM Center requests (using ALM) Added support for HP Service Manager 9.30 when used to integrate PPM Center tasks and Service Manager changes Added HP Application Lifecycle Management version 11.00 and version 11.00 Service Pack 2 support for integration with PPM Center Added mobile OS support for PPM mini app: iOS 4.0 and above; Android 2.2 and above Changed "Red Hat Enterprise Linux AS 5.0" to "Red Hat Enterprise Linux Advanced Platform 5.0" to reflect the product rebranding |
| June 2012, Second Edition (9.14) | <ul style="list-style-type: none"> Added Oracle 11.2.0.3 (Standard/Enterprise Edition) (RAC and Non-RAC) support for all PPM server platforms Added clarification that the Document Management Solution on page 57 provides system requirements and supportability matrices for the document management solution related to EMC Documentum Content Server Enterprise Edition (EE) software only, and also that only Oracle 11.1.0.7 is supported by Documentum DFC 6.5 SP2 |
| September 2012, Third Edition (9.14) | <ul style="list-style-type: none"> Added clarification of Oracle Enterprise Linux (OEL) version 5 support as PPM Server platform |
| March 2012, Fourth Edition (9.14) | <ul style="list-style-type: none"> Added clarification of Oracle 11.2.0.2 and 11.2.0.3 (Standard/Enterprise Edition) (RAC and Non-RAC) support for the Center Management for Quality Center solution Added clarification of VMware ESXi 5.0 support Added SAP BusinessObjects Enterprise XI 3.1 Service Pack 5 Fix Patch 3 (BO XI 3.1 SP5 FP3) support for Operational Reporting solution Content Pack 1.3 Restructured the Operational Reporting Solution section by adding two tables of compatibility matrix and simplifying the BusinessObjects Server Requirements section Modified the encoding requirements for Operational Reporting database in the BusinessObjects Database Client Software section Simplified the PPM Center Database Requirements section |
| April 2013, Fifth Edition (9.14) | <ul style="list-style-type: none"> Added clarification that Internet Explorer 9.0 is recommended if using IE as browser. |



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

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1 Introduction

About This Guide

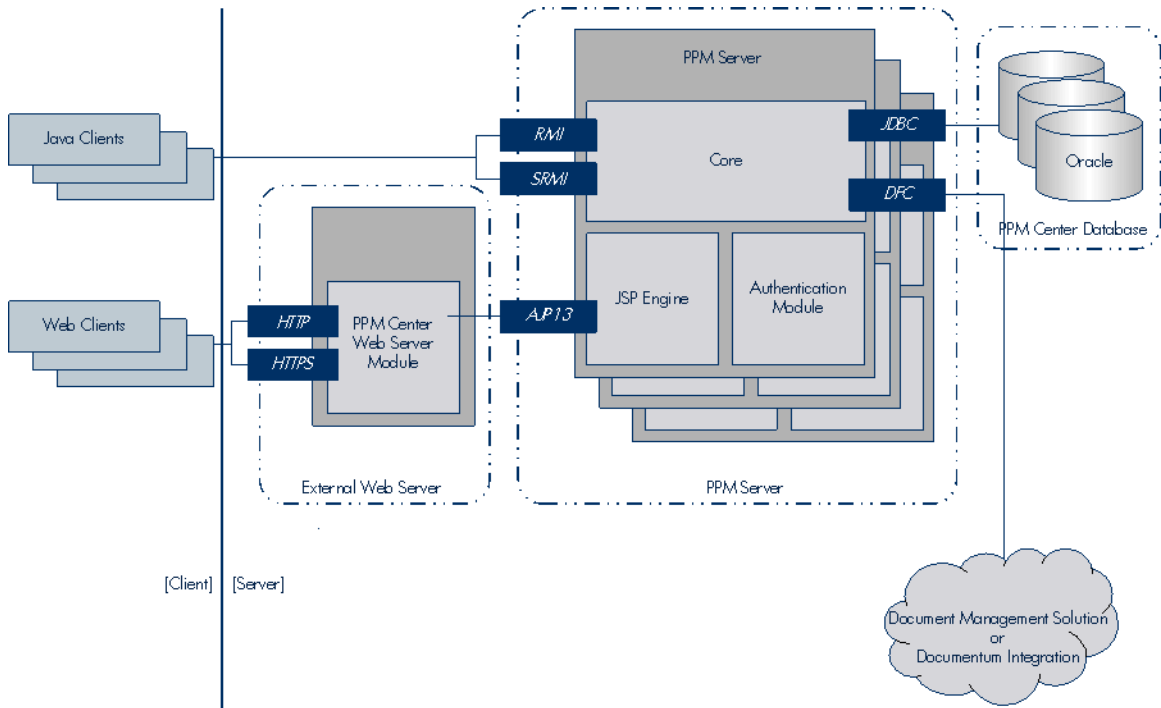
Welcome to HP Project and Portfolio Management Center (PPM Center). The goal of this document is to provide you with the details that will allow you to understand the hardware and software options available for your deployment of PPM Center.

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 17 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 23 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 83 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 91 details support requirements for the PPM Center integration products.

Chapter 6, *Platforms and Products Desupported in This Version*, on page 95 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.

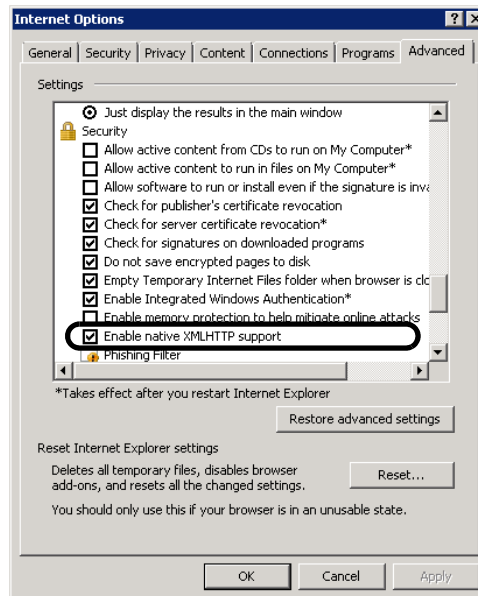
Platform and Browser Requirements

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 for PPM Mobility Accelerator
 - Windows Mobile 6.1
 - Blackberry OS 4.6.0.167
 - Symbian OS 9.3

- Mobile operating system for PPM Mini Apps
 - iOS 4.0 and above
 - Android 2.2 and above
- 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 (32-bit)
 - Enable native XMLHTTP support

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



- Microsoft Internet Explorer 8.0 (32-bit)

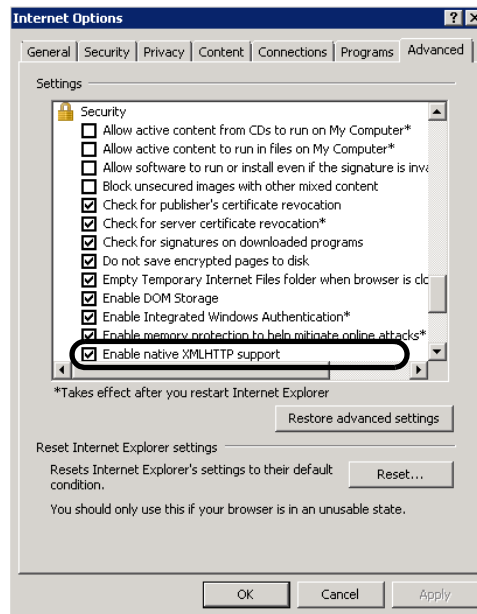
- Enable native XMLHTTP support

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

- Microsoft Internet Explorer 9.0 (32-bit)

- Enable native XMLHTTP support

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



➤ If using Internet Explorer, to achieve optimal viewing and application performance, HP recommends you use Internet Explorer 9.0.

➤ 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, IE 8.0, and IE 9.0. In order to receive support, customers must be able to demonstrate the problem in a fully supported browser version.

- Mozilla Firefox 3.5
- Mozilla Firefox 3.6 (See *Java™ Plug-In Requirements* on page 20.)

Multilingual User Interface Support

To support the languages listed in [Chapter 1, *Introduction*, on page 11](#), 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 (6.0 update 7) or later (32-bit only) for all supported browsers except Mozilla Firefox 3.6

➤ Mozilla has desupported the Java 1.6.0_07 (6.0 update 7) plug-in with Firefox 3.6. Firefox 3.6 users who must access the PPM Workbench must download and install version 1.6.0_19 (6.0 update 19) or later of the Java plug-in (32-bit only) from the JRE downloads on the following Web page:

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

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)
- Microsoft Office Project Standard 2010
- Microsoft Office Project Professional 2010

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 and 2010

Microsoft Office Primary Interop Assemblies for Microsoft Project

- Version 2003 for Microsoft Project 2003
- Version 2007 for Microsoft Project 2007
- Version 2010 for Microsoft Project 2010

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

HP PPM Center Software Platform Support

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

Third Party Software Platform Support



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

Overview of Server-Side Support

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

Important Considerations

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

- Oracle® Support
 - All installed Oracle versions should include the most recent patches and follow the guidelines provided in the latest *Critical Patch Update*. This information is available from <https://metalink.oracle.com>.

Throughout this guide, any Oracle patches or similar updates that are critical for PPM Center support are noted.

- Standard Edition One, as well as the Standard and Enterprise Editions of the Oracle database versions are supported.
- 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 3-6*.

- 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
 - 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
 - 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.
 - Implementation of the various languages on the PPM Center instance may require additional configuration and maintenance.
 - 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 6)

| Operating System | Requirements | Additional Information |
|--|---|---|
| Platform (without either the Document Management solution or Documentum integration) | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> • 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) • Microsoft Windows Server, 2008 R2, Standard and Enterprise Edition (64-bit) | <p>All of the following:</p> <ul style="list-style-type: none"> • x86 and compatible chip architectures (1.5 GHz) • 2 GB RAM • 1 GB disk space | <ul style="list-style-type: none"> • 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 49 for additional considerations. • Limits on physical memory for 32-bit Windows operating systems depend in part on whether the Physical Address Extension (PAE) is enabled. The PAE allows some 32-bit Windows systems (Windows Server 2008 Datacenter and Windows Server 2008 Enterprise) to use more than 4 GB of physical memory. (To enable PAE, use the <code>/PAE</code> switch in the <code>Boot.ini</code> file.) Because PAE is not available for Windows Server 2003 32-bit Standard Edition, the total available physical RAM on this system is limited to 4 GB. For detailed information about memory support and memory limitations on Windows operating systems, see Microsoft Support online. |

Table 3-1. PPM Server requirements on Microsoft platforms (page 2 of 6)

| Operating System | Requirements | Additional Information |
|--|--|---|
| <p>When installed on an x86 VMware ESX Server version 3.5, 4.0, or 4.1 partition, or VMware ESXi Server version 5.0 partition, one of the following:</p> <ul style="list-style-type: none"> All Microsoft operating systems previously identified in this table | <p>All of the following:</p> <ul style="list-style-type: none"> x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 1 GB disk space for installed files 400 MB temporary space for installation files | <ul style="list-style-type: none"> 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). |
| <p>When installed on Hyper-V, the following:</p> <ul style="list-style-type: none"> Microsoft Windows 2008 SP2 Enterprise Edition (32-bit) | <p>All of the following:</p> <ul style="list-style-type: none"> x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 1 GB disk space for installed files 400 MB temporary space for installation files | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. For system sizing impact, contact HP Software Support (hp.com/go/hpsoftwaresupport). |
| Platform (with Document Management solution) | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> 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 (64-bit) | <p>All of the following:</p> <ul style="list-style-type: none"> x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 1 GB disk space | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. See <i>Hardware Sizing Estimates on page 49</i> 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 3-1. PPM Server requirements on Microsoft platforms (page 3 of 6)

| Operating System | Requirements | Additional Information |
|---|---|------------------------|
| JDK Software | | |
| All Microsoft operating systems previously identified in this table, except as described in the row below | The following: <ul style="list-style-type: none"> • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (6.0 Update 7) or later (32-bit only) (available from Sun) | |
| Microsoft Windows 2008 R2 Enterprise Edition (64-bit only) | <ul style="list-style-type: none"> • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (6.0 Update 7) or later (both 32- and 64-bit) (available from Sun) | |
| Communications Software | | |
| All Microsoft operating systems previously identified in this table | One of the following: <ul style="list-style-type: none"> • Microsoft Windows Services for UNIX version 3.0 • Microsoft Windows Services for UNIX version 3.5 • Microsoft Telnet Services | |

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

| Operating System | Requirements | Additional Information |
|--|---|---|
| Secure Communications Software | | |
| <p>For:</p> <ul style="list-style-type: none"> All previously identified Microsoft Windows Server 2003-based versions | <p>One of the following:</p> <ul style="list-style-type: none"> 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 | <p>During Cygwin installation, use the following settings:</p> <ul style="list-style-type: none"> Select All Users for the Install For field Select Dos/text for the Default Text File Type field |

Table 3-1. PPM Server requirements on Microsoft platforms (page 5 of 6)

| Operating System | Requirements | Additional Information |
|--|---|------------------------|
| <p>For:</p> <ul style="list-style-type: none"> All previously identified Microsoft Windows Server 2008-based versions | <p>One of the following:</p> <ul style="list-style-type: none"> 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 | | |
| <p>All Microsoft operating systems previously identified in this table</p> | <p>One of the following:</p> <ul style="list-style-type: none"> “Dumb” mode VT100 mode VT220 mode | |

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

| Operating System | Requirements | Additional Information |
|---|---|--|
| Other Software | | |
| All Microsoft operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • SQL*Net • SQL*Plus | <ul style="list-style-type: none"> • 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 <i>Installation and Administration Guide</i> or the <i>Upgrade Guide</i>. |
| All Microsoft operating systems previously identified in this table | (Optional) The following: <ul style="list-style-type: none"> • Email application configuration | <ul style="list-style-type: none"> • If you are planning to use notifications, an email application is needed. See Email Server Requirements on page 49 for details. |
| All Microsoft operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Bourne shell | <ul style="list-style-type: none"> • This software is included in the Cygwin utilities. • The Bourne shell (bash) must be available on both the source and destination servers. |

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: <ul style="list-style-type: none"> • Oracle Solaris 9, Updates 1 through 7 (Sparc) • Oracle Solaris 10, Updates 1 through 8 (Sparc) | All of the following: <ul style="list-style-type: none"> • UltraSPARC III (1050 MHz) • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See Hardware Sizing Estimates on page 49 for additional considerations. |
| The following: <ul style="list-style-type: none"> • Oracle Enterprise Linux (OEL) 5 | All of the following: <ul style="list-style-type: none"> • x86, x86_64 • Kernel version 2.6.39 (Unbreakable Enterprise Kernel Release 2), or 2.6.32 (Unbreakable Enterprise Kernel Release 1); or 2.6.32 (Red Hat compatible Kernel) • 1 GB RAM (minimum) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. |
| Platform (with Document Management solution) | | |
| The following: <ul style="list-style-type: none"> • Oracle Solaris 10 | All of the following: <ul style="list-style-type: none"> • UltraSPARC III (1050 MHz) • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See Hardware Sizing Estimates on page 49 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 3-2. PPM Server requirements on Sun platforms (page 2 of 3)

| Operating System | Requirements | Additional Information |
|--|--|------------------------|
| JDK Software | | |
| All Sun operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (6.0 Update 7) or later (32-bit only) (available from Sun) | |
| Secure Communications Software | | |
| For: <ul style="list-style-type: none"> • All previously identified Sun Solaris 9-based versions | One of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • All previously identified Sun Solaris 10-based versions | One of the following: <ul style="list-style-type: none"> • 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 | |
| Terminal Emulation Software | | |
| All Sun operating systems previously identified in this table | One of the following: <ul style="list-style-type: none"> • “Dumb” mode • VT100 mode • VT220 mode | |

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

| Operating System | Requirements | Additional Information |
|---|---|--|
| Other Software | | |
| All Sun operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • SQL*Net • SQL*Plus | <ul style="list-style-type: none"> • 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 <i>Installation and Administration Guide</i> or the <i>Upgrade Guide</i>. |
| All Sun operating systems previously identified in this table | (Optional) The following: <ul style="list-style-type: none"> • Email application configuration | If you are planning to use notifications, an email application is needed. See Email Server Requirements on page 49 for details. |
| All Sun operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Bourne shell | The Bourne shell is available by default on most UNIX systems. However, in some environments, it might be not configured or enabled. Check with your UNIX system administrator to make sure that the Bourne shell is available and configured on your system. |

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) | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> • HP-UX 11i v2 • HP-UX 11i v3 | <p>One of the following processor options:</p> <ul style="list-style-type: none"> • Itanium 2 (1.4 GHz) • PA-RISC (1 GHz) <p>Plus all of the following:</p> <ul style="list-style-type: none"> • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See Hardware Sizing Estimates on page 49 for additional considerations. |
| <p>When using the Integrity VM, one of the following:</p> <ul style="list-style-type: none"> • HP-UX 11i v2 • HP-UX 11i v3 | <p>All of the following:</p> <ul style="list-style-type: none"> • Itanium 2 (1.4 GHz) • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | |
| Platform (with Document Management solution) | | |
| <p>The following:</p> <ul style="list-style-type: none"> • HP-UX 11i v2 Update 2 | <p>One of the following processor options:</p> <ul style="list-style-type: none"> • Itanium 2 (1.4 GHz) • PA-RISC (1 GHz) <p>Plus all of the following:</p> <ul style="list-style-type: none"> • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See Hardware Sizing Estimates on page 49 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: <ul style="list-style-type: none"> • HP-UX Java Development Kit (JDK) for the Java 2 Platform Standard Edition 6 (Java SE 6) version 6.0.02 (6.0 Update 2) or later (32-bit only) (available from HP) | |
| HP-UX 11i v2, PA-RISC | The following: <ul style="list-style-type: none"> • HP-UX Java Development Kit (JDK) for the Java 2 Platform Standard Edition 6 (Java SE 6) version 6.0.03 (6.0 Update 3) or later (32-bit only) (available from HP) | |
| Secure Communications Software | | |
| All HP operating systems previously identified in this table | One of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • “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: <ul style="list-style-type: none"> • SQL*Net • SQL*Plus | <ul style="list-style-type: none"> • 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 <i>Installation and Administration Guide</i> or the <i>Upgrade Guide</i>. |
| All HP operating systems previously identified in this table | (Optional) The following: <ul style="list-style-type: none"> • Email application configuration | If you are planning to use notifications, an email application is needed. See Email Server Requirements on page 49 for details. |
| All HP operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Bourne shell | The Bourne shell is available by default on most UNIX systems. However, in some environments, it might be not configured or enabled. Check with your UNIX system administrator to make sure that the Bourne shell is available and configured on your system. |

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: <ul style="list-style-type: none"> IBM AIX 5L version 5.3 | All of the following: <ul style="list-style-type: none"> POWER4 / POWER5 (both 32- and 64-bit) 2 GB RAM 1 GB disk space 400 MB temp space 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 49 for additional considerations. |
| The following: <ul style="list-style-type: none"> IBM AIX 5L version 6.1 | All of the following: <ul style="list-style-type: none"> POWER4 / POWER5 / POWER7 (both 32- and 64-bit) 2 GB RAM 1 GB disk space 400 MB temp space 300 MB on root partition (for installation only) | |
| Platform (with Document Management solution) | | |
| The following: <ul style="list-style-type: none"> IBM AIX 5L version 5.3 TL9 | All of the following: <ul style="list-style-type: none"> POWER4 / POWER5 2 GB RAM 1 GB disk space 400 MB temp space 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 49 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 3-4. PPM Server requirements on IBM platforms (page 2 of 3)

| Operating System | Requirements | Additional Information |
|---|---|------------------------|
| JDK Software | | |
| All IBM operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • 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 | |
| Secure Communications Software | | |
| For: <ul style="list-style-type: none"> • IBM AIX 5L version 5.3 • IBM AIX 5L version 6.1 | One of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • “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: <ul style="list-style-type: none"> • SQL*Net • SQL*Plus | <ul style="list-style-type: none"> • 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 <i>Installation and Administration Guide</i> or the <i>Upgrade Guide</i>. |
| All IBM operating systems previously identified in this table | (Optional) The following: <ul style="list-style-type: none"> • Email application configuration | If you are planning to use notifications, an email application is needed. See Email Server Requirements on page 49 for details. |
| All IBM operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Bourne shell | The Bourne shell is available by default on most UNIX systems. However, in some environments, it might be not configured or enabled. Check with your UNIX system administrator to make sure that the Bourne shell is available and configured on your system. |

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) | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) Red Hat Enterprise Linux Advanced Platform 5.0, Updates 1 through 6 (both 32- and 64-bit) | <p>All of the following:</p> <ul style="list-style-type: none"> x86 and compatible chip architectures (1.5 GHz) 2 GB RAM 1 GB disk space 400 MB temp space 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. See Hardware Sizing Estimates on page 49 for additional considerations. |
| <p>When installed on an x86 VMware ESX Server version 3.5, 4.0, or 4.1 partition, or VMware ESXi Server version 5.0 partition, one of the following:</p> <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) Red Hat Enterprise Linux Advanced Platform 5.0, Updates 1 through 6 (both 32- and 64-bit) | <p>All of the following:</p> <ul style="list-style-type: none"> x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 1 GB disk space for installed files 400 MB temporary space for installation files 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> 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/hpssoftwaresupport) |
| <p>When installed on Hyper-V, the following:</p> <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (64-bit) | <p>All of the following:</p> <ul style="list-style-type: none"> x86 and compatible chip architectures (1.5 GHz) 3 GB RAM 1 GB disk space for installed files 400 MB temporary space for installation files 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. For system sizing impact, contact HP Software Support (hp.com/go/hpssoftwaresupport) |

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

| Operating System | Requirements | Additional Information |
|---|--|--|
| Platform (with Document Management solution) | | |
| <p>The following:</p> <ul style="list-style-type: none"> • Red Hat Enterprise Linux AS 4.0 • Red Hat Enterprise Linux Advanced Platform 5.0 | <p>All of the following:</p> <ul style="list-style-type: none"> • x86 and compatible chip architectures (1.5 GHz) • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Hardware Sizing Estimates on page 49</i> 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. <p>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).</p> |
| JDK Software | | |
| <ul style="list-style-type: none"> • Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) • Red Hat Enterprise Linux Advanced Platform 5.0, Updates 1 through 6 (32-bit only) | <p>The following:</p> <ul style="list-style-type: none"> • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (6.0 Update 7) or later (32-bit JDK only) (available from Sun) | |
| <ul style="list-style-type: none"> • Red Hat Enterprise Linux Advanced Platform 5.0, Updates 1 through 6 (64-bit only) | <p>The following:</p> <ul style="list-style-type: none"> • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (6.0 Update 7) or later (64-bit JDK 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 | | |
| <p>For:</p> <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) | <p>One of the following:</p> <ul style="list-style-type: none"> 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 | |
| <p>For:</p> <ul style="list-style-type: none"> Red Hat Enterprise Linux Advanced Platform 5.0, Updates 1 through 6 (both 32- and 64-bit) | <p>One of the following:</p> <ul style="list-style-type: none"> 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 | | |
| <p>All Red Hat operating systems previously identified in this table</p> | <p>One of the following:</p> <ul style="list-style-type: none"> “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: <ul style="list-style-type: none"> • SQL*Net • SQL*Plus | <ul style="list-style-type: none"> • 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 <i>Installation and Administration Guide</i> or the <i>Upgrade Guide</i>. |
| All Red Hat operating systems previously identified in this table | (Optional) The following: <ul style="list-style-type: none"> • Email application configuration | If you are planning to use notifications, an email application is needed. See Email Server Requirements on page 49 for details. |
| All Red Hat operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Bourne shell | The Bourne shell is available by default on most UNIX systems. However, in some environments, it might be not configured or enabled. Check with your UNIX system administrator to make sure that the Bourne shell is available and configured on your system. |

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) | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> • 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) | <p>All of the following:</p> <ul style="list-style-type: none"> • x86 and compatible chip architectures (1.5 GHz) • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See Hardware Sizing Estimates on page 49 for additional considerations. |
| <p>When installed on an x86 VMware ESX Server 3.5, 4.0, or 4.1 partition, or VMware ESXi Server version 5.0 partition, one of the following:</p> <ul style="list-style-type: none"> • All SUSE Linux operating systems previously identified in this table | <p>All of the following:</p> <ul style="list-style-type: none"> • x86 and compatible chip architectures (1.5 GHz) • 3 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • 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) | | |
| <p>The following:</p> <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 10 SP2 | <p>All of the following:</p> <ul style="list-style-type: none"> • x86 and compatible chip architectures (1.5 GHz) • 2 GB RAM • 1 GB disk space • 400 MB temp space • 300 MB on root partition (for installation only) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See Hardware Sizing Estimates on page 49 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 | | |
| <p>All SUSE Linux operating systems previously identified in this table</p> | <p>The following:</p> <ul style="list-style-type: none"> • Java Platform Standard Edition 6 Development Kit (JDK) 1.6.0_07 (6.0 Update 7) or later (32-bit only) (available from Sun) | |
| Secure Communications Software | | |
| <p>For:</p> <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 9, SPs1 through 4 (both 32- and 64-bit) | <p>One of the following:</p> <ul style="list-style-type: none"> • 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 |
|---|---|------------------------|
| <p>For:</p> <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 10 (both 32- and 64-bit) | <p>One of the following:</p> <ul style="list-style-type: none"> • 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 | |
| <p>For:</p> <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 10, Updates 1 through 3 (both 32- and 64-bit) • SUSE Linux Enterprise Server 11 (both 32- and 64-bit) | <p>One of the following:</p> <ul style="list-style-type: none"> • 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 | | |
| <p>All SUSE Linux operating systems previously identified in this table</p> | <p>One of the following:</p> <ul style="list-style-type: none"> • “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: <ul style="list-style-type: none"> • SQL*Net • SQL*Plus | <ul style="list-style-type: none"> • 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 <i>Installation and Administration Guide</i> or the <i>Upgrade Guide</i>. |
| All SUSE Linux operating systems previously identified in this table | (Optional) The following: <ul style="list-style-type: none"> • Email application configuration | If you are planning to use notifications, an email application is needed. See Email Server Requirements on page 49 for details. |
| All SUSE Linux operating systems previously identified in this table | The following: <ul style="list-style-type: none"> • Bourne shell | The Bourne shell is available by default on most UNIX systems. However, in some environments, it might be not configured or enabled. Check with your UNIX system administrator to make sure that the Bourne shell is available and configured on your system. |

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

The following Oracle database versions are supported on all PPM Server platforms:

- Oracle 11.1.0.7, Standard and Enterprise Edition (RAC and Non-RAC)
- Oracle 11.2.0.1, Standard and Enterprise Edition (RAC and Non-RAC)
- Oracle 11.2.0.2, Standard and Enterprise Edition (RAC and Non-RAC)
- Oracle 11.2.0.3, Standard and Enterprise Edition (RAC and Non-RAC)



Because Oracle Enterprise DB Server is not supported on VMware, PPM Center does not work with Oracle Enterprise DB Server on VMware.

For sizing information for database-based DMS solutions, see *Database Sizing on page 51*.

For details about server requirements, see Oracle documentation specific to your operating system in the Oracle Database Documentation Library (http://www.oracle.com/pls/db112/portal.portal_db?selected=11&frame=).

For information on periodic database maintenance tasks, see the *Oracle Database Administrator's Guide*.

Database Character Sets

Table 3-7 lists the database character sets supported for English-language deployments of this version of PPM Center.

Table 3-7. Database character sets supported (page 1 of 2)

| Code | Description |
|---------------|---------------------------|
| US7ASCII | ASCII 7-bit U.S. America |
| WE8ISO8859P1 | ISO 8859-1 Western Europe |
| WE8ISO8859P9 | ISO 8859-9 |
| WE8ISO8859P15 | ISO 8859-15 |

Table 3-7. Database character sets supported (page 2 of 2)

| Code | Description |
|--------------|---|
| 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

Database Sizing

The only sizing impact of using PPM Center Database DMS or PPM Center External Database DMS is in your Database Server, as everything happens in the database.

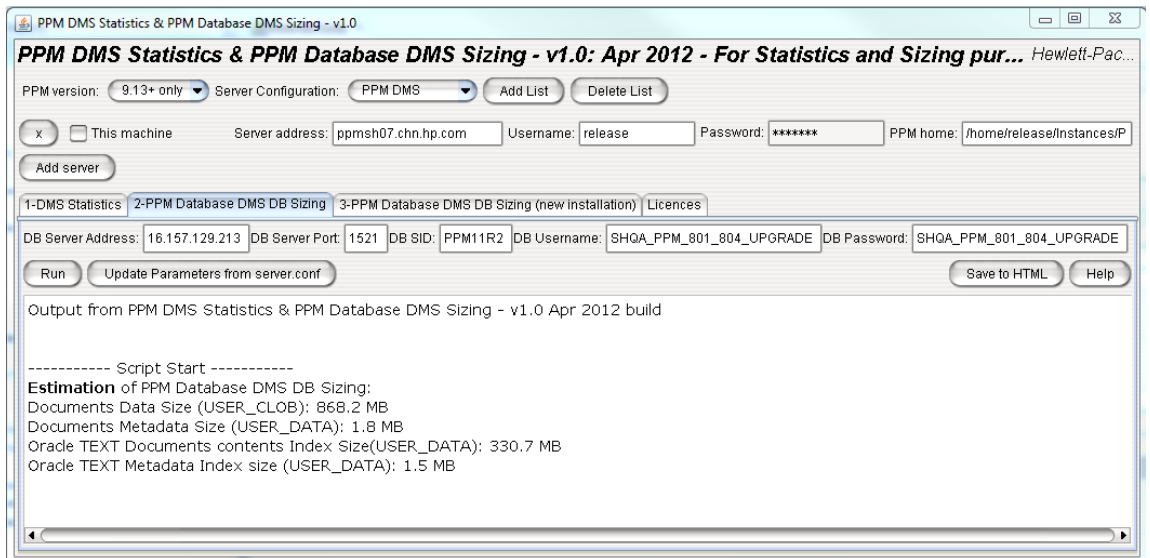
Database Disk Space

The database disk space consumed by PPM Center Database DMS or PPM Center External Database DMS can be split into three different parts:

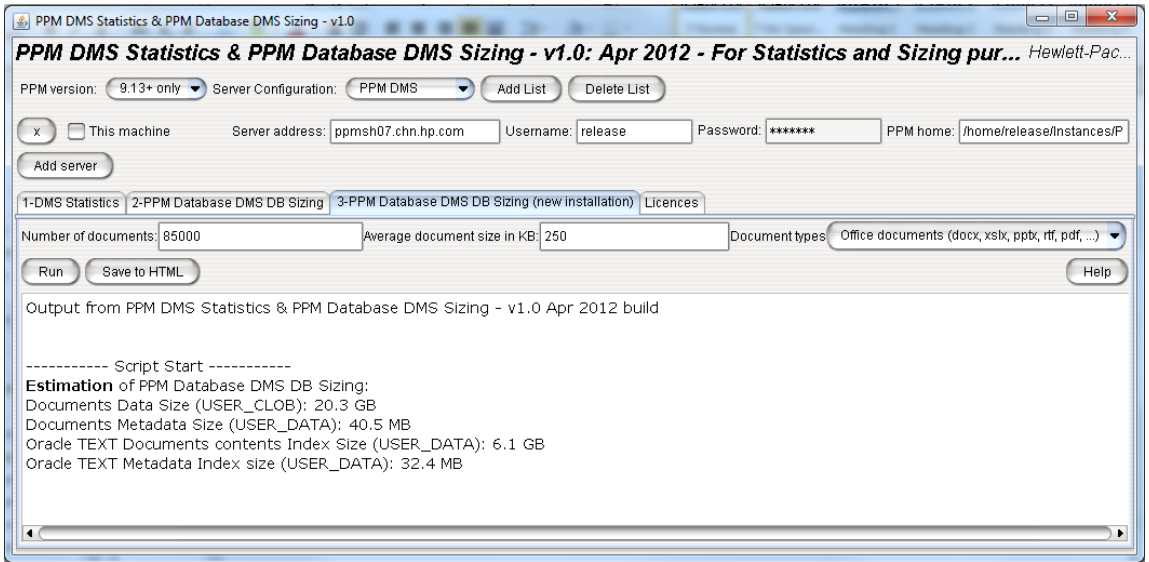
- Space taken up by Document contents (about equal to total documents size)
- Space taken up by Documents metadata (proportional to number of documents and propensity of PPM users to input lengthy documents descriptions, key words, and version comments).

- Space taken up by TEXT Indexes
 - Index on document contents, proportional to total size and types of documents (index on pure text file such as a logs file might take more space than the file itself, while index on a picture file, even very large, does not take any space as no text content can be extracted from the picture).
 - Index on text metadata, proportional to the size of metadata (as all indexed metadata is text and can be indexed).

The PPM DMS Statistics & PPM Database DMS Sizing tool available from HP Support automatically estimates the extra disk space needed in database to migrate an existing PPM Server environment to either of the database-based DMS solution. The tool computes estimates based on quantity of documents, total size of documents, and types of documents. All this information are retrieved from the KNTA_DOCUMENTS table of PPM Center database.



The tool can also provide estimates for new PPM Center installations, based on user's input on planned usage of documents in PPM Center (estimated total number and size of documents, text concentration of stored documents).



Customer Case

Here is an example of Database Space consumption from an existing PPM Center customer who used a Documentum-based DMS solution previously. [Table 3-8](#) lists customer documents statistics, and [Table 3-9](#) lists detailed document repartition information.

Table 3-8. Customer documents statistics

| Item | Statistics |
|--|-------------------------------|
| Total number of documents | 128,853 |
| Average number of versions per document | 1.003 |
| Maximum number of versions for a document | 8 |
| Total number of documents versions | 129,221 |
| Cumulated size of all documents versions (estimated) | 32,056 MB |
| Document repartition by type | See Table 3-9 |

Table 3-9. Customer Case: Document repartition by type

| Document Type | Text Content | Files Count | Cumulated total size (MB) |
|---------------|--------------|-------------|---------------------------|
| RTF | Medium | 2,175 | 10,513 |
| MSG | Medium | 49,088 | 6,507 |
| DOC | Medium | 21,767 | 4,684 |
| TXT | High | 14,365 | 3,367 |
| XLS | Medium | 5,457 | 1,500 |
| PDF | Medium | 8,634 | 1,399 |
| ZIP | Unknown | 864 | 797 |
| XLSX | Medium | 1,248 | 650 |
| DOCX | Medium | 2,604 | 649 |
| BMP | None | 302 | 386 |
| none | Unknown | 1,922 | 342 |
| HTM | High | 16,783 | 319 |
| TIF | None | 667 | 242 |
| REP | Unknown | 22 | 141 |
| EXE | None | 21 | 76 |
| DOT | Medium | 126 | 57 |
| JPG | None | 349 | 54 |
| MDB | Medium | 2 | 48 |
| SQL | High | 782 | 27 |
| PPT | Medium | 13 | 21 |
| Other | Unknown | 2,030 | 278 |

Text-only documents contain high level text contents, Microsoft Office documents contain medium level text contents, and images as well as binary

documents contain practically no text content. This is reflected in the document contents index size.

Text Index creation time: ~ 6 hours (on a 2-instance RAC server with 4 x Dual Core CPU Intel(R) Xeon(R) E5540 @ 2.53GHz per instance).

Disk space consumed by PPM Center Database DMS:

| Item | Disk Space Consumed (MB) |
|---|--------------------------|
| Documents binary contents (BLOB Columns) | 32,041 |
| DMS Tables without BLOB columns (not including KNTA_DOCUMENTS): | 30 |
| Total Metadata Indexes | 21.7 |
| Document Contents Indexes | 6,011 |

As you can see, the size of document contents index (~6 GB) accounts for almost 20 percent of the documents contents size (~32 GB). This is a relatively ratio, which can be explained by the large amount of office documents in the customer’s attachments.

It might be possible that the index size is larger than the document contents if all the attachments are pure text files (such as .txt, .sql, and .log files).



The BLOB columns containing the documents are appearing slightly smaller than the estimated total size of documents (15 MB smaller). The reason is that the total size of the documents is an estimation, computed using “Versions count * file size of latest version” for each document. It appears that the earlier versions of documents are smaller in size in average, resulting in the observed discrepancy.

Database Server CPU

If you have no plan to enable full-text search (or more precisely, if you do not need to create TEXT indexes), there is virtually no impact on database CPU, as reading and writing documents contents to database are mainly I/O intensive operations.

If you do create TEXT indexes, but schedule them to be updated only out of peak hours, there should be no need to consider an upgrade of DB Server CPU based on standard PPM Center sizings.

However, if you are using frequent index updates, or use SYNC (ON COMMIT) indexes for real time indexing, a CPU upgrade of your DB Server might be necessary, especially if your PPM Center users tend to store a large amount of text intensive files in PPM Center (more than 1 GB of new documents per week, with peak document activity concentrated on a few hours in the week).

Document Management Solution

This section provides system requirements and supportability matrices for the document management solution using HP version of EMC Documentum Content Server Enterprise Edition (EE) software bundled with PPM Center, or integrating PPM Center with stand-alone EMC Documentum Enterprise Edition.

For detailed system requirements and supportability matrices for the PPM Center Database DMS (the new document management system introduced with PPM Center version 9.13), see *PPM Server Platforms* on page 26 and *PPM Center Database Platforms* on page 50.

For more information about PPM Center Database DMS, see *Release Notes for PPM Center, version 9.13 or later*.

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 12.

[For More Information](#)

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

Microsoft Platforms

Table 3-10. Document Management server requirements on Microsoft platforms

| Component | Requirements | Additional Information |
|--|---|---|
| Document Management Content Server Platform | | |
| One of the following: <ul style="list-style-type: none">• 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: <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• 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 63 for additional storage considerations. |
| Document Management Index Server Platform | | |
| One of the following: <ul style="list-style-type: none">• Microsoft Windows Server 2003 R2 SP2, Enterprise Edition (32-bit)• Microsoft Windows Server 2003 SP2, Enterprise Edition (32-bit) | All of the following: <ul style="list-style-type: none">• 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 | <ul style="list-style-type: none">• 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 63 for additional storage considerations. |

Sun Platforms

Table 3-11. Document Management server requirements on Sun platforms

| Component | Requirements | Additional Information |
|---|---|---|
| Document Management Content Server Platform | | |
| The following: <ul style="list-style-type: none"> • Sun Solaris 10 | All of the following: <ul style="list-style-type: none"> • UltraSPARC III (1050 MHz) • 512 MB RAM • 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |
| Document Management Index Server Platform | | |
| The following: <ul style="list-style-type: none"> • Sun Solaris 10 | All of the following: <ul style="list-style-type: none"> • UltraSPARC III (1050 MHz) • 2 GB RAM • 3 GB disk space in addition to the minimum requirements for the operating system | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |

Table 3-12. Document Management server requirements on HP platforms

| Component | Requirements | Additional Information |
|--|--|---|
| Document Management Content Server Platform | | |
| For: <ul style="list-style-type: none"> • HP-UX 11i v2 Update 2 | One of the following processor options: <ul style="list-style-type: none"> • PA-RISC 2.0 (1 GHz) • Itanium 2 (1.4 GHz) Plus all of the following: <ul style="list-style-type: none"> • 512 MB RAM • 700 MB disk space (for installation only in addition to the minimum requirements for the operating system) | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |
| For: <ul style="list-style-type: none"> • HP-UX 11i v3 Update 1 | All of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • HP-UX 11i v2 Update 2 | One of the following processor options: <ul style="list-style-type: none"> • PA-RISC 2.0 (1 GHz) • Itanium 2 (1.4 GHz) Plus all of the following: <ul style="list-style-type: none"> • 2 GB RAM • 3 GB disk space in addition to the minimum requirements for the operating system | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |

Table 3-13. Document Management server requirements on IBM platforms

| Component | Requirements | Additional Information |
|--|---|---|
| Document Management Content Server Platform | | |
| One of the following: <ul style="list-style-type: none"> • IBM AIX 5L version 5.3 TL9 | All of the following: <ul style="list-style-type: none"> • POWER4/POWER5 • 512 MB RAM • 700 MB disk space (for installation only) in addition to the minimum requirements for the operating system | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |
| Document Management Index Server Platform | | |
| The following: <ul style="list-style-type: none"> • IBM AIX 5L version 5.3 TL9 | All of the following: <ul style="list-style-type: none"> • POWER4/POWER5 • 2 GB RAM • 3 GB disk space in addition to the minimum requirements for the operating system | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |

Table 3-14. Document Management server requirements on Red Hat platforms

| Component | Requirements | Additional Information |
|---|---|---|
| Document Management Content Server Platform | | |
| One of the following: <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0 Red Hat Enterprise Linux Advanced Platform 5.0 | All of the following: <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |
| Document Management Index Server Platform | | |
| The following: <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0 Red Hat Enterprise Linux Advanced Platform 5.0 | All of the following: <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> These are minimum requirements—faster processors and additional memory and storage are acceptable. See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 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 3-15. Document Management server requirements on SUSE platforms

| Component | Requirements | Additional Information |
|--|---|---|
| Document Management Content Server Platform | | |
| The following: <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 10 SP2 | All of the following: <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 for additional storage considerations. |
| Document Management Index Server Platform | | |
| The following: <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 10 SP2 | All of the following: <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • These are minimum requirements—faster processors and additional memory and storage are acceptable. • See <i>Document Management Content Server and Index Server Sizing Recommendations</i> on page 63 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 71 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* by multiplying the average document size by 30%.

5. Estimate the document size as follows:

$$(\text{document size}) \times (\text{number of versions}) \times (\text{number of documents})$$

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

$$(\text{index size}) \times (\text{number of versions}) \times (\text{number of documents})$$

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

Document Management Database

Microsoft Platforms

Table 3-16. Document Management database requirements on Microsoft platforms

| Component | Requirements | Additional Information |
|---|--|--|
| Document Management Database Server Platforms | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> • 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) | <p>All of the following:</p> <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • 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 26 for details. • See Document Management Database Sizing Recommendations on page 71 for additional storage considerations. |
| Document Management Database Software | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> • Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC) | <ul style="list-style-type: none"> • Oracle requirements unknown—check https://metalink.oracle.com for any necessary patches or configuration changes. | <ul style="list-style-type: none"> • 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. |

Table 3-17. Document Management database requirements on Sun platforms

| Component | Requirements | Additional Information |
|--|--|--|
| Document Management Database Server Platforms | | |
| One of the following: <ul style="list-style-type: none"> • Sun Solaris 10 | All of the following: <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 32 for details. • See Document Management Database Sizing Recommendations on page 71 for additional storage considerations. |
| Document Management Database Software | | |
| One of the following: <ul style="list-style-type: none"> • Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC) | <ul style="list-style-type: none"> • Oracle requirements unknown—check https://metalink.oracle.com for any necessary patches or configuration changes. | <ul style="list-style-type: none"> • 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. |

Table 3-18. Document Management database requirements on HP platforms

| Component | Requirements | Additional Information |
|--|--|--|
| Document Management Database Server Platforms | | |
| <p>The following:</p> <ul style="list-style-type: none"> HP-UX 11i v3 Update 1 | <p>All of the following:</p> <ul style="list-style-type: none"> PA-RISC 2.0 (1 GHz) 2 GB RAM 3 GB disk space in addition to the minimum requirements for the operating system | <ul style="list-style-type: none"> 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 35 for details. See Document Management Database Sizing Recommendations on page 71 for additional storage considerations. |
| <p>For:</p> <ul style="list-style-type: none"> HP-UX 11i v2 Update 2 | <p>One of the following processor options:</p> <ul style="list-style-type: none"> PA-RISC 2.0 (1 GHz) Itanium 2 (1.4 GHz) <p>Plus all of the following:</p> <ul style="list-style-type: none"> 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: | | |
| <ul style="list-style-type: none"> Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC) | <ul style="list-style-type: none"> Oracle requirements unknown—check https://metalink.oracle.com for any necessary patches or configuration changes. | <ul style="list-style-type: none"> 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. |

Table 3-19. Document Management database requirements on IBM platforms

| Component | Requirements | Additional Information |
|--|---|--|
| Document Management Database Server Platforms | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> • IBM AIX 5L version 5.3 TL9 | <p>All of the following:</p> <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 38 for details. • See Document Management Database Sizing Recommendations on page 71 for additional storage considerations. |
| Document Management Database Software | | |
| One of the following: | | |
| <ul style="list-style-type: none"> • Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC) | <ul style="list-style-type: none"> • Oracle requirements unknown—check https://metalink.oracle.com for any necessary patches or configuration changes. | <ul style="list-style-type: none"> • 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. |

Table 3-20. Document Management database requirements on Red Hat platforms

| Component | Requirements | Additional Information |
|--|---|---|
| Document Management Database Server Platforms | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> Red Hat Enterprise Linux AS 4.0 Red Hat Enterprise Linux Advanced Platform 5.0 | <p>All of the following:</p> <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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 41 for details. See Document Management Database Sizing Recommendations on page 71 for additional storage considerations. <p>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).</p> |
| Document Management Database Software | | |
| <p>One of the following:</p> <ul style="list-style-type: none"> Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC) | <ul style="list-style-type: none"> Oracle requirements unknown—check https://metalink.oracle.com for any necessary patches or configuration changes. | <ul style="list-style-type: none"> 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. |

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

| Component | Requirements | Additional Information |
|--|--|--|
| Document Management Database Server Platforms | | |
| One of the following: <ul style="list-style-type: none"> • SUSE Linux Enterprise Server 10 SP2 | All of the following: <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 45 for details. • See Document Management Database Sizing Recommendations on page 71 for additional storage considerations. |
| Document Management Database Software | | |
| One of the following: <ul style="list-style-type: none"> • Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC) | <ul style="list-style-type: none"> • Oracle requirements unknown—check https://metalink.oracle.com for any necessary patches or configuration changes. | <ul style="list-style-type: none"> • 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. |

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 63* 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 63* 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:

$$(5 \text{ KB}) \times (\textit{number of versions}) \times (\textit{number of documents})$$

Example

Continuing with the *Example on page 64* where you were planning for 100,000 documents, 100 KB in size (on average), with four versions (on average), then the amount of storage necessary for your metadata would be:

- In the Document Management database:
 $(5 \text{ KB}) \times (4 \text{ versions}) \times (100,000 \text{ documents}) = 2 \text{ GB}$

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 3-22](#).

[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 3-22. Web Server support (page 1 of 3)

| Operating System | Requirements |
|--|---|
| Microsoft Platforms | |
| For: <ul style="list-style-type: none">● 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: <ul style="list-style-type: none">● Microsoft IIS 6.0 (both 32- and 64-bit)● Apache HTTP 2.0 (32-bit only)● Apache HTTP 2.2 (32-bit only) |
| For: <ul style="list-style-type: none">● Microsoft Windows Server 2008, SPs 1 through 2 (both 32- and 64-bit) | The following: <ul style="list-style-type: none">● Microsoft IIS 7.0 (32-bit only) |

Table 3-22. Web Server support (page 2 of 3)

| Operating System | Requirements |
|--|---|
| For: <ul style="list-style-type: none"> • Microsoft Windows Server 2008, SPs 1 through 2 (64-bit only) | One of the following: <ul style="list-style-type: none"> • Apache HTTP 2.0 (32-bit only) • Apache HTTP 2.2 (32-bit only) |
| For: <ul style="list-style-type: none"> • Microsoft Windows Server 2008 R2 (64-bit) | Tthe following: <ul style="list-style-type: none"> • Microsoft IIS 7.5 (64-bit only) |
| Sun Platforms | |
| For: <ul style="list-style-type: none"> • Sun Solaris (SPARC-32) | One of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Sun Solaris 9, Updates 1 through 7 (PA-RISC/Itanium) • Sun Solaris 10, Updates 1 through 8 (PA-RISC/Itanium) | One of the following: <ul style="list-style-type: none"> • 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 3-22. Web Server support (page 3 of 3)

| Operating System | Requirements |
|---|--|
| HP Platforms | |
| For: <ul style="list-style-type: none"> • HP-UX 11i v2 • HP-UX 11i v3 | One of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • IBM AIX 5L version 5.3 • IBM AIX 5L version 6.1 | The following: <ul style="list-style-type: none"> • IBM HTTP Server (IHS) version 6.1.0 (32-bit only) (available from IBM) |
| Red Hat Platforms | |
| For: <ul style="list-style-type: none"> • Red Hat Enterprise Linux AS 4.0, Updates 1 through 8 (both 32- and 64-bit) • Red Hat Enterprise Linux Advanced Platform 5.0, Updates 1 through 6 (both 32- and 64-bit) | One of the following: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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

Operational Reporting version 9.10 ~ Content Pack 1.2

The Operational Reporting 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).

- SAP BusinessObjects Enterprise XI 3.1 with Service Pack 4 Fix Pack 1

Support for SAP BusinessObjects Enterprise XI 3.1 with Service Pack 4 Fix Pack 1 (BO XI 3.1 SP4 FP1) is available starting from PPM Center version 9.14.

For compatibility matrix, see *Table 3-23 on page 77*.

Operational Reporting Content Pack 1.3

The Operational Reporting Content Pack 1.3 for PPM Center requires the following version of BusinessObjects software:

- SAP BusinessObjects Enterprise XI 3.1 with Service Pack 5 Fix Pack 3 (BO XI 3.1 SP5 FP3)

If you are first-time users, install BusinessObjects Enterprise XI 3.1 Service Pack 5 (BO XI 3.1 SP5) directly, then upgrade to BO XI 3.1 SP5 FP3.



If there are any discrepancies between the information in this section and the *Release Notes for Operational Reporting Content Pack 1.3*, the information in the *Release Notes* shall prevail.

Existing users shall follow the supported upgrade sequences described in the table below:

| Current Version | Supported Upgrade Sequence |
|-------------------|---|
| BO XI 3.1 SP2 | BO XI 3.1 SP2 > BO XI 3.1 SP4 > BO XI 3.1 SP5 > BO XI 3.1 SP5 FP3 |
| BO XI 3.1 SP4 FP1 | BO XI 3.1 SP4 FP1 > BO XI 3.1 SP5 > BO XI 3.1 SP5 FP3 |

Compatibility Matrix

Table 3-23 describes compatibility matrix between the Operational Reporting solution and SAP BusinessObjects Enterprise XI 3.1.

Table 3-23. Compatibility matrix between Operational Reporting solution and PPM Center

| Operational Reporting Solution Version | SAP BusinessObjects Enterprise XI 3.1 Version | | |
|--|---|-------------------|-------------------|
| | BO XI 3.1 SP2 | BO XI 3.1 SP4 FP1 | BO XI 3.1 SP5 FP3 |
| 9.10 (GA) | X | | |
| 9.12 Content Pack 1 | X | | |
| Content Pack 1.1 | X | X | |
| Content Pack 1.2 | X | X | |
| Content Pack 1.3 | | | X |

Table 3-24 describes compatibility matrix between the Operational Reporting solution and PPM Center.

Table 3-24. Compatibility matrix between Operational Reporting solution and PPM Center

| Operational Reporting Solution for PPM Center Version | PPM Center Version | | | | | | |
|---|--------------------|------|------|------|------|------|------|
| | 8.0x | 9.10 | 9.11 | 9.12 | 9.13 | 9.14 | 9.20 |
| 9.10 (GA) | | X | | | | | |
| 9.12 Content Pack 1 | | | X | X | X | X | |
| Content Pack 1.1 | | | | X | X | X | |
| Content Pack 1.2 | | | | X | X | X | |
| Content Pack 1.3 | | | | X | X | X | X |

Supported Operational Reporting Solution Installation and Upgrade Paths

The Operational Reporting Content Pack 1.3 for PPM Center package contains an install bundle and an upgrade bundle. Therefore, it supports the following installation and upgrade paths:

- **Fresh installation.** For new users of the Operational Reporting solution, they can install Content Pack 1.3 directly, as this version contains everything since version 9.10 (GA) of the Operational Reporting solution.
- **Upgrade.** The following upgrade paths are supported:

| From version | To version |
|---------------------|------------------|
| 9.10 (GA) | Content Pack 1.3 |
| 9.12 Content Pack 1 | Content Pack 1.3 |
| Content Pack 1. | Content Pack 1.3 |
| Content Pack 1.2 | Content Pack 1.3 |

For detailed instructions about fresh installation and upgrade, see the *Operational Reporting Administrator's Guide for Content Pack 1.3*.

BusinessObjects Server Requirements

BusinessObjects Enterprise XI 3.1 SP5 is supported for the following operating systems:

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

For detailed information on your hardware and software requirements,

- Visit the SAP BusinessObjects Articles page (<https://www.sdn.sap.com/irj/boc/articles>), and then go to **BI Platform > SUPPORTED PLATFORMS/PARS > SAP BUSINESSOBJECTS ENTERPRISE XI 3.1**. Or,
- Visit the SAP Indirect Client Knowledge Center to access all BusinessObjects documentation. The SAP Indirect Client Knowledge Center requires that you register a user ID. To register for a user ID, go to the [Request Your User ID for the BusinessObjects Indirect Client Knowledge Center](#) page. Or,
- Find all the BusinessObjects user guides here: http://help.sap.com/boall_en/



Table 3-25 provides server platforms that are also supported by PPM Center version 9.20. If an independent 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 3-25. Business Object server platforms

| Server Platforms | Versions Supported |
|---------------------|---|
| Microsoft Platforms | One of the following: <ul style="list-style-type: none"> • Microsoft Windows Server 2003 SP2 (both 32- and 64-bit) • Microsoft Windows Server 2003 R2 SP2 (both 32- and 64-bit) • Microsoft Windows Server 2008 (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) |
| Oracle Platforms | The following: <ul style="list-style-type: none"> • Solaris 10 (SPARC) |
| HP Platforms | One of the following: <ul style="list-style-type: none"> • HP-UX 11.23 (IA64) • HP-UX 11.31 (IA64) |
| IBM Platforms | The following: <ul style="list-style-type: none"> • IBM AIX 6.1 • IBM AIX 7.1 |
| Red Hat Platforms | One of the following: <ul style="list-style-type: none"> • Red Hat Linux Enterprise Advanced Platform Server 5 • Red Hat Linux Enterprise Server 6 |
| SuSE Platforms | One of the following: <ul style="list-style-type: none"> • SuSE Linux Enterprise Server 10 • SuSE Linux Enterprise Server 11 |

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), and for better performance, install the database on a separate instance (independent of any other databases or applications), with Oracle Block Size (`DB_BLOCK_SIZE`) set to **32k**.

HP also recommends that the Operational Reporting database be preferably configured with OLAP Settings.

- 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 the same encoding as that for PPM Center database, and add the following MLU database parameters with appropriate values:
 - `NLS_LENGTH_SEMANTICS = CHAR` (same setting for both the Operational Reporting database and the PPM Center database)
 - `NLS_CHARACTERSET = <Same value as that for PPM Center Database>`
 - `NLS_NCHAR_CHARACTERSET = <Same value as that for PPM Center Database>`

BusinessObjects Database

- Oracle 11.1.0.7, Standard/Enterprise Edition (RAC and Non-RAC)
- Oracle 11.2.0.1, Standard/Enterprise Edition (RAC and Non-RAC)
- Oracle 11.2.0.2, Standard/Enterprise Edition (RAC and Non-RAC)
- Oracle 11.2.0.3, Standard/Enterprise Edition (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.

BusinessObjects Database Clients

- 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)

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.

Migrators

Application Requirements

Various versions of PPM Center support particular combinations of Object Migrator, GL Migrator, and the following Oracle E-Business Suite Releases:

- 11i (11.5.7 through 11.5.10.2 (CU2))
- Release 12 (12.0.0 through 12.1.3)



Oracle no longer supports Oracle E-Business Suite Release 11 or Releases 11.5.1 through 11.5.6 (which are early releases of 11i), so HP no longer supports use of PPM Center Extensions, GL Migrator, or Object Migrator with those releases.

Each unshaded cell in *Table 4-1* lists the versions of PPM Center that support the combination of Oracle E-Business Suite release (in a table row) and a migrator (in a table column). Combinations that are *not* supported on any version of PPM Center are shown in the lightly shaded table cells. In a cell, “8.0x” represents PPM Center version 8.00 with or without any of its service packs, and “9.1x” represents PPM Center version 9.10 with or without any of its service packs.

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

| Oracle E-Business Suite Release | Kintana Object* Migrator Version 5.1 | Mercury Object Migrator Version 6.0 | HP Object Migrator Version 7.5 | Mercury GL Migrator Version 6.0 | HP GL Migrator Version 9.12 |
|---|--------------------------------------|-------------------------------------|--------------------------------|---------------------------------|-----------------------------|
| 11.5.7 Application Object Library: FND.E Applications DBA: AD.F Common Modules: AK.D Financials Suite: Family Pack A | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 8.0x, 9.1x |
| 11.5.8 Application Object Library: FND.F Applications DBA: AD.G Common Modules: AK.E Financials Suite: Family Pack C | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 8.0x, 9.1x |
| 11.5.9 ^a Application Object Library: FND.G Applications DBA: AD.H Common Modules: AK.F Financials Suite: Family Pack D | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 8.0x, 9.1x |
| 11.5.10 with FND.H Mini Pack ^{b, c} Application Object Library: FND.H Applications DBA:AD.I Common Modules: AK.G Financials Suite: Family Pack F | | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 8.0x, 9.1x |
| 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, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 7.5, 8.0x, 9.1x | 8.0x, 9.1x |

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

| Oracle E-Business Suite Release | Kintana Object* Migrator Version 5.1 | Mercury Object Migrator Version 6.0 | HP Object Migrator Version 7.5 | Mercury GL Migrator Version 6.0 | HP GL Migrator Version 9.12 |
|---|--------------------------------------|-------------------------------------|--------------------------------|---------------------------------|---|
| 12.0.0 through 12.1.3 ^e Applications Technology: R12.ATG_Pf.A through R12.ATG_Pf.B.DELTA.3 Applications DBA: R12.AD.A through R12.AD.B.DELTA.3 | | | 7.5, 8.0x, 9.1x | | 8.0x ^f , 9.1x ^f Important: See footnote f. |

- 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 Object Migrator).
11.5.8-11.5.9 with the Financials Family Pack F is functionally equivalent to 11.5.10 (for GL Migrator).
- c. 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.
- d. See the HP Object Migrator Oracle Apps Version 11.5.10.2 Compatibility Patch (#174141) 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 or later.
- f. Using PPM Center version 8.0x with Oracle Release 12.1.3 (or later) and HP GL Migrator version 9.12 requires patch PPMC_00097 for HP Deployment Management Extension for Oracle E-Business Suite version 8.00.
Using PPM Center version 9.1x with Oracle Release 12.1.3 (or later) and HP GL Migrator version 9.12 requires patch PPMC_00098 for HP Deployment Management Extension for Oracle E-Business Suite version 9.10.

File and Table Space Requirements

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

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

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

- 11.5.7
 - 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 12.0.0–12.1.3
 - Applications Technology:
R12.ATG_PF.A through R12.ATG_PF.B.DELTA.3
 - Applications DBA:
R12.A through R12.AD.B.DELTA.3

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 (for Object Migrator).

11.5.8-11.5.9 with the Financial Family Pack is functionally equivalent to 11.5.10 (for GL Migrator).



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 9i, 10g, 11, or 12
- Oracle Developer 2000, Developer 6i, or Developer 10g

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 and HP Application Lifecycle Management (ALM)
 - HP Quality Center 10.00
 - HP Application Lifecycle Management 11.00
 - HP Application Lifecycle Management 11.00 Service Pack 2

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 ALM 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

- 9.21
- HP Service Manager when used to integrate PPM Center tasks and Service Manager changes
 - 7.10 and later service packs
 - 9.20
 - 9.21
 - 9.30
- CCRM (Change Configuration and Release Management) when used for PPM Center extensions (PPM Project Task to SM RFC Integration and SM RFC to PPM Project Task Integration)
 - 9.1



Make sure that these extensions support Service Manager 9.20, which is required for CCRM 9.1 support.

- HP Universal CMDB when used for impact analysis of PPM Center requests, using ALM
 - 8.00 and service packs
 - 8.06
 - 9.00 ~ 9.05
- HP Universal CMDB when used for service portfolio
 - 8.00 and service packs
 - 8.06
 - 9.00 ~ 9.03

- HP Center Management for Quality Center

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

- PPM Center version 9.1x 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
- HP Application Lifecycle Management 11.00
 - If you are using PPM Center to manage multiple Quality Center or ALM instances, do not open both Quality Center 10.00 and ALM 11.00 instances from the same browser window.
 - Only the English version of Quality Center/Application Lifecycle Management is supported.
- Oracle database versions
 - 11.1.0.7 (Standard/Enterprise Edition) (RAC and Non-RAC)
 - 11.2.0.2 (Standard/Enterprise Edition) (RAC and Non-RAC)
 - 11.2.0.3 (Standard/Enterprise Edition) (RAC and Non-RAC)

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 23](#) 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 platforms are no longer supported:

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

Browser

The following browsers are 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 Products

The following products are no longer supported:

- CA SiteMinder 5.5
- Kintana GL*Migrator version 2.0
- For use with HP Deployment Management Extension for Oracle E-Business Suite, with any version of Object Migrator, or with any version of GL Migrator, the following Oracle E-Business Suite releases, which Oracle no longer supports:
 - Release 11
 - Releases 11.5.1 through 11.5.6 (which are early releases of 11i)