Oracle® Demantra

System Requirements Guide

Release 12.2

Part No. E22751-08

November 2013

ORACLE

Oracle Demantra System Requirements Guide, Release 12.2

Part No. E22751-08

Copyright © 2013, Oracle and/or its affiliates. All rights reserved.

Primary Author: Diane Westgate

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Send Us Your Comments

Preface

1 Overview

Purpose 1-1
Scope 1-1

2 System Requirements

Client Requirements 2-1
32-Bit Oracle Client Requirement 2-3
Using Other Software 2-4
Software Requirements for Servers 2-4
Oracle Demantra Analytical Engine 2-9
Trade Promotion Optimization (TPO) Engine 2-10
Hardware Architecture 2-11
Hardware Requirements for the Servers 2-12
Network Requirements 2-15

Index

Send Us Your Comments

Oracle Demantra System Requirements Guide, Release 12.2

Part No. E22751-08

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: appsdoc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

Preface

Intended Audience

Welcome to Release 12.2 of the *Oracle Demantra System Requirements Guide.*

See Related Information Sources on page vii for more Oracle E-Business Suite product information.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Structure

1 Overview
2 System Requirements

Related Information Sources

Oracle Demantra products share business and setup information with other Oracle Applications products. Therefore, refer to other user guides when you set up and use Oracle Demantra. In particular, refer to the *Oracle Demantra Implementation Guide* for more information about how to set up and customize Demantra for your environment, *Oracle Demantra Analytical Engine Guide* for more information about tuning the

Analytical Engine, and *Oracle Demantra Integration Guide* for detailed information about the various integrations supported. All guides can be accessed from My Oracle Support Note 443969.1 – Oracle Demantra Documentation Library.

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

You can navigate to the Oracle Integration Repository through Oracle E-Business Suite Integrated SOA Gateway.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

1

Overview

Purpose

This document provides a complete, up-to-date description of Oracle Demantra system requirements for Release 12.2. For the latest version of the Oracle Demantra Systems Guide, please refer to My Oracle Support Note 443969.1 -- Oracle Demantra Documentation Library which lists all the current guides for this release.

Scope

This document provides the system requirements for the Oracle Demantra 12.2 release.

2

System Requirements

This chapter covers the following topics:

- Client Requirements
- 32-Bit Oracle Client Requirement
- Using Other Software
- Software Requirements for Servers
- Oracle Demantra Analytical Engine
- Trade Promotion Optimization (TPO) Engine
- Hardware Architecture
- Hardware Requirements for the Servers
- Network Requirements

Client Requirements

Depending on which Oracle Demantra software the users need, these are the minimum requirements for their machines.

All Desktop Products	Web-based Products Apart from Oracle Demantra Anywhere	Oracle Demantra Anywhere
1 CPU at 1.3 GHz or faster	1 CPU at 1.3 GHz or faster	Any hardware that supports the browser
512 MB RAM minimum (1 GB RAM recommended) and 500 MB of free disk space	512 MB RAM minimum (1 GB RAM recommended) and 500 MB of free disk space	512 MB RAM minimum (1 GB RAM recommended) and 500 MB of free disk space

All Desktop Products	Web-based Products Apart from Oracle Demantra Anywhere	Oracle Demantra Anywhere
Minimum screen resolution of 1280 x 1024 (preferred: 1400 x1050)	Minimum screen resolution of 1280 x 1024 (preferred: 1400 x1050)	Minimum screen resolution of 1280 x 1024 (preferred: 1400 x1050)
Locale: <your locale> The locale generally controls the date, time, and number displays.	Locale: <your locale> The locale generally controls the date, time, and number displays.	Locale: <your locale> The locale generally controls the date, time, and number displays.
-	• Microsoft Internet Explorer versions 7.x, 8.x, or 9.x on Microsoft Windows XP, 2000, Windows Server 2003 and 2008, Vista, Windows 7, Windows 8, or Solaris 10 or 11 with the latest version of Java, 1.6 or 1.7 • Mozilla Firefox versions 10.x and 11.x on Microsoft Windows XP, 2000, Vista, or Windows 7, Windows 8 with the latest version of Java 1.6 or 1.7 • Mozilla Firefox version 10.x and 11.x on Mac OS X 10.6.x or Mavericks • Apple Safari version 4.0.3 or later, or 5.x on Mac OS X 10.6.x or Mavericks with the latest version of Java 1.6 or 1.7 Please see Known Apple Mac OS X Limitations, page 2-3 for more information.	• Microsoft Internet Explorer versions 7.x, 8.x, or 9.x on Microsoft Windows XP, 2000, Windows Server 2003 and 2008, Vista, Windows 7, Windows 8, or Solaris 10 or 11 with the latest version of Java 1.6 or 1.7 • Mozilla Firefox versions 10.x and 11.x on Microsoft Windows XP, 2000, Vista, or Windows 7, Windows 8 with the latest version of Java 1.6 or 1.7 • Mozilla Firefox version 10.x or 11.x on Mac OS X 10.6.x or Mavericks • Apple Safari version 4.0.3 or later, or 5.x on Mac OS X 10.6.x or Mavericks, with the latest version of Java 1.6 or 1.7 Please see Known Apple Mac OS X Limitations, page 2-3 for more information.

All Desktop Products	Web-based Products Apart from Oracle Demantra Anywhere	Oracle Demantra Anywhere
-	JRE* (installed automatically)	-
-	Client software for terminal server, same version as on Web server (if terminal server is used	-

Known Apple Mac OS X Limitations

The Oracle Demantra administrative utilities (Business Modeler, Chaining Management, Member Management, Engine Administrator) are not supported on the Mac OS X operating system. These utilities are supported only on Windows platforms. This means the Demantra Silent Installer in Collaborator Workbench is not supported on the Mac operating system. See Oracle Demantra Administrative Utilities, page 2-9 for details.

Only the web browsers listed in the table above are supported. Apple Mac support is limited to the Demantra client. Database and application server software is not supported on Mac OS X. See Software Requirements for the Servers, page 2-4.

Additionally, ending a Demantra session using the browser's X icon may cause unexpected errors, and it is therefore not recommended to end a session in this manner. Always click the Logout link to properly end a Demantra session.

32-Bit Oracle Client Requirement

A 64-bit application server is supported. Generally, the only 32-bit restrictions are that the administrative and configuration tools on Windows require a 32-bit Oracle client to connect to the database. The administrative and configuration tools include:

- Business Modeler
- Member Management
- Chaining Management
- Engine Administrator (see special Linux instructions below)
- Analytical Engine (see special Linux instructions below)

Special Linux instructions when deploying the Demantra Analytical Engine:

- The Oracle instant client is provided, so it is not necessary to install it separately.
- The engine can be deployed on either a 32-bit or 64-bit Linux platform, but in either scenario, you must use a 32-bit application server (Tomcat, WebLogic, or WebSphere).
- Engine Administrator is not available on Linux (it is only supported on Windows). However, it is possible to access Engine Administrator to modify engine configuration settings. For details, see Modify Engine Settings using Engine Administrator on Linux, *Oracle Demantra Installation Guide for Release 12.2*.

Using Other Software

Oracle Demantra supports the Windows Terminal Services. It also supports Excel integration for XP, 2003, 2007 and 2010 for Dynamic Open Link (DOL). Open Office 3 is supported for export.

> **Note:** Dynamic Open Link (DOL) is not yet certified on Microsoft Office for Mac. However, Demantra's 'Export to Excel' option generates XLS files that can be opened by most Mac-based applications that support this format.

Software Requirements for Servers

This section lists the software stacks that support the Oracle Demantra Web Platform Server, Administrative Utilities, and Analytical Engine. For the latest, most up-to-date information on supported platforms, refer to the Certifications section on My Oracle Support.

Oracle Demantra Web Platform Server

These are the stacks on which Oracle Demantra receives rigorous testing. Other variations are possible. In principle, Oracle supports any:

- Database operating system for the database server that the database software supports
- Application server operating system for the application server that the application server software supports

Refer to certification details for Oracle VM support for Oracle WebLogic and Oracle database).

Both the Analytical Engine and Trade Promotion Optimization engine are also certified on Oracle VM using any of the Demantra-certified Windows platforms and Linux..

In this release, VMWare is not officially supported. Please see My Oracle Support Note 249212.1 [https://support.us.oracle.com/oip/faces/secure/km/DocumentDisplay.jspx?id=249212.1] for Oracle's policy on VMWare image support.

Oracle Demantra supports the following software:

Entity	Stack 1	Stack 2	Stack 3	Stack4
Web server	IBMHttpServer 6.x or latest patch	Apache Web Server 2.2.x or latest patch or Oracle WebLogic Web Server 10.3.0, 10.3.1, 10.3.2, 10.3.3 (10gR3), 10.3.4 (11g), 10.3.5 (11gR1), 10.3.6		
J2EE application server	IBM WebSphere or WebSphere Express 6.1.x and 7.x	Oracle Web Server 10.3.0, 10.3.1, 10.3.2, 10.3.3 (10gR3), 10.3.4 (11g), 10.3.5 (11gR1), 10.3.6	Apache Jakarta Tomcat 6.x or 7.0, latest patch	Apache Jakarta Tomcat 6.x or 7.0, latest patch
Java	• JDK 1.6 or 1.7 for Server, latest version • JVM as included with application server installation **Note:** Available Java heap memory must be at least 512 MB to create and run the JVM.			

Entity	Stack 1	Stack 2	Stack 3	Stack4
Database	• Oracle 11g (Enterprise Edition or Standard Edition; see note below table), latest version • Oracle 11gR2 certified on Exadata • Oracle 12c. For more details about additional configuration steps, see Additional Steps for Configuring Oracle 12c, page 2-7. • Oracle Real Application Clusters (RAC) • Oracle Connection Manager 11g (CMAN) • Oracle Exadata platform			

Note: If you are using Oracle JRockit, refer to My Oracle Support Note 978098.1 at https://support.oracle.com/CSP/main/article?cmd=show&type=978098.1&type=NOT for important configuration guidelines. Additionally, if you are using JRockit and will be deploying the 64-bit analytical engine, refer to My Oracle Support Note 1576829.1 at https://support.oracle.com/CSP/main/article?cmd=show&type=1576829.1&type=NOT for deployment details.

Note: The database health check procedures are supported on both the Standard Edition (SE) and Enterprise Edition (EE) of the Oracle database. However, the Enterprise Edition is required to leverage the online table reorganization functionality. Additionally, the Standard Edition does not include the database functions parallel query/DML or

database partitioning. For details on how these functions can be used to improve database performance, see Database Health Check, Database Partitioning for the Analytical Engine, and the UseParallelDML procedures in the *Oracle Demantra Implementation Guide*.

Caution: There is a known issue when using parallel hints to improve Demantra performance on Oracle 11g version 11.2.0.1 and earlier. If your Oracle 11g version is earlier than 11.2.0.1, refer to My Oracle Support Note 1249314.1 [https://support.us.oracle.com/oip/faces/secure/km/DocumentDisplay.jspx?id=1249314.1] before installing Demantra.

Additional Steps for Configuring Oracle 12c

A Pluggable Database (PDB) is a new multi-tenancy feature of Oracle 12c. This feature enables a single container database (CDB) to contain multiple pluggable databases. The Demantra Installer does not automatically create or configure a PDB, so if you will be using Demantra with Oracle 12c, a PDB must be defined before running the Oracle Demantra Installer to install a new or upgrade an existing installation. For information on how to create a PDB, see http://docs.oracle.com/cd/E16655_01/server.121/e17209/statements_6009.htm.

You must also create an entry in your TNSNAMES file and enter the PDB name as the SERVICE_NAME before running Oracle Demantra Installer.

For example, assume the PDB you want to use is called "PDBORCL". In this case, create a new entry in your TNSNAMES file as follows:

```
pdborcl =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP)(HOST10064.my-domain.com)(PORT = 1521))
    )
    (CONNECT_DATA =
      (SERVER=DEDICATED)
      (SERVICE_NAME = PDBORCL.MY-DOMAIN.COM)
    )
  )
```

Running the Oracle Demantra Installer

After creating the TNSNAMES entry as described above, run the Oracle Demantra Installer.

In the 'DBA Details' screen, specify the pluggable database you want to use in the 'TNS Name' field. Using the example above as a guideline, you would enter 'pdborcl' here.

In the 'Configure JDBC Connection' screen, specify the pluggable database you want to use. For the example above, you would enter:

- Host Machine (DNS or IP address): host10064.my-domain.com
- Service Name: PDBORCL.MY-DOMAIN.COM

For more information about the Oracle 12c Database, please refer to Oracle 12c documentation.

Oracle Database Servers

These are the Oracle Demantra components that the Oracle database supports:

- Oracle Demantra Demand Management
- Oracle Demantra Advanced Forecasting and Demand Modeling
- Oracle Demantra Sales and Operations Planning
- Oracle Demantra Predictive Trade Planning
- Oracle Demantra Trade Promotion Optimization
- Oracle Demantra Settlement Management

These are the Oracle Demantra integrations that the Oracle database supports:

- Oracle Demantra Demand Management / Oracle eBusiness Suite integration
- Oracle Demantra Demand Management / Oracle EBS Service Parts Planning
- Oracle Demantra Integration with EBS Advanced Planning Command Center
- Oracle Demantra Sales and Operations Planning / Oracle eBusiness Suite integration
- Oracle Demantra Sales and Operations Planning / Oracle Hyperion Planning integration
- Oracle Demantra Demand Management / Oracle EnterpriseOne integration
- Oracle Demantra Predictive Trade Planning / Oracle EnterpriseOne integration
- Oracle Demantra Settlement Management / Oracle EnterpriseOne integration
- Oracle Demantra Demand Management / Oracle Peoplesoft
- Oracle Demantra Integration Pack for Siebel CRM Consumer Goods
- Oracle Demantra Demand Management with Asset-Intensive Planning Applications

- Oracle Demantra Predictive Trade Planning with Siebel integration
- Oracle Demantra integration with Demand Signal Repository

Oracle does not support Microsoft SQL Server in this release. To learn which Demantra versions support SQL Server, please review previous versions of the Installation Guide and Release Notes on My Oracle Support.

Oracle Demantra Administrative Utilities

The Oracle Demantra Administrative Utilities (Business Modeler, Chaining Management, Member Management, and Engine Administrator) are supported on the following Windows versions:

- Windows 2000
- Windows XP
- Windows Vista
- Windows 7
- Windows 8
- Windows server 2003
- Windows server 2008

See also 32-bit Oracle Client Requirement, page 2-3 in this section.

Oracle Demantra Analytical Engine

Oracle supports the Analytical Engine on Windows, Solaris 10 and 11, and Linux.

You can install, configure, and run the Analytical Engine on all Windows stacks including Windows 2008.

Oracle Enterprise Linux OEL4, OEL5 or OEL6 are supported.

Special Linux instructions when deploying the Demantra Analytical Engine:

- The Oracle instant client is provided, so it is not necessary to install it separately.
- The engine can be deployed on either a 32-bit or 64-bit Linux platform, but in either scenario, you must use a 32-bit application server (Tomcat, WebLogic, or WebSphere). See 32-bit Oracle Client Requirement, page 2-3 for more information.
- Engine Administrator is not available on Linux (it is only supported on Windows). However, it is possible to access Engine Administrator to modify engine

configuration settings. For details, see Modify Engine Settings using Engine Administrator on Linux, *Oracle Demantra Installation Guide for Release 12.2*.

For additional details, see Deploying Demantra on UNIX, Solaris or Linux, *Oracle Demantra Installation Guide for 12.2*.

Trade Promotion Optimization (TPO) Engine

The Demantra Trade Promotion Optimization (TPO) Engine has been tested and certified on the following:

Entity	Supported Versions (32-bit or 64-bit)
Operating System	• Windows 2003 and 2008 • Oracle Enterprise Linux (OEL), versions 4, 5 and 6 • SUSE Linux 10 (SP3) • Solaris 10 and 11 **Note:** The TPO engine supports version 12 of both the ILOG CPLEX and OPL libraries.
Application Server	• Tomcat • WebLogic • IBM WebSphere • IBM WebSphere Express
Database	TPO engine supports any of the databases listed in Oracle Demantra Web Platform Server, page 2-4.

* Both the 32-bit and 64-bit versions of the operating systems listed above are supported. However, please note that the TPO engine runs on a 64-bit application server. For more information, see 32-bit Oracle Client Requirements, page 2-3.

Note: If you are deploying the TPO engine on Linux, see Configure Promotion Optimization (PMO) on Linux, *Oracle Demantra Installation Guide for 12.2*

Hardware Architecture

For solution architecture, the most important consideration is the size of the implementation:

- Small implementations have 5-50 users and a relatively low volume of data.
- Medium implementations have 50-150 users.
- Large implementations have hundreds of users across multiple time zones, complex data structures, and a relatively high volume of data.

For larger systems, consider running the database and application server on a UNIX platform such as Linux, Solaris, HPUX, or AIX and be sure to size the hardware accordingly. Demantra is a data process-intensive application and database clustering using Oracle database Real Application Clusters (RAC) is supported. The application server is not the load point in the Demantra application architecture, so J2EE clustering is not supported.

Note: RAC supports several methods of connection configurations, and not all forms are currently supported by the Demantra Web-based applications. (The analytical engine, Business Modeler, and Member Management/Chaining applications support all forms of RAC configuration through TNSname configuration.). The Demantra Web applications support only a single VIP host name configuration form. For more information see "Overview of Connecting to Oracle Database Using Services and VIP Addresses" in the *Oracle® Real Application Clusters Administration and Deployment Guide 11g Release 2 (11.2)*.

Two-Tier and Multi-Tier Architectures

The architecture of Oracle Demantra implementations fall into two main categories:

- Two-tier architecture: All the server components and the Analytical Engine are on a single, dedicated machine; client software is on other machines. This type of architecture is sufficient for small to medium implementations.
- Multi-tier architecture (required for large implementations): In the most general case, each server component listed previously is on a different dedicated machine; client software is on other machines. A typical variation is for one machine to run

the database server, and for a second machine to run the Analytical Engine and the rest of the server software.

Architectures Using the Distributed Engine

Commonly you use one machine as the server for the Analytical Engine, and you run one instance of the engine (single-instance mode). If your system includes the Distributed Engine, other variants are possible:

- Multiple-instance mode: One machine acts as the server for the Analytical Engine and runs many instances of the engine. This requires a multi-CPU machine. In some situations when using a machine based on Intel Xeon hardware, it is possible to run more than one instance per CPU.

- Distributed mode: A cluster of equally powered machines are configured to run one instance of the Analytical Engine server. The minimum recommended system is Pentium 4 1Ghz and 128MB RAM for each machine.

- Mixed mode: A cluster of unequally powered machines are configured to run one or more instances of the Analytical Engine server. The selected number of instances per machine is done during configuration. Faster machines may be configured to run more instances of the engine. For the minimum recommended system, refer to the table below.

Hardware Requirements for the Servers

This section lists sample hardware requirements for the servers used in an Oracle Demantra installation, as well as for the Analytical Engine. These are basic guidelines; please contact your account representative or Oracle Support Services for detailed guidelines.

Requirements for Two-Tier Solution

For a two-tier solution, you must use the Windows stack or a variation, because Oracle Demantra Administrative Utilities (the Business Modeler and other desktop utilities) are supported only on Windows. You can run these administrative utilities using Collaborator Workbench on any Windows client. These are the minimum hardware requirements.

Entity	Windows Stacks	UNIX Stack
Processor	Four Pentium 4 processors, 1 GHz	Contact Oracle Support Services

Entity	Windows Stacks	UNIX Stack
Memory	Dedicated server with 4 GB of memory	At least 1 GB
Disk	80 GB disk space consisting of: • Minimum 8 disks at RAID level 5 • 2 channel RAID controller	6 GB disk space

General Comments Regarding Multi-Tier Solution

In a multi-tier solution, the servers and the Analytical Engine are potentially all on different machines. Note the following general comments:

- The hardware requirements are different for the different components and depend upon the operating system/software stack.
- In each case, a dedicated server is recommended.
- Oracle Demantra is a relational system, in which many records (potentially all) can be pulled up at the same time, rather than a single record at a time. It therefore requires larger and faster hardware than a transactional database would.
- Oracle Demantra does not support the J2EE clustering feature, because the Web Platform Server cache is not designed to be shared by multiple machines.
- Using fewer machines does not necessarily provide a cost savings. When a given machine runs multiple solution components, that machine generally must have more disk space, more memory, and greater speed than if it ran fewer components.

Database Server

The table below shows the database server requirements.

Entity	Windows Stacks	UNIX Stack
Processor	Four Pentium 4 processors (with extension ability to 8), 2.5 GHz	Contact Oracle Support
Memory	At least 4 GB	At least 4 GB
Disk	160 GB disk space consisting of: • High-end storage system, for example SAN • Minimum 8 disks at RAID level 10 • 2 channel RAID controller	160 GB disk space consisting of: • High-end storage system (for example, SAN) • Minimum 8 disks at RAID level 10 • 2 channel RAID controller

Application Server

The table below shows the application server requirements.

Entity	Windows Stacks	UNIX Stack
Processor	Two Pentium 4 Xeon processors (with extension ability to four), 1 GHz	Contact Oracle Support
Memory (depends on number of concurrent users)	3 GB	3 GB
Disk	20 GB disk space, configured RAID 1+0	20 GB disk space, configured RAID 1+0

Analytical Engine

The table below shows the Analytical Engine requirements.

Entity	Windows Stacks	Linux Stacks
Processor	Pentium 4 processor, 1 GHz	Contact Oracle Support
Memory (depends on number of concurrent users)	At least 1 GB	At least 1 GB
Disk	6 GB disk space	6 GB disk space

If your system includes the Distributed Engine, refer to Architectures Using the Distributed Engine, page 2-12.

Oracle Demantra Administrative Utilities

The table below shows the Oracle Demantra Administrative Utilities requirements.

Entity	Windows Stacks
Processor	Two Pentium 4 Xeon processors (with extension ability to four), 1 GHz
Memory	2 GB of memory (depends on number of concurrent users)
Disk	20 GB disk space, configured RAID 1+0

Network Requirements

For a Web-based solution, the WAN requirements vary by implementation; here are some guidelines:

- Connect the servers by high-speed network lines (1 GBps).
- For a web-based solution, the WAN requirements may vary by implementation and will depend on whether the environment is shared, the size of the data set, performance expectations, and so on. However, Oracle recommends high-speed network lines capable of at least 1 GBps.
- For client-server requirements, Oracle recommends 100 Gigabit Ethernet (100 Gbit/s).

Note: Oracle Demantra is SAN aware.

Index

A

administrative utilities, 2-9
analytical engine, 2-9
Apple Mac OS X limitations, 2-3

C

client requirements, 2-1
  32-bit Oracle client, 2-3

H

hardware architecture, 2-11
  distributed engine, 2-12
  two-tier and multi-tier, 2-11
hardware requirements
  administrative utilities, 2-15
  analytical engine, 2-14
  application server, 2-14
  database server, 2-13
  multi-tier, 2-13
  servers, 2-12
  two-tier solution, 2-12

N

network requirements, 2-15

O

Oracle 12c, 2-7

P

pluggable databases, 2-7

S

server requirements
  database servers, 2-8
  Demantra web platform server, 2-4
  software, 2-4

T

TPO engine, 2-10