

Oracle[®] Hyperion Enterprise Performance Management System

EPM System Standard Deployment Guide

Release 11.1.2.1

EPM System Standard Deployment Guide, 11.1.2.1

Copyright © 2011, Oracle and/or its affiliates. All rights reserved.

Authors: EPM Information Development Team

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 software or related documentation 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 RIGHTS:

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software 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 which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software 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

1. EPM System Standard Deployment Overview	5
1.1. What is Standard Deployment?	5
1.2. Standard Deployment Topology	5
1.3. Deployment Directory Structure and Location Reference	6
1.4. Deployment Approach	7
1.5. Deployment Scenarios	8
2. Deployment Requirements	9
2.1. Minimum Server Specifications	9
2.2. Server Requirements	9
2.3. CLIENTHOST1 Requirements	10
2.4. Deployment User Requirements	11
2.5. Shared File System Requirements	11
2.6. Hostname Resolution Requirements	12
2.7. Clock Synchronization	12
3. Set up Oracle Database	13
3.1. Database Settings	13
3.2. Database Accounts for EPM System Deployment	13
3.3. Database Roles and Privileges for EPM System Users	13
3.4. Other User Settings	13
3.5. Database Information Required for EPM System Deployment	13
4. Set up Network	14
4.1. Firewall Setup	14
4.2. Virtual Hosts Setup	14
4.2.1. External Virtual Host	14
4.2.2. Internal Virtual Host	14
4.3. Loadbalancer Setup	15
5. Deploy EPM System Software	16
5.1. Prerequisites	16
5.2. Download the EPM System Software	16
5.2.1. Part Numbers of Required EPM System Software	16
5.2.2. Unzipping EPM System Software	19
5.3. Install and Configure Foundation Services on FNDHOST1	20
5.4. Install and Configure Planning on PLANHOST1	29
5.5. Install and Configure Essbase Server on ESSHOST1	39
5.6. Install and Configure Financial Management on HFMHOST1	45
5.7. Install and Configure Financial Management Web Application on HFMWEBHOST1	53
5.8. Web Tier Configuration	64

6. Scaling Out the Application Tier	65
6.1. Scaling out EPM System Foundation Services to FNDHOST2	65
6.2. Scaling out EPM System Planning to PLANHOST2	75
6.3. Scaling out Financial Management to HFMHOST2	75
6.4. Scaling out Financial Management Web Application to HFMWEBHOST2	75
6.5. Scaling out Essbase to ESSHOST2.....	76
6.6. Reconfigure the Web Server on Foundation Services Servers (FNDHOST1 and FNDHOST2)	76
6.7. Reconfigure Loadbalancer	78
7. Installing EPM System Clients on CLIENTHOST1	79
7.1. Smart View	79
7.2. Financial Reporting Studio.....	80
7.3. Essbase Administration Console.....	80
8. Configuring Financial Reporting Print Server on CLIENTHOST1.....	81

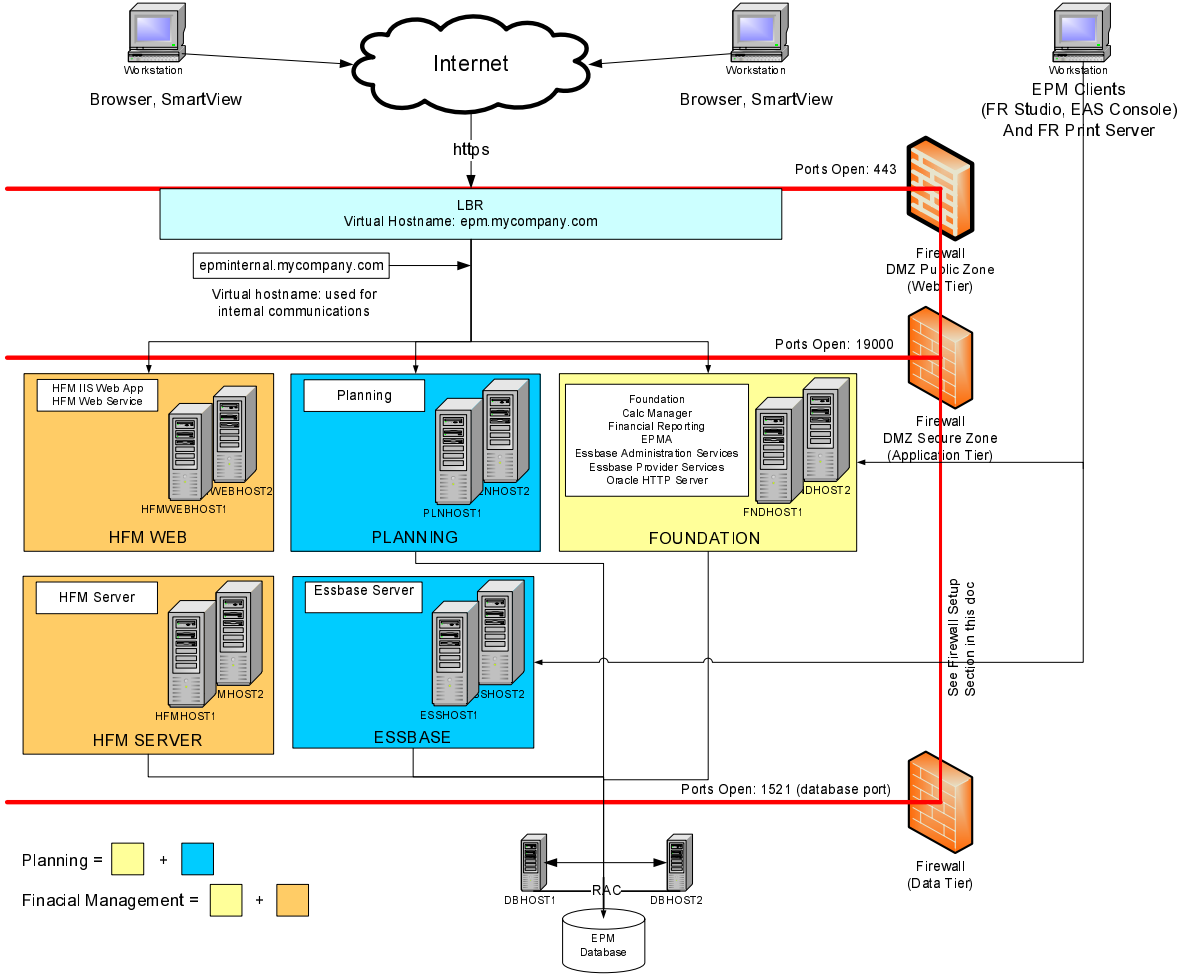
1. EPM System Standard Deployment Overview

1.1. What is Standard Deployment?

EPM System Standard Deployment is Oracle’s best practice approach for deploying EPM System products. This approach is based on creating a base deployment of the product and then scaling out the services to handle the needed capacity. This process, described using Microsoft Windows 2008 R2 operating system and Oracle database 11g, is applicable to all supported databases and operating systems after adjustments specific to the operating system and database being used.

1.2. Standard Deployment Topology

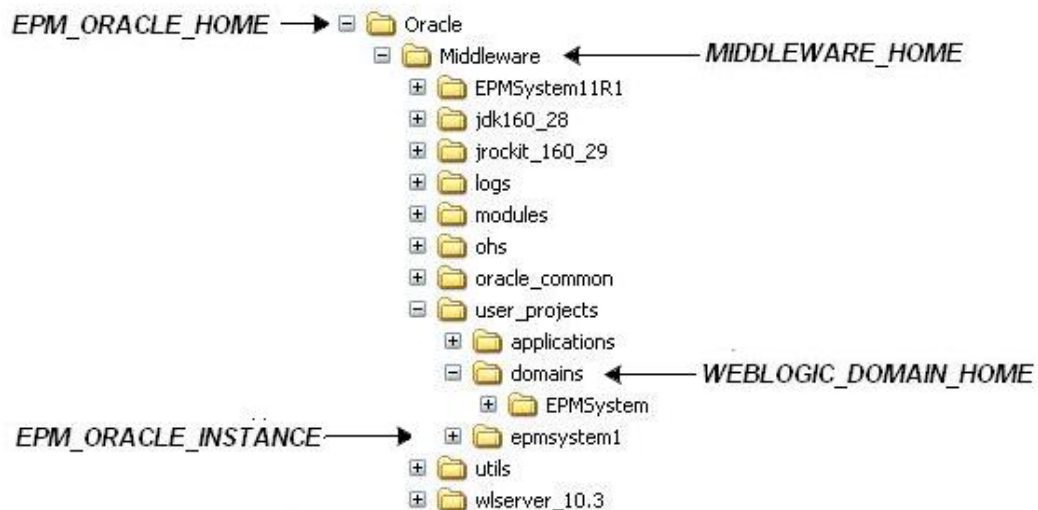
The standard deployment topology is depicted in the following illustration. This deployment consists of different components that can be scaled out separately.



Oracle recommends that you set up a base deployment with one server for each component, validate that it is working, and then scale out each component depending on your high-availability and system-load requirements.

1.3. Deployment Directory Structure and Location Reference

The following illustration shows the enterprise deployment directory structure on each server. Binaries and configuration files for each EPM System component are located only on the server on which the component is installed. For example, Oracle Essbase binaries and configuration files, along with Essbase data directory (not shown in the illustration), are located on the Essbase host machine (*ESSHOST1* in the deployment diagram).



Data directories of EPM System products other than Essbase are located on a shared disk that must be accessible from all the servers in the deployment. Because EPM System components are not installed on the shared disk, it does not have the directory structure depicted in the illustration. The shared disk hosts data directories for:

- Reporting and Analysis Repository directory
- Shared Services Lifecycle Management exported artifacts

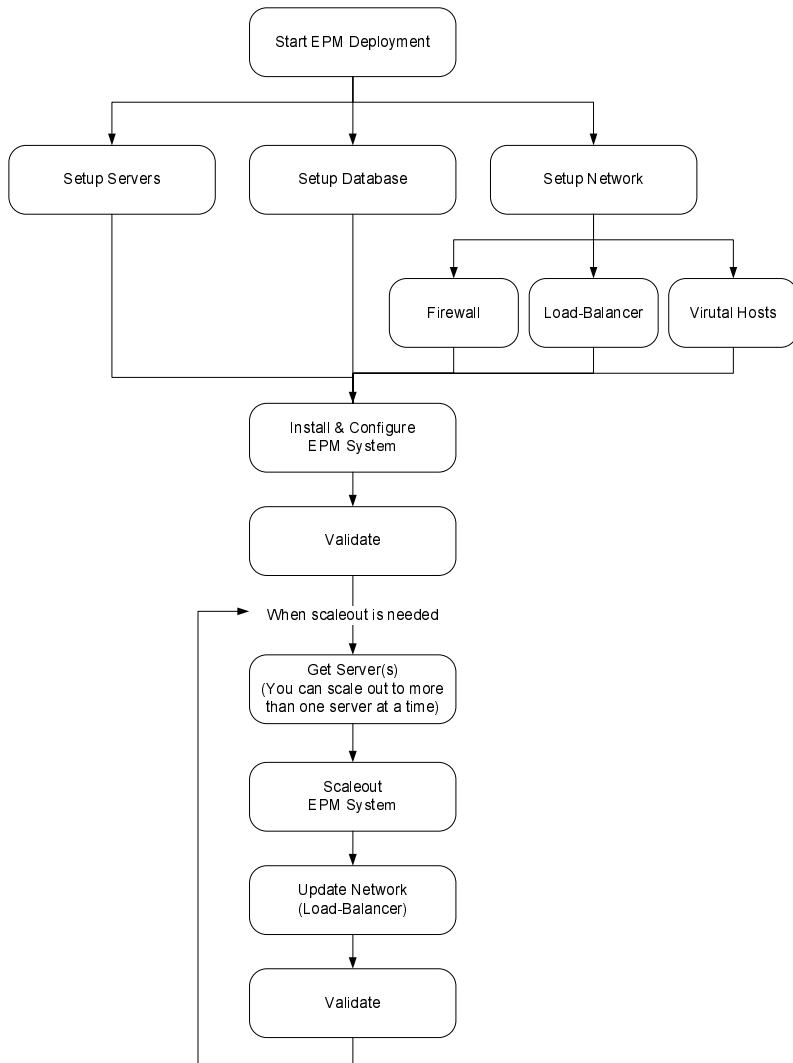
This document refers to the following installation and deployment locations:

- *MIDDLEWARE_HOME* refers to the location of middleware components such as WebLogic Server, Oracle HTTP Server, Java, and, optionally, one *EPM_ORACLE_HOME* or more. The *MIDDLEWARE_HOME* is defined during EPM System product installation. The default *MIDDLEWARE_HOME* directory is Oracle/Middleware.
- *EPM_ORACLE_HOME* refers to the installation directory containing the files required to support EPM System products. *EPM_ORACLE_HOME* resides within *MIDDLEWARE_HOME*. The default *EPM_ORACLE_HOME* is *MIDDLEWARE_HOME/EPMSys11R1*; for example, Oracle/Middleware/EPMSys11R1.

- *EPM_ORACLE_INSTANCE* denotes a location that is defined during the configuration process where some products deploy components. The default location is *EPM_ORACLE_INSTANCE* is *MIDDLEWARE_HOME/user_projects/empsystem1*; for example, *Oracle/Middleware/user_projects/empsystem1*.
- *WEBLOGIC_DOMAIN_HOME* refers to the directory that contains the WebLogic domain configuration for EPM System.

1.4. Deployment Approach

Oracle recommends a modular deployment approach, depicted in the following illustration, to facilitate the verification of each individual EPM System component.



This approach simplifies troubleshooting during the setup process and facilitates configuration. Each module in this deployment process is discussed elsewhere in this document.

1.5. Deployment Scenarios

Before starting EPM System setup process, you must complete the required server, database, and network set up process appropriate for your deployment strategy.

Scenario	Deployment Instructions to Follow
Set up Oracle Hyperion Planning Domain	<ul style="list-style-type: none">• Install and Configure Foundation Services on FNDHOST1• Install and Configure Planning on PLANHOST1• Install and Configure Essbase Server on ESSHOST1
Set up Oracle Hyperion Financial Management Domain	<ul style="list-style-type: none">• Install and Configure Foundation Services on FNDHOST1• Install and Configure Financial Management on HFMHOST1• Install and Configure Financial Management Web on HFMWEBHOST1
Add Financial Management to an existing Planning Domain	<ul style="list-style-type: none">• Install and Configure Financial Management on HFMHOST1• Install and Configure Financial Management Web on HFMWEBHOST1
Add Planning to an existing Financial Management Domain	<ul style="list-style-type: none">• Install and Configure Planning on PLANHOST1• Install and Configure Essbase Server on ESSHOST1

2. Deployment Requirements

2.1. Minimum Server Specifications

The [Standard Deployment Topology](#) uses these servers which have Microsoft Windows 2008 R2 operating system installed. The server names indicated in this table are used throughout this document to identify specific servers involved in the deployment.

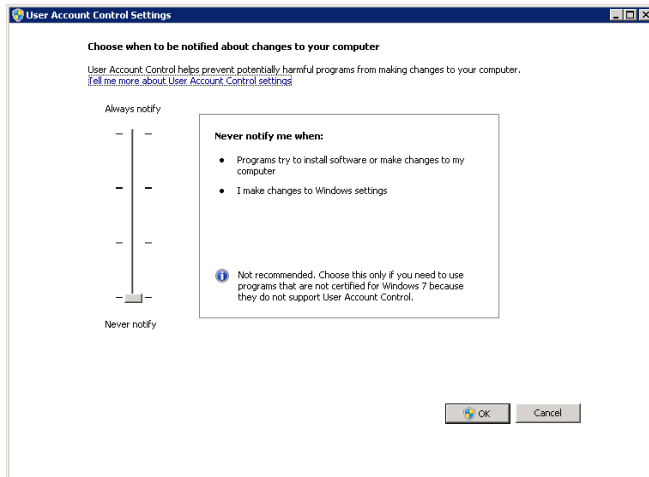
EPM System Component	Server Name	Processor	Memory
Foundation Services	FNDHOST1	4 core 2 CPU	32 GB
Planning	PLANHOST1	4 core 2 CPU	16 GB
Essbase	ESSHOST1	4 core 2 CPU	16 GB
Financial Management Server	HFMHOST1	4 core 2 CPU	16 GB
Financial Management Web	HFMWEBHOST1	4 core 2 CPU	16 GB
EPM System Clients	CLIENTHOST1	4 core 2 CPU	16 GB

2.2. Server Requirements

User Access Control (UAC) must be disabled on all deployment servers. To verify that UAC is disabled, on each server, complete the following steps:

Select Start, then All Programs, then Control Panel, then User Accounts, then User Accounts, and then Change User Account Control settings.

Ensure that the slider is set to Never Notify.



Each server involved in the deployment must have the following installations:

- Oracle Client Runtime 11.2.0.1
- IIS 7 and Application Server. Run the following script from a command prompt to install the required Windows server roles. If the required roles are already installed, the script does not install those roles:

```
ServerManagerCmd -Install Application-Server AS-Web-Support Web-Server  
Web-ASP Web-CGI Web-Mgmt-Service Web-Mgmt-Compat Web-Metabase Web-WMI  
Web-Lgcy-Scripting Web-Lgcy-Mgmt-Console
```

2.3. CLIENTHOST1 Requirements

In addition to the requirements listed in the previous sections, CLIENTHOST1 requires the following installations:

- Microsoft Office 2010
- Microsoft Word, Excel, and PowerPoint must have the following characteristics:
 - Be registered in the server's registry for printing
 - Be available to the "SYSTEM" account
 - Have access to, and be able to print from the printers installed by Financial Reporting (HRPrinter1-5). The SYSTEM account issues all print requests, so it is important that the applications can print using the Print Server's printers.
- A supported 32-bit version of GhostScript.

Disable the following on CLIENTHOST1 to support Financial Reporting Print Server:

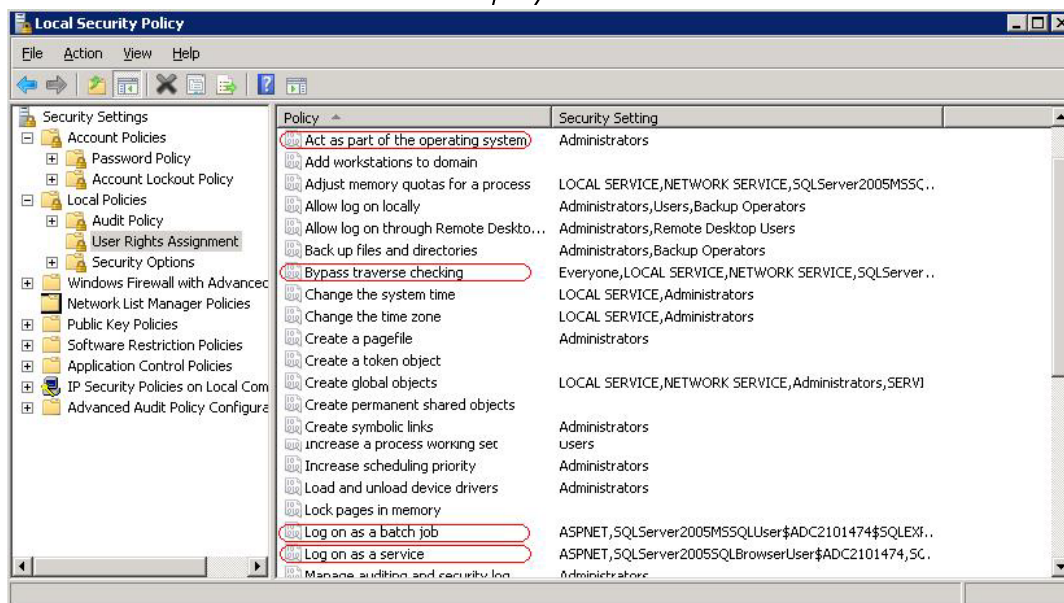
- All add-ins (including EPM System add-ins) from all Microsoft Office applications to enhance application launch time and reduce system resource consumption. If add-ins are present, they may display UI components that require user input.
- SmartTags (Office 2002+) to enhance performance.
- Microsoft Office Assistant which prompts the user for input and may halt printing.

2.4. Deployment User Requirements

All EPM System components should be installed from a generic Windows user account (an account that does not belong to a specific user). All patches and upgrades for this deployment must be run using the user account that was used to install EPM System. This user account should satisfy the following requirements:

- Deployment account is a member of the Administrators group on the server.
- User account control is disabled for the deployment account.
- The following local security policies are assigned to the deployment account (select Start, then Administrative Tools, then Local Security Policy, then Local Policies, and then User Rights Assignment to view local security policy assignments):
 - Act as part of the operating system
 - Bypass traverse checking
 - Log on as a batch job
 - Log on as a service

This account is referred to as the *deployment account* in this document:



2.5. Shared File System Requirements

A shared file system that is accessible from all the servers in the deployment is required to host these rights components:

- Installation files
- Repository data for Reporting and Analysis
- Artifacts for Lifecycle Management in Shared Services

The shared file system could be a share on a NAS/SAN or on one of the Windows servers. The deployment account must have read-write access to the share. In the rest of this document, this shared location is referred to as `SHARE_HOST\SHARED_LOCATION`.

2.6. Hostname Resolution Requirements

The canonical hostname of each server must be the same when accessed from within the server and from other servers in the deployment. You may want to create a local hosts file on each server to resolve hostname issues.

EPM System uses Java's canonical hostname resolution for resolving hostnames. A utility to validate hostnames as resolved by Java is available at <https://www.samplecode.oracle.com/tracker/tracking/linkid/prpl1004?id=S773>. Run this utility on each server to validate that hostname resolution requirements are met.

2.7. Clock Synchronization

The clock on each server must be synchronized to within one second difference. To accomplish this, point each server to the same network time server. Refer to your operating system documentation for more information.

3. Set up Oracle Database

3.1. Database Settings

Create an Oracle 11g database with AL32UTF8 character set encoding and set these database parameters:

- NLS_LENGTH_SEMANTICS to CHAR
- CURSOR_SHARING to FORCED

3.2. Database Accounts for EPM System Deployment

Create the following database accounts:

- One user for EPM System Repository
- One user for Financial Management data repository
- One user for a Planning data repository

Each Planning application requires a separate database account. Before creating a new Planning application, you must create a new database user for it.

3.3. Database Roles and Privileges for EPM System Users

- CONNECT
- RESOURCE
- CREATE VIEW

3.4. Other User Settings

- Users must be created in a tablespace with a minimum initial capacity of 1GB
- Extends by 500MB
- Auto Extend set to ON
- Minimum 1 GB temporary tablespace

3.5. Database Information Required for EPM System Deployment

- Database host name
- Database port
- Database service name
- Username and password of database user accounts for:
 - EPM System Repository
 - Planning
 - Financial Management

4. Set up Network

4.1. Firewall Setup

The following firewall ports must be opened for EPM System. Note that default ports used by EPM System components are listed.

Firewall	Ports to be Opened	Comments
Web-Tier Firewall	443 (SSL Port)	Browsers and Smart View use these ports to access EPM System
Application-Tier Firewall	19000 (Oracle HTTP Server Port)	
Application-Tier Firewall (Thick client Access)	19000 (Oracle HTTP Server Port) 1423 (Essbase Server/Agent) 32768-33768 (Essbase Databases) 8205-8209 (RMI Ports for Financial Reporting Studio)	Thick clients use these ports to access EPM System
Database-Tier Firewall	1521	

4.2. Virtual Hosts Setup

4.2.1. External Virtual Host

EPM System standard deployment topology uses `epm.mycompany.com`, which is an externally accessible load balancer virtual host created on the load balancer.

The virtual host acts as the access point for all HTTP traffic to the runtime components. The HTTP traffic from browser to load balancer is always over secure socket layer (SSL). This virtual host receives all external requests (from the intranet or internet) on port 443 and forwards them to an Oracle HTTP Server on Foundation Services servers (FNDHOST1, FNDHOST2).

4.2.2. Internal Virtual Host

The recommended standard deployment topology uses `epminternal.mycompany.com`, which is a virtual host that is used for interprocess transactional and administrative access.

This virtual host is defined on the load balancer and is used for internal invocations of services within the data center. It is not exposed to the internet or intranet, and is only

accessible within the data center. It forwards requests to an Oracle HTTP Server hosted on Foundation Services servers (FNDHOST1, FNDHOST2).

4.3. Loadbalancer Setup

Configure the loadbalancer to route requests from `epm.mycompany.com` and `epminternal.mycompany.com` to an Oracle HTTP Server hosted Foundation Services servers FNDHOST1, FNDHOST2. These routings need to be sticky.

To configure the load balancer with virtual hosts created for this deployment, refer to the instructions provided by the vendor of your load balancer.

5. Deploy EPM System Software

The following high-level steps need to be completed to set up a base installation of EPM System that can be scaled out to suit your needs:

1. [Download the EPM System Software](#)
2. [Install and Configure Foundation Services on FNDHOST1](#)
3. [Install and Configure Planning on PLANHOST1](#)
4. [Install and Configure Essbase Server on ESSHOST1](#)
5. [Install and Configure Financial Management on HFMHOST1](#)
6. [Install and Configure Financial Management Web on HFMWEBHOST1](#)

5.1. Prerequisites

Before you start, ensure that you have the following:

- The servers and the deployment user credentials to access them
- Database connection information (hostname, port, and service name) to be used during the setup
- Database user accounts (username and password) to use
- Shared disk for storing downloaded EPM System software, the repository for Reporting and Analysis, and Lifecycle Management artifacts

5.2. Download the EPM System Software

5.2.1. Part Numbers of Required EPM System Software

Download the following part numbers from [Oracle Software Delivery Cloud](#).

Part Number	Name
V25495-01.zip	Oracle Hyperion Enterprise Performance Management System Installer, Fusion Edition Release 11.1.2.1.0 for Microsoft Windows (64-bit)
V25496-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 for Microsoft Windows (64-bit) Part 1 of 7
V25497-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 for Microsoft Windows (64-bit) Part 2 of 7
V25498-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 for Microsoft Windows (64-bit) Part 3 of 7
V25499-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 for Microsoft Windows (64-bit) Part 4 of 7

V25459-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 Part 5 of 7
V25460-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 Part 6 of 7
V25461-01.zip	Oracle Hyperion Foundation Services Release 11.1.2.1.0 Part 7 of 7
V25462-01.zip	Oracle Hyperion Calculation Manager Release 11.1.2.1.0
V25463-01.zip	Oracle Hyperion Enterprise Performance Management Architect, Fusion Edition Release 11.1.2.1.0
V25464-01.zip	Oracle Essbase Release 11.1.2.1.0 Part 1 of 2
V25500-01.zip	Oracle Essbase Release 11.1.2.1.0 Part 2 of 2 for Microsoft Windows (64-bit)
V25468-01.zip	Oracle Hyperion Financial Reporting, Fusion Edition Release 11.1.2.1.0
V25470-01.zip	Oracle Hyperion Enterprise Performance Management Reporting and Analysis Core Components Release 11.1.2.1.0
V25475-01.zip	Hyperion Web Analysis Release 11.1.2.1.0
V25477-01.zip	Oracle Hyperion Planning, Fusion Edition Release 11.1.2.1.0
V25494-01.zip	Oracle Hyperion Enterprise Performance Management System Additional Content Release 11.1.2.1.0
V25476-01.zip	Oracle Hyperion Financial Management, Fusion Edition Release 11.1.2.1.0
V25479-01.zip	Oracle Hyperion Financial Data Quality Management, Fusion Edition Release 11.1.2.1.0
Additionally, you should also download these part numbers for client components	
V25466-01.zip	Oracle Hyperion Financial Reporting Studio and Print Server, Fusion Edition Release 11.1.2.1.0 for Microsoft Windows
V25469-01.zip	Oracle Hyperion Financial Reporting Studio and Print Server, Fusion Edition Release 11.1.2.1.0 for Microsoft Windows
V25487-01.zip	Oracle Hyperion Smart View for Office, Fusion Edition Release 11.1.2.1.0 for Microsoft Windows

To download the part numbers from [Oracle Software Delivery Cloud](#):

1. Search for Oracle Enterprise Performance Management System software for Microsoft Windows X64 (64-bit)



2. To open the download page, in Media Pack Search results, select Oracle Enterprise Performance Management (11.1.2.1.0) Media Pack for Microsoft Windows X64 (64-bit), Release 11.1.2.1.0.



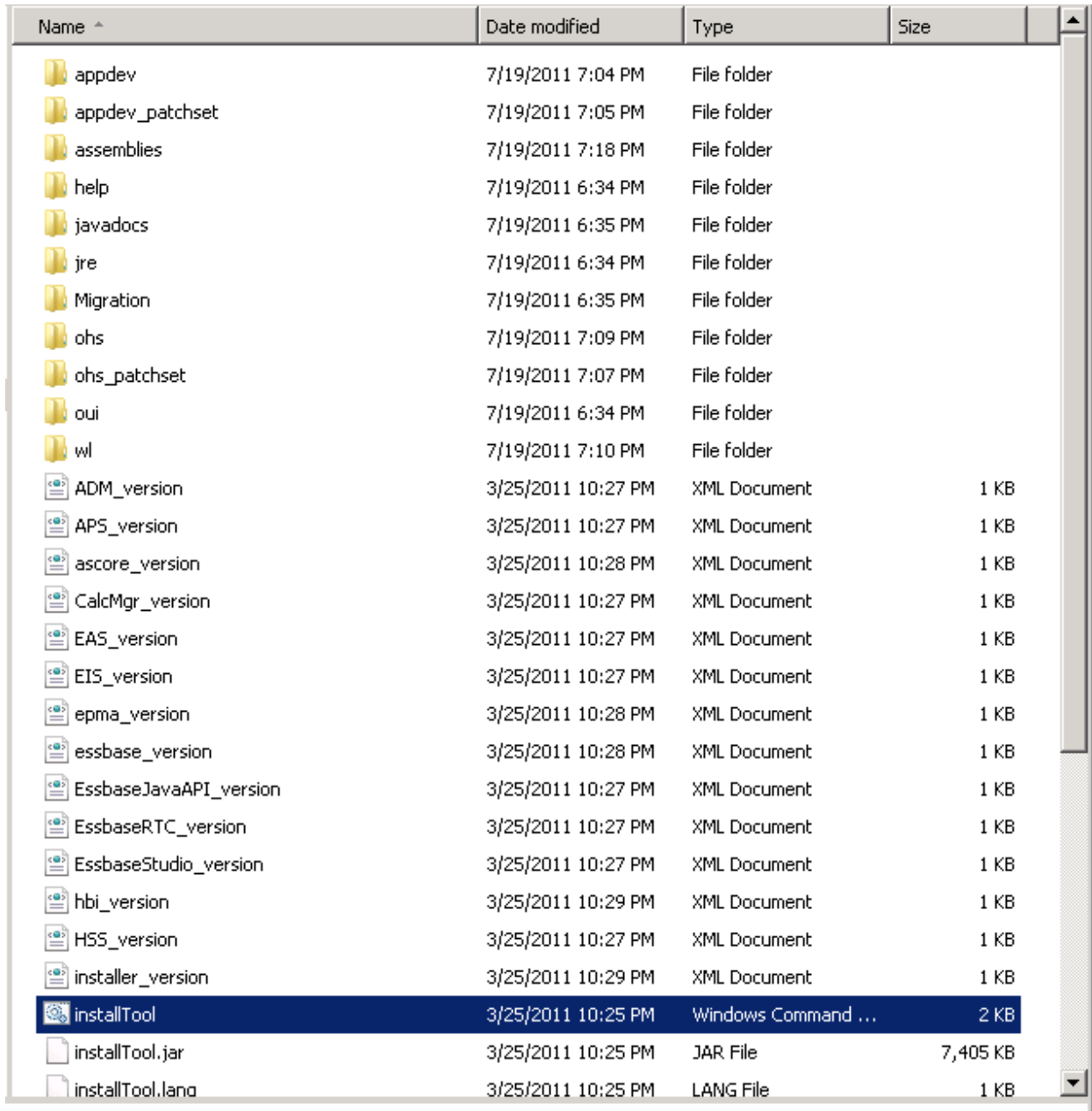
3. Download the part numbers into a directory (for example, `epm_downloads`) on the shared disk.

5.2.2. Unzipping EPM System Software

On the shared disk, unzip the downloaded zip files into a directory (for example, `epm_unzipped`). You can unzip the files individually from Windows Explorer or, if you have a software such as 7-zip, use a command window to unzip all files in the folder using a DOS command similar to the following:

```
Z:\epm_downloads> for %i in (*.zip) do unzip -u -o %i -d epm_unzipped (7-zip)
```

After unzipping, the `epm_unzipped` directory would be similar to this screenshot.

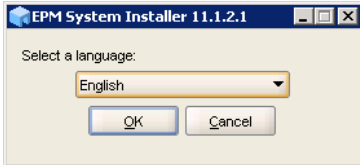


Name ^	Date modified	Type	Size
appdev	7/19/2011 7:04 PM	File folder	
appdev_patchset	7/19/2011 7:05 PM	File folder	
assemblies	7/19/2011 7:18 PM	File folder	
help	7/19/2011 6:34 PM	File folder	
javadocs	7/19/2011 6:35 PM	File folder	
jre	7/19/2011 6:34 PM	File folder	
Migration	7/19/2011 6:35 PM	File folder	
ohs	7/19/2011 7:09 PM	File folder	
ohs_patchset	7/19/2011 7:07 PM	File folder	
oui	7/19/2011 6:34 PM	File folder	
wl	7/19/2011 7:10 PM	File folder	
ADM_version	3/25/2011 10:27 PM	XML Document	1 KB
APS_version	3/25/2011 10:27 PM	XML Document	1 KB
ascore_version	3/25/2011 10:28 PM	XML Document	1 KB
CalcMgr_version	3/25/2011 10:27 PM	XML Document	1 KB
EAS_version	3/25/2011 10:27 PM	XML Document	1 KB
EIS_version	3/25/2011 10:27 PM	XML Document	1 KB
epma_version	3/25/2011 10:28 PM	XML Document	1 KB
essbase_version	3/25/2011 10:28 PM	XML Document	1 KB
EssbaseJavaAPI_version	3/25/2011 10:27 PM	XML Document	1 KB
EssbaseRTC_version	3/25/2011 10:27 PM	XML Document	1 KB
EssbaseStudio_version	3/25/2011 10:27 PM	XML Document	1 KB
hbi_version	3/25/2011 10:29 PM	XML Document	1 KB
HSS_version	3/25/2011 10:27 PM	XML Document	1 KB
installer_version	3/25/2011 10:29 PM	XML Document	1 KB
installTool	3/25/2011 10:25 PM	Windows Command ...	2 KB
installTool.jar	3/25/2011 10:25 PM	JAR File	7,405 KB
installTool.lana	3/25/2011 10:25 PM	LANG File	1 KB

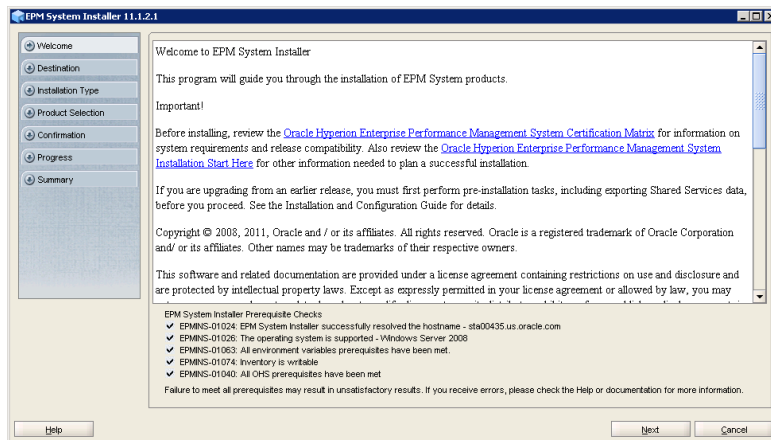
5.3. Install and Configure Foundation Services on FNDHOST1

To install and configure Foundation Services on FNDHOST1:

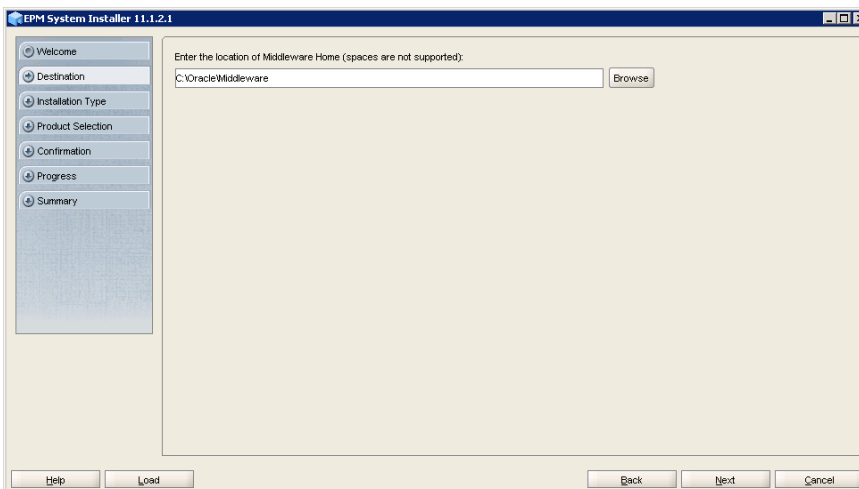
1. On Foundation Services host machine (FNDHOST1), create a network drive (for example, z:\) mapping to the shared drive directory where you extracted EPM System software (for example, epm_unzipped).
2. From the mapped network drive, launch `installTool.cmd`.
3. In EPM System Installer, select a language and then click OK.



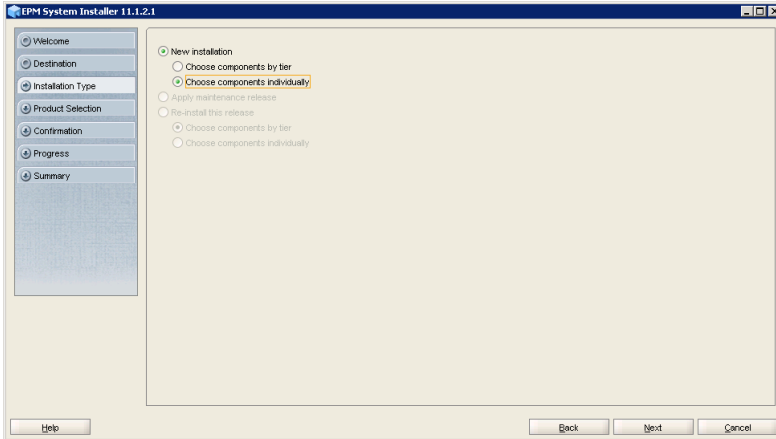
4. Click Next in the Welcome screen.



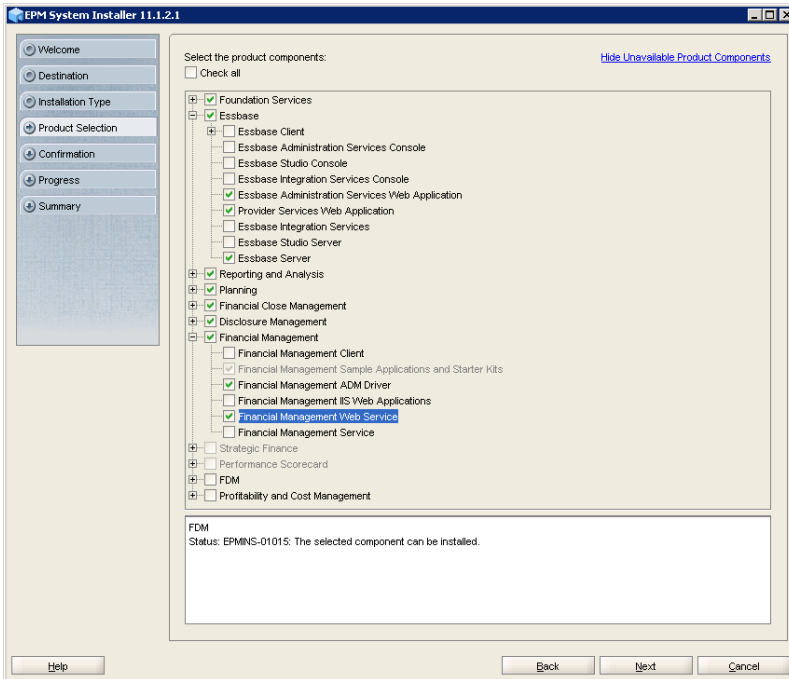
5. If you want to install the software in a location other than the default location, enter that location, and then click Next.



6. Select Choose components individually, and then click Next.



7. Remove the selection (uncheck) from Uncheck All and then select the following components to install.



- Foundation Services
- Essbase -- Administration Services Web Application
- Essbase -- Provider Services Web Application
- Reporting and Analysis
- Planning
- Financial Close Management

- Disclosure Management

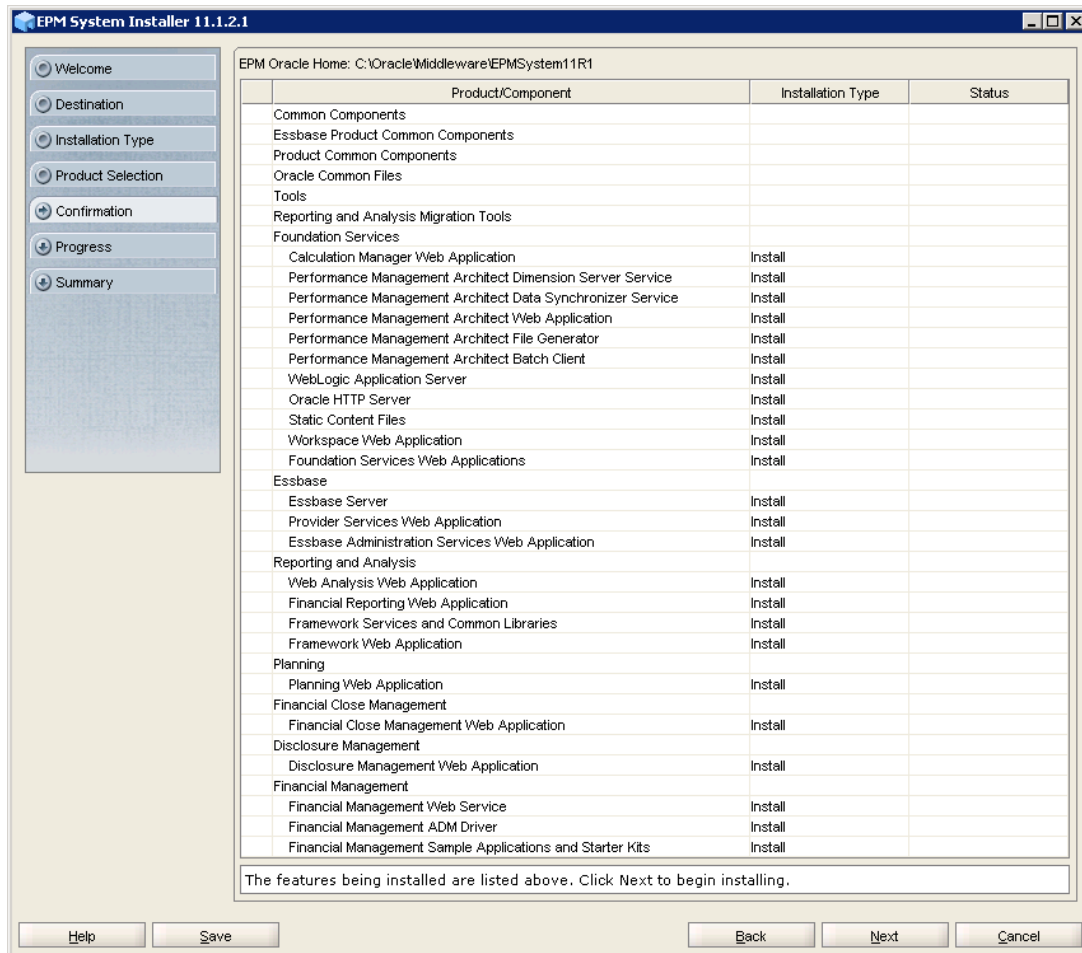
Financial Management -- Financial Management Web Service (ADM Driver under Financial Management is selected by default)

- Profitability and Cost Management

Unselect the following component:

- Essbase -- Essbase (Essbase Server is selected by default when you select Planning)

8. In Confirmation, click Next to begin the installation of the binaries on the server.

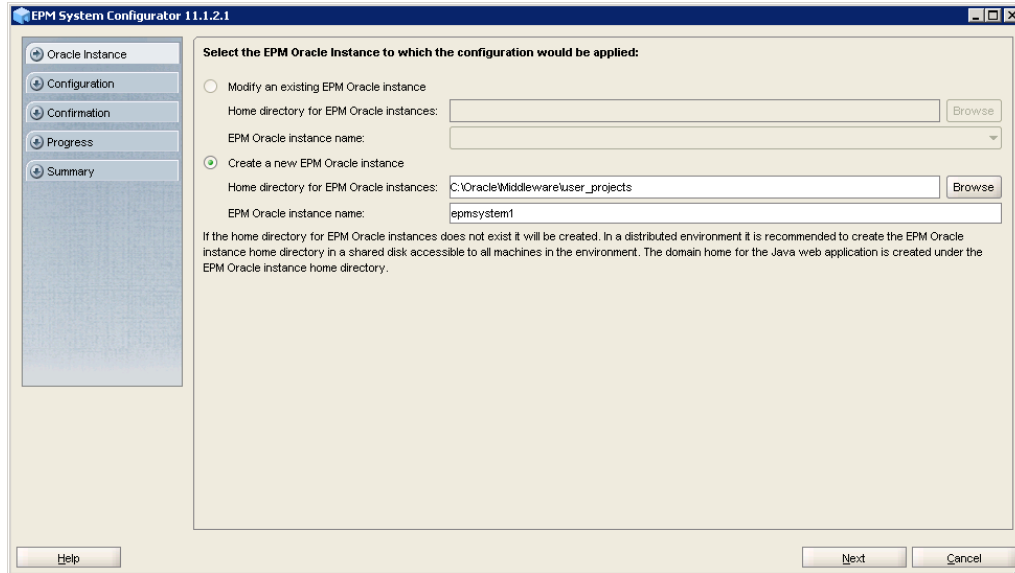


9. In the Summary screen, click Finish after verifying that all components installed successfully.

10. Download and apply patch 12552933 from <http://support.oracle.com>.

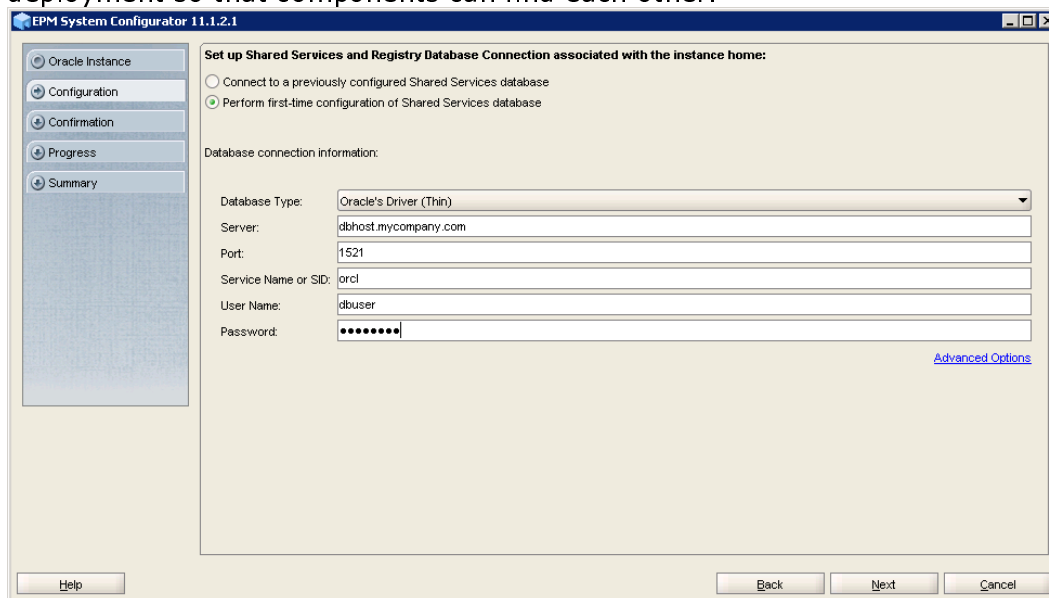
Because you have not yet configured the system, you do not need to perform the Edit Shared Services Registry prerequisite as mentioned in the patch readme.

11. Launch EPM System Configurator by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then EPM System Configurator.
12. In Oracle Instance, change the location of EPM Oracle Home directory if needed, and then click Next.



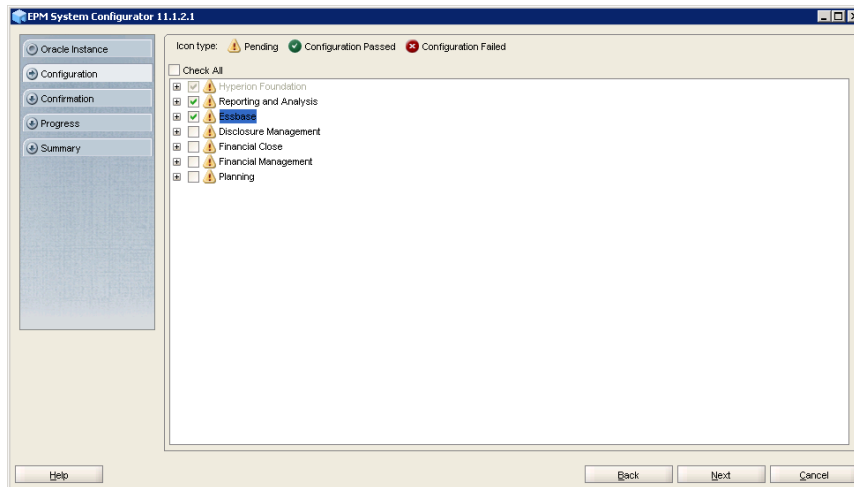
13. On the database configuration screen, enter the required information, and then click Next.

This database stores the configuration information for all the servers in the deployment so that components can find each other.



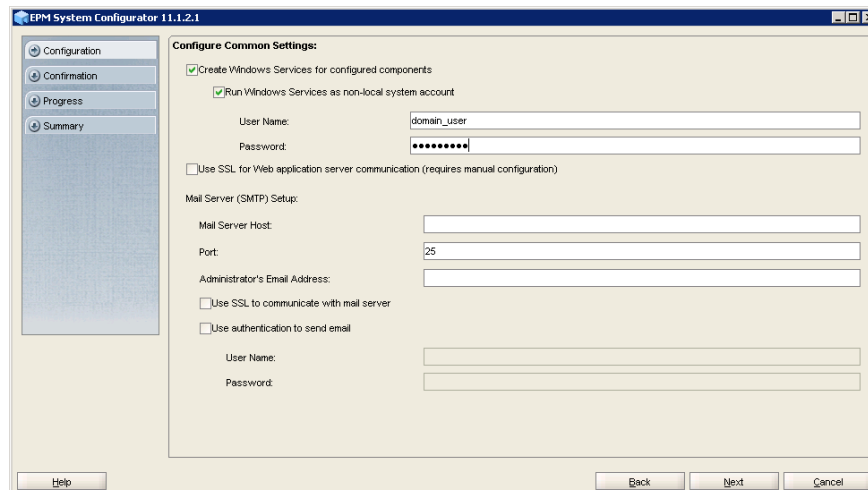
14. In component configuration screen, uncheck the following components, and then click Next.

- Disclosure Management
- Financial Close
- Financial Management
- Planning
- Profitability and Cost Management

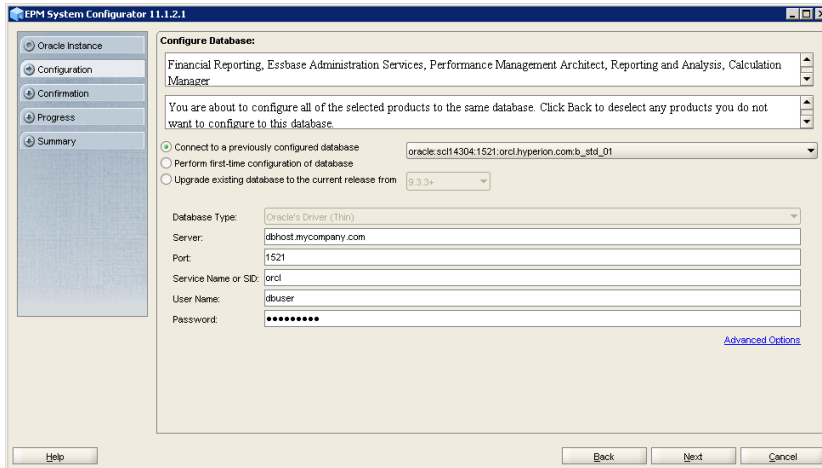


15. In Configure Common Settings, complete these actions and then click Next.

- a. Select Run Windows Services as non-local system account and enter the deployment username and password.
- b. Enter your mail server information.

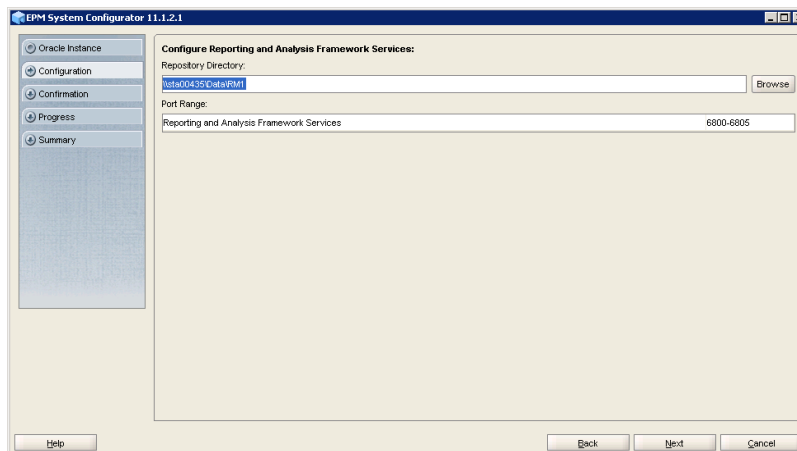


16. In Configure Database, use the default values to leverage the Foundation Services database for all the products, and then click Next.



17. In Configure Reporting and Analysis Framework Services, complete these steps, and then click Next.

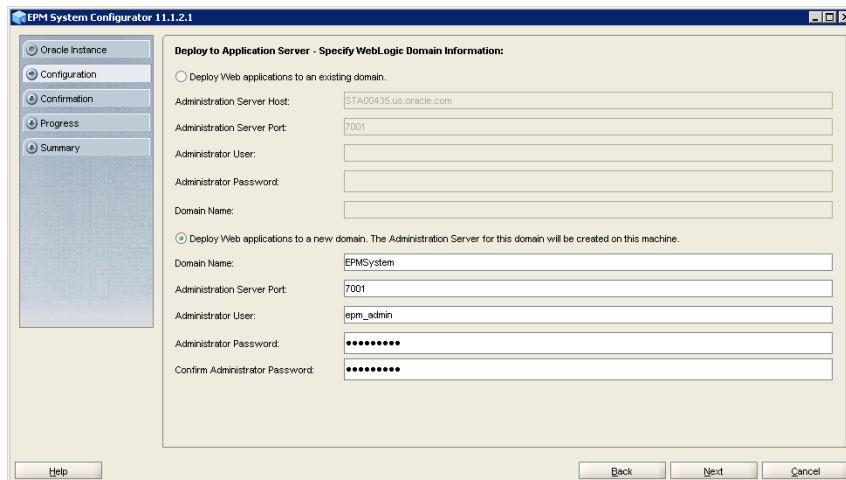
- a. In Repository Directory, enter the location for Reporting and Analysis repository directory (for example, \\sharedHost\sharedLocation\data\RM1) on the shared drive so that the repository directory is accessible to other servers when this server is scaled out. Do not create this directory; EPM Configurator will create it for you.
- b. Optional: Change Reporting and Analysis Framework port number range.



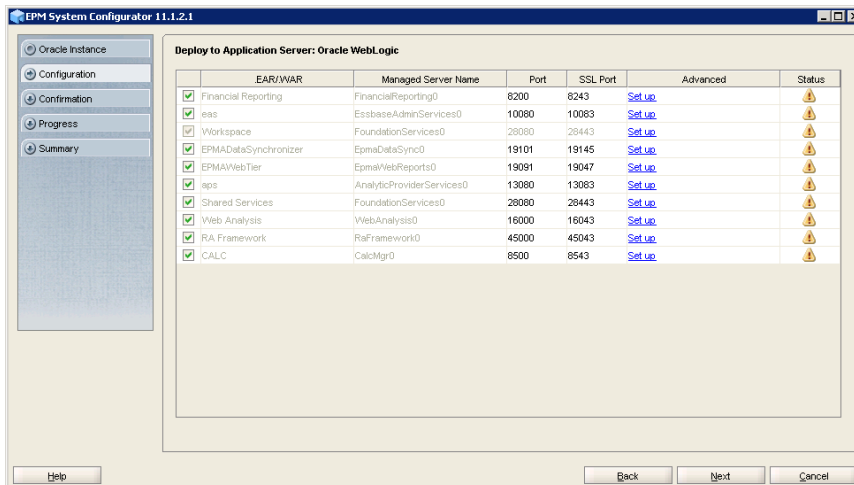
18. In Deploy to Application Server - Specify WebLogic Domain Information, enter the required information, and then click Next.

The WebLogic domain for EPM System components and the Admin Server are created on this server.

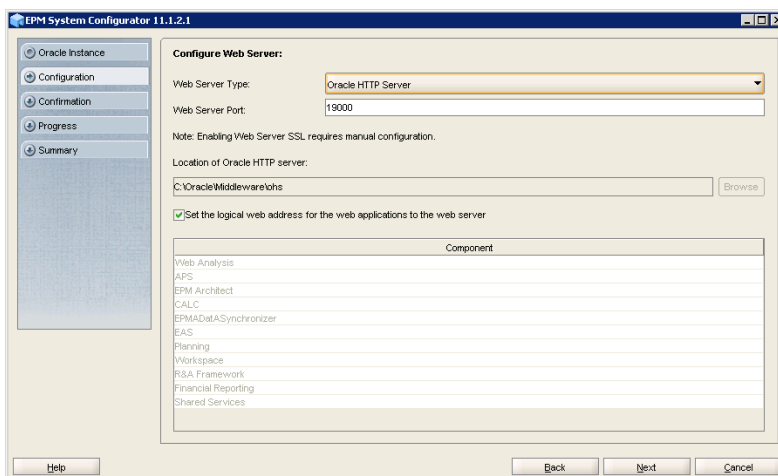
- Administrator Password--Enter WebLogic domain administrator password.
- Confirm Administrator Password--Re-enter the WebLogic domain administrator password.



19. In Deploy to Application Server: Oracle WebLogic, review the list of Java web applications that will be deployed on this server, and then click Next.

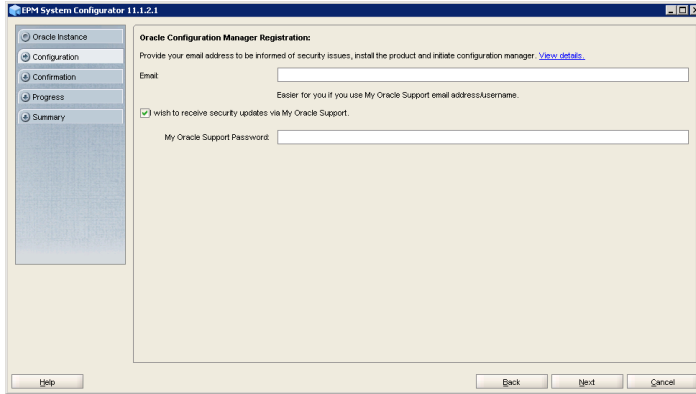


20. In Configure Web Server, click Next.

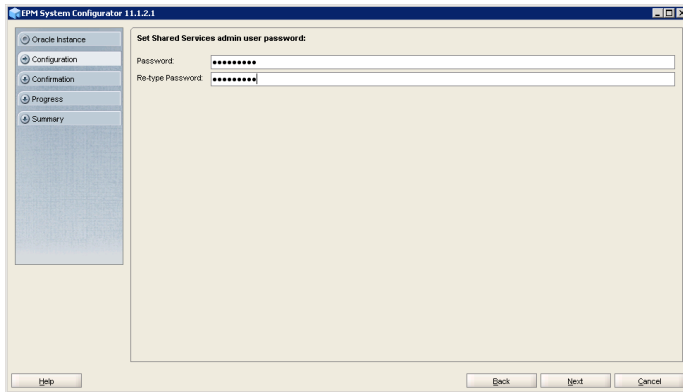


21. In Oracle Configuration Manager Registration, enter your information, and then click Next.

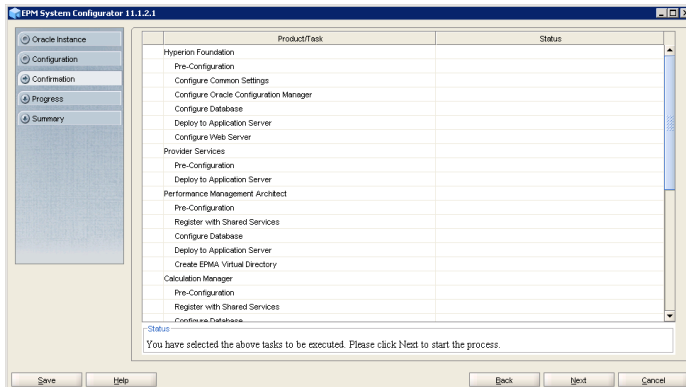
Oracle Configuration Manager notifies you when Oracle issues patches or security alerts. The password you enter in this screen must match the password associated with your email address in My Oracle Support.



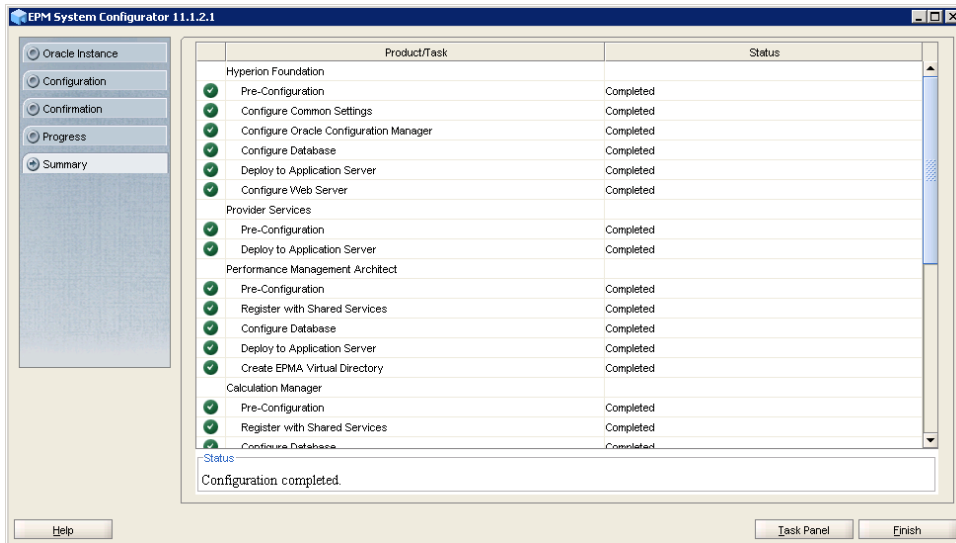
22. In Set Shared Services admin user password, enter the administrator password of EPM System administrator, and then click Next.



23. In Confirmation, review the summary of the configuration tasks that will be executed, and then click Next.

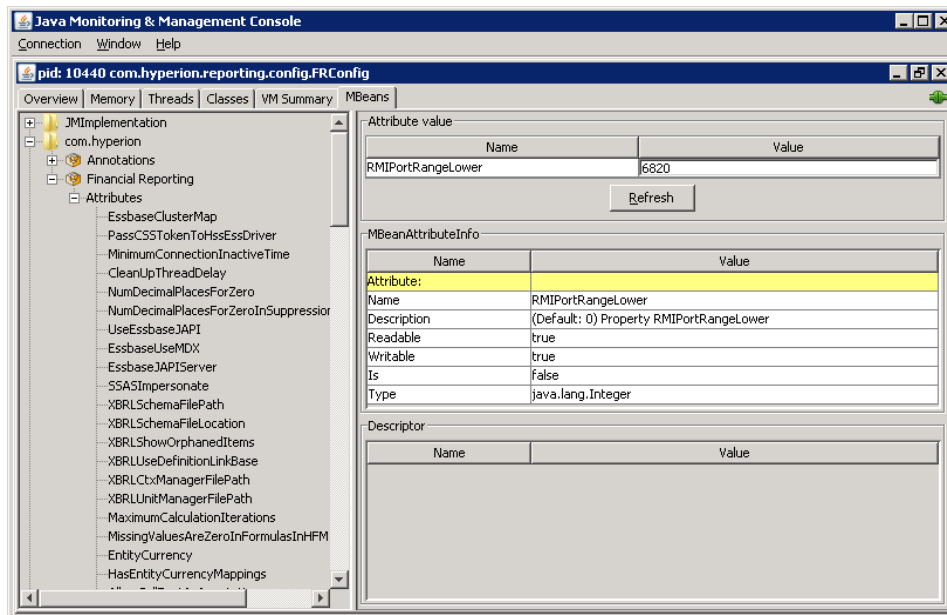


24. When the deployment process is complete, the Summary screen is displayed. Verify that all the tasks completed successfully, and then click Finish.



25. Set the Financial Reporting RMI port range.

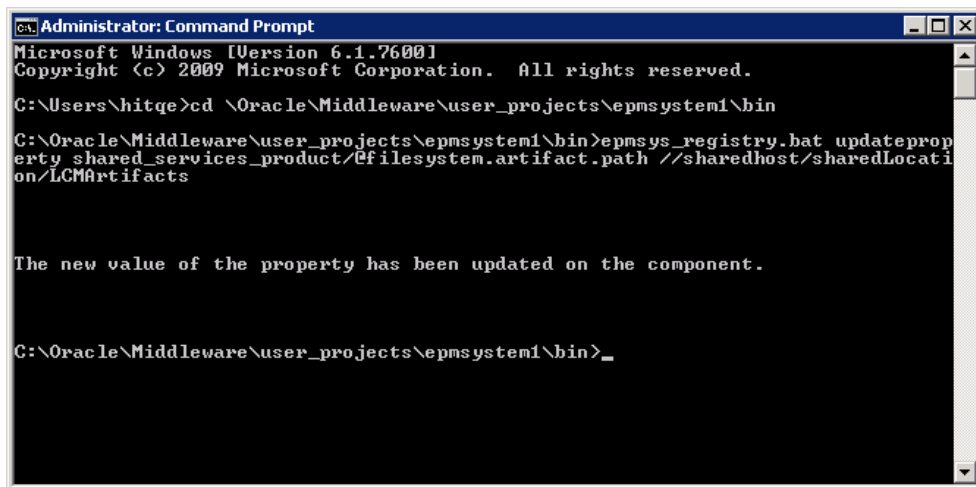
- a. Launch the JConsole by executing `EPM_ORACLE_HOME/products/financialreporting/bin/FRConfig.cmd.`
- b. Expand `com.hyperion`, then `Financial Reporting`, and then `Attributes`.
- c. Set the value of `RMIPortRangeLower` to 8205 and `RMIPortRangeUpper` to 8209.
- d. Click `Refresh` to ensure that the values are set.



26. Set the location of exported Lifecycle Management artifacts to the shared drive; for example, to `//sharedHost/sharedLocation/LCMartifacts`.

- a. Using a command prompt, change directory to `EPM_ORACLE_INSTANCE/bin`.
- b. Execute the following command in one line. Be sure to replace the shared drive value with the actual location for your deployment:

```
epmsys_registry updateproperty  
shared_services_product/@filesystem.artifact.path  
//sharedHost/sharedLocation/LCMartifacts
```



The screenshot shows a Windows Command Prompt window titled "Administrator: Command Prompt". The text in the window is as follows:

```
Microsoft Windows [Version 6.1.7600]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
  
C:\Users\hitqe>cd \Oracle\Middleware\user_projects\epmsystem1\bin  
  
C:\Oracle\Middleware\user_projects\epmsystem1\bin>epmsys_registry.bat updateprop  
erty shared_services_product/@filesystem.artifact.path //sharedhost/sharedLocati  
on/LCMartifacts  
  
The new value of the property has been updated on the component.  
  
C:\Oracle\Middleware\user_projects\epmsystem1\bin>_
```

27. Start EPM System by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then Start EPM System.

28. Increase the default heap size for the Weblogic Admin Server. Edit `MIDDLEWARE_HOME/user_projects/domains/EPMSystem/bin/setDomainEnv.cmd` and add the following line as a new line after the `@ECHO OFF` directive:

```
set USER_MEM_ARGS=-Xms256m -Xmx1024m
```

29. Start the WebLogic Admin Server on Foundation Services host machine (FNDHOST1).

30. Log in to EPM Workspace using the following URL:

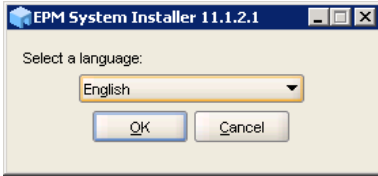
```
http://localhost:9000/workspace/index.jsp
```

5.4. Install and Configure Planning on PLANHOST1

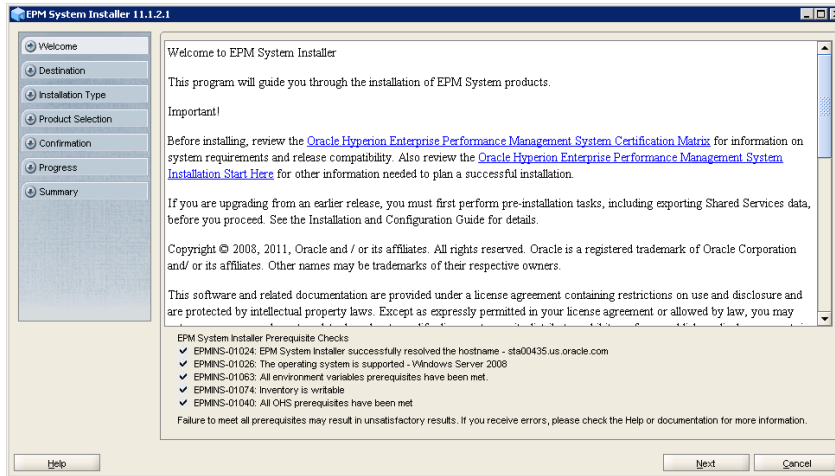
To install and configure Planning on PLANHOST1:

1. On EPM System Planning host machine (PLANHOST1), create a network drive (for example, `z:\`) mapping to the shared drive directory where you extracted EPM System software (for example, `epm_unzipped`).
2. From the mapped network drive, launch `installTool.cmd`.

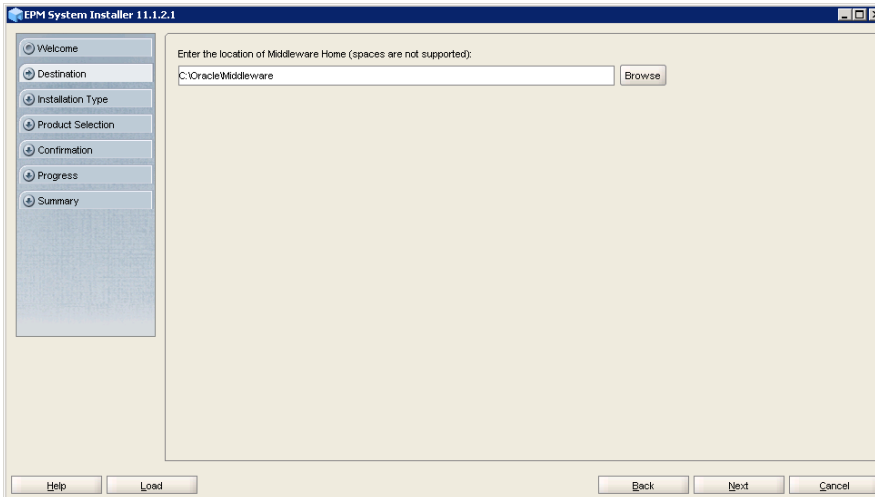
3. In EPM System Installer, select a language and then click OK.



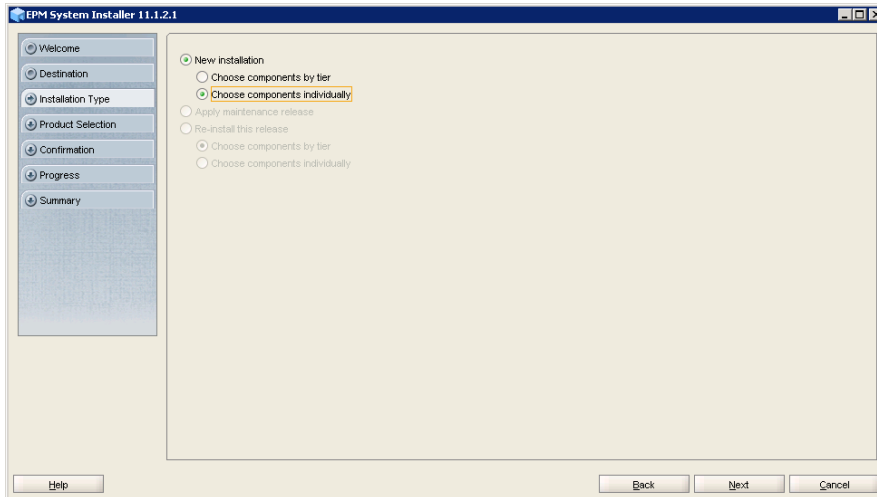
4. Click Next in the Welcome screen.



5. In Destination, specify the `MIDDLEWARE_HOME` directory location exactly as set while deploying Foundation Services on FNDHOST1, and then click Next.



6. Select Choose components individually, and then click Next.

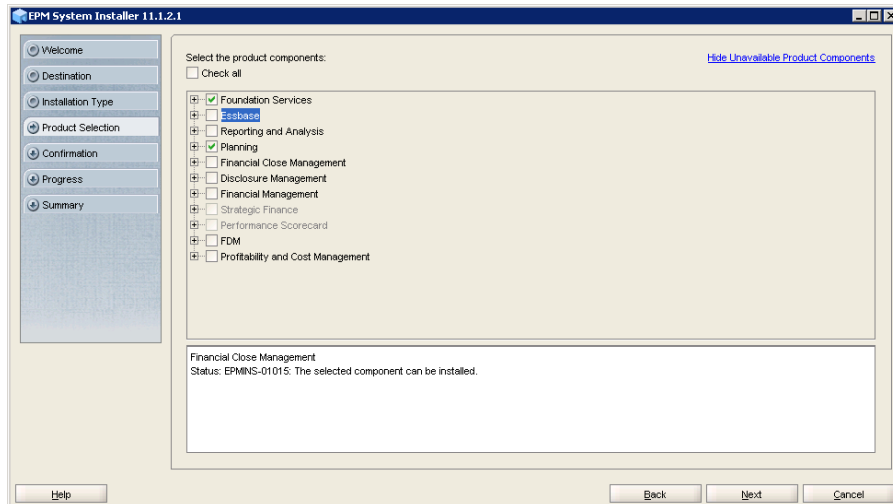


7. Remove the selection (uncheck) from Uncheck All, and then select the following components to install.

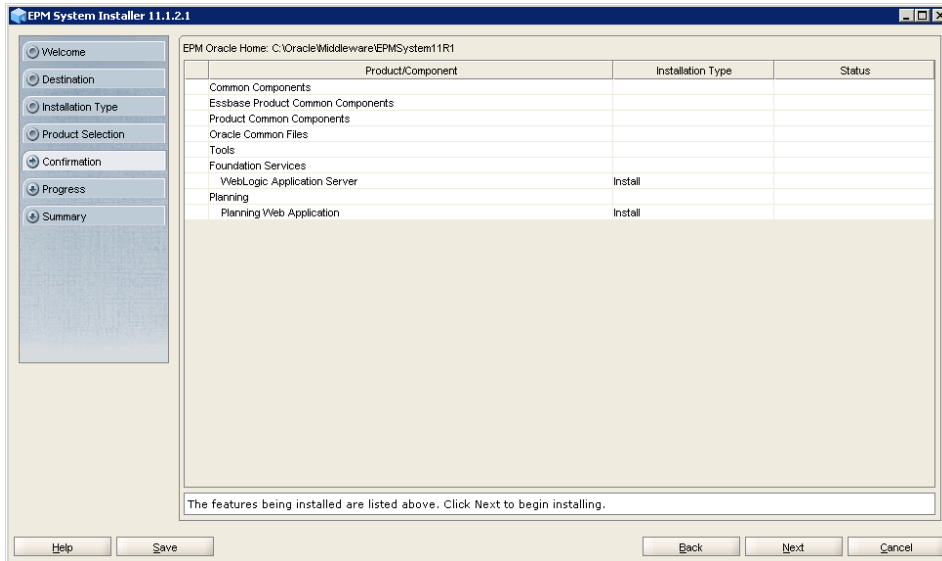
- Foundation Services
- Planning

Unselect the following component:

- Essbase (Essbase is selected by default when you select Planning)



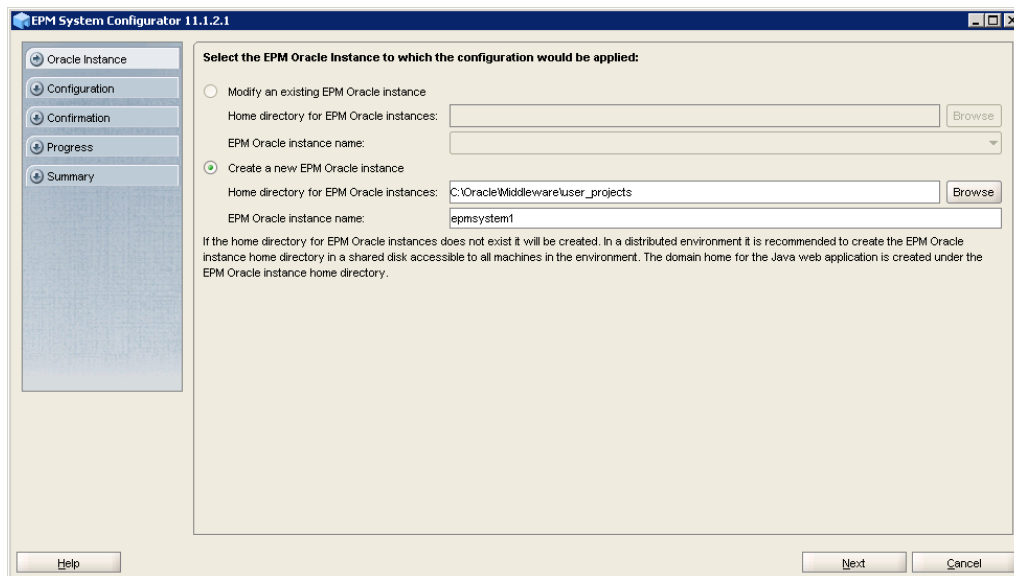
8. In the Confirmation screen, click Next to begin the installation of the binaries on the server.



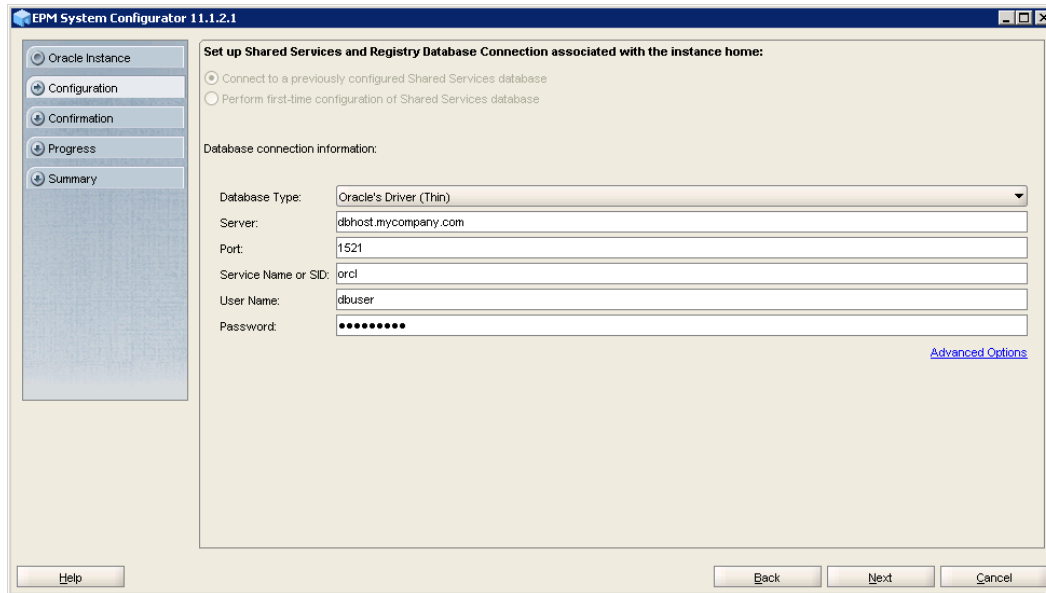
9. In the Summary screen, click Configure after verifying that all components installed successfully.

10. In the Oracle Instance screen, complete these steps:

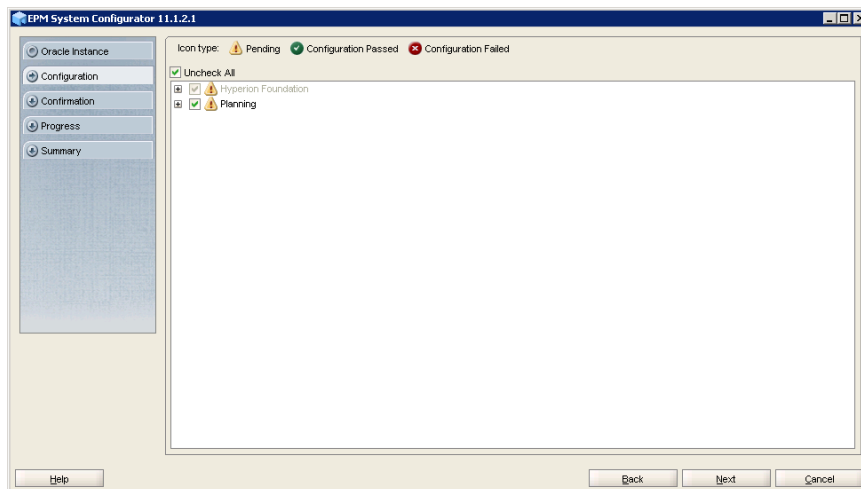
- a. Verify that the value in Home Directory for EPM Oracle Instance is identical to that set on the Foundation Services server (FNDHOST1).
- b. Set a unique name; for example, `epmsystem2`, in EPM Oracle Instance Name field. This name must be unique across deployment servers.
- c. Click Next.



11. In the database configuration screen, enter the required information, and then click Next. This information must be identical to the information you entered while configuring Foundation Services Database on the Foundation Services server (FNDHOST1).

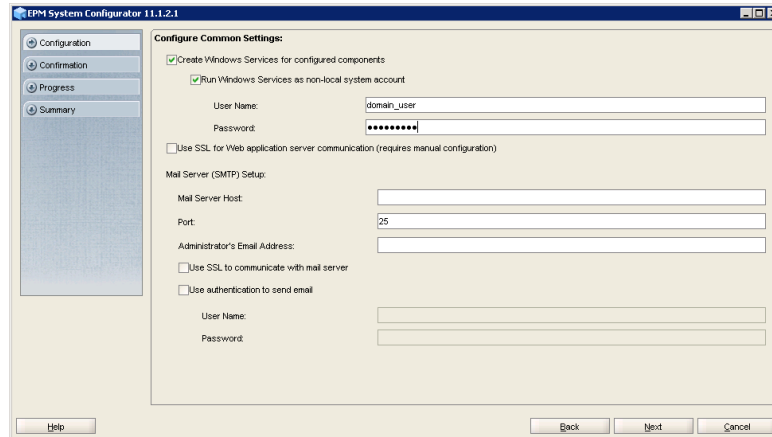


12. In the component configuration screen, click Next.

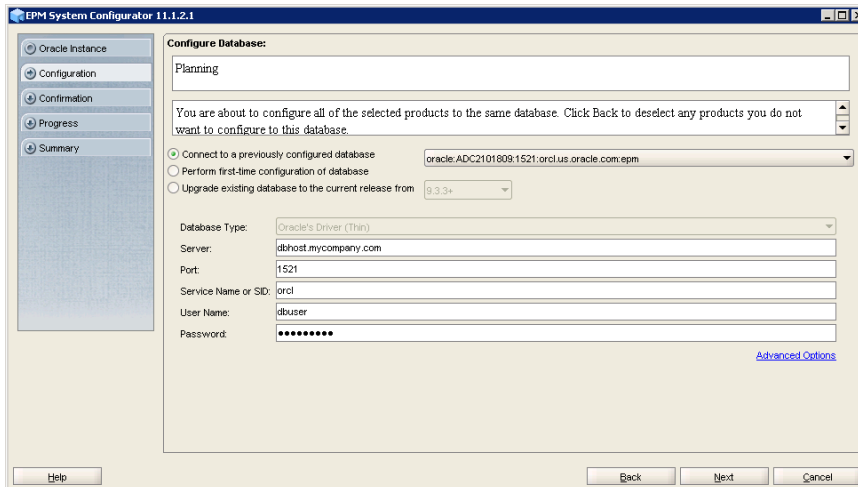


13. In Configure Common Settings, complete these actions and then click Next.
 - a. Select Run Windows Services as non-local system account and enter the deployment username and password.

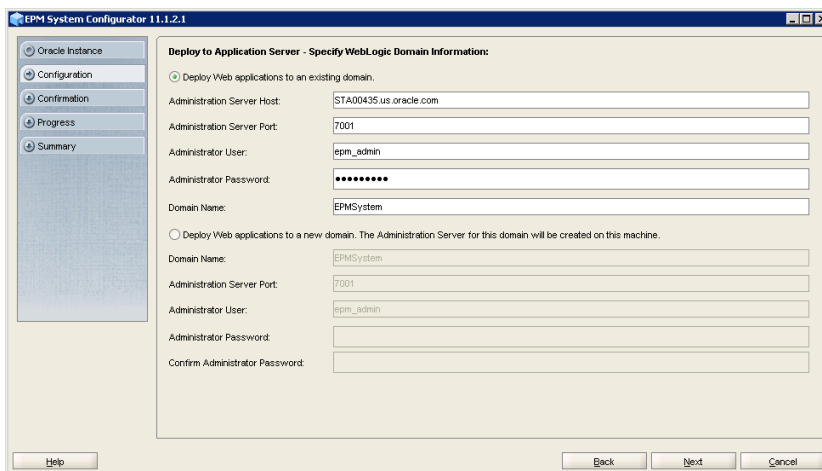
b. Enter mail server information.



14. In Configure Database, use the default values to leverage the Foundation Services database for Planning, and then click Next.



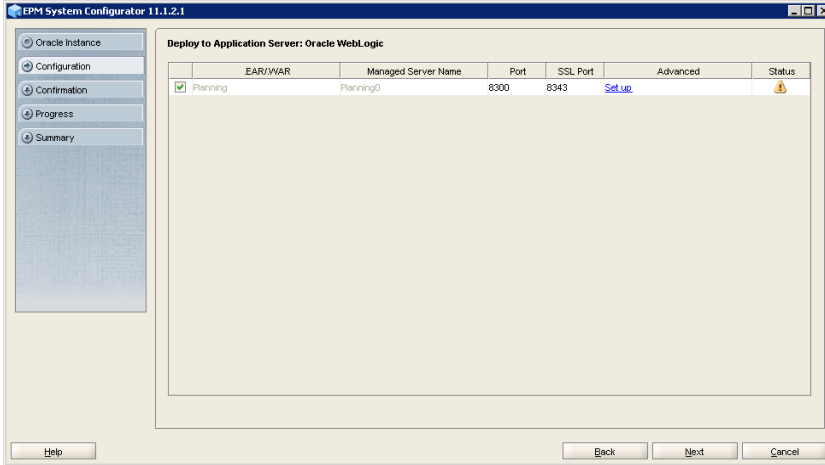
15. In Deploy to Application Server - Specify WebLogic Domain Information, click Next.



The Planning web application should be deployed to the domain already created on

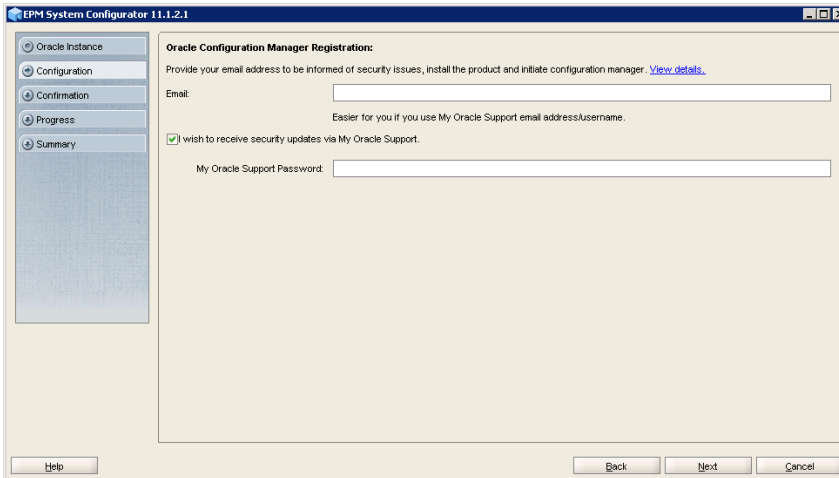
the Foundation Services host (FNDHOST1). The required settings are displayed by default.

16. In Deploy to Application Server: Oracle WebLogic, review the list of Java web applications that will be deployed, and then click Next.

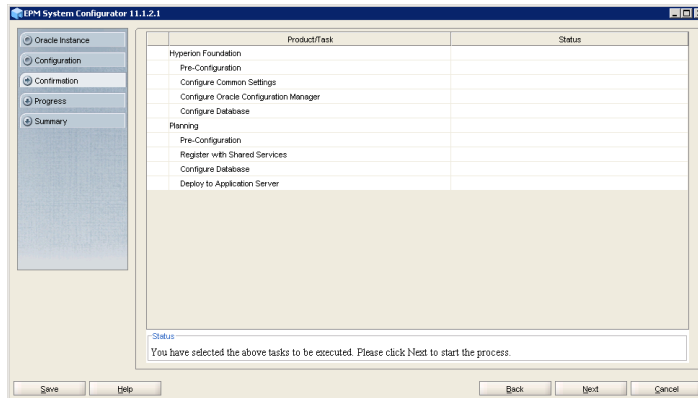


17. In Oracle Configuration Manager Registration, enter your information, and then click Next.

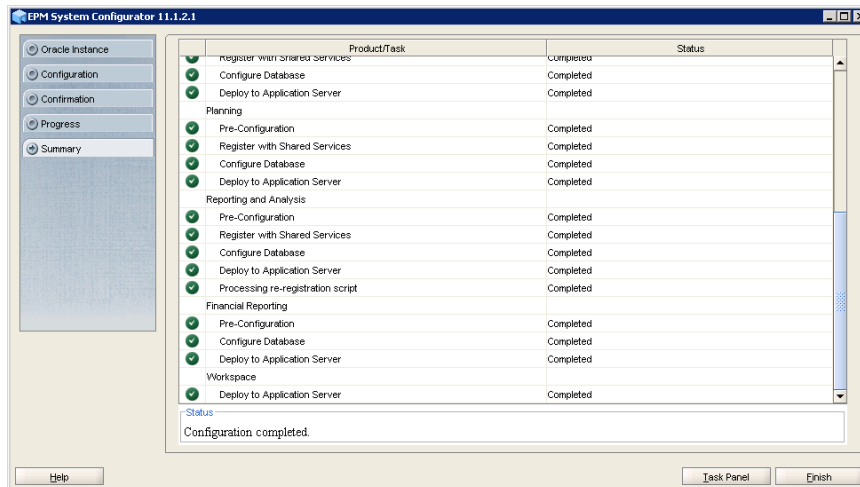
Oracle Configuration Manager notifies you when Oracle issues patches or security alerts. The password you enter in this screen must match the password associated with your email address in My Oracle Support.



- In Confirmation, review the summary of the configuration tasks that will be executed, and then click Next.

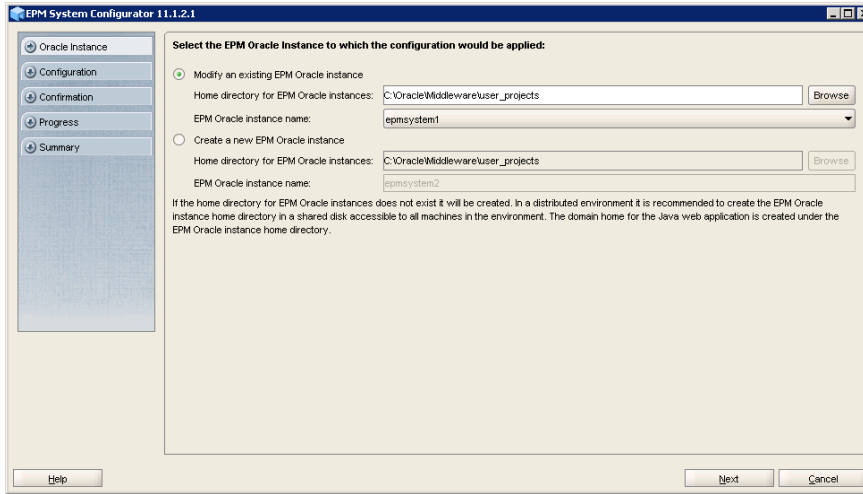


- When the deployment process is complete, the Summary screen is displayed. Verify that all the tasks completed successfully, and then click Finish.



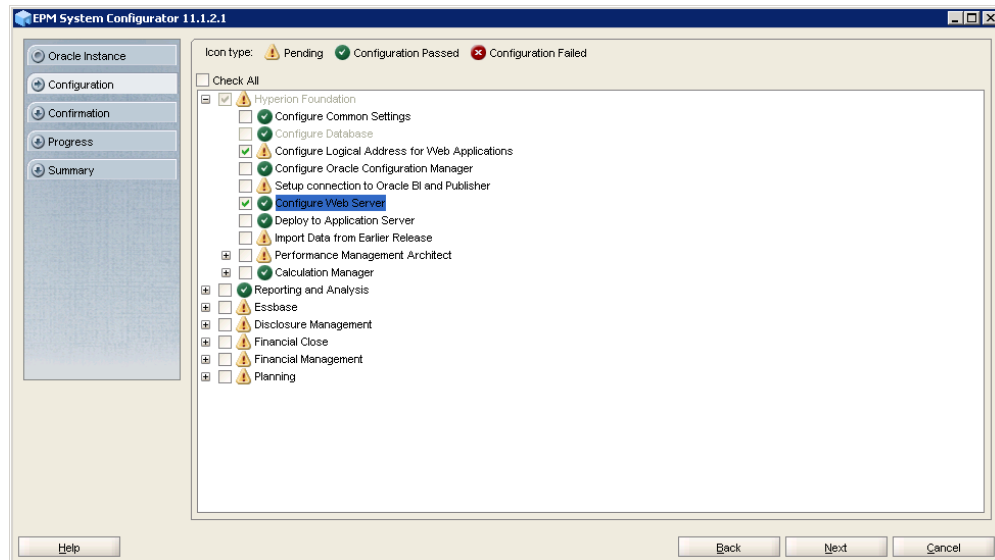
- On PLANHOST1, start EPM System by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then Start EPM System.
- On Foundation Services host (FNDHOST1), launch EPM System Configurator by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then EPM System Configurator.

22. In Oracle Instance, Modify an existing EPM Oracle instance should already be selected. Click Next.



23. In the Configuration screen, complete these actions, and then click Next:

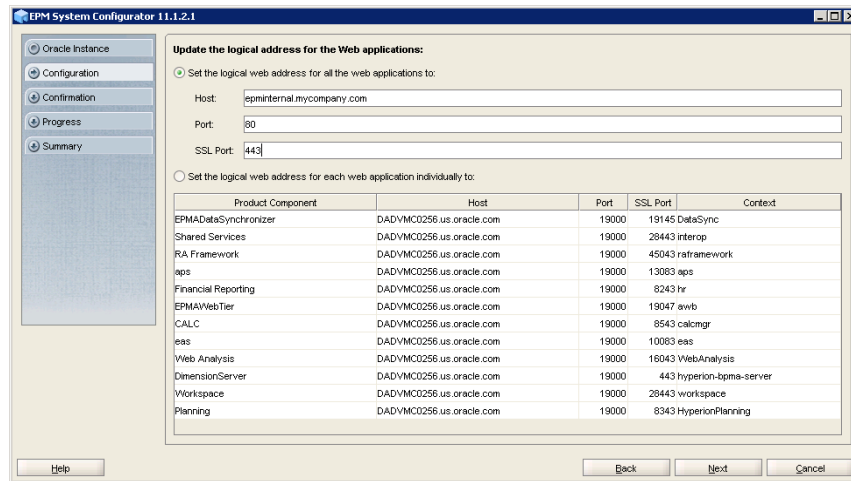
- a. Remove the selection (uncheck) from Uncheck All.
- b. Select these tasks from Hyperion Foundation configuration tasks:
 - Configure Logical Address for Web Applications
 - Configure Web Server



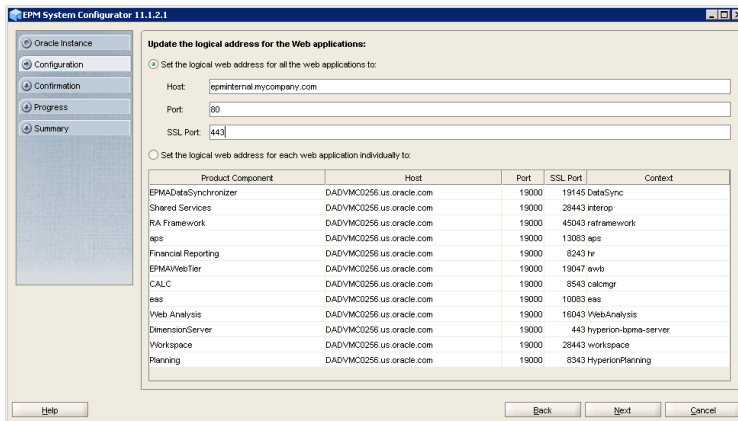
24. In Update the logical address for the Web applications, complete these steps:

- a. In Host, enter `epminternal.mycompany.com`.
- b. In Port, enter 80.

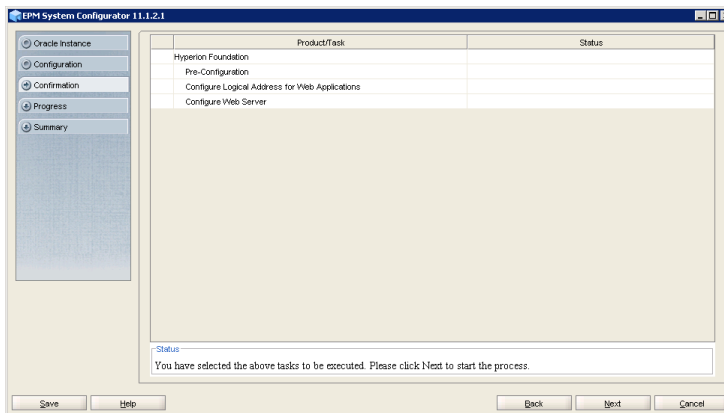
- c. In SSL Port, enter 443.
- d. Click Next.



25. In Configure Web Servers, uncheck Set the logical web address for the web application to the web server, and then click Next.

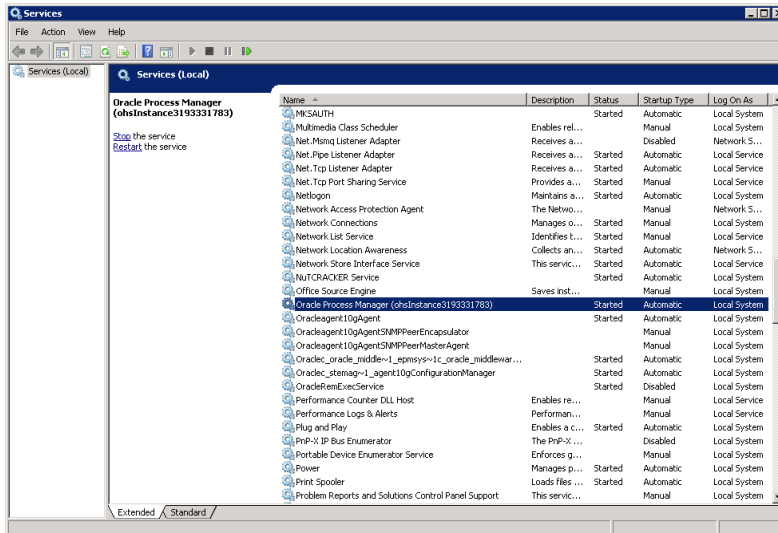


26. In the Confirmation screen, click Next.



27. In the Summary screen, click Finish.

28. Restart the OHS Service. (The number after *ohsInstance* would be different for you).



29. Refresh EPM System Workspace. On FNDHOST1, go to <http://localhost:9000/workspace/refresh>

30. Reconfigure the web server on the Foundation Services host machine (FNDHOST1) using the procedures in [Re-configure the Web Server on Foundation Services Servers \(FNDHOST1 and FNDHOST2\)](#). If you scaled out Foundation Services to other servers, you must reconfigure web server on those servers also.

31. Login to EPM Workspace using the following URL and ensure you can access Planning Administration panel:

<http://localhost:9000/workspace/index.jsp>

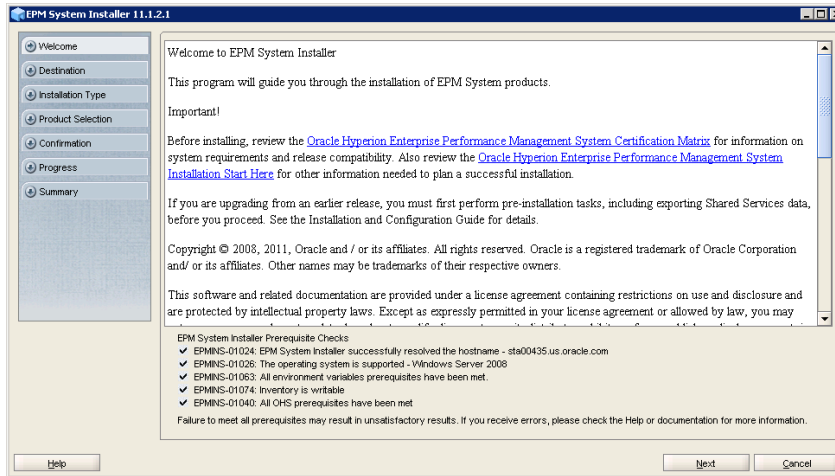
5.5. Install and Configure Essbase Server on ESSHOST1

To install and configure Essbase on ESSHOST1:

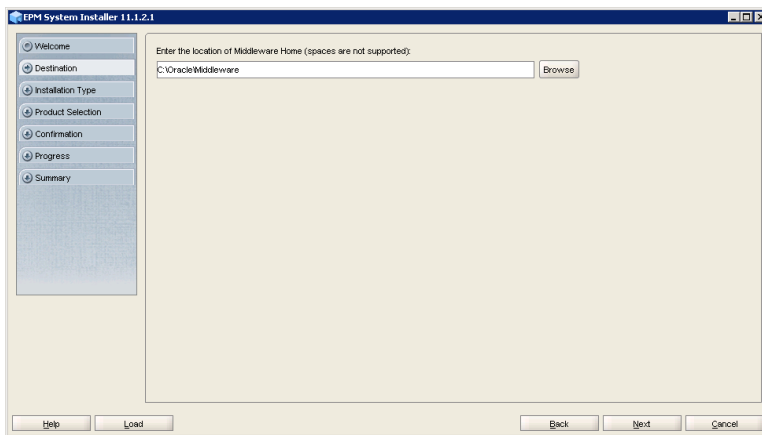
1. On the Essbase Server host machine (ESSHOST1), create a network drive (for example, `Z:\`) mapping to the shared drive directory where you extracted EPM System software (for example, `epm_unzipped`).
2. From the mapped network drive, launch `installTool.cmd`.
3. In EPM System Installer, select a language and then click OK.



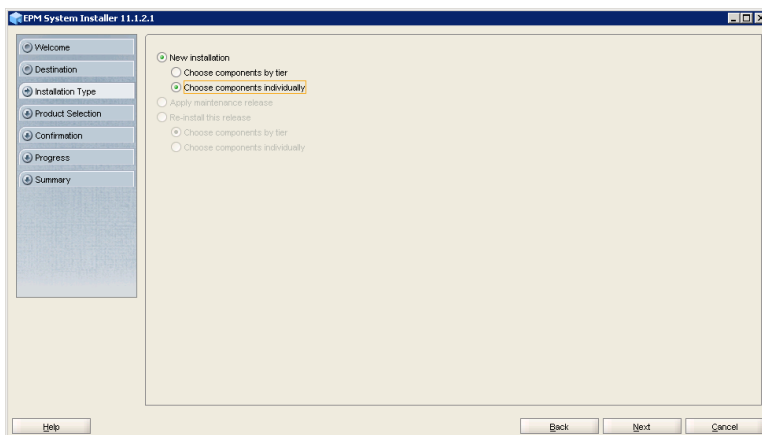
- Click Next in the Welcome screen.



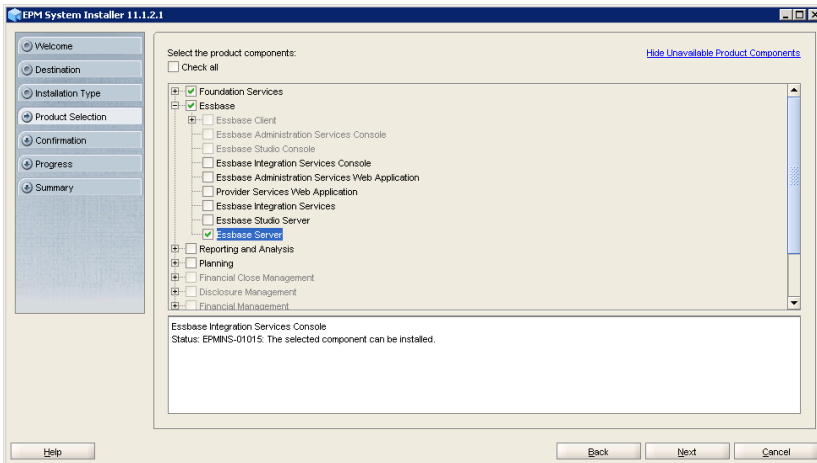
- Specify the `MIDDLEWARE_HOME` directory location exactly as set while deploying Foundation Services on `FNDHOST1`, and then click Next.



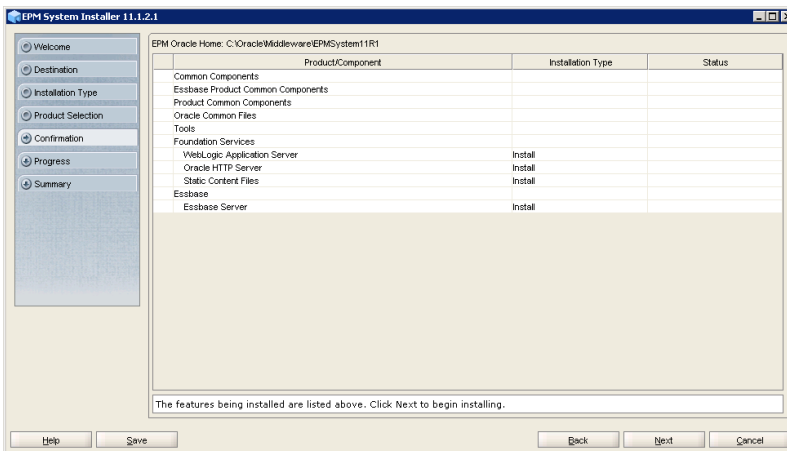
- Select Choose components individually, and then click Next.



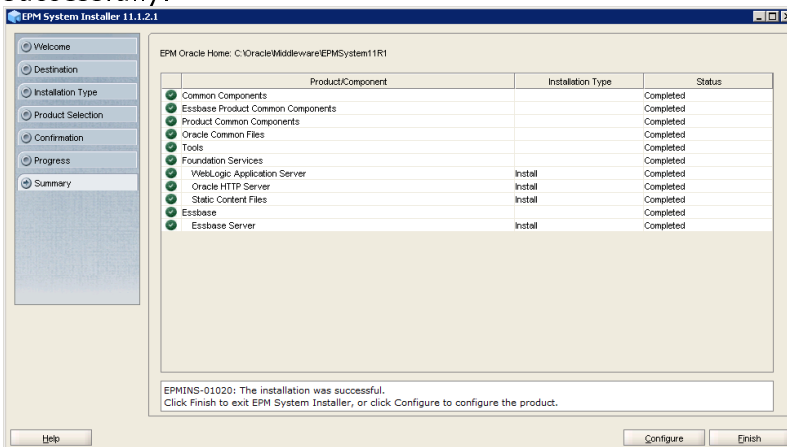
- Remove the selection (uncheck) from Uncheck All, and then select Essbase Server. Required Foundation Services components are automatically selected. Click Next.



- In the Confirmation screen, click Next to begin the installation of the binaries on the server.

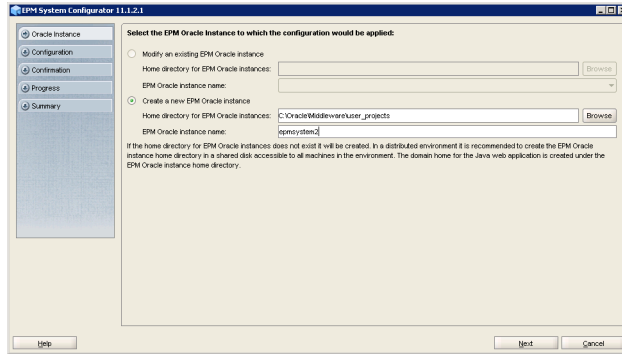


- In the Summary screen, click Configure after verifying that all components installed successfully.

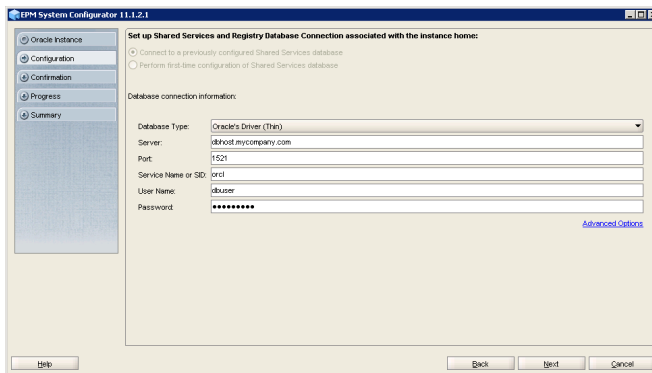


- In the Oracle Instance screen, complete these steps:

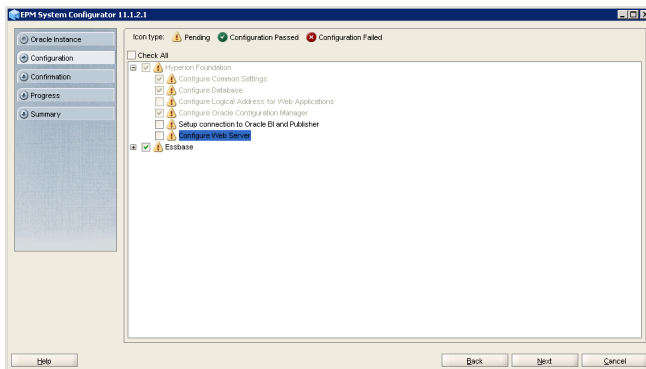
- a. Verify that the value in Home Directory for EPM Oracle Instance is identical to that set on the Foundation Services server (FNDHOST1).
- b. Set a unique name; for example, `epmsystem3`, in EPM Oracle Instance Name field. This name must be unique across deployment servers.
- c. Click Next.



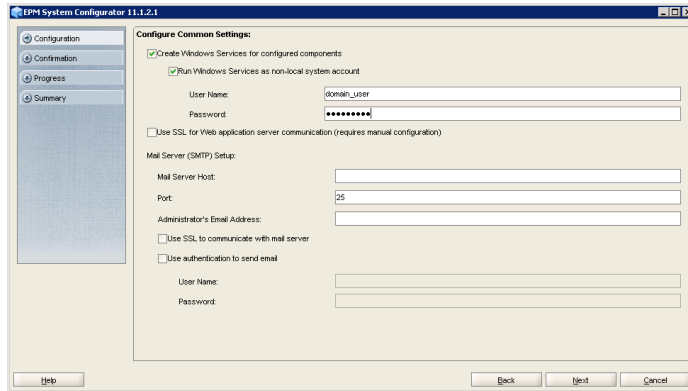
11. On the database configuration screen, enter the required information, and then click Next. This information must be identical to the information you entered while configuring Foundation Services database on the Foundation Services server (FNDHOST1).



12. In the component configuration screen, uncheck `Configure Web Server`, and then click Next.

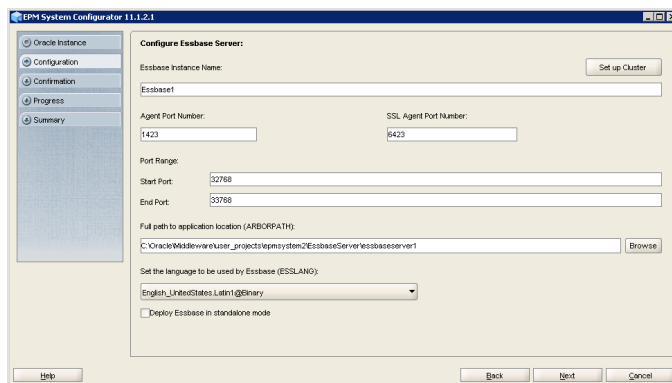


13. In Configure Common Settings, click Next.



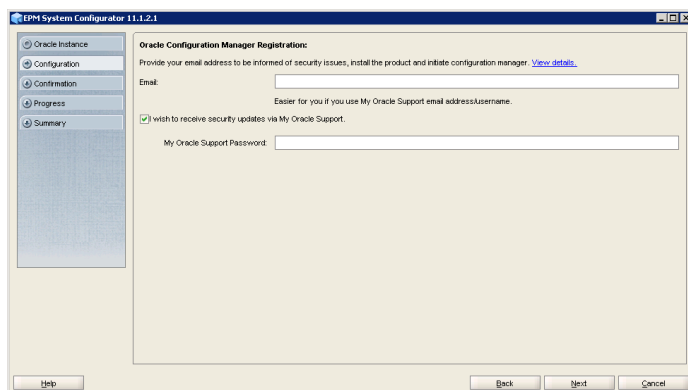
14. In Configure Essbase Server1, click Next.

Essbase cannot be configured for active-active failover. However, it can be configured in active-passive mode at a later time. This deployment process assumes that Essbase will be in stand-alone mode on this server.

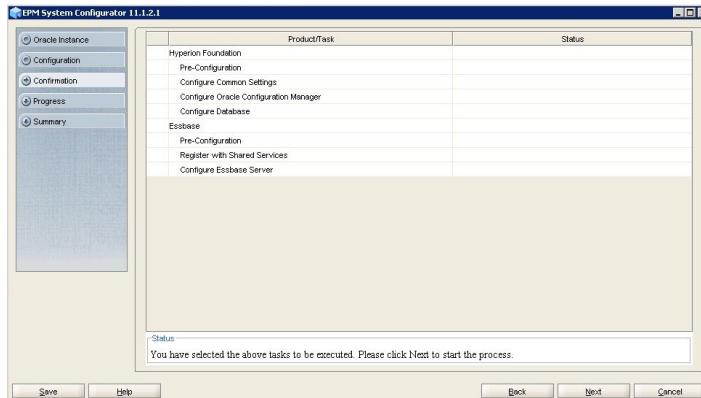


15. In Oracle Configuration Manager Registration, enter your information, and then click Next.

Oracle Configuration Manager notifies you when Oracle issues patches or security alerts. The password you enter in this screen must match the password associated with your email address in My Oracle Support.



16. In Confirmation, review the summary of the configuration tasks that will be executed, and then click Next.



17. When the deployment process is complete, the Summary screen is displayed. Verify that all the tasks completed successfully, and then click Finish.
18. On ESSHOST1, start EPM System by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then Start EPM System.
19. Validate Essbase Server configuration by starting the Sample application that is installed by default. The command execution is illustrated in the following screenshot.

```
C:\Oracle\Middleware\user_projects\epmsystem12\EssbaseServer\essbaseserver1\bin>startMaxl -l admin password1
Essbase MaxL Shell 64-bit - Release 11.1.2 (ESB11.1.2.1.0B347)
Copyright (c) 2000, 2011, Oracle and/or its affiliates.
All rights reserved.

OK/INFO - 1051034 - Logging in user [admin@Native Directory].
OK/INFO - 1241001 - Logged in to Essbase.

MAXL> alter system load application sample;

OK/INFO - 1054014 - Database Basic loaded.
OK/INFO - 1054014 - Database Xchgrate loaded.
OK/INFO - 1054014 - Database Interntl loaded.
OK/INFO - 1051061 - Application Sample loaded - connection established.
OK/INFO - 1054027 - Application [Sample] started with process id [46481].
OK/INFO - 1056090 - System altered.

MAXL> alter system unload application sample;

OK/INFO - 1054005 - Shutting down application Sample.
OK/INFO - 1056090 - System altered.

MAXL> exit;

MaxL Shell completed

C:\Oracle\Middleware\user_projects\epmsystem12\EssbaseServer\essbaseserver1\bin>_
```

- a. From a command prompt, change the directory to `EPM_ORACLE_INSTANCE/EssbaseServer/essbaseserver1/bin`.
- b. Start Maxl using a command such as the following:


```
startMaxl -l admin password1
```

 Replace `password1` with the password of the Shared Services admin account you set while configuring Foundation Services host machine (FNDHOST1).
- c. Load the sample application using the following command:


```
alter system load application sample;
```

Maxl shows the message `Application [Sample] started with process id [xxxx]` to indicate that the process was successful.

- d. Unload Sample application using this command and then exit Maxl.
`alter system unload application sample;`

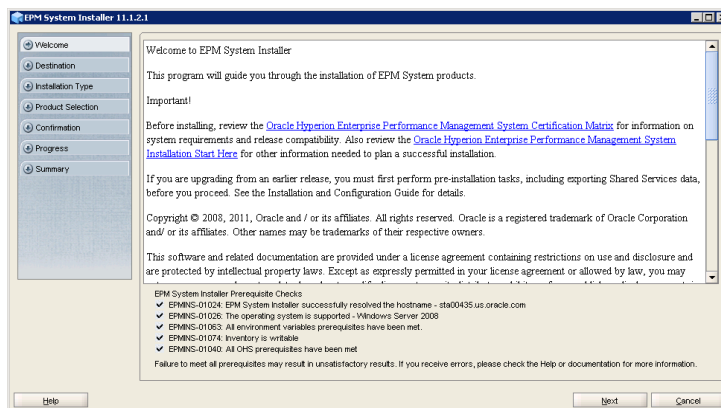
5.6. Install and Configure Financial Management on HFMHOST1

To install and configure Financial Management on HFMHOST1:

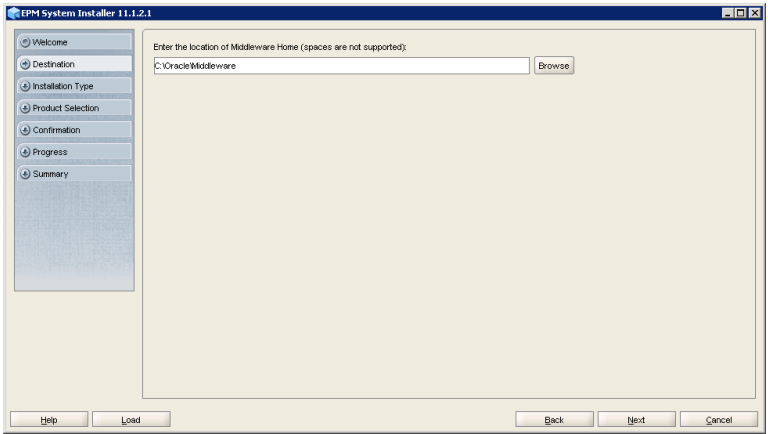
1. On the Financial Management host machine (HFMHOST1), create a network drive (for example, `Z:\`) mapping to the shared drive directory where you extracted EPM System software (for example, `epm_unzipped`).
2. Verify that the `tnsnames.ora` file on HFMHOST1 contains an entry that identifies the Financial Management database.
3. From the mapped network drive, launch `installTool.cmd`.
4. In EPM System Installer, select a language and then click OK.



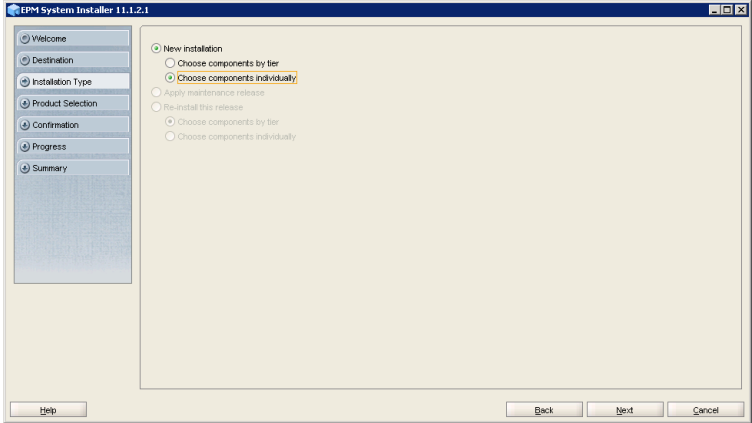
5. Click Next in the Welcome screen.



6. Specify the `MIDDLEWARE_HOME` directory location exactly as set while deploying Foundation Services on FNDHOST1, and then click Next.

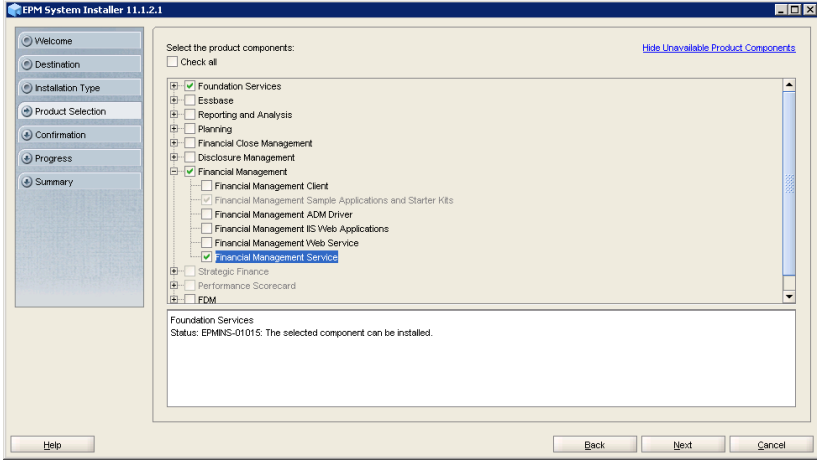


7. Select Choose components individually, and then click Next.

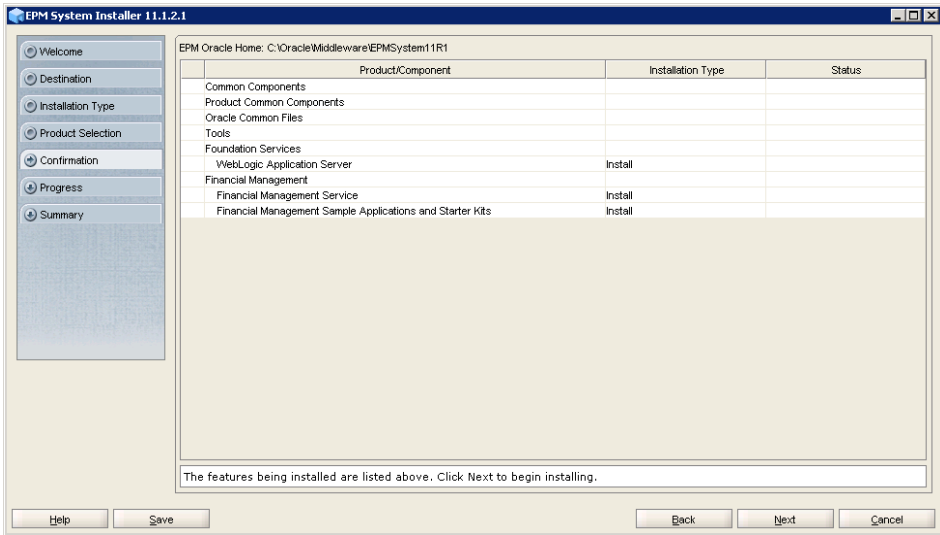


8. Remove the selection (uncheck) from Uncheck All and then select Financial Management Service task under Financial Management. Click Next.

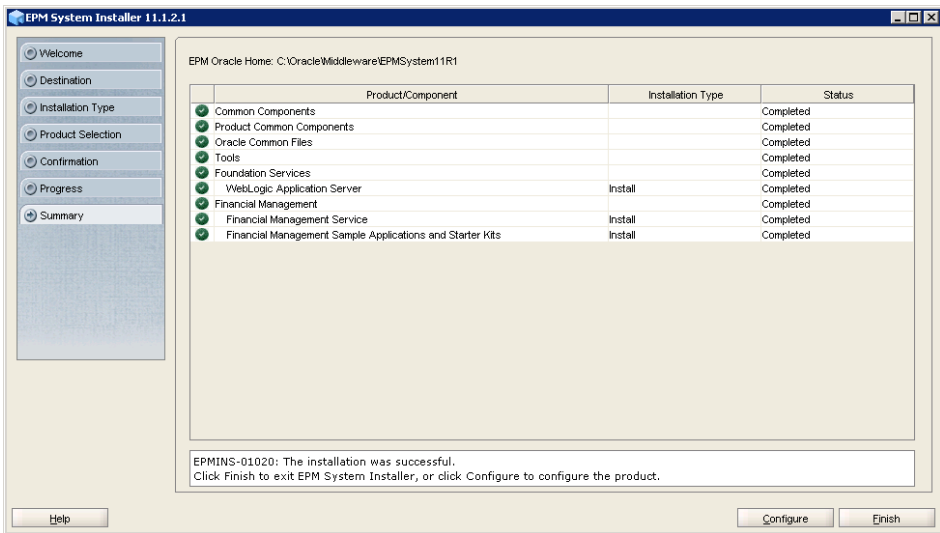
Required Foundation Services components are automatically selected.



9. In the Confirmation screen, review the list of components being installed, and then click Next to begin the installation of the binaries on the server.



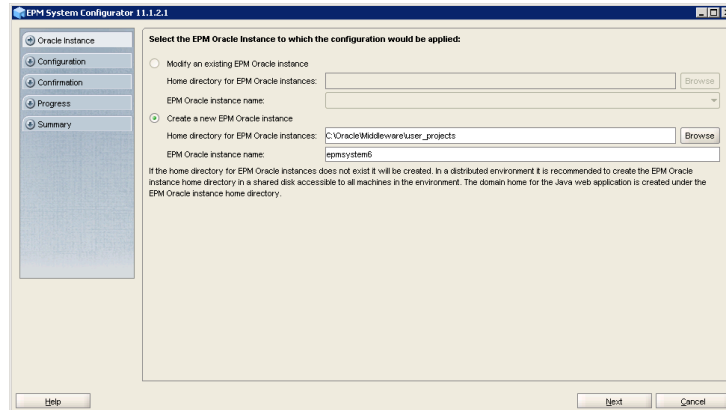
10. In the Summary screen, click Configure after verifying that all components installed successfully.



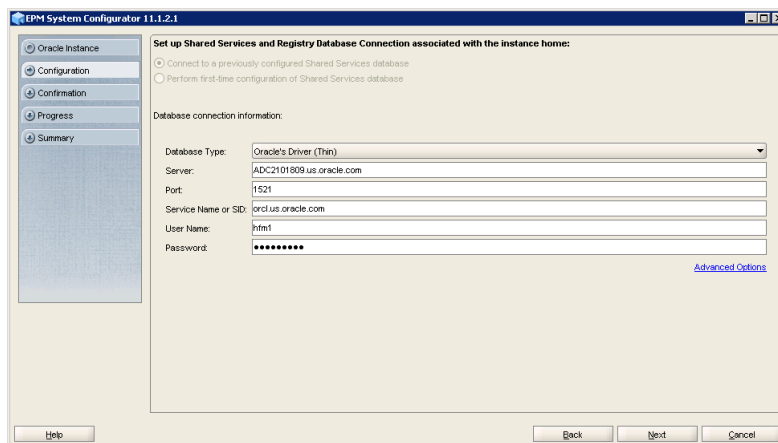
11. In Oracle Instance, complete these steps:

- a. Verify that the value in Home Directory for EPM Oracle Instance is identical to that set on the Foundation Services server (FNDHOST1).
- b. Set a unique name; for example, epmsystem9, in EPM Oracle Instance Name field. This name must be unique across deployment servers.

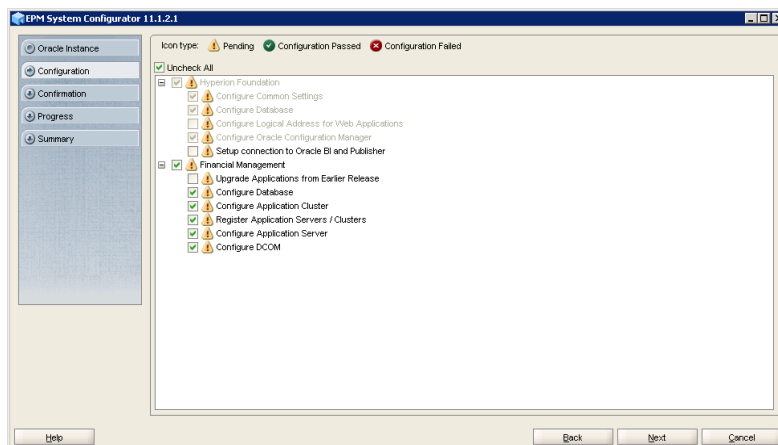
c. Click Next.



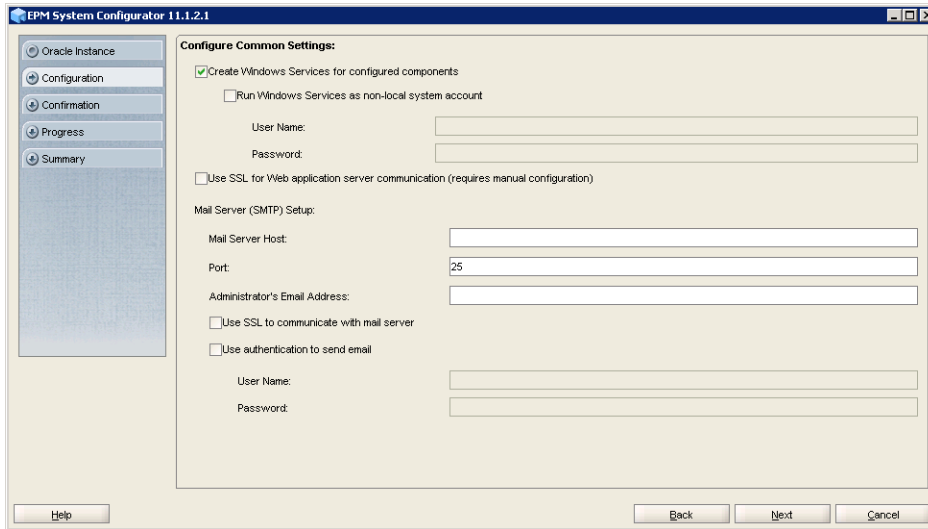
12. In the database configuration screen, enter the required information, and then click Next. This information must be identical to the information you entered while configuring Foundation Services database on the Foundation Services server (FNDHOST1).



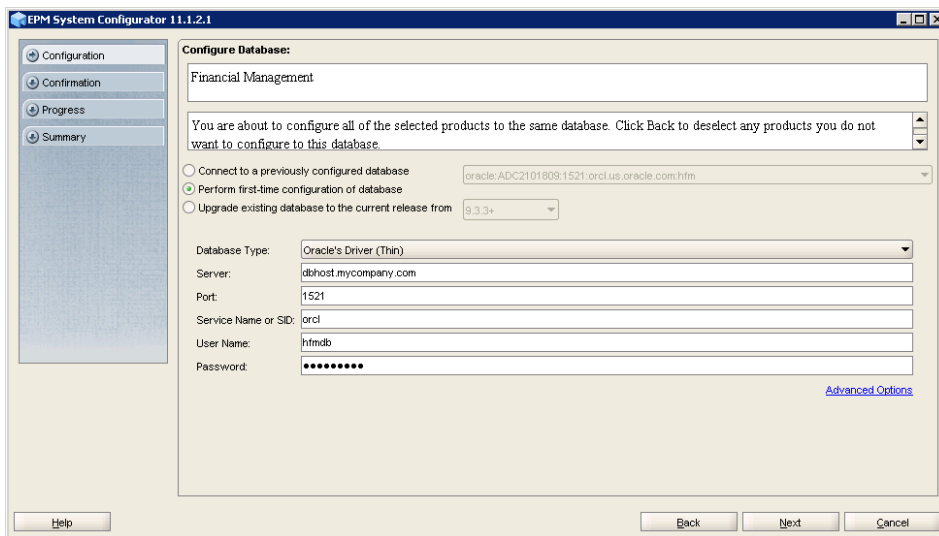
13. In the component configuration screen, the required tasks are preselected. Click Next.



14. In Configure Common Settings, click Next.



15. In Configure Database, complete these steps, and then click Next.



- a. Select Perform first-time configuration of database.
- b. Enter connection information for the Financial Management database.
An entry identifying this database must be present in `tnsnames.ora` on HFMHOST1.

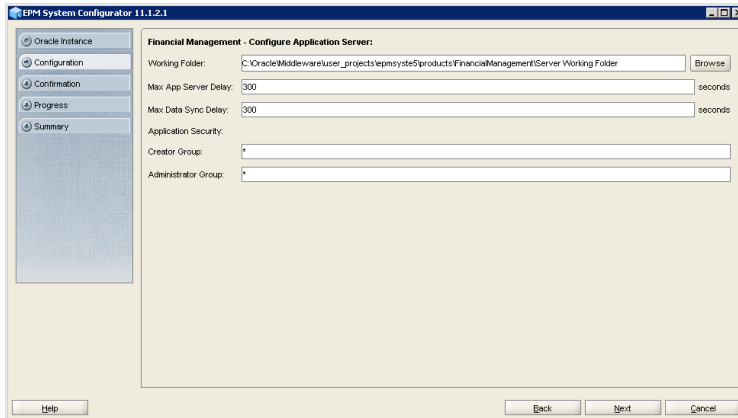
16. In Deploy to Application Server - Specify WebLogic Domain Information, and then click Next.
You are deploying Financial Management components to an existing WebLogic domain.

The screenshot shows the 'EPM System Configurator 11.1.2.1' window. On the left is a navigation pane with 'Configuration' selected. The main area is titled 'Deploy to Application Server - Specify WebLogic Domain Information'. It has two radio buttons: the first is selected, 'Deploy Web applications to an existing domain', and the second is 'Deploy Web applications to a new domain. The Administration Server for this domain will be created on this machine.' Below the first option are fields for 'Administration Server Host' (ADC2101838.us.oracle.com), 'Administration Server Port' (7001), 'Administrator User' (epm_admin), 'Administrator Password' (masked with dots), and 'Domain Name' (EPMSysSystem). Below the second option are fields for 'Domain Name' (EPMSysSystem), 'Administration Server Port' (7001), 'Administrator User' (epm_admin), 'Administrator Password' (empty), and 'Confirm Administrator Password' (empty). At the bottom are 'Help', 'Back', 'Next', and 'Cancel' buttons.

17. In Financial Management – Configure DCOM, complete these steps:
- In Domain User, enter the deployment user account.
 - In Password and Re-type Password, enter the password of the deployment user.
 - Click Next.

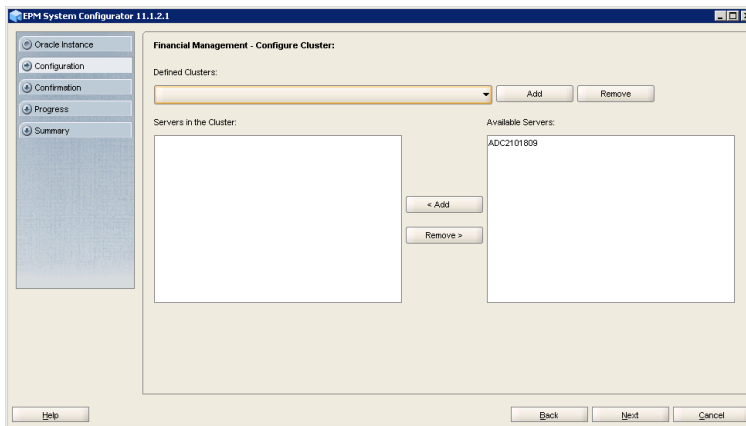
The screenshot shows the 'EPM System Configurator 11.1.2.1' window. On the left is a navigation pane with 'Configuration' selected. The main area is titled 'Financial Management - Configure DCOM:'. It has three text input fields: 'Domain user' (hyperionad@itq.e), 'Password' (masked with dots), and 'Re-type Password' (masked with dots). Below these is a checked checkbox labeled 'Enable DCOM on this machine'. At the bottom are 'Help', 'Back', 'Next', and 'Cancel' buttons.

18. In Financial Management – Configure Application Server, click Next.

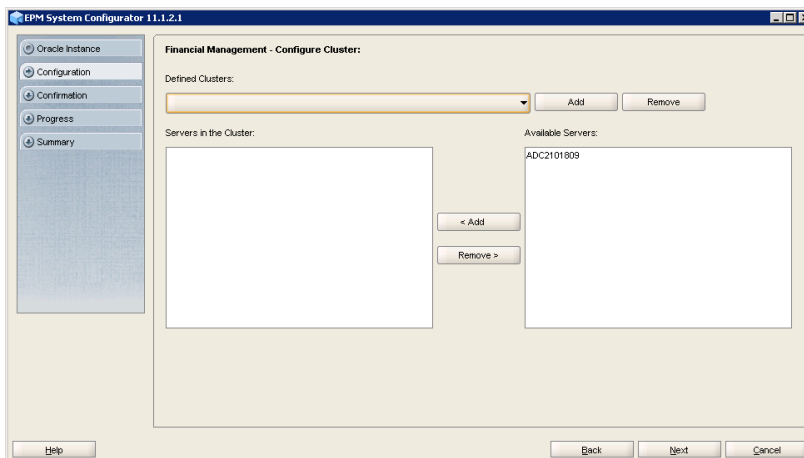


19. In Financial Management – Configure Cluster, click Next.

Clusters are used to target different Financial Management tasks to different servers. This task of creating clusters is not part of this deployment.



20. In Financial Management – Register Servers and Clusters, click Next.



21. In Oracle Configuration Manager Registration, enter your information, and then click Next.

Oracle Configuration Manager Registration:
Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

Email:

Easier for you if you use My Oracle Support email address:Username.

wish to receive security updates via My Oracle Support.

My Oracle Support Password:

Buttons: Help, Back, Next, Cancel

Oracle Configuration Manager notifies you when Oracle issues patches or security alerts. The password you enter in this screen must match the password associated with your email address in My Oracle Support.

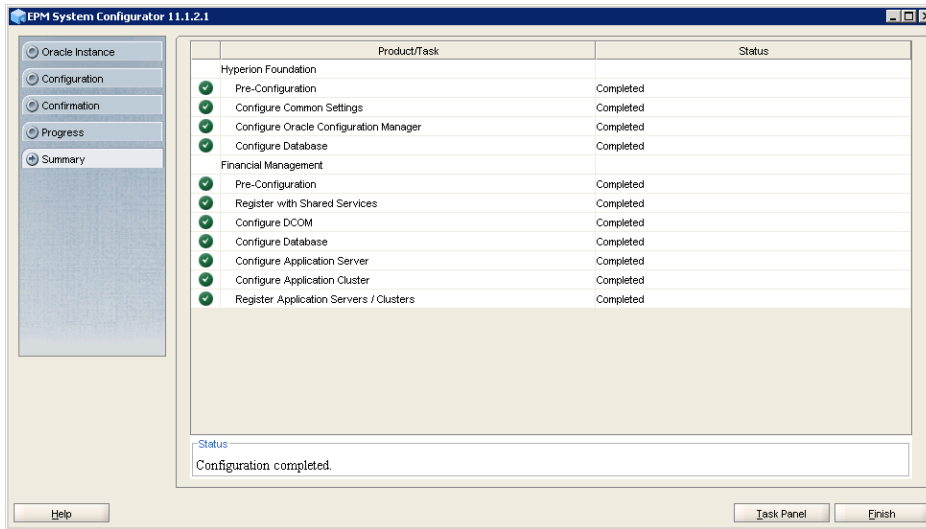
22. In Confirmation, review the summary of the configuration tasks that will be executed, and then click Next.

Product/Task	Status
Hyperion Foundation	
Pre-Configuration	
Configure Common Settings	
Configure Oracle Configuration Manager	
Configure Database	
Financial Management	
Pre-Configuration	
Configure DCOM	
Register Application Servers / Clusters	
Configure Web Server	
Deploy to Application Server	

Status
You have selected the above tasks to be executed. Please click Next to start the process.

Buttons: Save, Help, Back, Next, Cancel

23. When the deployment process is complete, the Summary screen is displayed. Verify that all the tasks completed successfully, and then click Finish.



24. Start EPM System services on HFMHOST1 by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then Start EPM System.

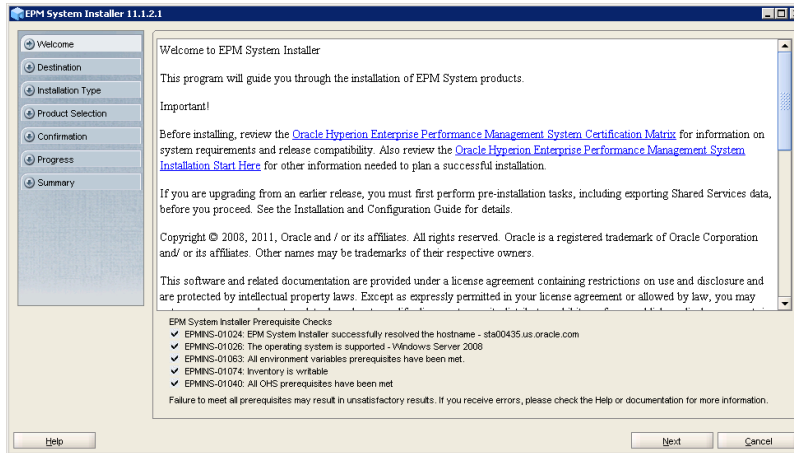
5.7. Install and Configure Financial Management Web Application on HFMWEBHOST1

To install and configure Financial Management web application on HFMWEBHOST1:

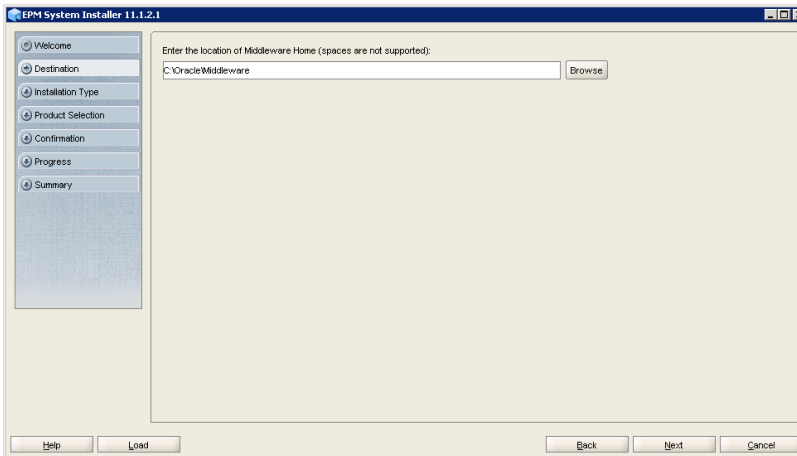
1. Start the WebLogic Admin Server on the first Foundation Services machine (FNDHOST1).
2. On Financial Management web application host machine (HFMWEBHOST1), create a network drive (for example, z:\) mapping to the shared drive directory where you extracted EPM System software (for example, `epm_unzipped`).
3. From the mapped network drive, launch `installTool.cmd`.
4. In EPM System Installer, select a language and then click OK.



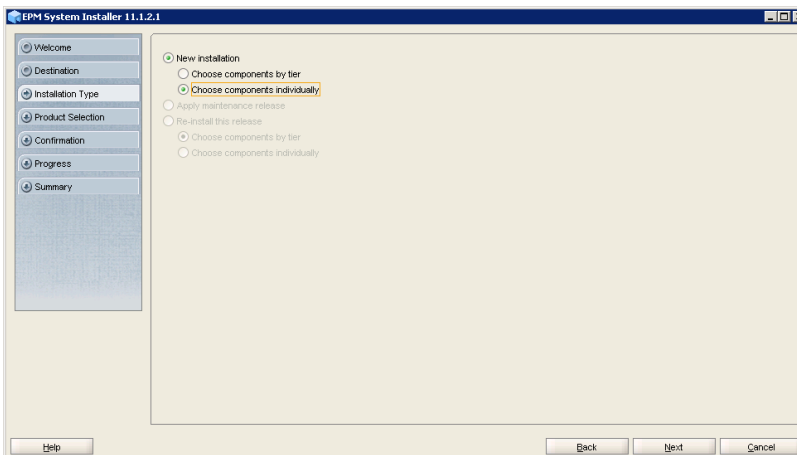
5. Click Next in the Welcome screen.



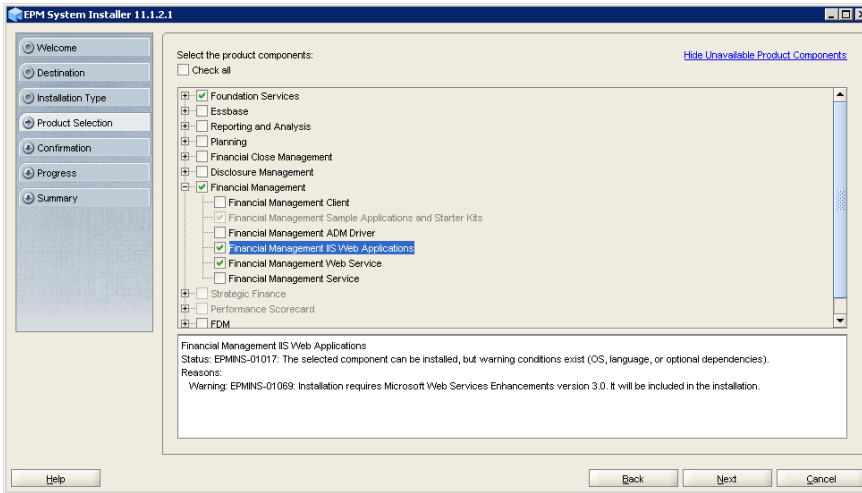
6. Specify the `MIDDLEWARE_HOME` directory location exactly as set while deploying Foundation Services on FNDHOST1, and then click Next.



7. Select Choose components individually, and then click Next.



8. In Product Selection, remove the selection (uncheck) from Uncheck All.

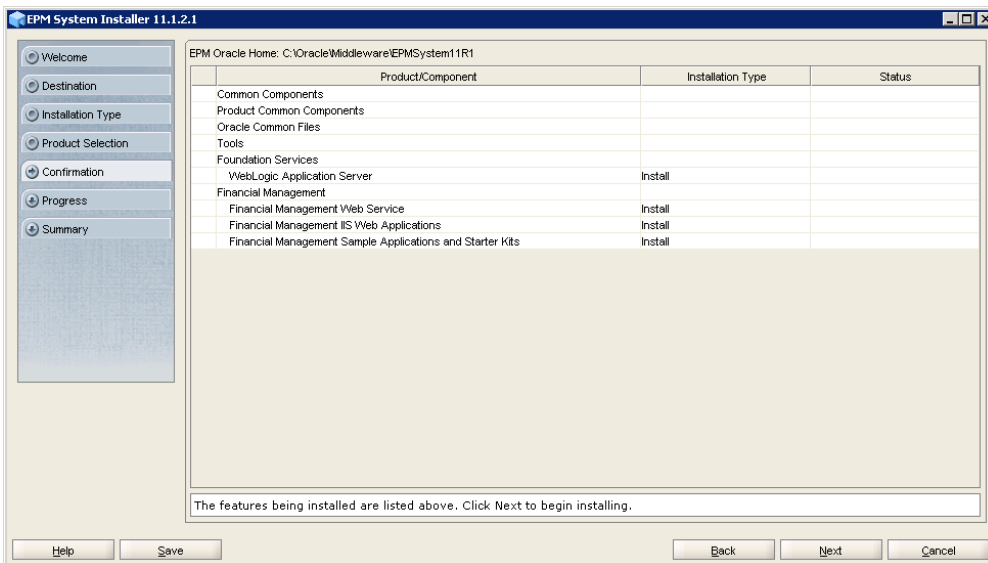


Select the following components to install.

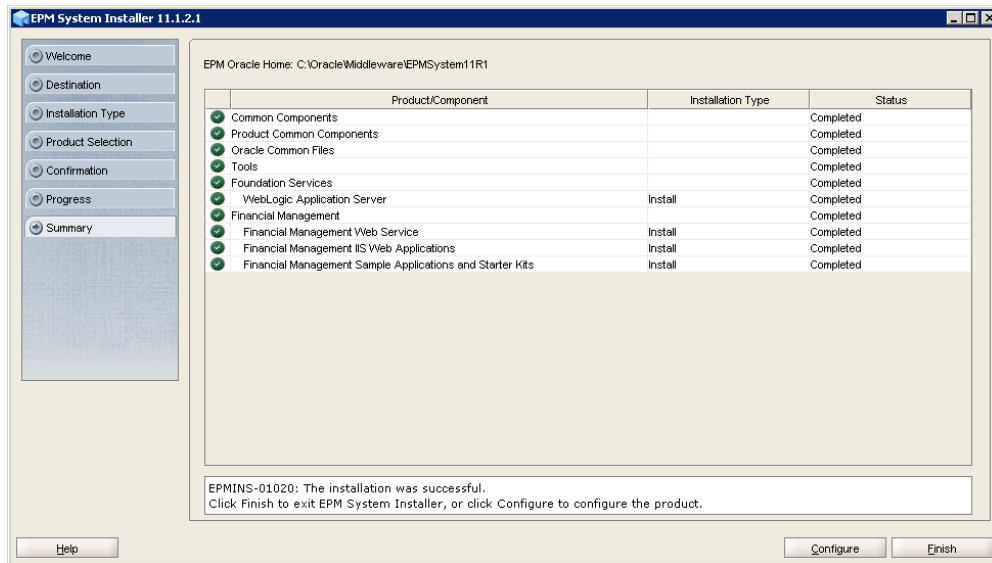
- Financial Management -- Financial Management IIS Web Applications
- Financial Management -- Financial Management Web Service

Required Foundation Services components are automatically selected.

9. In the Confirmation screen, review the list of components being installed, and then click Next to begin the installation of the binaries on the server.

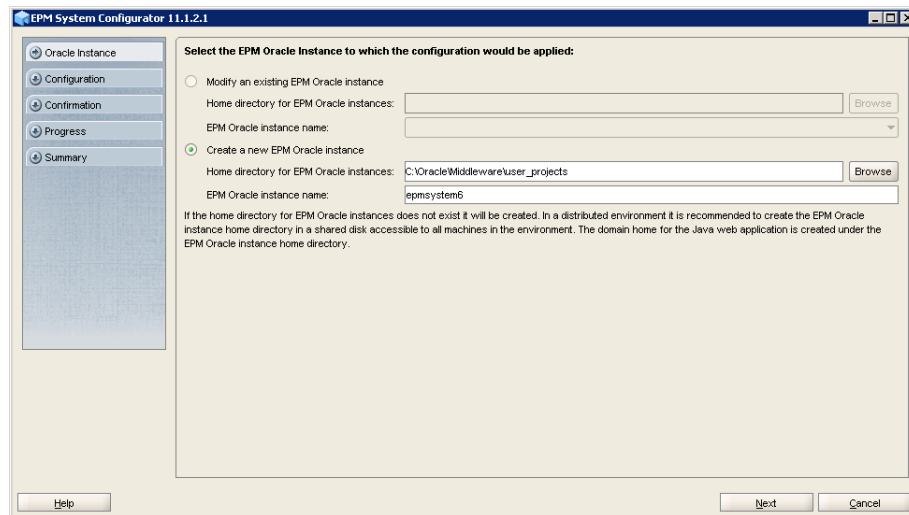


10. In the Summary screen, click Configure after verifying that all components installed successfully.

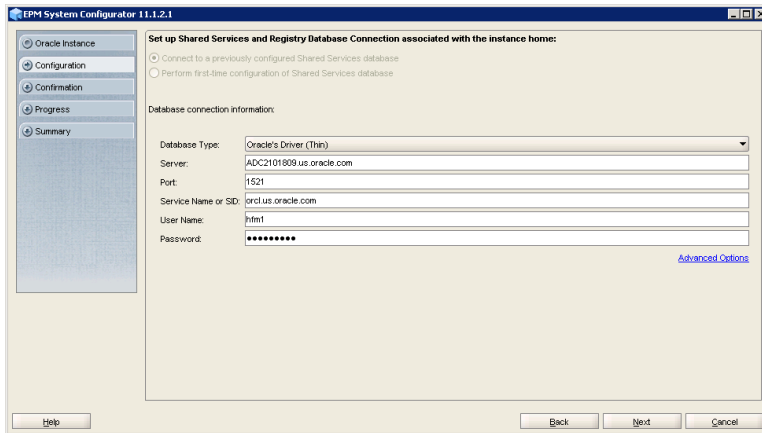


11. In Oracle Instance, complete these steps:

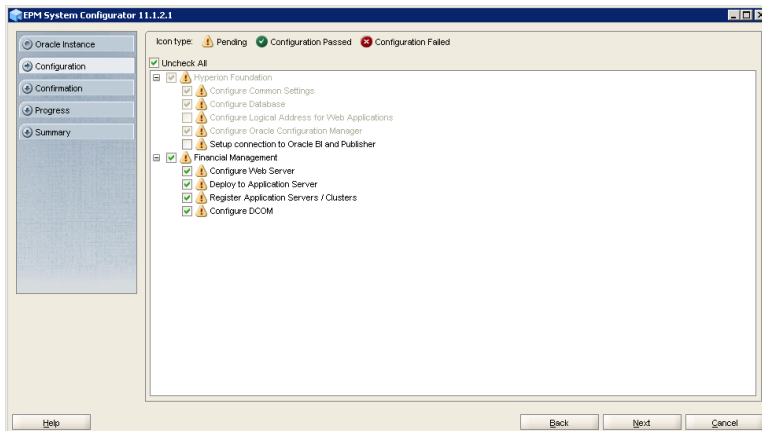
- a. Verify that the value in Home Directory for EPM Oracle Instance is identical to that set on the Foundation Services server (FNDHOST1).
- b. Set a unique name; for example, `epmsystem6`, in EPM Oracle Instance Name field. This name must be unique across deployment servers.
- c. Click Next.



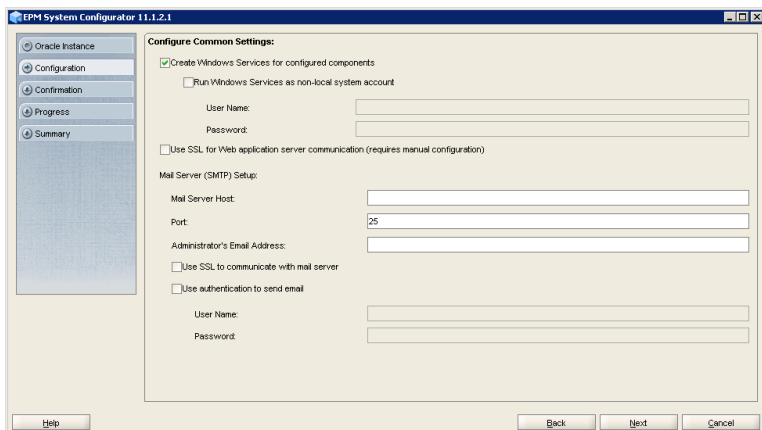
12. In the database configuration screen, enter the required information, and then click Next. This information must be identical to the information you entered while configuring Foundation Services database on the Foundation Services server (FNDHOST1).



13. In the component configuration screen, the required tasks are preselected. Click Next.

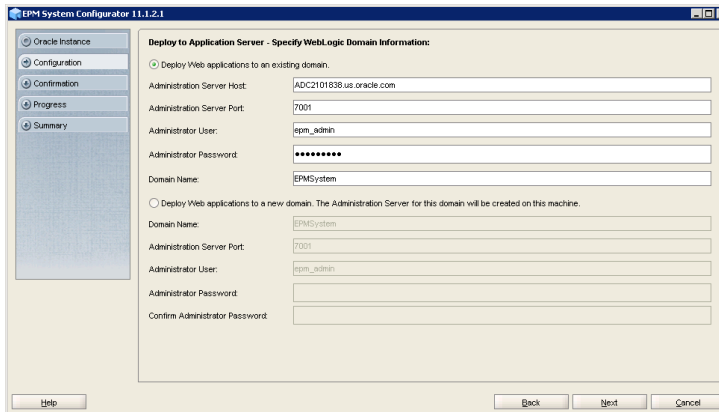


14. In Configure Common Settings, click Next.

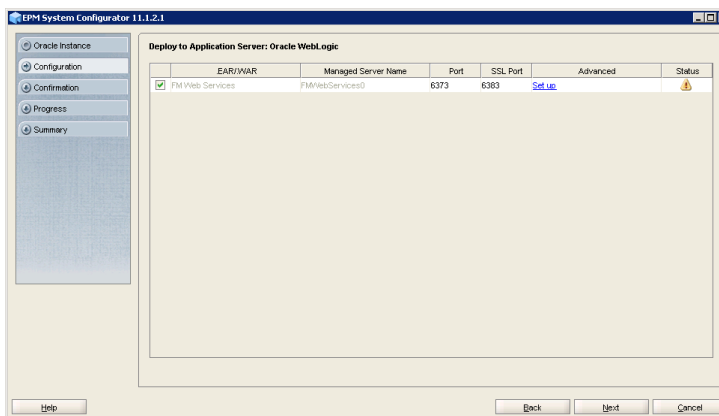


15. In Deploy to Application Server - Specify WebLogic Domain Information, click Next.

You are deploying Financial Management web application to an existing WebLogic domain.

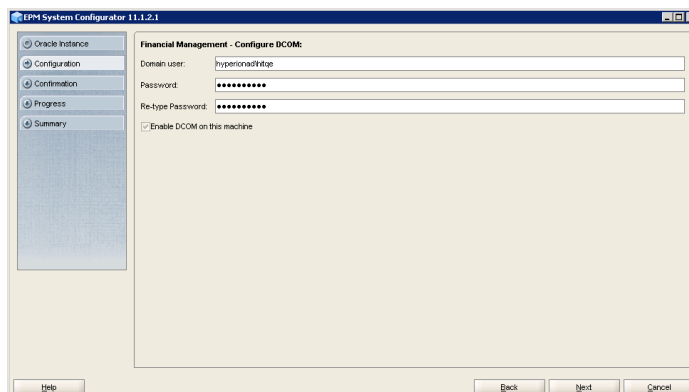


16. In Deploy to Application Server: Oracle WebLogic, click Next.

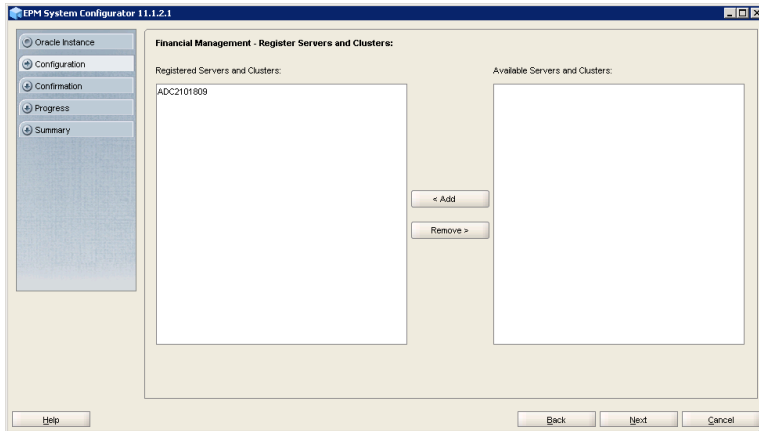


17. In Financial Management - Configure DCOM, complete these steps:

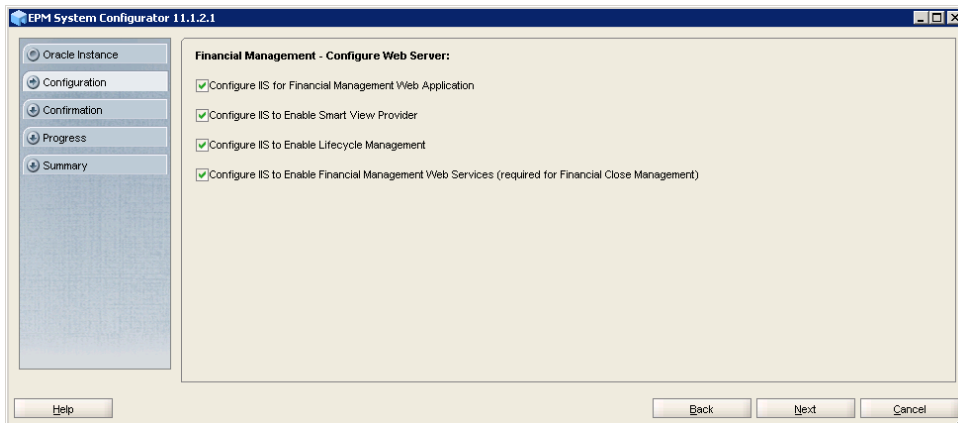
- In Domain User, enter the deployment user account.
- In Password and Re-type Password, enter the password of the deployment user.
- Click Next.



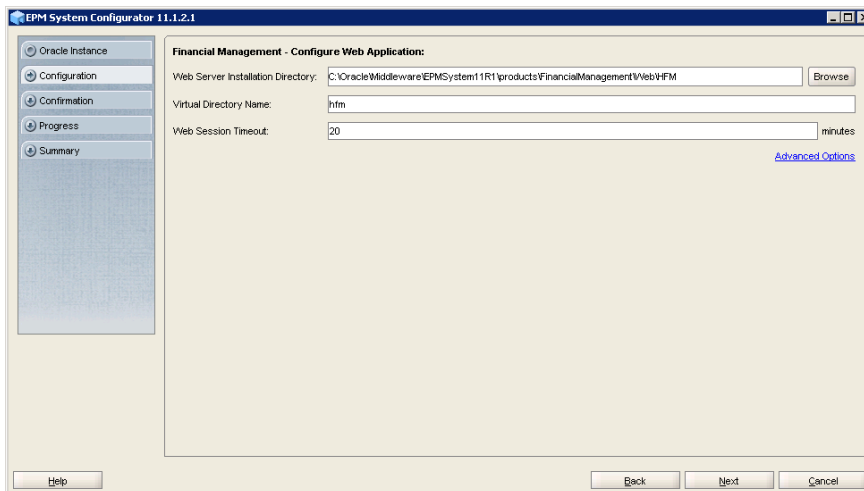
18. In Financial Management – Register Domains and Clusters, click Next.



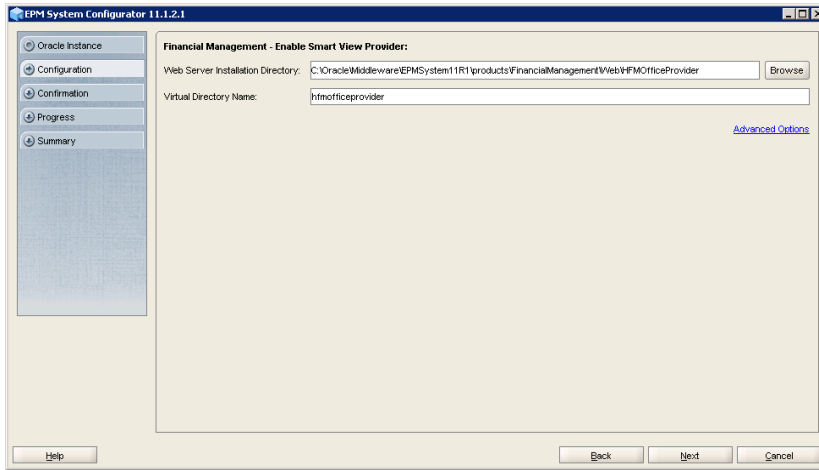
19. In Financial Management – Configure Web Server, click Next.



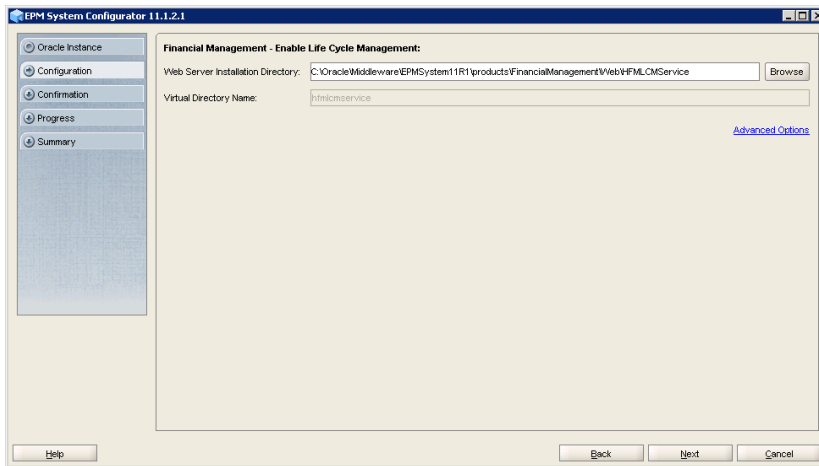
20. In Financial Management – Configure Web Application, click Next.



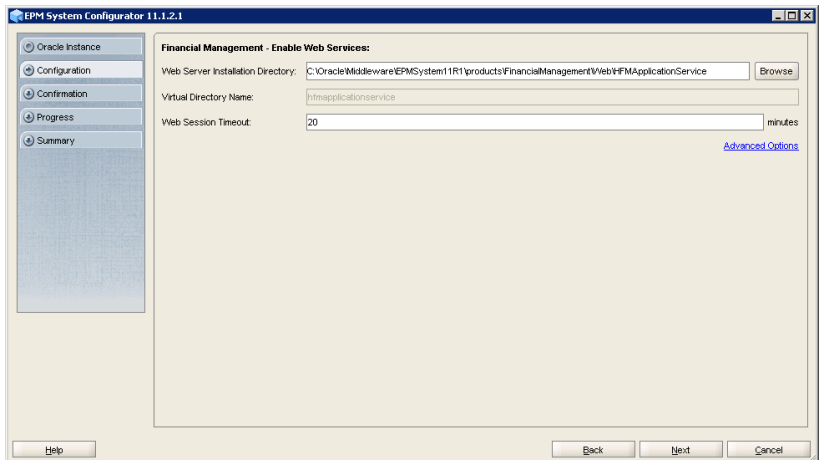
21. In Financial Management – Configure Smart View Provider, click Next.



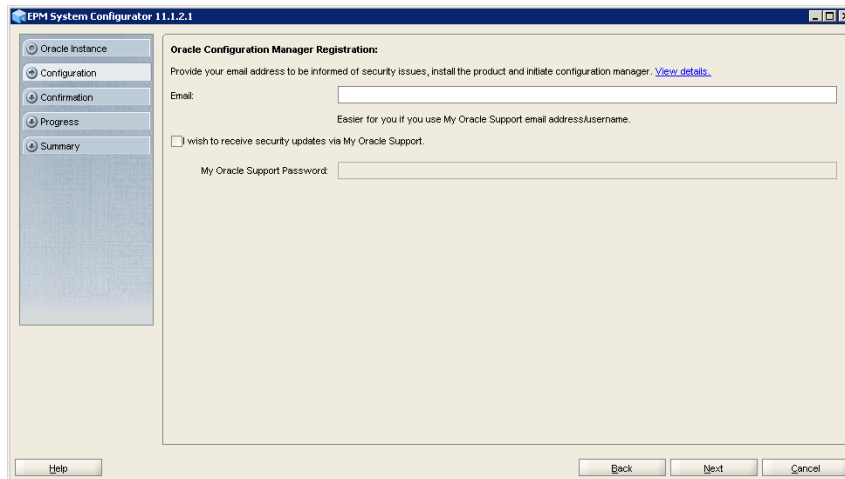
22. In Financial Management – Enable Life Cycle Management, click Next.



23. In Financial Management – Enable Web Services, click Next.

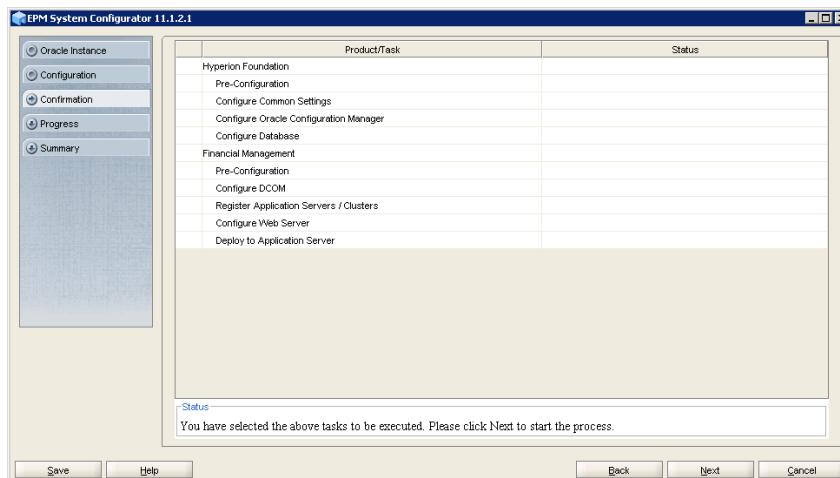


24. In Oracle Configuration Manager Registration, enter your information, and then click Next.

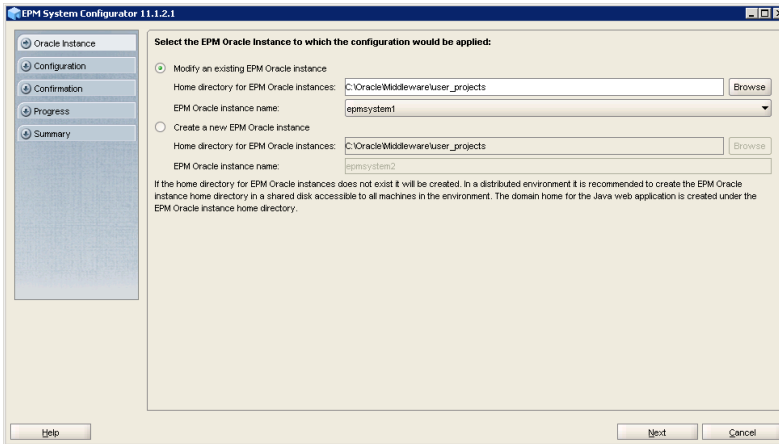


Oracle Configuration Manager notifies you when Oracle issues patches or security alerts. The password you enter in this screen must match the password associated with your email address in My Oracle Support.

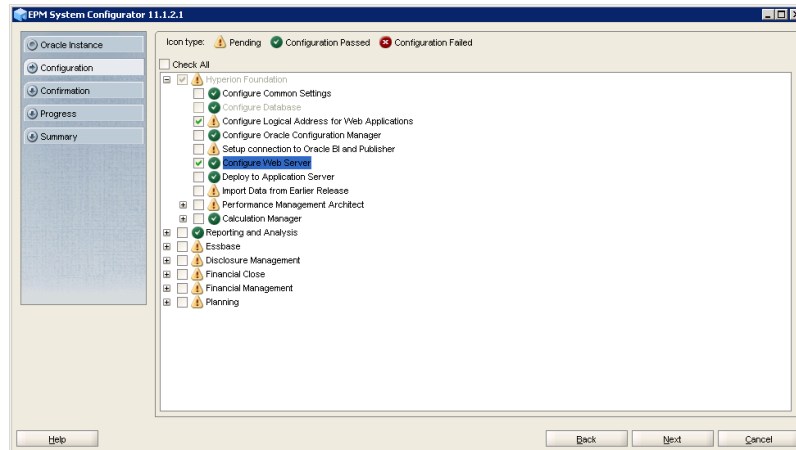
25. In Confirmation, review the summary of the configuration tasks that will be executed, and then click Next.



26. When the deployment process is complete, the Summary screen is displayed. Verify that all the tasks completed successfully, and then click Finish.
27. Start EPM System services on HFMWEBHOST1 by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then Start EPM System.
28. On Foundation Services host (FNDHOST1), launch the EPM System Configurator by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then EPM System Configurator.
29. In Oracle Instance, Modify an existing EPM Oracle instance is selected. Click Next.

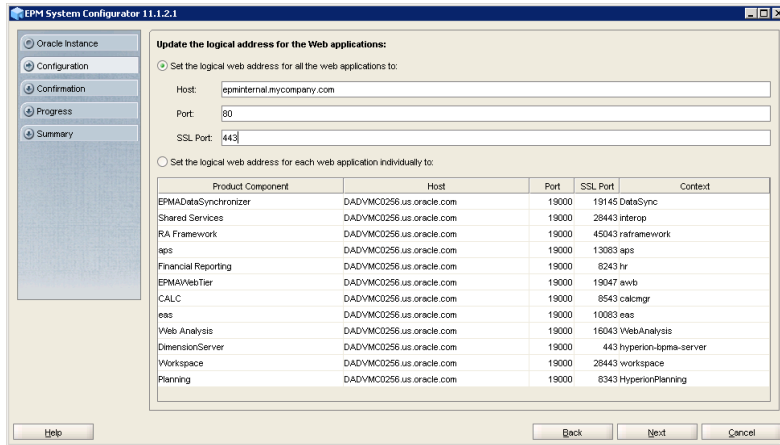


30. In the Configuration screen, complete these actions:
- Remove the selection (uncheck) from Uncheck All.
 - Select these tasks from Hyperion Foundation configuration tasks:
 - Configure Logical Address for Web Applications
 - Configure Web Server
 - Click Next.

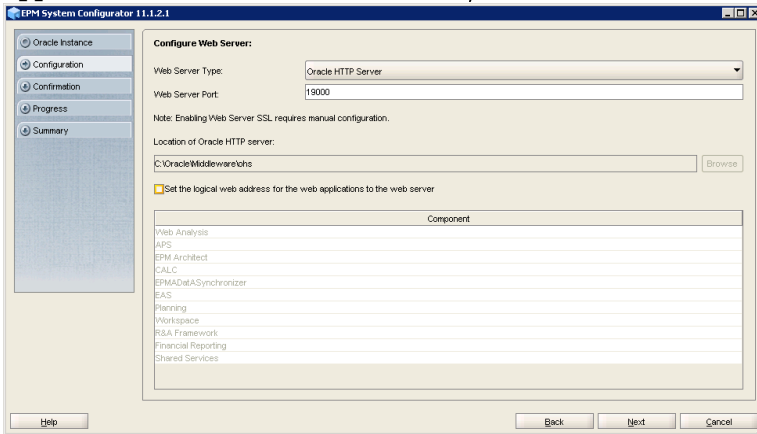


31. In Update the logical address for the Web applications screen, complete these steps. If your network administrator provided different ports, use them instead of 80 and 443.
- In Host, enter `epminternal.mycompany.com`.
 - In Port, enter 80.
 - In SSL Port, enter 443.

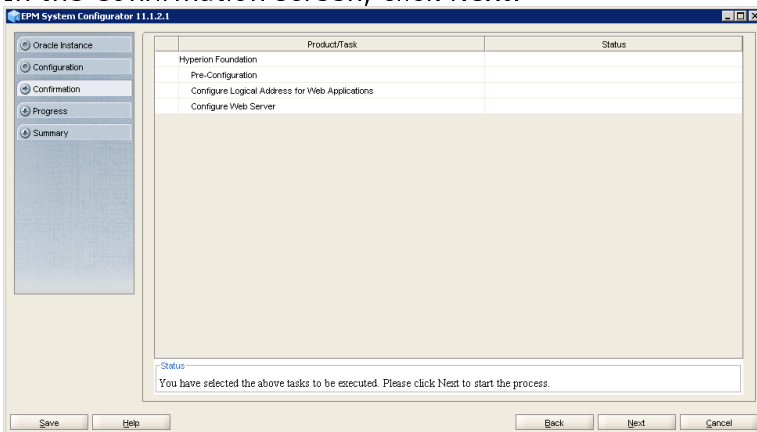
d. Click Next



32. In Configure Web Servers, uncheck Set the logical web address for the web application to the web server, and then click Next.

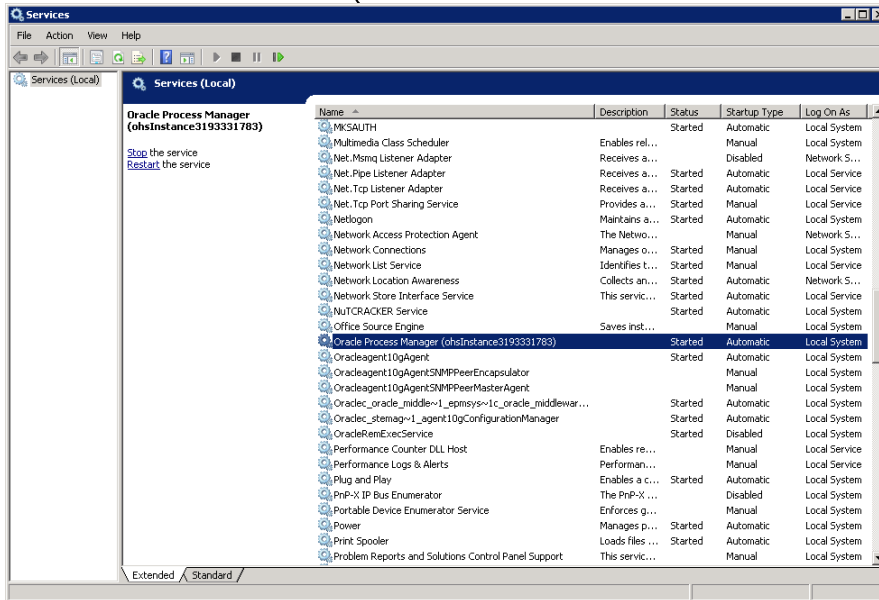


33. In the Confirmation screen, click Next.



34. In the Summary screen, click Finish.

35. Restart the OHS Service. (The number after *ohsInstance* would be different for you).



36. Refresh Workspace by going to <http://localhost:28080/workspace/refresh>.

37. Reconfigure the web server on the Foundation Services host machine (FNDHOST1) using the procedures in [Re-configure the Web Server on Foundation Services Servers \(FNDHOST1 and FNDHOST2\)](#). If you scaled out Foundation Services to other servers, you must reconfigure web server on those servers also.

5.8. Web Tier Configuration

Your network administrator should already have configured the load balancer to route all requests to epm.mycompany.com and epminternal.mycompany.com to the OHS installations on the Foundation Services host machine (FNDHOST1).

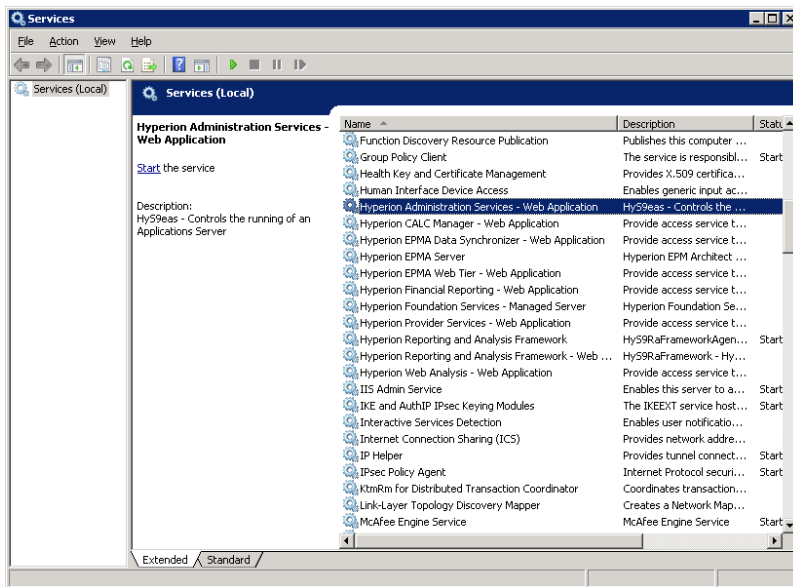
6. Scaling Out the Application Tier

This chapter covers the scaling out procedures for EPM System components.

6.1. Scaling out EPM System Foundation Services to FNDHOST2

To scale out Foundation Services to FNDHOST2:

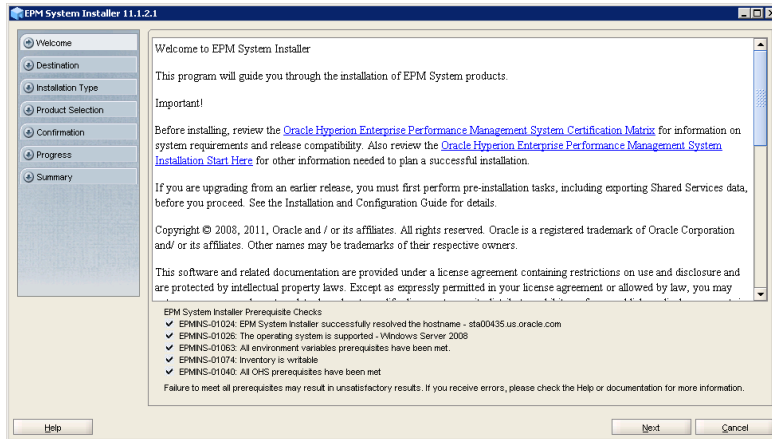
1. Start the WebLogic Administration Server on FNDHOST1.
2. Stop the Windows service of Essbase Administration Services web application on Foundation Services server (FNDHOST1) because it interferes with the scale out process.



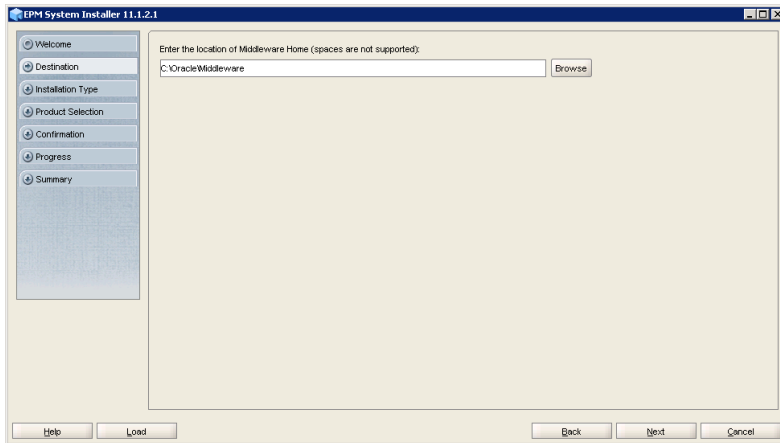
3. On the server to which you are scaling out Foundation Services (FNDHOST2), create a network drive (for example, Z:\) mapping to the shared drive directory where you extracted EPM System software (for example, `epm_unzipped`).
4. From the mapped network drive, launch `installTool.cmd`.
5. In EPM Installer, select a language and click OK.



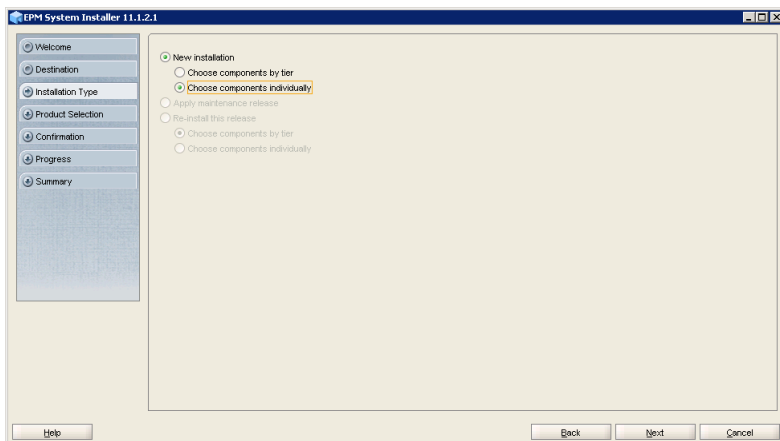
- Click Next in the Welcome screen.



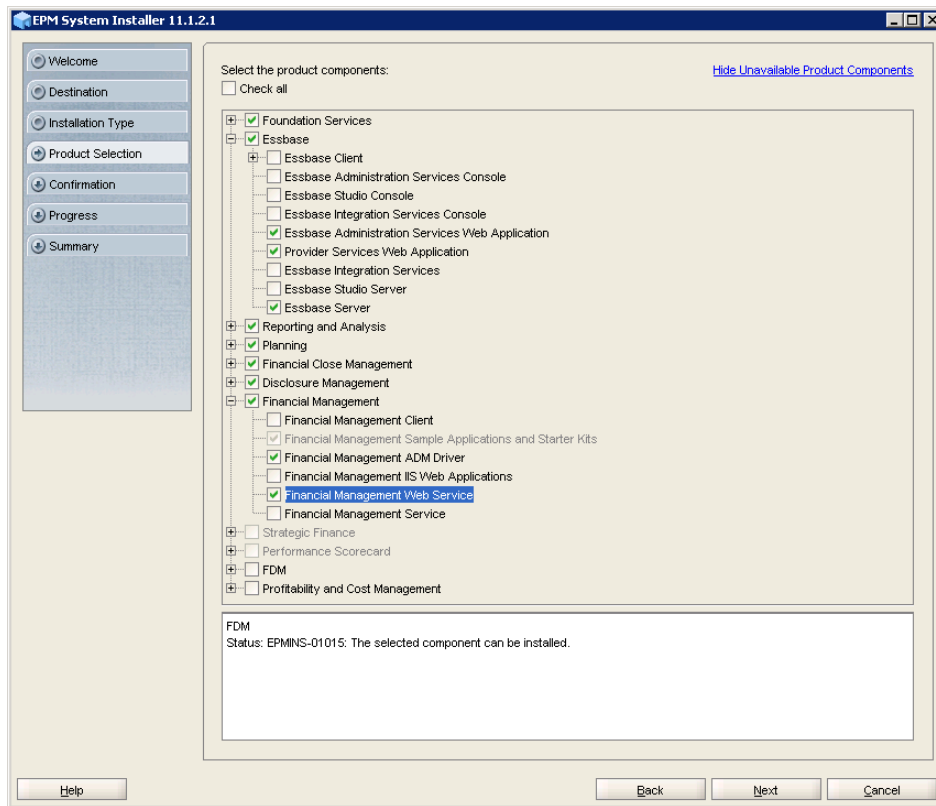
- Verify that the `MIDDLEWARE_HOME` location is identical to that specified while installing Foundation Services on `FNDHOST1`, and then click Next.



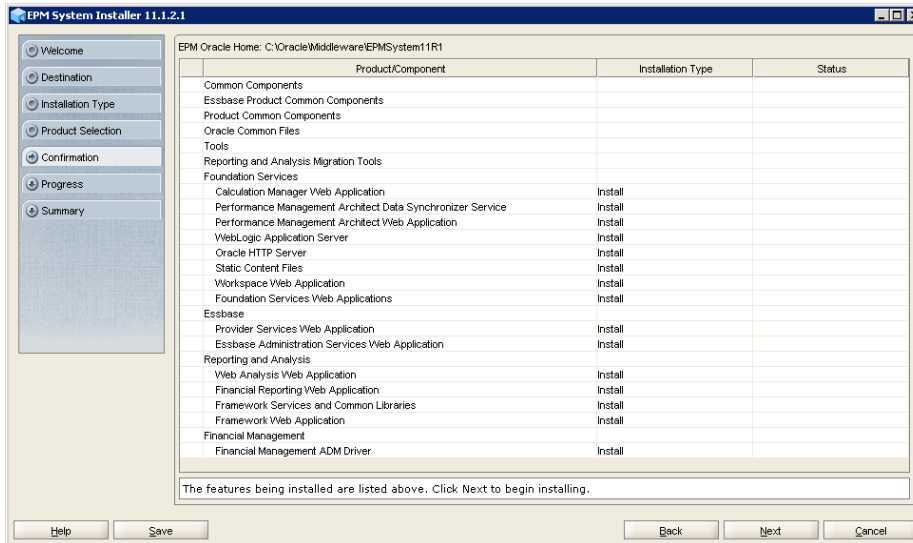
- In Installation type, select Choose components individually, and then click Next.



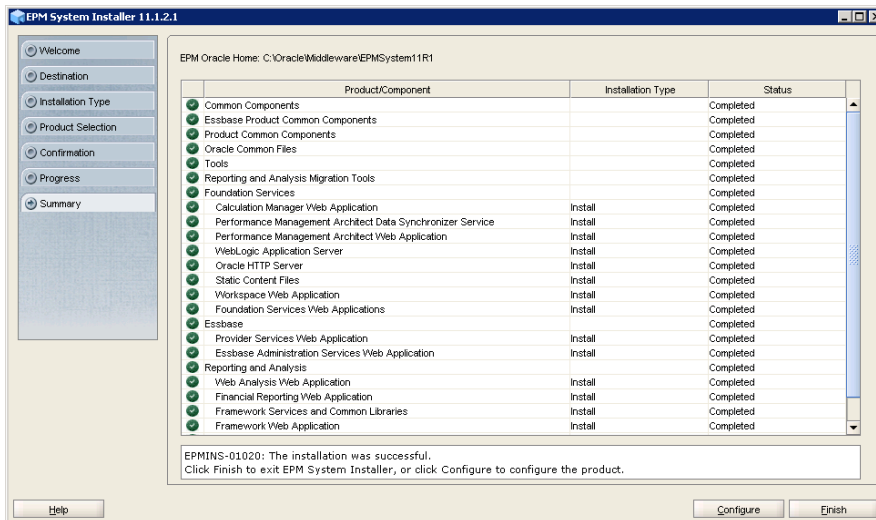
9. Remove the selection (uncheck) from Uncheck All and then select the following components to install.
- Foundation Services -- Foundation Components
 - Foundation Services – Performance Management Architect Web Application
 - Foundation Services – Performance Management Architect Data Synchronizer Service
 - Foundation Services – Calculation Manager
 - Essbase -- Administration Services Web Application
 - Essbase -- Provider Services Web Application
 - Reporting and Analysis
 - Financial Management -- ADM Driver (selected by default)



10. In Confirmation, click Next to begin the installation of the binaries on the server.



11. In the Summary screen, click Finish after verifying that all components installed successfully.



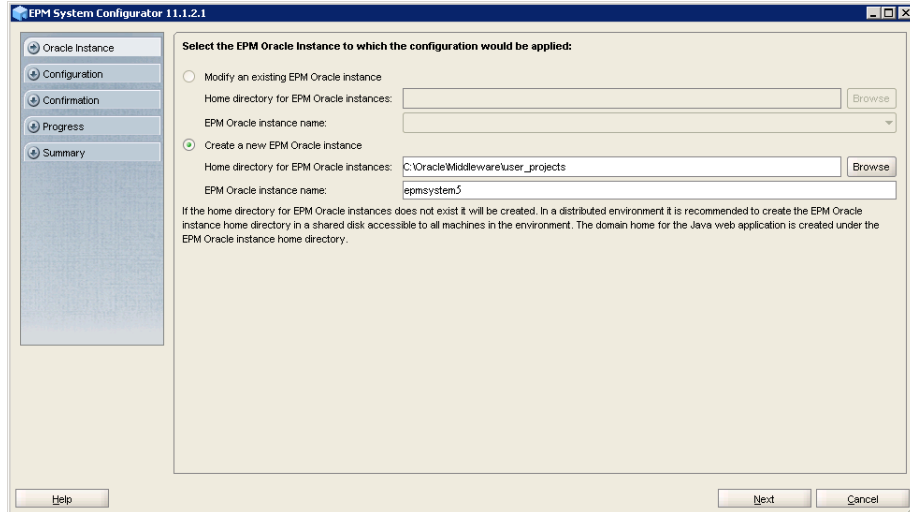
12. Download and apply patch 12552933 from <http://support.oracle.com>.

Because you have not yet configured the system, you do not need to perform the Edit Shared Services Registry prerequisite mentioned in the patch readme.

13. Launch the EPM System Configurator by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then EPM System Configurator.

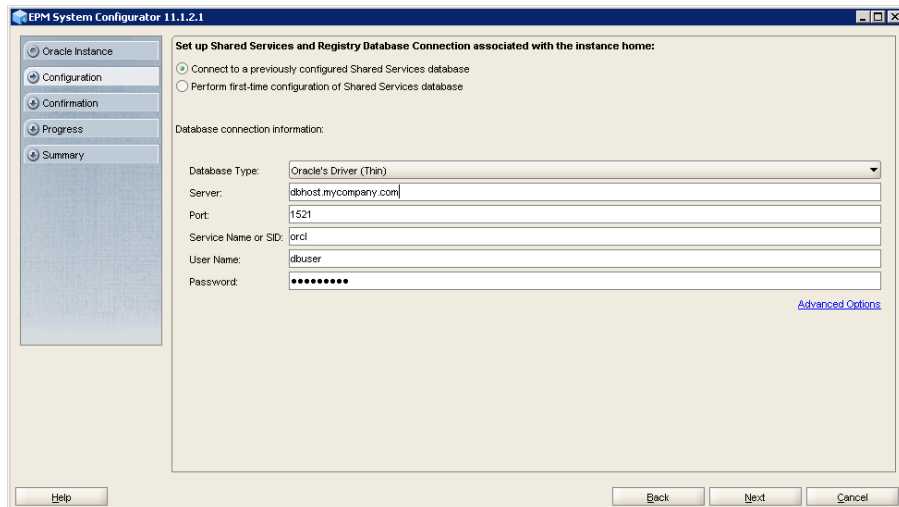
14. In Oracle Instance, complete these steps:

- a. Verify that the Home Directory for EPM Oracle Instance is identical to that set on other deployment servers.
- b. Instance name in EPM Oracle Instance; for example, `epmsystem5`, is unique across the deployment.
- c. Click Next.

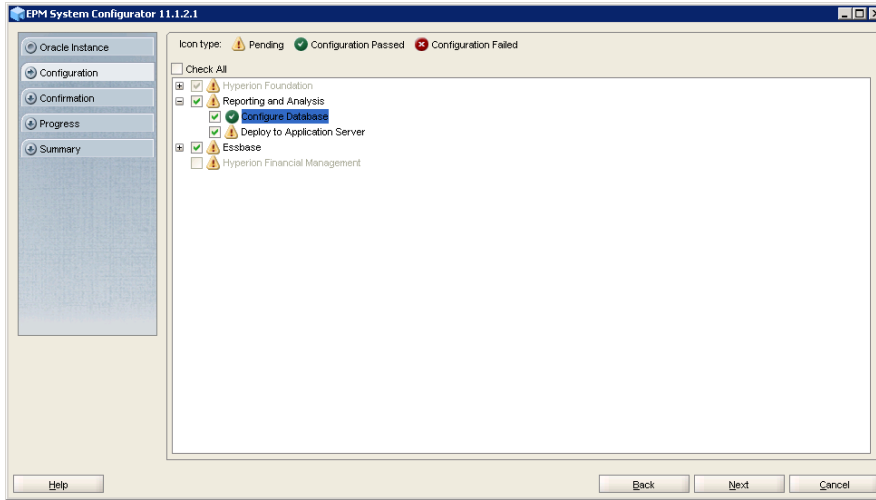


15. In the database configuration screen, complete these steps:

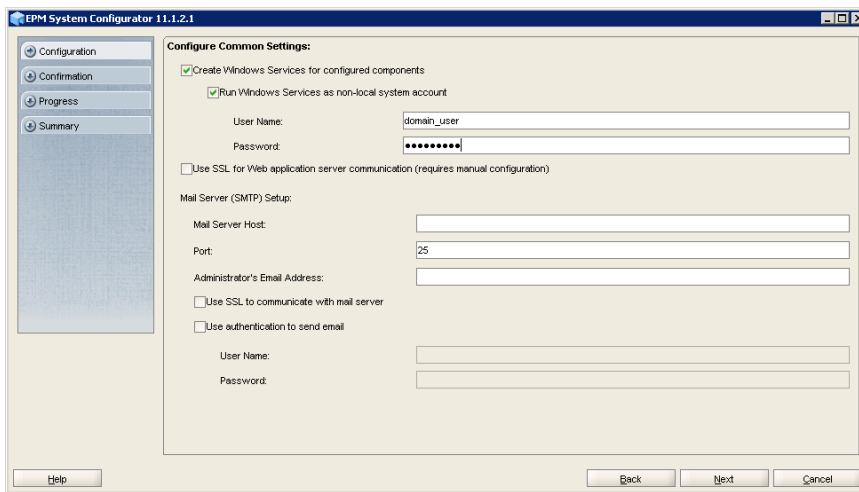
- a. Select `Connect to a previously configured Shared Services database`.
- b. Enter database connection details exactly as you entered for the first Foundation Services server (FNDHOST1).
- c. Click Next.



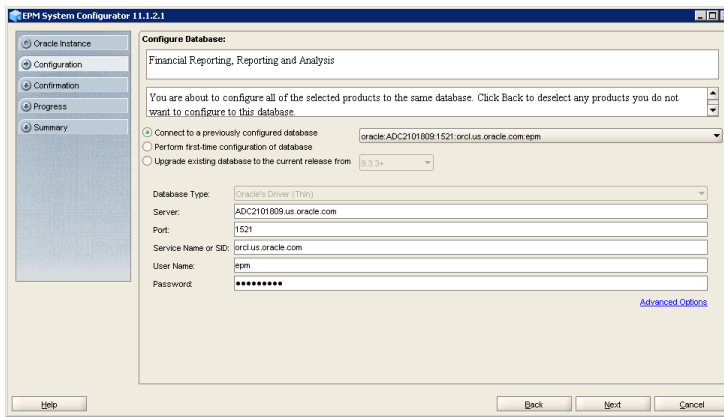
16. In the component configuration screen, in addition to the default selections, select the Configure Database task under Reporting and Analysis, and click Next.



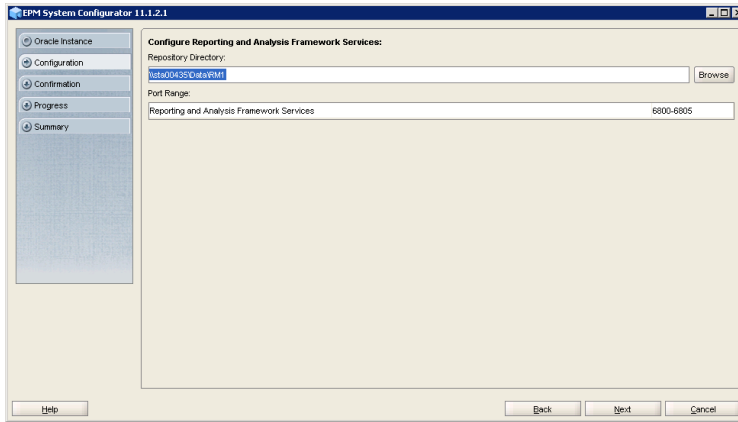
17. In Configure Common Settings, click Next.



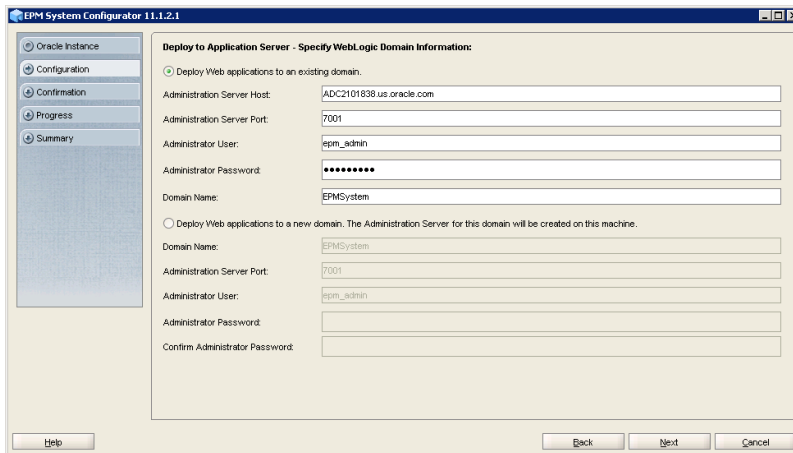
18. In Configure Database, click Next.



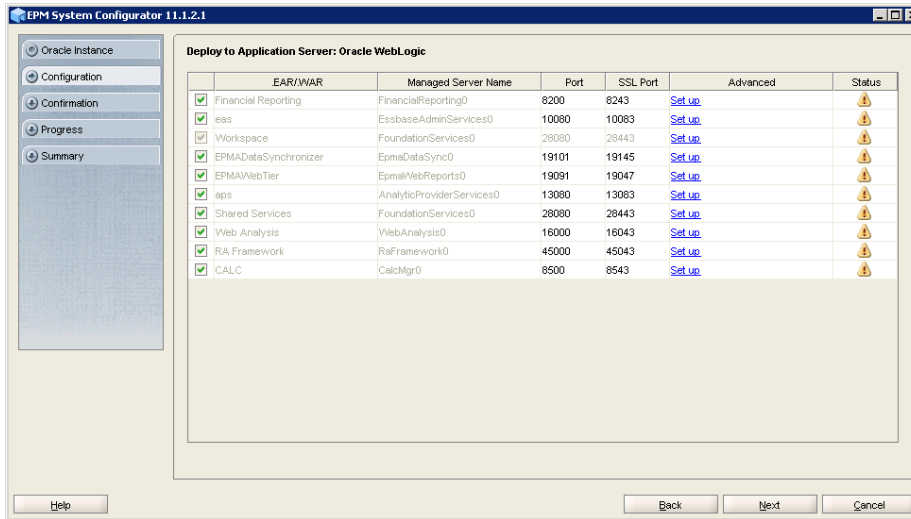
19. In Configure Reporting and Analysis Framework Services, in Repository Directory, enter the location for Reporting and Analysis repository directory exactly as you entered for the first Foundation Services server (FNDHOST1), and then click Next.



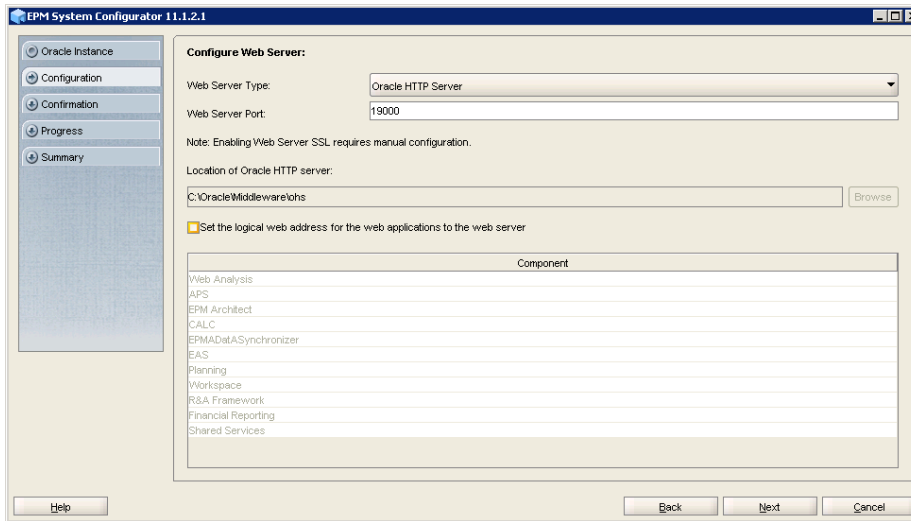
20. In Deploy to Application Server - Specify WebLogic Domain Information, verify that Deploy Web applications to an existing domain is selected, and then click Next.



21. In Deploy to Application Server: Oracle WebLogic, review the list of Java web applications that will be deployed on this server, and then click Next.

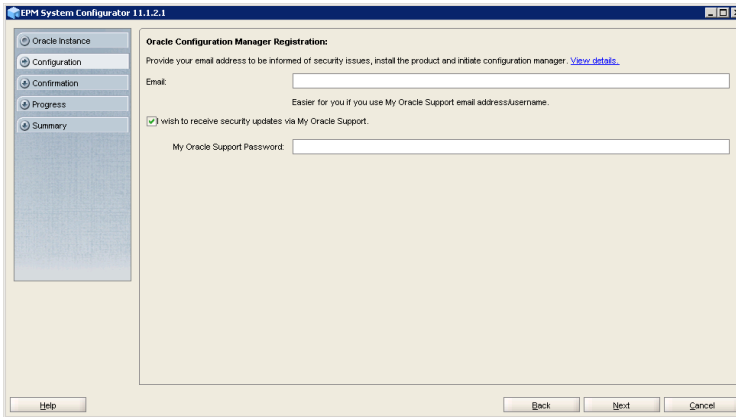


22. In Configure Web Servers, uncheck Set the logical web address for the web application to the web server, and then click Next.

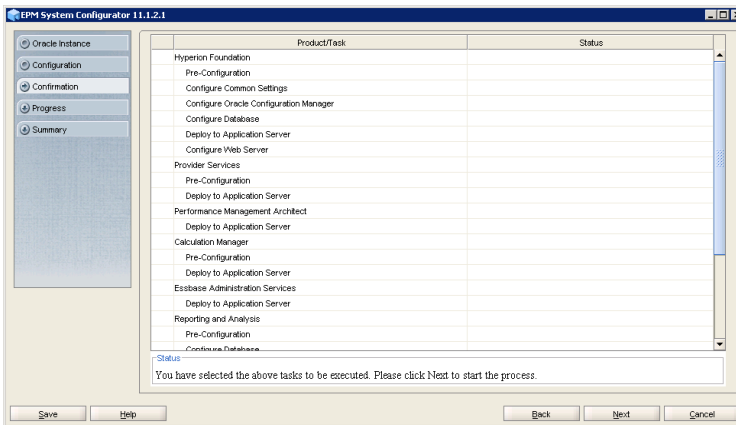


23. In Oracle Configuration Manager Registration, enter your information, and then click Next.

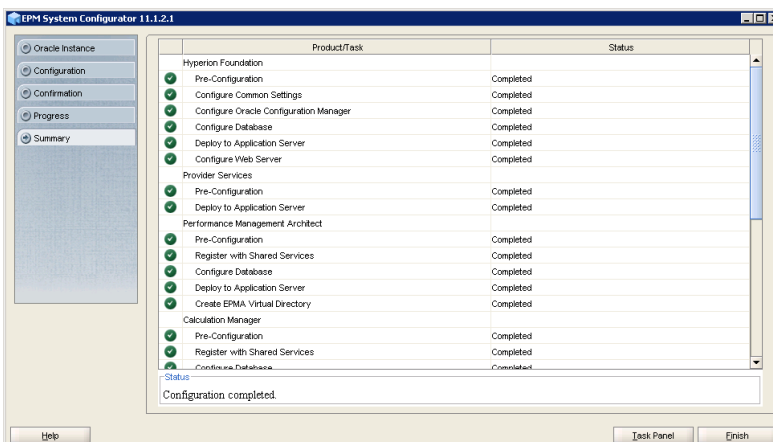
Oracle Configuration Manager notifies you when Oracle issues patches or security alerts. The password you enter in this screen must match the password associated with your email address in My Oracle Support.



24. In the Confirmation screen, review the summary of the configuration tasks that will be executed, and then click Next.



25. When the deployment process is complete, the Summary screen is displayed. Verify that all the tasks completed successfully, and then click Finish.



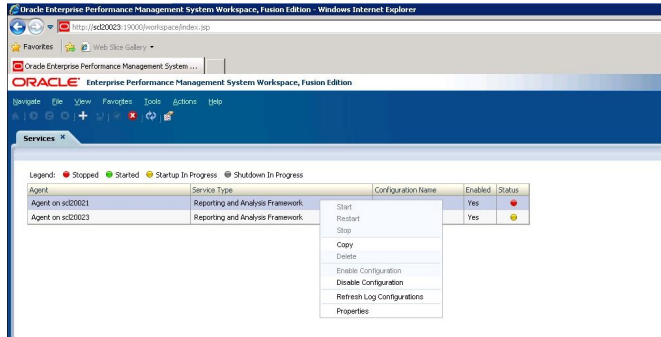
26. Enable Reporting and Analysis services.

- a. Go to <http://epm.mycompany.com:19000/workspace/index.jsp>.

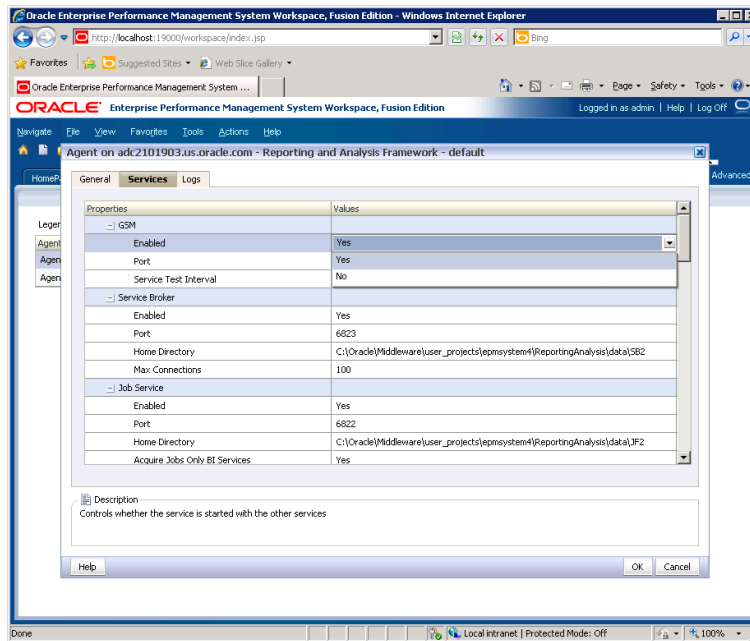
- b. In EPM Workspace, select Navigate, then Administer, then Reporting and Analysis, and then Services.

A list of configured Reporting and Analysis Agent services is displayed.

- c. Right-click the agent for the Foundation Services host (FNDHOST2), and then select Properties.



- d. Select the Services tab.
- e. Enable the following services on this agent:
 - GSM
 - Service Broker



- f. Click OK.
- g. Log out of EPM Workspace.

27. Start EPM System by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then Start EPM System.
28. Start Essbase Administration Services that you stopped at the beginning of this scale-out procedure.
29. Reconfigure the web server on all Foundation Services servers using the procedures in [Re-configure the Web Server on Foundation Services Servers \(FNDHOST1 and FNDHOST2\)](#).

6.2. Scaling out EPM System Planning to PLANHOST2

To scale out EPM System Planning to PLANHOST2:

1. Verify that you are logged on to PLANHOST2 using the deployment account.
2. Use [Steps 1](#) through [Step 19](#) under [Install and Configure Planning on PLANHOST1](#) to create an instance of Planning on PLANHOST2. While configuring, be sure to select an instance name (example, `epmsystem5`) that is unique across the deployment.
2. Reconfigure the web server on all Foundation Services servers using the procedures in [Re-configure the Web Server on Foundation Services Servers \(FNDHOST1 and FNDHOST2\)](#).

6.3. Scaling out Financial Management to HFMHOST2

To scale out Financial Management to HFMHOST2:

1. Verify that you are logged on to HFMHOST2 using the deployment account.
2. Follow the instructions in [Install and Configure Financial Management on HFMHOST1](#) to set up an instance of Financial Management server on HFMHOST2. While configuring, be sure to select an instance name (example, `epmsystem7`) that is unique across the deployment.
3. Reconfigure the web server on all Foundation Services servers using the procedures in [Re-configure the Web Server on Foundation Services Servers \(FNDHOST1 and FNDHOST2\)](#).

6.4. Scaling out Financial Management Web Application to HFMWEBHOST2

To scale out Financial Management web application to HFMWEBHOST2:

1. Verify that you are logged on to HFMWEBHOST2 using the deployment account.
2. Use [Step 1](#) through [Step 26](#) in [Install and Configure Financial Management Web on HFMWEBHOST1](#) to set up an instance of Financial Management Web on HFMWEBHOST2. While configuring, be sure to select an instance name (example, `epmsystem8`) that is unique across the deployment.
3. Reconfigure the web server on all Foundation Services servers using the procedures in [Re-configure the Web Server on Foundation Services Servers \(FNDHOST1 and FNDHOST2\)](#).

6.5. Scaling out Essbase to ESSHOST2

To scale out Essbase to ESSHOST2:

1. Verify that you are logged on to ESSHOST2 using the deployment account.
2. Follow the instructions in [Install and Configure Essbase on ESSHOST1](#) to set up an instance of Essbase on ESSHOST2.

Because scaled-out Essbase Servers are independent, an application deployed to one server does not span across to other Essbase Servers. While creating applications, for example, using Planning, you choose the Essbase Server that you want to use.

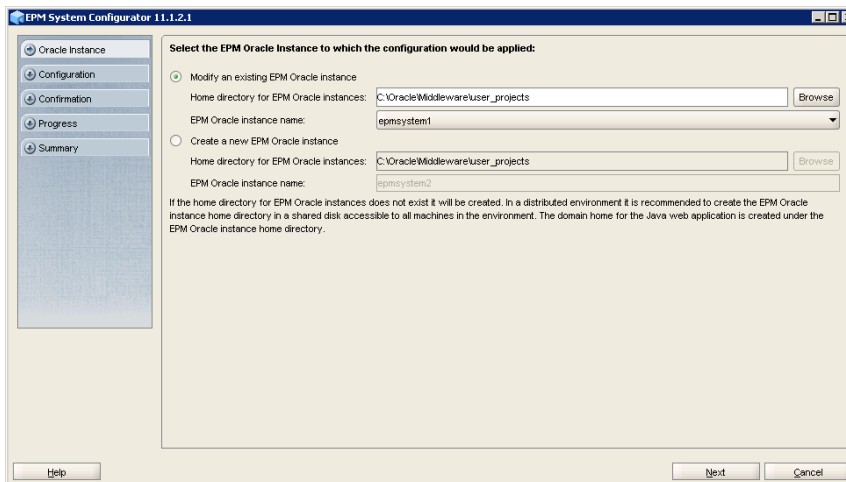
Two Essbase Servers can be setup in an Active-Passive mode.

6.6. Reconfigure the Web Server on Foundation Services Servers (FNDHOST1 and FNDHOST2)

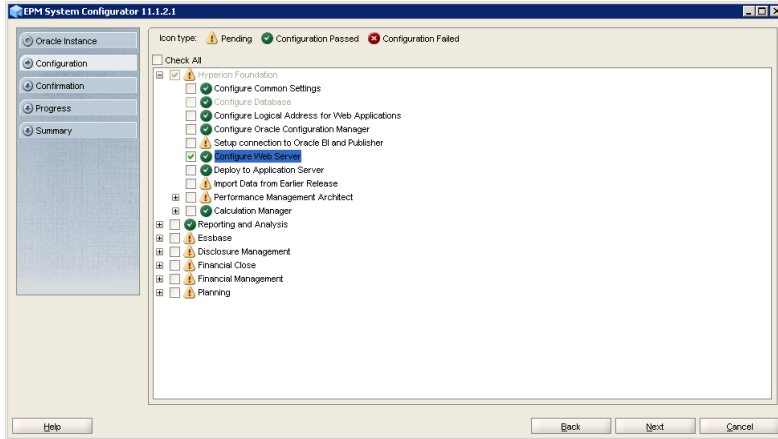
You must reconfigure and restart the web servers on the Foundation Services host machines after each component is scaled out.

To reconfigure web servers on Foundation Services host machines:

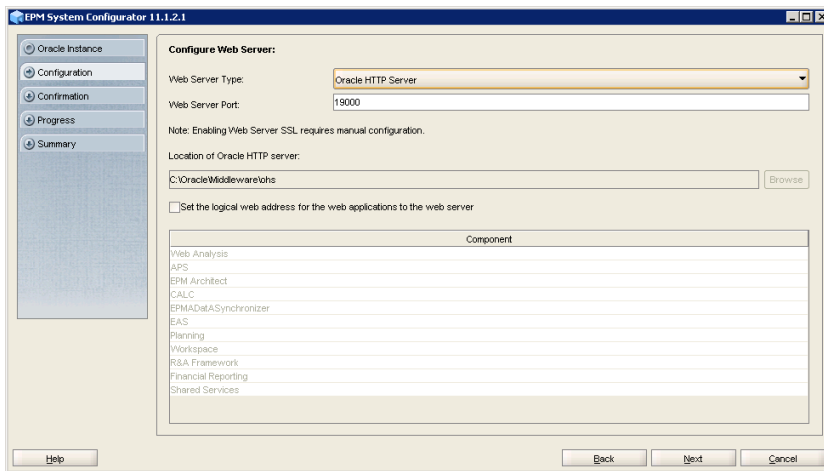
1. Using the deployment account, log into the Foundation Services host on which you want to reconfigure the web server.
2. Launch EPM System Configurator by selecting Start, then All Programs, then Oracle EPM System, then Foundation Services, and then EPM System Configurator.
3. In Oracle Instance, Modify existing EPM Oracle instance option is preselected. Click Next.



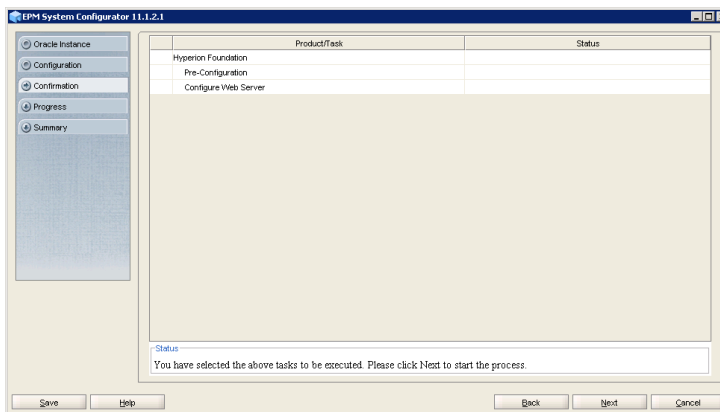
- Remove the selection (uncheck) from Uncheck All, and select only the Configure Web Server task under Hyperion Foundation, and then click Next.



- In Configure Web Server, uncheck Set the logical web address for the web application to the web server, and then click Next.

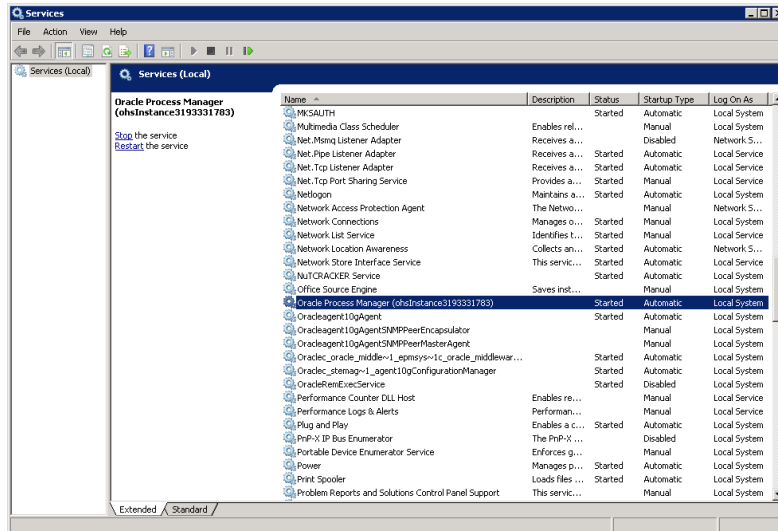


- In the Confirmation screen, click Next.



- In the Summary screen, click Finish.

7. Restart the OHS Service (The number after *ohsInstance* would be different for you).



6.7. Reconfigure Loadbalancer

After adding new Foundation Servers to the deployment, reconfigure your loadbalancer to route all HTTP requests received by `epm.mycompany.com` and `epminternal.mycompany.com` to the Foundation Servers (`FNDHOST1`, `FNDHOST2`, `FNDHOSTn`).

7. Installing EPM System Clients on CLIENTHOST1

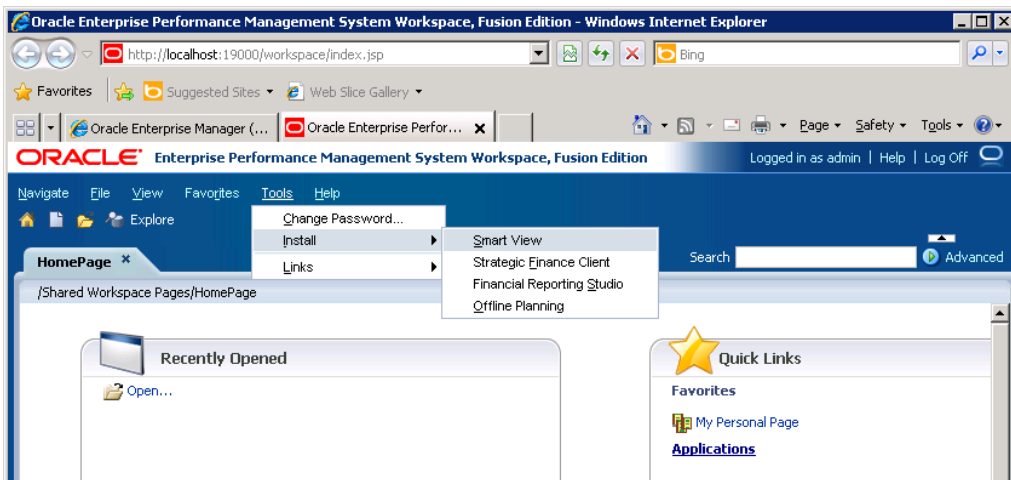
7.1. Smart View

Smart View must be installed on a machine that already has Microsoft Office installed.

To install Smart View:

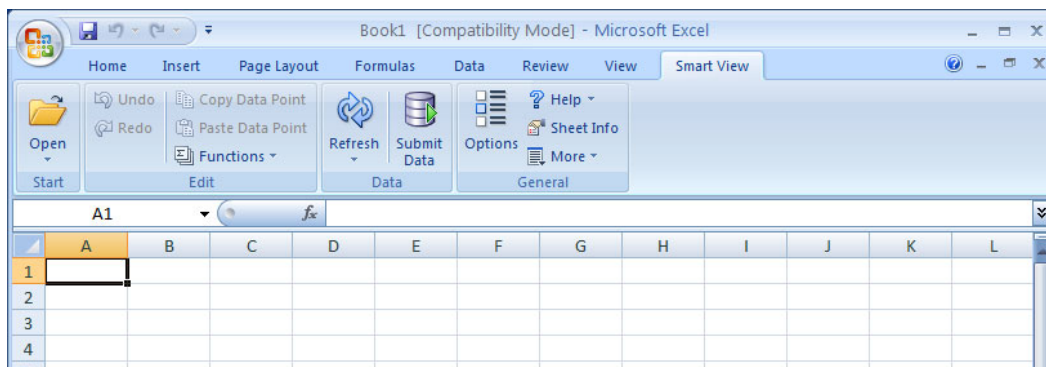
1. Using the deployment account, log into the EPM System Clients host (CLIENTHOST1).
2. Log on to EPM Workspace.
3. In Workspace, select Tools, then Install, and then Smart View.

Smart View Installer is displayed.



4. Follow onscreen prompts to install Smart View.

After you complete Smart View installation, Smart View is available as a menu item in Microsoft Office products like Excel.



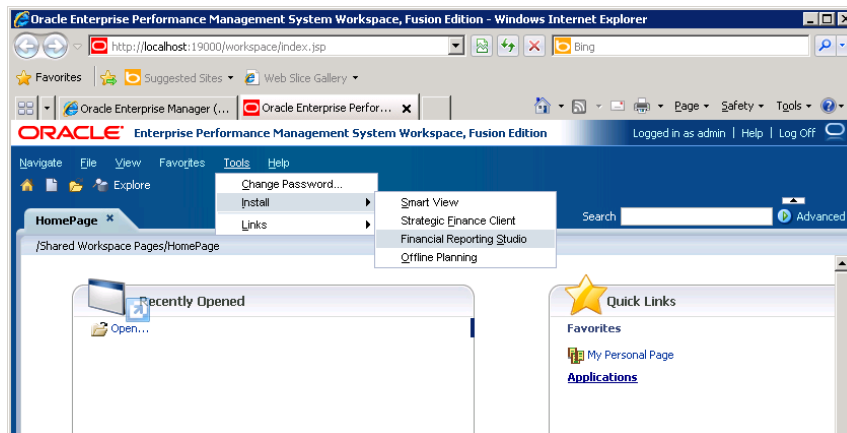
7.2. Financial Reporting Studio

Because Financial Reporting Studio requires access to the host servers in the application tier, it should be installed on a machine that has network access to these servers. In the reference topology illustrated in [Standard Deployment Topology](#), Financial Reporting Studio is installed on client workstation (CLIENTHOST1) within the DMZ.

To install Financial Reporting Studio:

1. Using the deployment account, log into the EPM System Clients host (CLIENTHOST1).
2. Log on to EPM Workspace.
3. In Workspace, select Tools, then Install, and then Financial Reporting Studio.

Financial Reporting Studio installer is displayed.



4. Follow onscreen prompts to install Financial Reporting Studio.
5. To launch Financial Reporting Studio, select Start, then All Programs, then Oracle, then Financial Reporting Studio, and then Financial Reporting Studio.

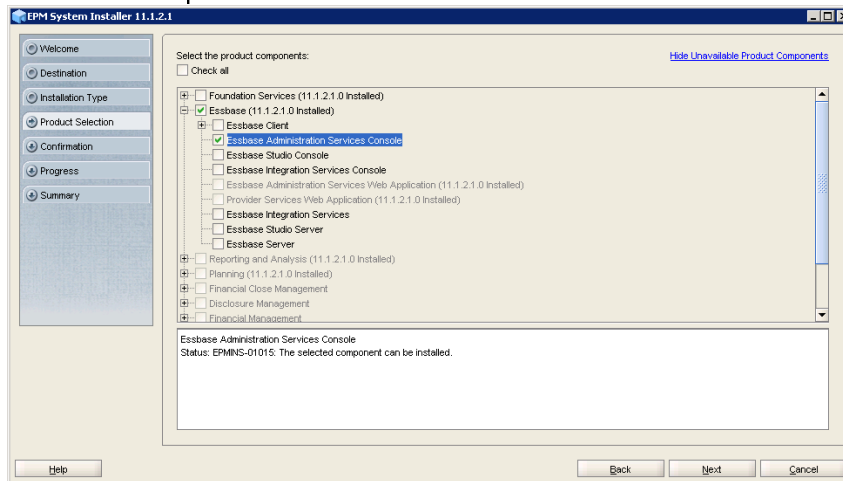
7.3. Essbase Administration Console

Because Essbase Administration Console requires access to the host servers in the application tier, it should be installed on a machine that has network access to these servers. In the reference topology illustrated in [Standard Deployment Topology](#), Essbase Administration Console is installed on client workstation (CLIENTHOST1) within the DMZ.

To install Essbase Administration Console:

1. Using the deployment account, log into the EPM System Clients host (CLIENTHOST1).
2. Create a network drive (for example, z:\) mapping to the shared drive directory where you extracted EPM System software (for example, epm_unzipped).
3. From the mapped network drive, launch `installTool.cmd`.

4. In EPM System Installer, click Next in each screen until the Product Selection screen opens.
5. In the Product Selection screen, select only the Essbase Administration Services Console component under Essbase.



6. Click Next.
7. Choose default selections in all subsequent screens.
8. In Summary screen, click Finish.
9. To launch Essbase Administration Console, select Start, then All Programs, then Oracle EPM System, then Essbase, then Essbase Administration Services, and then Start Administration Services Console.

8. Configuring Financial Reporting Print Server on CLIENTHOST1

Financial Reporting Print Server is used to generate PDF reports. Before you configure Print Server, ensure the following:

- At least one Planning server is configured and running
- Financial Reporting Studio is installed on a client host machine (CLIENTHOST1)

To configure Print Server:

1. Using the deployment account, log into the EPM System Clients host (CLIENTHOST1).
2. Using a text editor, open `C:\Program Files (x86)\Oracle\FinancialReportingStudio\products\financialreporting\install\bin\FRSetupPrintServer.properties`.
3. Enter the following information:

```
FRWebServer=http://epminternal.mycompany.com:19000
AdminUser=admin
AdminPassword=EPM Administrator's password
```

4. Save and close FRSetupPrintServer.properties.
5. Run FRSetupPrintServer utility.

The print server should be ready to use after you run the FRSetupPrintServer utility.

