## **Oracle® Hyperion Financial Management**

Rapid Deployment of Oracle Hyperion Financial Management in Development Environments

Release 11.2

F13345-03

September 2020

# **Financial Management Rapid Deployment**

## **Related Topics**

- About This Document
- Deployment Requirements
- Deployment Process
- Step 1: Downloading Installation Files
- Step 2: Installing and Configuring Oracle Database
- Step 3: Installing the Financial Management Domain
- Step 4: Creating Infrastructure Schemas Using Repository Creation Utility
- Step 5: Configuring the Financial Management Domain
- Step 6: Verifying Financial Management Domain Deployment

# About This Document

This document presents recommended steps to build a typical Oracle Hyperion Financial Management development environment on a single server running Microsoft Windows. This deployment is not intended for use in a production environment. A typical Financial Management development environment comprises the following products:

- Financial Management
- Foundation Services
- Oracle Hyperion Financial Reporting
- Oracle Smart View for Office
- Required products including Oracle Database and Oracle WebLogic Server

# **Deployment Requirements**

## Server



Requirement	Description
Server Operating System	Windows Server 2019 or Windows Server 2016 (Windows 2016 support is available in Release 11.2.1).
Processor	x64
Memory	16 GB RAM
Disk	200 GB Disk
Other Software	<ul> <li>A program, such as 7-Zip or WinZip, to extract the contents of media packs</li> <li>Microsoft Office 2016 or 2019 (to support Oracle Smart View for Office)</li> </ul>

### Table 1-1 Server Requirements

## User Account

Use a generic Windows user account, for example, <code>epm\_user</code>, that satisfies the following requirements. This account is referred to as <code>deployment account</code> throughout this document:

- The deployment account is a member of the Administrators group on the server on which you are deploying this domain.
- The following local security policies are assigned to the deployment account. By default, these policies are granted to members of the Administrators group:
  - Act as part of the operating system
  - Bypass traverse checking
  - Log on as a batch job
  - Log on as a service
- User account control is disabled for the deployment account

The password that you select for this account will be used as the password for Oracle Database Administrator, Oracle Database User, WebLogic Administrator, and EPM Administrator. This password is referred to as the *deployment password* throughout this document.

The deployment password must conform to these guidelines:

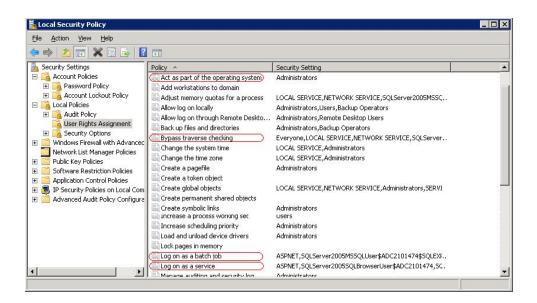
- Contain at least one uppercase letter
- Contain at least one numeral
- Be at least eight characters long
- Contain no special characters

# Verifying Local Security Policy Assignments

To verify that local security policies are assigned to the deployment account:



- **1.** Log on to the server using the deployment account.
- 2. On the server, click Start, then Windows Administrative Tools, and then Local Security Policy.
- 3. In Local Security Policy, expand Local Policies, and then select User Rights Assignment.
- Verify that the security setting for the policies highlighted in the following screen shot includes the Administrators group. Double-click the security setting of the policy to view its properties and assignments.



# **Disabling User Account Control**

To turn off user account control:

- **1**. Log on to the server using the deployment account.
- 2. On the server, click Start, and then Control Panel.
- 3. In Control Panel, click User Accounts, and then User Accounts.
- In Make changes to your user account, click Change User Account Control settings.
- 5. Drag the user account control slider to Never Notify.



💙 User Account Control Settings	-	×
Choose when to be notified about changes to your computer User Account Control helps prevent potentially harmful programs from making changes to you Tell me more about User Account Control settings	ı <mark>r compute</mark> r.	
Always notify		
-       -       Never notify me when:         •       Apps try to install software or make changes to my computer         •       I make changes to Windows settings		
This setting will take effect after you click OK and restart your PC.		
Never notify		
ОК	Cancel	

6. Click OK.

## Server Name

You must know your server name to complete the deployment process. Determine the name of your server by entering hostname in a command prompt. The name of your server is referred to as the *HostName* throughout this document.

## **Deployment Process**

The deployment process involves the following steps:

- Step 1: Downloading Installation Files
- Step 2: Installing and Configuring Oracle Database
- Step 3: Installing the Financial Management Domain
- Step 4: Creating Infrastructure Schemas Using Repository Creation Utility
- Step 5: Configuring the Financial Management Domain
- Step 6: Verifying Financial Management Domain Deployment

# Step 1: Downloading Installation Files

This section explains how to download Oracle Database 12c Standard Edition 2 and Oracle Enterprise Performance Management System product download files and



get them ready. You can download files simultaneously. Using a T1 connection, downloading files takes approximately 20 minutes. You must also download Oracle Smart View for Office from Oracle Technology Network.

To download from Oracle Software Delivery Cloud:

- 1. Create a folder named epm\_downloads on your server. The file path should not contain spaces.
- 2. Using a browser, go to http://edelivery.oracle.com.
- 3. On the Oracle Software Delivery Cloud, click Sign In.
- 4. In **Sign In**, enter your Oracle Software Delivery Cloud user name and password, and then click **Sign In**.
- 5. Download files to install Oracle Database.
  - a. In the search box, search for Oracle Database 12c Standard Edition 2 and click Search.
  - In the Results section, select Oracle Database 12c Standard Edition 2 12.2.0.1.0 (Oracle Database Standard Edition 2), and then click Add to Cart.

Oracle Software Delivery Cloud		Need Help? Contact Software Delivery Customer S			
Add items to your Carl by choosing a Category and type in the search term or software title.     Select from the drop down results or click Search - you can also select one of our most Popular Downloads.     A list of results will appear - additional filters will then be available to refine your search.     Click on the 'Add to Cart' think next to the title you within to download - the software will automatically be placed in your Cart where you will assi     Download Resage (DLP)'s Acotection of related Resears / Release (REL): A specific version of new functionality of a product     Still need help? Take our step-by-step Demo Tour or visit the FAQs.	gn a platforr	m for each l	Release.		
All Categories  V Oracle Database 12c Standard Edition 2	Search	Clear	Popular Downloads	Download History	Š
All Commercial Linux/VM 1-Click. Courseware Documentation Found 39 results DLP: Oracle Database 12c Standard Edition 2 12.2.0.1.0 (Oracle Database Standard Edition 2 )		+ A	dd to Cart		Feedback

- 6. Download files to install EPM System Oracle Hyperion Financial Management domain.
  - a. Click Clear to clear the Search selection.
  - b. In the search box, enter Oracle Enterprise Performance Management System 11.2, and then click Search.
  - c. In Results, select the following files and then click Add to Cart.

REL: Oracle Enterprise Performance Management System - Client Installers 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Installation Documents and Readmes 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Oracle HTTP Server 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Part 1 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Part 2 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Part 3 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Part 4 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Part 5 11.2.0.0.0	+ Add to Cart
REL: Oracle Enterprise Performance Management System - Part 6 11.2.0.0.0	+ Add to Cart



- Oracle Enterprise Performance Management System Client Installers
   11.2.0.0.0
- Oracle Enterprise Performance Management System Installation Documents and Readmes 11.2.0.0.0
- Oracle Enterprise Performance Management System Oracle HTTP Server 11.2.0.0.0
- Oracle Enterprise Performance Management System Part 1 11.2.0.0.0
- Oracle Enterprise Performance Management System Part 2 11.2.0.0.0
- Oracle Enterprise Performance Management System Part 3 11.2.0.0.0
- Oracle Enterprise Performance Management System Part 4 11.2.0.0.0
- Oracle Enterprise Performance Management System Part 5 11.2.0.0.0
- Oracle Enterprise Performance Management System Part 6 11.2.0.0.0
- 7. Click Checkout.
- 8. In the **Platform/Languages** column, for each row, select **Microsoft Windows x64** (64-bit) if it's not already selected, and then click **Continue**.
- 9. Review and accept the Oracle Standard Terms and Restrictions and then click **Continue**.
- Use the download manager to download files: Select the check boxes next to the desired files, click **Download**, select a download location, and then click **Save**. The single use download manager is saved to your computer.
- **11.** From the download location, run the executable file. Browse to save the files in epm\_downloads and then click **Next**.

Name	Date modified	Туре	Size
📕 V266899-01.zip	2/11/2020 4:24 PM	Compressed (zipped)	570,329 KB
🔥 V839963-01.zip	2/11/2020 4:18 PM	Compressed (zipped)	2,935,517 KB
🚺 V840015-01.zip	2/11/2020 4:20 PM	Compressed (zipped)	1,944,961 KB
V980724-01.zip	2/11/2020 4:26 PM	Compressed (zipped)	1,153,246 KB
V984488-01.zip	2/11/2020 4:23 PM	Compressed (zipped)	1,144,619 KB
🚺 V984500-01.zip	2/11/2020 4:18 PM	Compressed (zipped)	2,274,811 KB
V984501-01.zip	2/11/2020 4:21 PM	Compressed (zipped)	1,813,516 KB
🚺 V984502-01.zip	2/11/2020 4:25 PM	Compressed (zipped)	1,724,355 KB
🚺 V984503-01.zip	2/11/2020 4:25 PM	Compressed (zipped)	1,607,175 KB
V984508-01.zip	2/11/2020 4:30 PM	Compressed (zipped)	3,295,938 KB
🚺 V984509-01.zip	2/11/2020 4:20 PM	Compressed (zipped)	3,494,764 KB
V984510-01.zip	2/11/2020 4:22 PM	Compressed (zipped)	1,236,055 KB
1 V984542-01.zip	2/11/2020 4:13 PM	Compressed (zipped)	5,786 KB

- 12. When the download is complete, close the Download Manager.
- **13.** Using a program such as 7-Zip, extract the contents of the each of the ZIP files to epm\_downloads.

To download Smart View:



- 1. Using a browser, go to www.oracle.com/technetwork/middleware/smart-view-foroffice/downloads/index.html.
- 2. Click Oracle SmartView for Office.
- 3. Click **Download Now**, accept the license agreement and then click **Download**.
- 4. Click Save File, browse to epm\_downloads, and then click Save.
- Using a program, for example 7-Zip, extract the contents of the Smart View ZIP file into epm\_downloads.

# Step 2: Installing and Configuring Oracle Database

To install and configure Oracle Database:

- 1. Using Windows Explorer, navigate to <code>epm\_downloads\database</code>, and then double-click <code>setup.exe</code> to launch the installer.
- 2. In Configure Security Updates, clear I wish to receive security updates via My Oracle Support, and then click Next.

A warning that you did not provide an email address is displayed.

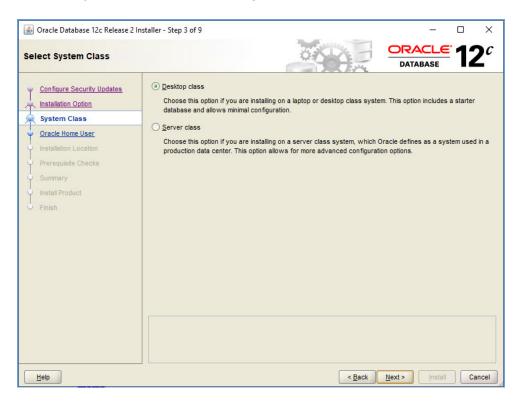
🕌 Oracle Database 12c Release 2 In	staller - Step 1 of 10		- 🗆 X
Configure Security Updates			
Configure Security Updates     Installation Option     Database Installation Options     Install Type     Oracle Home User     Installation Location     Prerequisite Checks     Summary     Install Product     Finish	Provide your email address to be i and initiate configuration manager Email: I wish to receive security upda My Oracle Sugport Password:	Easier for you if you use your My Orack	
Help		< <u>B</u> ack	Next > Install Cancel

- 3. In Email Address Not Specified, click Yes.
- 4. In Select Installation Option, ensure that Create and configure a database is selected, and then click Next.



🕌 Oracle Database 12c Release 2 In	staller - Step 2 of 10		1.5	
Select Installation Option				<b>12</b> <sup>c</sup>
Configure Security Updates     Installation Option     Database Installation Options     Install Type     Oracle Home User     Installation Location     Prerequisite Checks     Summary     Install Product     Finish	Select any of the following install options.			
Help		< Back	<u>N</u> ext > Install	Cancel

5. In Select System Class, select Desktop class, and then click Next.





6. In Specify Oracle Home User, select Use Virtual Account, and then click Next.

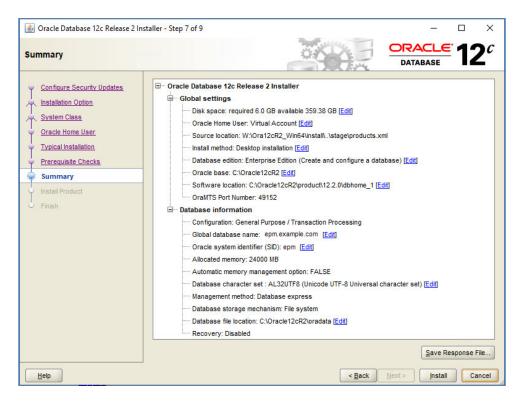
🎒 Oracle Database 12c Release 2 In	staller - Step 4 of 9 — 🗆 🗙
Specify Oracle Home User	
Configure Security Updates	For enhanced security, you may choose to run Windows Services from this Oracle home with a non-administrator account. Oracle recommends that you choose a Virtual Account or specify a standard Windows User Account for this purpose.
Oracle Home User     Installation Location     Prerequisite Checks     Summary     Install Product     Finish	O Use <u>y</u> intui Account
Help	< <u>Back</u> Install Cancel

- 7. In **Typical Install Configuration**, enter the following details. Keep default values for all other fields. Click **Next** when you are done.
  - Database eddition—Select Enterprise Edition (6.0GB).
  - Global database name—Set to epm.
  - **Password**—Enter the deployment password.
  - **Confirm password**—Reenter the deployment password.



🎒 Oracle Database 12c Release 2 Ir	nstaller - Step 5 of 9			4 <u>767</u> 1		×
Typical Install Configuration	n	04		DRACLE	12	C
Configure Security Updates Installation Option System Class Oracle Home User Typical Installation Prerequisite Checks Summary Install Product Finish	Perform full database in Oracle bage: Software location: Database file location: Database gdition: Character set: Global database name: Password: Create as Container Pluggable database		10me_1	· ·	Brows Brows Brows	se
Help			< <u>B</u> ack <u>N</u> ex	t > Install	Ca	ncel

#### 8. In Summary, click Install.





#### 9. In Finish, click Close.

🕌 Oracle Database 12c Release 2 I	Installer - Step 9 of 9			×
Finish			12	<b>2</b> <sup>c</sup>
Configure Security Updates	The installation of Oracle Database was successful. Note: Oracle Enterprise Manager Database Express URL: https://localhost.5500/en	1		
Oracle Home User Typical Installation Prerequisite Checks Summary				
Install Product     Finish				
Help	< <u>B</u> ack	Next > Instal		lose

- **10.** After installation is complete, create a database user named **epm\_user**, and assign roles and privileges and set parameters.
  - On your server, from the Start menu, select
     Oracle-OraClient18c32\_user\_name (for 32-bit) or Oracle-OraClient18c64\_user\_name (for 64-bit), and then SQL Plus.
  - For Enter user name, enter SYS as SYSDBA.
  - For **Password**, enter the deployment password.
  - Create a database user named epm\_user, identified by the deployment password, by executing this statement: create user epm\_user identified by DEPLOYMENT\_PWD;. Remember to replace DEPLOYMENT\_PWD with your actual deployment password.
  - Grant privileges to epm\_user by entering the following command:

grant CREATE ANY SYNONYM, CREATE CLUSTER, CREATE INDEXTYPE, CREATE PROCEDURE, CREATE SEQUENCE, CREATE SESSION, CREATE TABLE, CREATE TRIGGER, CREATE TYPE, CREATE VIEW, DROP ANY SYNONYM to epm\_user;

• Set parameters:

ALTER SYSTEM SET processes=2000 SCOPE=SPFILE; ALTER SYSTEM SET OPEN\_CURSORS=5000 SCOPE=SPFILE;



ALTER SYSTEM SET SESSION\_CACHED\_CURSORS=200 SCOPE=SPFILE; ALTER SYSTEM SET SESSIONS=2000 SCOPE=SPFILE;

- The sqlnet.ora file in the database server (in %ORACLE\_HOME% \product\xx.x.x\dbhome\_1\network\admin\sqlnet.ora) should have the following setting: sqlnet.expire\_time=10
- Set the max\_string\_size setting to standard.

After setting parameters, restart Oracle Database (both the Listener and the Oracle Database service).

# Step 3: Installing the Financial Management Domain

To install the Oracle Hyperion Financial Management domain of Oracle Enterprise Performance Management System:

- 1. In Windows Explorer, navigate to the <code>epm\_downloads</code> folder, and then double-click <code>installTool.cmd</code>.
- 2. In EPM System Installer, select a language, and then click **OK**.



3. In **Welcome**, verify that your system has passed all prerequisite checks, and then click **Next**.

♥ Welcome         ♥ Destination         ♥ Installation Type         ● Installation Type         ● Product Selection         ● Product Selection         ● Progress         ● Summary         ● Summary         If you are upgrading from an earlier release, you must first perform pre-installation tasks, including exporting Shared Services data, before you proceed. See the Installation and Configuration Guide for details.         Copyright © 2008, 2015, Oracle and / or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and / or its affiliates. Other names may be trademarks of their respective owners.         This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are noticted by intellectual nonerty laws. Excent as expressly mermitted in your license agreement or allowed by law your         ■ EMM System Installer Prerequiste Checks         ● EPMNS-01024: EPM System Installer successfully resolved the hostname - sicf4xie.us.oracle.com         ● EPMNS-01074: hventory is writable         Failure to meet all prerequistes may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.	EPM System Installer 11	20.0 — 🗆	>
Destination Destination Product Selection Product Selection Product Selection Before installing, review the Oracle Hyperion Enterprise Performance Management System Certification Matrix for information on system requirements and release compatibility. Also review the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide for other information needed to plan a successful installation. If you are upgrading from an earlier release, you must first perform pre-installation tasks, including exporting Shared Services data, before you proceed. See the Installation and Configuration Guide for details. Copyright © 2008, 2015, Oracle and / or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and / or its affiliates. Other names may be trademarks of their respective owners. This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are noracle (DHS) vision installer successfully resolved the hostance - sic14xie us oracle.com EPM System Installer Prerequiste Checks I EPMINS-01026: The operating system is supported - Window Server 2019 Standard EPMINS-01026: The operating system supported - Window Server 2019 Standard EPMINS-01074: Inventory is wrtable Fahrers to neet all prerequistes may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.	Welcome	Welcome to EDM System Testaller	•
Product Selection       Important!         Product Selection       Before installing, review the Oracle Hyperion Enterprise Performance Management System Certification Matrix for information on system requirements and release compatibility. Also review the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide for other information needed to plan a successful installation.         If you are upgrading from an earlier release, you must first perform pre-installation tasks, including exporting Shared Services data, before you proceed. See the Installation and Configuration Guide for details.         Copyright © 2008, 2015, Oracle and / or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/ or its affiliates. Other names may be trademarks of their respective owners.         This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are notected by intellectual nonerty laws. Excent as extressive mermitted in your license agreement or allowed by law you         EMM System Installer Precessible Checks         * EMNINS-0102e. The operating system is supported - Windows Server 2019 Standard         * EMNINS-0102e. The operating system supported - Windows Server 2019 Standard         * EMNINS-0102e. The operating system system is may be requises have been met.         * EMNINS-0102e. The operating system system system is my result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.	THE REPORT OF THE PARTY OF THE PARTY		
Progress       on system requirements and release compatibility. Also review the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide for other information needed to plan a successful installation.         If you are upgrading from an earlier release, you must first perform pre-installation tasks, including exporting Shared Services data, before you proceed. See the Installation and Configuration Guide for details.         Copyright © 2008, 2015, Oracle and / or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and / or its affiliates. Other names may be trademarks of their respective owners.         This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are notacled by intellectual nonerty laws. Excent as extressly nermitted in your license areement or allowed by law you.         EPM System Installer Preventing system is supported - Windows Server 2019 Standard         CHMINS-0102: The operating system is supported - Windows Server 2019 Standard         EPMINS-0102: The operating system is supported - Windows Server 2019 Standard         EPMINS-0102: The operating system is supported - Windows Server 2019 Standard         EPMINS-0102: The operating system is supported - Windows Server 2019 Standard         Environment all preequisites may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.	CONTRACTOR OF THE OWNER OF THE	Important!	
9 progress       System Installation and Configuration Guide for other information needed to plan a successful installation.         9 summary       If you are upgrading from an earlier release, you must first perform pre-installation tasks, including exporting Shared Services data, before you proceed. See the Installation and Configuration Guide for details.         Copyright © 2008, 2015, Oracle and / or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/ or its affiliates. Other names may be trademarks of their respective owners.         This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are noratecled. by intellectual property laws. Excent as expressive nermitted in your license aereement or allowed by law. you         EPM System Installer PM System Installer successfully resolved the hostname - slc14xle us oracle com         Y EPMINS-01026: The operating system is supported - Windows Serve 2019 Standard         Y EPMINS-01030: All environment variables prerequistes have been met.         Y EPMINS-01074: Inventiony is writable         Failure to meet all preequisites may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.	) Confirmation		
If you are upgrading from an earlier release, you must first perform pre-installation tasks, including exporting Shared Services data, before you proceed. See the Installation and Configuration Guide for details. Copyright © 2008, 2015, Oracle and / or its affiliates. All rights reserved. Oracle is a registered trademark of Oracle Corporation and/ or its affiliates. Other names may be trademarks of their respective owners. This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are notacted how intellectual nonerty laws. Excent as expressly nemtited in your license agreement or allowed hy law you. EPM System Instaler Prerequisite Checks <ul> <li>EPM System Instaler Prerequisite Checks</li> <li>EPMINS-01024: EPM System Installer successfully resolved the hostname - sic14xie us oracle.com</li> <li>EPMINS-01026: The operating system is supported - Windows Server 2019 Standard</li> <li>EPMINS-01026: The operating system is supported - Windows Server 2019 Standard</li> <li>EPMINS-01026: The operating system is supported - Windows Server 2019 Standard</li> <li>EPMINS-01026: The operating system is supported - Windows Server 2019 Standard</li> <li>EPMINS-01026: The operating system is supported - Windows Server 2019 Standard</li> <li>EPMINS-01026: The operating system is supported - Windows Server 2019 Standard</li> <li>EPMINS-01074: Inventory is writable</li> <li>Failure to meet all preequisites may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.</li> </ul>	Contraction of the local division of the loc		
Corporation and/ or its affiliates. Other names may be trademarks of their respective owners. This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are instanced by intellectual aronerty laws. Excent as expressive nermitted in your license agreement or allowed by law. you EPM System Installer Prerequiste Checks $\checkmark$ EPMINS-01024: EPM System Installer successfully resolved the hostname - slc14xle us oracle.com $\checkmark$ EPMINS-01026: The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01026. The operating system is supported - Windows Server 2019 Studard $\checkmark$ EPMINS-01074. Inventory is writable Failure to meet all prerequisites may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.	y summary		
and are protected by intellectual property laws. Excent as expressiv permitted in your license agreement or allowed by law, you         EPM System Installer Perequisite Checks         Model         Model <td></td> <td></td> <td></td>			
EPMINS-01024: EPMI System installer successfully resolved the hostname – sic14xie us.oracle.com     EPMINS-01026: The operating system is supported - Vindows Server 2019 Standard     EPMINS-01063: All environment variables prerequisites have been met.     EPMINS-01074: inventiony is writable     Failure to meet all prerequisites may result in unsatisfactory results. If you receive errors, please check the Help or documentation for more information.			-
information.		EPM System Installer Prerequisite Checks FMMS-01024: EPM System Installer successfully resolved the hostname - slc14xle.us.oracle.com FMMS-01026: The operating system is supported - Windows Server 2019 Standard FMMS-01026: All environment variables prerequisites have been met.	
			D



4. In **Destination** keep the default value, and then click **Next**.

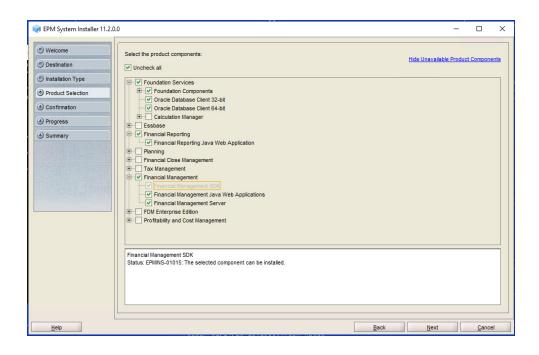
🔿 EPM System Installer	11.2.0.0	-		×
() Welcome	Enter the location of Middleware Home (spaces are not supported):			1
<ul> <li>Destination</li> </ul>	C:IOracle/Middleware Browse			
Installation Type				
Product Selection				
<ul> <li>Confirmation</li> </ul>				
Progress				
<ul> <li>Summary</li> </ul>				
			10 10	
Load <u>H</u> elp	Back	Next	<u><u>C</u></u>	ancel

5. In Installation Type, ensure that New installation is selected, and then select Next.

😭 EPM System Installer 11.2.0.	0	-		×
<ul> <li>Welcome</li> <li>Destination</li> <li>Installation Type</li> <li>Product Selection</li> <li>Confirmation</li> <li>Progress</li> <li>Summary</li> </ul>	Choose the install type: New installation     Re-install this release     Apply maintenance release			
Help	Back Next		Cance	el

- 6. In **Product Selection**, clear (uncheck) **Uncheck all**, make the following selections, and then click **Next**:
  - a. Under Foundation Services, select Foundation Components, Oracle Database Client 32-bit, Oracle Database Client 64-bit.
  - b. Under Financial Reporting, select Financial Reporting Java Web Application.
  - c. Under Financial Management, select all Financial Management components.





### 7. In Confirmation, click Next.

Welcome	EPM Oracle Home: C:\RapidHFM\EPMSystem11R1		
Destination	Product/Component	Installation Type	Status
Destination	Common Components	Install	
Installation Type	Essbase Product Common Components	Install	
Construction and the second second	Product Common Components	Install	
Product Selection	Tools	Install	
A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE	Foundation Services		
Confirmation	Oracle Database Client 64-bit	Install	
2.	Oracle Database Client 32-bit	Install	
Progress	WebLogic Application Server	Install	
Summary	Oracle HTTP Server	Install	
Junnary	Static Content Files	Install	
	Workspace Java Web Application	Install	
	Foundation Services Java Web Applications	Install	
	Financial Reporting		
	Financial Reporting Java Web Application	Install	
	Financial Management		
	Financial Management Server	Install	
	Financial Management Java Web Applications	Install	
	Financial Management SDK	Install	
	The features being installed are listed above. Click Next to be		

- 8. In Progress, monitor the installation status
- 9. In Summary, click Finish.



Welcome	EPM Oracle Home: C:\RapidHFM\EPMSystem11R1		
Destination			
) Installation Type	Product/Component     Common Components	Installation Type	Status Completed
A CONTRACTOR OF	Essbase Product Common Components	Install	Completed
Product Selection	Product Common Components	Install	Completed
	Tools	Install	Completed
Confirmation	Foundation Services	install	Completed
) Progress	Oracle Database Client 64-bit	Install	Completed
Jingitud	Oracle Database Client 32-bit	Install	Completed
Summary	WebLogic Application Server	Install	Completed
CONTRACTOR POLICY AND INC.	Oracle HTTP Server	Install	Completed
	Static Content Files	Install	Completed
	Workspace Java Web Application	Install	Completed
	Foundation Services Java Web Applications	Install	Completed
	Financial Reporting	iiistaii	Completed
	Financial Reporting Java Web Application	Install	Completed
	<ul> <li>Financial Management</li> </ul>	inataii	Completed
	Financial Management Server	Install	Completed
	Financial Management Java Web Applications	Install	Completed
	Financial Management SDK	Install	Completed
	EPMINS-01020: The installation was successful. Click Finish to exit EPM System Installer, or click Configure	to configure the product.	

- **10.** Install Oracle Smart View for Office:
  - a. Close all Microsoft Office applications.
  - **b.** Browse to epm\_downloads, and then double-click SmartView.exe to start the installation wizard.
  - c. Select a destination folder for Smart View, and then click OK.
  - d. When installation is complete, click **OK**.

# Step 4: Creating Infrastructure Schemas Using Repository Creation Utility

The Repository Creation Utility (RCU) is used to create schemas to support Oracle Enterprise Performance Management System Java web applications. To run RCU and update RCU schema properties:

- Navigate to C:\Oracle\Middleware\oracle\_common\bin and launch rcu.bat.
- 2. On the Welcome page, click Next.





3. In Create Repository, ensure that Create Repository and System Load and Product Load are selected, and then click Next.





4. On the **Database Connection Details** page, specify the host, port, fully qualified service name, a user with DBA or SYSDBA, privileges, such as sys, and password, and then click **Next**. When the prerequisite check is completed, click **OK**.



Wekome Create Repository Database Connection Deta Select Components	Database Type:	Oracle Database	
Schema Passwords Hao Tablespaces Summary Completion Summary	Connection String Format: Connect String Host Name: Port: Service Name: Username: Password: Bole:	Connection Pgrameters     Connection String     localhost     1521     epm.example.com     sys     SYSDBA	

- 5. On the Select Components page, perform these tasks, and then click Next:
  - Select **Create new prefix** and provide a prefix. Oracle recommends that you use the same prefix for the EPM System database user and for the RCU database, such as EPM.
  - Expand **AS Common Schemas** and select all the options.
  - Clear the selection for **Oracle Data Integrator** if **Oracle Data Integrator** is listed.



pository Creation U	tility			$\mathbf{V}$
Welcome_	Specify a unique prefix for all schem schemas later.	nas created in this session, so you	can easily locate, reference, and man	age the
Create Repository				
Database Connection Details	Select existing prefix:			
Select Components				
	Oreate new prefix:	EPM		
Schema Passwords		Alpha numeric only. Cannot s	tart with a number. No special charact	ers.
Map Tablespaces				
Summary	Component		Schema Owner	
100 million 100	Oracle AS Repository Components			
Completion Summary	■ AS Common Sche			
	Common Infras	structure Services *	EPM_STB	
		Security Services	EPM_OPSS	
	User Messagin	g Service	EPM_UMS	
	Audit Services		EPM_IAU	
	Audit Services /	Append	EPM_IAU_APPEND	
	Audit Services V		EPM_IAU_VIEWER	
	Metadata Servic	ces	EPM_MDS	
	Weblogic Servi	ces *	EPM_WLS	
	* Mandatory component. Mano	latory components cannot be des	elected.	
	**			

When the prerequisite check is completed, click **OK**.

6. On the Schema Passwords page, select Use same passwords for all schemas. Enter a password in Password and Confirm Password, make a note of it, and then click Next.



Repository Creation Utility - Ste	p 5 of 8		19	· 🗆 🗙
Repository Creation U	tility			♥)
y <u>Welcome</u>	Define passwords for m	ain and auxiliary schema users.		
Create Repository	• Use same password	s for all schemas		
Database Connection Details	Password:	•••••	]	
Select Components		Alpha numeric only.Cannot start with a nur No special characters except: \$, # ,	nber.	
Schema Passwords				
Map Tablespaces	Confirm Password:	•••••	]	
Summary	Use <u>m</u> ain schema pa	asswords for auxiliary schemas		
O Completion Summary	Specify different pa	sswords for all schemas		
Help			< Back Next > Eir	iish Cancel

7. On the **Map Tablespaces** page, click **Next**, and then click **OK** to create tablespaces. When the prerequisite check is completed, click **OK**.



Repository Creation U	tility			
Velcome Create Repository Database Connection Details Select Components	Default and temporary tables To create new tablespaces or			
Schema Passwords	Component	Schema Owner	Default Tablespace	Temp Tablespace
	Common Infrastructur	EPM_STB	*EPM_STB	*EPM_IAS_TEMP
Map Tablespaces	Oracle Platform Securit	EPM_OPSS	*EPM_IAS_OPSS	*EPM_IAS_TEMP
Summary	User Messaging Service	EPM_UMS	*EPM_IAS_UMS	*EPM_IAS_TEMP
Completion Summary	Audit Services	EPM_IAU	*EPM_IAU	*EPM_IAS_TEMP
O completion summary	Audit Services Append	EPM_IAU_APPEND	*EPM_IAU	*EPM_IAS_TEMP
	Audit Services Viewer	EPM_IAU_VIEWER	*EPM_IAU	*EPM_IAS_TEMP
	Metadata Services	EPM_MDS	*EPM_MDS	*EPM_IAS_TEMP
	Weblogic Services	EPM_WLS	*EPM_WLS	*EPM_IAS_TEMP
	* Default tablespaces (specifi	ed in the configuration files	s) are to be created upon co	nfirmation.
	**			

8. On the **Summary** page, review the selections, and then click **Create**.

Repository Creation Utility - Ste	p 7 of 8			- 🗆 X		
epository Creation Utility						
Welcome	Database details:					
Create Repository	Host Name	localhost				
Database Connection Details	Port	1521				
Select Components	Service Name	epm.example.cor	n			
Schema Passwords	Connected As	sys				
Map Tablespaces	Operation	System and Data	Load concurrently			
	Prefix for (prefixable) Schema Owners	EPM				
Summary						
Completion Summary	Component	Schema Owner	Tablespace Type	Tablespace Name		
	Common Infrastructure Services	EPM_STB	Default Temp Additional	EPM_STB EPM_IAS_TEMP [None]		
	Oracle Platform Security Services	EPM_OPSS	Default Temp Additional	EPM_IAS_OPSS EPM_IAS_TEMP [None]		
	User Messaging Service	EPM_UMS	Default Temp Additional	EPM_IAS_UMS EPM_IAS_TEMP [None]		
	Audit Services	EPM_IAU	Default Temp Additional	EPM_IAU EPM_IAS_TEMP [None]		
	Audit Services Append	EPM_IAU_APPEND	Default Temp	EPM_IAU EPM_IAS_TEMP		
	Save Response File					
Hala			Rade North	Crosto Court		
Help			< <u>B</u> ack <u>N</u> ext >	<u>C</u> reate Cano		



9. On the Completion Summary page, click Close.

Repository Creation Utility - Ste epository Creation U	•				
<ul> <li>Welcome</li> <li>Create Repository</li> <li>Database Connection Details</li> <li>Select Components</li> <li>Schema Passwords</li> <li>Map Tablespaces</li> <li>Summary</li> <li>Completion Summary</li> </ul>	Database details: Host Name Port Service Name Connected As Operation Execution Time RCU Logfile Component Log Directory View Log Prefix for (prefixable) Schema Owners	2 minutes 14 C:\Users \EPM	ita Load concurrently seconds \ AppData\Local\Tem	p\2\RCU2020-01-15_16-42 p\2\RCU2020-01-15_16-42	
	Compo Common Infrastructure Orade Platform Securit User Messaging Service Audit Services Audit Services Append Audit Services Viewer Metadata Services Weblooki Services	Services y Services	Status Success Success Success Success Success Success Success Success	Time           00:09.482(sec)           00:19.592(sec)           00:15.288(sec)           00:09.238(sec)           00:09.238(sec)           00:09.260(sec)           00:15.817(sec)           00:15.817(sec)	Logfile(Click to view) stb.log opss.log ucsums.log iau.log iau.append.log iau_viewer.log mds.log wis.log

#### **10.** Navigate to

C:\Oracle\Middleware\EPMSystem11R1\common\config\11.1.2.0\RCU Schema.properties and open it in a text editor.

- **11**. Provide the database details and then save the file.
  - sysDBAUser—The sysdba user for RCU
  - sysDBAPassword—The sysdba password for RCU
  - rcuSchemaPassword—RCU schema password created while running RCU
  - schemaPrefix—The schema prefix used to create RCU.
  - dbURL—For example: dbURL=jdbc:oracle:thin:@hostname:port/ epm.example.com

```
*RCUSchema.properties - Notepad
```

```
File Edit Format View Help
sysDBAPassword=Welcome01
schemaPrefix=EPM
rcuSchemaPassword=Welcome01
dbURL=jdbc:oracle:thin:@//localhost:1521/epm.example.com
sysDBAUser=sys
```



# Step 5: Configuring the Financial Management Domain

To configure the Oracle Hyperion Financial Management domain:

- 1. From the Start menu, select Oracle EPM System, and then EPM System Configurator (all instances).
- 2. In EPM Oracle Instance, click Next to use the default values.

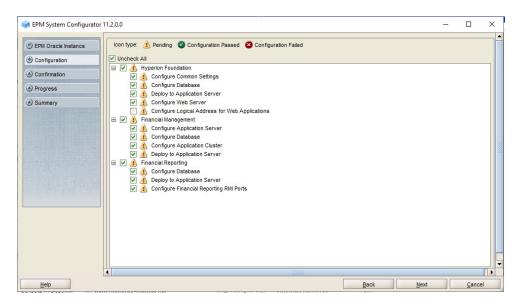
🏟 EPM System Co	onfigurator 11.2.0.0		<u></u>		×
EPM Oracle Instance	Select the EPM Oracle Instance to which th	he configuration would be applied:			
<ul> <li>Configuration</li> </ul>	Home directory for EPM Oracle instances:	C:\Oracle\Middleware\user_projects		Brows	-
<ul> <li>Confirmation</li> </ul>	Home directory for EPM Grade instances.			Citerror	
Progress	EPM Oracle instance name:	epmsystem1			
<ul> <li>Summary</li> </ul>	Only one EPM Instances Home is supported	per user and EPM System.			
	•				
Help			Next	C	ancel

- 3. In Shared Services and Registry Database Connection, enter the following information, and then click Next. Use default values for all remaining fields and selections.
  - Service Name or SID—Enter epm.
  - User Name—Enter epm\_user.
  - **Password**—Enter the deployment password.



EPM System Configurato	r 11.2.0.0				100		>
EPM Oracle Instance	Set up Shared Service	and Registry Database Connection associated w	ith the database instance home	e:			_
Configuration		configured Shared Services database					
) Confirmation	Perform first-time con	uration of Shared Services database					
) Progress	Database connection info	nation:					
Summary							
	Database Type:	racle's Driver (Thin)					•
	Server:	pm.example.com					
	Port:	521					
	Service Name or SID:	pm.example.com					
	User Name:	pm_user					
	Password:	•••••					
					Advanc	ed Option	ns
	•	8888					n
Help	Dit .		Back	Next		Cance	-

4. In **Configuration**, click **Next** to configure the selected products.



5. In Configure Common Settings, click Next to use the default values.



EPM System Config	jurator 11.2.0.0			×
EPM Oracle Instance     Configuration     Confirmation	Configure Common Settings: Create Windows Services for configure Run Windows Services as non-lo User Name:			
Progress Summary	Password:			
	Mail Server (SMTP) Setup: Mail Server Host: Outgoing Port:	25		
	Incoming Port	143		
	Administrator's Email Address:			
	Use SSL to communicate with mail : Use authentication to send email User Name: Password:	server		

6. In **Configure Database**, click **Next** to use the default values.

EPM Oracle Instance	nfigure Database:					
Configuration Dat	abase Type:	Oracle's Driver (Thin)				
COLUMN DESIGNATION OF COLUMN DATA OF COLUMN						
Confirmation	Product Name	Server	Port	Servicename/SID	Username	Password
	Financial Reporting	epm.example.com	1521	epm.example.com	epm_user	
	Financial Management	epm.example.com	1521	epm.example.com	epm_user	
	Advanced database option	s for selected rows				

- 7. In **Deploy to Application Server Specify WebLogic Domain Information**, enter the following values, and then click **Next**. Use the default values in the remaining fields.
  - Administrator Password—Enter the deployment password.
  - Confirm Administrator Password—Reenter the deployment password.



EPM System Configurato				
EPM Oracle Instance	Deploy to Application Server - Sp	pecify WebLogic Domain Information:		
Configuration	O Deploy Java web applications to	an existing domain.		
Confirmation	Administration Server Host:	and Palaty and service income		
) Progress	Administration Server Port:			
) Summary	Administrator User:			
	Administrator Password:			
	Domain Name:			
	Deploy Java web applications to	a new domain. The Administration Server for this domain will be created on this machine.		
	Domain Name:	EPMSystem		
	Administration Server Port:	7001		
	Administrator User:	epm_admin		
	Administrator Password:	•••••		
	Confirm Administrator Password:	•••••		

8. In Deploy to Application Server: Oracle WebLogic, click Next to use the default selections.

EPM Oracle Instance     De	eploy to Application Server: Oracle We	bLogic			
Configuration	Deploy the Java web applications to a si	ngle managed server			
Confirmation	.EAR/.WAR	Managed Server Name	Port	SSL Port	Status
	Financial Reporting	EPMServer0	9000	9443	
) Progress	Workspace	EPMServer0	9000	9443	
Summary	Shared Services	EPMServer0	9000	9443	1
	FM Web Services	EPMServer0	9000	9443	
	FM ADF Web Application	EPMServer0	9000	9443	

9. In Financial Reporting – Configure RMI Ports, click Next to use the default values.



EPM System Configurate	or 11.2.0.0			
) EPM Oracle Instance	Financial Reporting - Configure RMI Ports:			
Configuration	Port Range:			
) Confirmation	RMI Ports	8205-82	228	-
Progress	The FR Java web application consumes one RMI port per instance. Reconfiguring the port range affects all the FR Java web app			-
) Summary	The port range must be at least as large as the number of deployed FR Java web applications.			

10. In Configure Web Server, select Embedded WebLogic HTTP Server, and then click Next.

	or 11.2.0.0		- 0
EPM Oracle Instance	Configure Web Server:		
Configuration	Web Server Type:	Embedded WebLogic HTTP Server	
Confirmation			
COLUMN STREET, GIVE STOLEN	Web Server Port:		
Progress			Advanced Opti
Summary			Advanced Opti
	Note: Fashing Web Convert	201 and the second and formation	
	Note: chabling web Server S	SL requires manual configuration.	
	Set the logical address fo	r the applications to this web server	
		Component	
	HFM ADF Java Web Applica	tion	
	HFM Web Services		
	Workspace		
	Financial Reporting		
	Financial Reporting		

**11.** In Financial Management – Configure Server, click Next.



EPM System Configurate	or 11.2.0.0			1.77	
) EPM Oracle Instance	Financial Management - Configure Server:				
Configuration		9091			
) Confirmation	Port:		Active:		
Progress	SSL Port:	9092	Active:		
COLUMN TRACTOR					
Summary					
	Max App Server Delay:	300	seconds		
	Max Data Sync Delay:	300	seconds		
	Database Connection Pool Size:	200			
	Datasource Port Range:				
	Start Port:	10001	_		
	End Port:	10020	_		

12. In Financial Management – Configure Cluster, click Next.

😭 EPM System Configurator	11.2.0.0			_		×
EPM Oracle Instance     Configuration     Configuration     Progress     Summary	Financial Management - Configure Clust Defined Clusters: Servers in the Cluster:	er: < Add Remove >	Add Available Servers: epm.example.com	Remove	Edit	
Help			Back	Next	Canc	

**13.** In **Set Shared Services Admin User and Password**, enter the deployment password in **Password** and **Re-type Password**, and then click **Next**.



EPM System Configurator 11.2.0	0.0		-		>
EPM Oracle Instance	et Shared Service	s Admin User and Password			
Configuration A	dmin Name:	admin			
Confirmation Pa	assword:	•••••			
Progress Re	e-type Password:	•••••			
) Summary					
					_
Help		Back Next		Cance	-

14. In **Confirmation**, click **Next** to initiate the deployment process.

	Product/Task	Status
Configuration	Hyperion Foundation	
Configuration	Pre-Configuration	
Confirmation	Configure Common Settings	
Progress	Configure Database	
THE OWNER AND A DESCRIPTION OF	Deploy to Application Server	
Summary	Configure Web Server	
	Financial Reporting	
	Pre-Configuration	
	Register with Shared Services	
	Configure Database	
	Deploy to Application Server	
	Configure Financial Reporting RMI Ports	
	Workspace	
	Deploy to Application Server	
	Financial Management	
	Pre-Configuration	
	Register with Shared Services	
	Configure Application Server	
	Configure Database	
	Configure Application Cluster	
	Deploy to Application Server	

If you see an error message that .NET Framework couldn't be installed, click **Close**. This error does not affect the deployment.

**15.** In **Summary**, click **Finish**.



EPM Oracle Instance	Product/Task	Status
	Hyperion Foundation	
Configuration	Pre-Configuration	Completed
Confirmation	Configure Common Settings	Completed
) Progress	Configure Database	Completed
COMPENSION INCOMES A COMPANY	Deploy to Application Server	Completed
Summary	Configure Web Server	Completed
	Financial Reporting	
	Pre-Configuration	Completed
	Register with Shared Services	Completed
	Configure Database	Completed
	Opploy to Application Server	Completed
	Configure Financial Reporting RMI Ports	Completed
	Workspace	
	Deploy to Application Server	Completed
	Financial Management	
	Pre-Configuration	Completed
	Register with Shared Services	Completed
	<ul> <li>Configure Application Server</li> </ul>	Completed
	Configure Database	Completed
	Configure Application Cluster	Completed
	Deploy to Application Server	Completed
	Configuration completed.	
	Configuration completed.	

- **16.** Start WebLogic Administration Server: Launch C:/Oracle/Middleware/ user\_projects/domains/EPMSystem/bin/startWeblogic.cmd.
- 17. Start Oracle Enterprise Performance Management System: From the Start menu, select Oracle EPM System, and then Start EPM System.
- **18.** Confirm that processes are running by viewing Windows services. In **Services**, verify that the **Oracle Hyperion** services startup status match those indicated in the following screen shot:

A Network Location Awareness  Network Ster Instracts Service  NutCRACKER Service  Offline Files  Offline Files	Collects an The Networ This service The Offline Agent to bo	Running Running Running	Automatic Manual (Trig Automatic Automatic Disabled Disabled	Network S Local Syste Local Service Local Syste Local Syste Local Syste
Oracle Hyperion EPM Server - Java Web Application (epmsystem1) Oracle Hyperion Financial Management - Java Server (epmsystem1)	Controls th Oracle Hyp		Automatic Automatic	Local Syste Local Syste
Oracleogent13c1Agent     OracleoloSchedulerSLC14XLE     OracleOn2DB12Home1MTSRecoveryService     OracleOn2DB12Home1MTSRistener		Starting Running Running	Automatic Disabled Automatic Automatic	Local Syste NT SERVIC NT SERVIC NT SERVIC
(A 0		D	Dischard	La cal Conta

# Step 6: Verifying Financial Management Domain Deployment

To verify Oracle Hyperion Financial Management domain deployment:

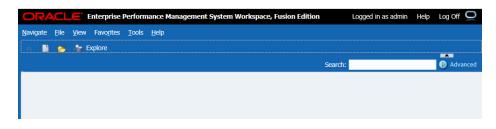
 Run Oracle Hyperion Enterprise Performance Management System Diagnostics: From the Start menu, select Oracle EPM System, and then EPM System Diagnostics.



Diagnostic test results are displayed in your browser.



- 2. Verify that you can access Oracle Hyperion Enterprise Performance Management Workspace and Financial Management.
  - a. From the Start menu, select Oracle EPM System, and then Workspace URL.
  - b. Log in to EPM Workspace:
    - User Name—Enter admin.
    - **Password**—Enter the deployment password.
  - c. Click Log On.



 Select Navigate, then Administer, and then Consolidation Administration. Click OK if a warning about compatibility settings is displayed. Consolidation Administration is displayed.



Slc15dxw.us.oracle.com:19000/wor	kspace/index.jsp
ORACLE <sup>®</sup> Enterprise Perfo	rmance Management System Workspace, Fusion Edition
Navigate File View Favorites Ioo	
Admin Tasks	Can Messages
> System	Actions 🔻 View 🔻 😡 💥 🦉 🍇 🚯
Applications	Type System Message Summary
<ul> <li>Import Application</li> <li>Profile Editor</li> <li>Configure DSN</li> <li>Task Flows</li> <li>&amp; Audit</li> </ul>	There are no results that match the filter criteria
<	

Oracle® Hyperion Financial Management Rapid Deployment of Oracle Hyperion Financial Management in Development Environments F13345-03

Copyright © 2012, 2020, Oracle and/or its affiliates. All rights reserved.

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, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software" or "commercial computer software" or "commercial computer software" or users are "software" or "commercial computer software" or users are "software" or "commercial computer software" or users are "software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of 1) Oracle programs embedded, installed or activated on delivered hardware, and modifications of such programs, iii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. 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.

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

Intel and Intel Inside 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, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.



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 that have purchased support 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.

To provide feedback on this documentation, click the Feedback button at the bottom of the page in any Oracle Help Center topic. You can also send email to epmdoc\_ww@oracle.com.

