Oracle® MICROS Enterprise Back Office with OBIEE

Installation Guide

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Oracle MICROS Enterprise Back Office with OBIEE Installation Guide, Release 9.1

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Preface

This document provides information and instructions for installing or upgrading to this Oracle MICROS Enterprise Back Office release.

Purpose

The Installation Guide provides instructions for installing Oracle MICROS Enterprise Back Office at a new site, or for upgrading from an older version. Review the Enterprise Back Office Release Notes for information regarding technical and architectural changes before beginning installation, to avoid incompatibility or supportability issues. Review Enterprise Back Office's product documentation, including technical and application advisories for previous versions, for detailed information on installation, upgrade, configuration, and general use.

Audience

This document is for system and server administrators install or maintain Oracle MICROS Enterprise Back Office installations.

Customer Support

To contact Oracle Customer Support, access the Support Portal at the following URL:

https://iccp.custhelp.com/

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle MICROS product documentation is available on the Oracle Help Center at https://docs.oracle.com/en/industries/food-beverage/.

Revision History

Date	Description of Change
June 2018	Initial publication

Date	Description of Change
November 2018	Added the following topics to the Post-Installation Configuration chapter: • Entering the Organization Passwords • Configuring the OHGBU_ADMIN User Group • Enabling Secure Socket Layer (SSL) • Configuring HTTPS Ports for Gift and Loyalty
January 2019	Updated *Enterprise Back Office System Architecture* and *Where do I Install Inventory Management* to include information on installing matching component versions.
March 2019	Updated the document title.
October 2019	Updated Report Mail for OBIEE information.
March 2020	Updated Uninstallation
August 2020	Updated Inventory Management Prerequisites
August 2023	Updated guide title.

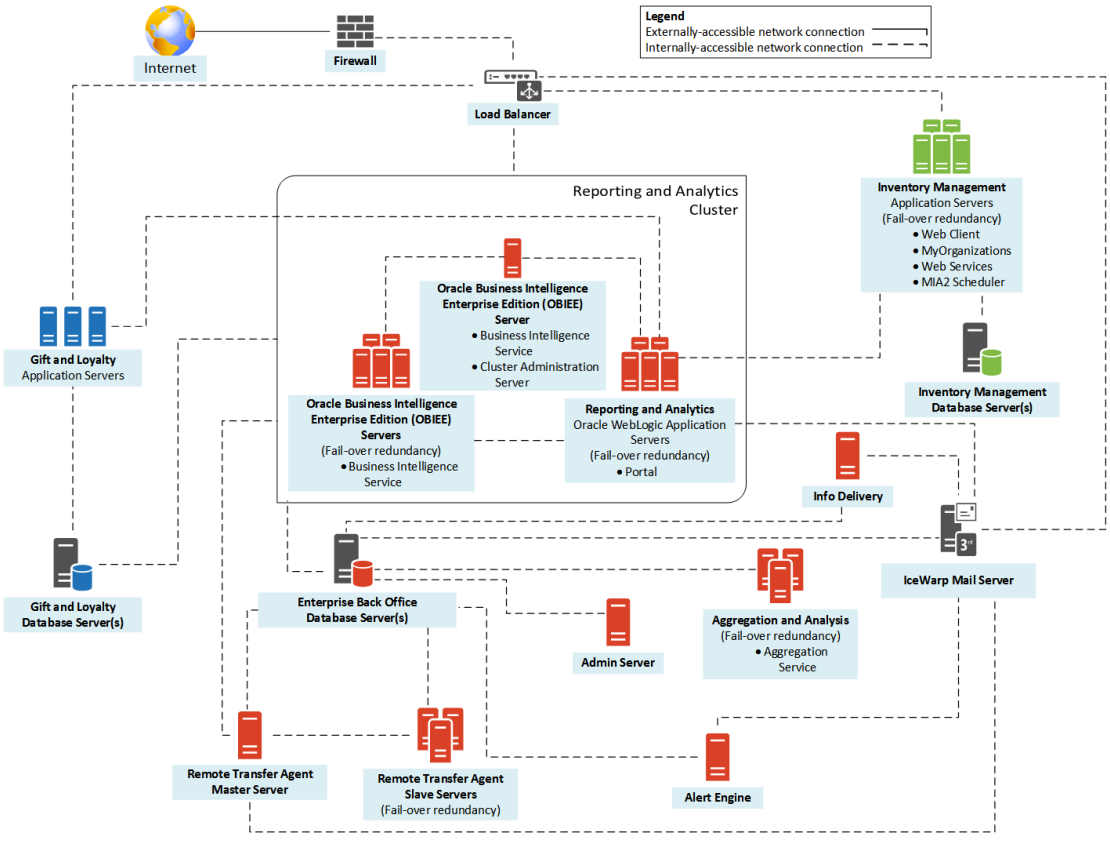
1

Enterprise Back Office System Architecture

The following diagram shows the system and network architecture of Enterprise Back Office if all components are installed on individual servers. Installation environments can choose to install one or more components on the same server.

Make sure to install matching release versions of Enterprise Back Office components. For example, to use Inventory Management with Reporting and Analytics 9.1.0, make sure to install Inventory Management 9.1.0. This does not apply to patches because patch release versions may vary by component.

Figure 1-1 Enterprise Back Office System Architecture Diagram



2

Enterprise Back Office Installation FAQ

This section introduces key Enterprise Back Office concepts, answers frequently asked questions, and describes important installation topics.

- What Components Do I Need to Install?
- What is the Difference Between Enterprise Back Office and Reporting and Analytics?
- What are the Deployment Scenarios Supported by Reporting and Analytics?
- Where do I Install Gift and Loyalty?
- Where do I Install Inventory Management?
- Do I Need Security Certificates Before Installation?
- What are Published Site URLs?

What Components Do I Need to Install?

Enterprise Back Office is comprised of applications and components that can be installed together or on separate servers. Use the following table and the *Oracle MICROS Enterprise Back Office Server Sizing Guide* to determine what components your environment needs and what a server in your environment can support:

Table 2-1 Enterprise Back Office Components

Component	Description
OBIEE (Oracle Business Intelligence)	This component is required and installs Oracle WebLogic, Oracle WebLogic Administration Server, and Oracle Business Intelligence.
Portal (Reporting and Analytics)	This component is required and installs Oracle WebLogic and the Reporting and Analytics application. You can configure the component to install Labor Management.
Analysis Aggregation	This service is required and populates the Aggregation Database used for Oracle Business Intelligence and Gift and Loyalty segmentation.
Aggregation and Adjustment Service	This service performs data forecasting, generates trends and projections for InMotion Mobile, and suggests inventory cost adjustments.
iCare	This component installs Oracle WebLogic and the Gift and Loyalty application.
Master	This component is the Remote Transfer Agent posting server that receives incoming sales data from the Point-of-Sale applications and manages all Posting servers. Installation is not required if the Point-of-Sale application uses a different method for posting data to the Enterprise Back Office database.
Posting	Install this component on additional Remote Transfer Agent posting server nodes for load balancing.
Admin Server	This services provides export scheduling and product integration.

Table 2-1 (Cont.) Enterprise Back Office Components

Component	Description
infoDelivery	This service interfaces with the mail server to process, schedule, and send reports by mail.
Alert Engine	This services provides push notifications and indicators for mobile applications.
Weather	This service interfaces with a third-party weather provider to retrieve up-to-date information, and stores daily weather condition and forecast information.
EMS Batch Service	This service interfaces with Point-of-Sale applications to process menu item, price, and tax rate updates.
Simphony Mobile Aggregation	This service interfaces with Oracle MICROS Simphony to aggregate and process sales data for InMotion Mobile.

What is the Difference Between Enterprise Back Office and Reporting and Analytics?

Oracle MICROS Enterprise Back Office refers to the whole product suite that contains Reporting and Analytics, Forecasting and Budget, Labor Management, Inventory Management, Gift and Loyalty, and support for mobile applications such as InMotion Mobile. When documentation refers to an Enterprise Back Office entity, it typically refers to an entity that is shared across two or more of these products.

Oracle MICROS Reporting and Analytics refers to the core web application that provides reporting and data management. When documentation refers to Reporting and Analytics, it does not include components such as the Remote Transfer Agent, the Admin Server, and the Analysis Aggregation service.

What are the Deployment Scenarios Supported by Reporting and Analytics?

Oracle MICROS Reporting and Analytics supports the following server deployment scenarios:

Table 2-2 Reporting and Analytics Deployment Scenarios

Deployment Scenario	Description
Two Servers	Reporting and Analytics is typically installed in a two-server configuration consisting of: • Oracle Business Intelligence Server • Reporting and Analytics application server Other required and optional components, such as the mail server, posting servers, and InfoDelivery service can be installed on the existing servers or on their own servers.

Table 2-2 (Cont.) Reporting and Analytics Deployment Scenarios

Deployment Scenario	Description
Server Cluster	Reporting and Analytics can be installed in a server cluster for load-balancing and fail-over redundancy. This deployment is typically used by data centers and high-volume customers and consists of: • Primary Oracle Business Intelligence Server (OBIEE), which includes the Oracle WebLogic administration server • Primary Reporting and Analytics application server • Additional OBIEE and application servers (non-primary) Other required and optional components, such as the mail server, posting servers, and InfoDelivery service can be installed on the existing servers or on their own servers.
Single Server	Reporting and Analytics offers the option to install all required applications and components on a single server. Oracle MICROS does not recommend this deployment scenario.

What do I do when Upgrading?

If you are upgrading Enterprise Back Office from version 9.0, run the installation wizard for the new version with OBIEE and follow the instructions.

If you are upgrading Enterprise Back Office from version 8.5 or earlier:

- If you are upgrading to Enterprise Back Office 9.0 or later and you want to generate metadata outputs of legacy reports, you must generate metadata for legacy reports before uninstalling Enterprise Back Office. You will not be able to recover the reports after you uninstall the earlier version of Enterprise Back Office.
- Remove all components and services of the existing installation. Uninstalling Enterprise Back Office 8.5 or Earlier contains instructions for removing Enterprise Back Office.

Where do I Install Gift and Loyalty?

Oracle MICROS recommends installing the Gift and Loyalty web application on a separate application server for hardware requirement and load purposes.

If the Enterprise Back Office database is installed on Microsoft SQL Server, you can install the Gift and Loyalty database with the Enterprise Back Office database. Review the hardware guidelines in the *Oracle MICROS Enterprise Back Office Server Sizing Guide* to ensure the database server meets hardware and storage requirements.

If you install the Gift and Loyalty application with Reporting and Analytics:

- Verify that the server specifications comply with compatibility information in the *Oracle MICROS Enterprise Back Office Release Notes* and hardware guidelines in the *Oracle MICROS Enterprise Back Office Server Sizing Guide*.
- Change the Secure Socket Layer listening port and the listening ports for the network channel in Oracle WebLogic. Changing Gift and Loyalty Ports contains instructions for changing the ports after installation.

Where do I Install Inventory Management?

Oracle MICROS recommends installing the Inventory Management web application and database on a separate server for hardware requirement and load purposes.

You can install the Inventory Management database on the Enterprise Back Office database server if the server specifications adhere to compatibility information in the *Oracle MICROS Enterprise Back Office Release Notes* and hardware guidelines in the *Oracle MICROS Enterprise Back Office Server Sizing Guide*.

Install matching release versions of Enterprise Back Office components. For example, to use Inventory Management with Reporting and Analytics 9.1.0, make sure to install Inventory Management 9.1.0. This does not apply to patches because patch release versions may vary by component.

Do I Need Security Certificates Before Installation?

Oracle MICROS recommends preparing and using security certificates for all applications that support traffic over public communications methods.

If you do not have a security certificate prepared for one or more servers and must proceed with the installation, you can install Enterprise Back Office without enabling Secure Socket Layer (SSL) security. You can then set up SSL using Oracle WebLogic after acquiring the required certificates.

When performing the installation without enabling SSL, use port `9704` for the Oracle Business Intelligence server published site URL. After enabling SSL in Oracle WebLogic, change the published site URL to use port `443`.

Gift and Loyalty

Gift and Loyalty requires a security certificate. You cannot proceed with a Gift and Loyalty installation without acquiring a security certificate.

What are Published Site URLs?

Enterprise Back Office uses Oracle WebLogic Security Assertion Markup Language (SAML) to implement and secure single sign-on authentication across Enterprise Back Office web applications and services. The SAML implementation includes the use of published site URLs to specify the hostname and port at which the server is accessible externally. This hostname and port typically differs from the local address due to a domain name system (DNS) or load balancer.

The Enterprise Back Office installation wizard requests the published site URL information for the server hosting Oracle Business Intelligence Enterprise Edition and for the server hosting the Reporting and Analytics portal web application. To avoid the need to change the published site URLs after the installation, determine what your published site URL will be for both servers before running the installation wizard.

The following table provides a guideline for identifying what you should enter in the published site URL fields.

Table 2-3 Published Site URL Information

Network Access	Oracle Business Intelligence Server Published Site URL	Reporting and Analytics Application Server Published Site URL
Intranet (internal network)	Use a Domain Name System (DNS) hostname, which must be different from the Reporting and Analytics hostname. `https://OBI Server Address:443` If you are installing Enterprise Back Office without secure socket layer, use port `9704`.	Use a Domain Name System (DNS) hostname, which must be different from the OBI hostname. `https://Reporting and Analytics Server Address`
Internet (external)	Set up a Domain Name System (DNS) hostname or a URL redirect for accessing the web application from outside the server network. The OBI URL must be different from the Reporting and Analytics URL. For example, `https://obiee.example.com` If you use a port other than the default ports, make sure to enter the port. `https://obiee.example.com:port`	Set up a Domain Name System (DNS) hostname or a URL redirect for accessing the web application from outside the server network. The Reporting and Analytics URL must be different from the OBI URL. For example, `https://www.example.com` If you use a port other than the default ports, make sure to enter the port. `https://www.example.com:port`

You can configure Enterprise Back Office to force users to use the HTTPS protocol. The *Enterprise Back Office Security Guide* contains more information.

3

Enterprise Back Office on Two Servers

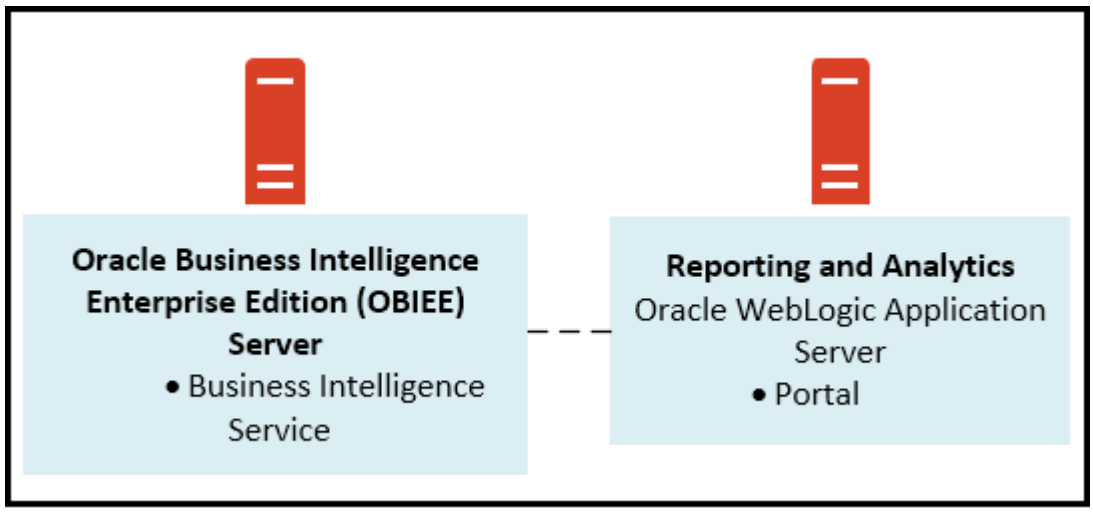
Enterprise Back Office can be installed in a two-server environment provided the servers meet hardware and load requirements. At minimum, the environment uses the following Reporting and Analytics servers:

- Oracle Business Intelligence Enterprise Edition Server
- Oracle WebLogic application server with Oracle MICROS Reporting and Analytics

You can then install other components on these servers or on additional servers.

Do not install Oracle MICROS Simphony with these instructions. Enterprise Back Office with Oracle MICROS Simphony contains specific recommendations and instructions for an environment with Simphony.

Figure 3-1 Reporting and Analytics on Two Servers



Install the servers and components in the following order. Make sure each set of instructions is complete before moving to the next server.

Before starting installation, review related documentation and prepare your environment and servers.

1. Install the Enterprise Back Office database depending on your database type:
   - Installing Enterprise Back Office on Oracle Database
   - Installing Enterprise Back Office on Microsoft SQL Server
2. Installing the Oracle Business Intelligence Server
3. Installing the Reporting and Analytics Application Server

Before You Begin

1. Review the *Oracle MICROS Enterprise Back Office Server Sizing Guide* for the latest hardware specifications and recommendations. Determine the hardware requirements for your projected data and user load, and then map what applications and components can be comfortably hosted on each server in your deployment environment.
2. Review the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.
3. Review the *Oracle MICROS Enterprise Back Office Security Guide* and, if you are installing Inventory Management, the *Oracle MICROS Inventory Management Security Guide* for detailed explanations regarding securing your system during and after installation.
4. Make sure the IceWarp Mail Server is set up and accessible on the network.
5. For each server in the environment:
    a. Make sure the operating system accepts filenames and file paths longer than 260 characters.
    b. Make sure you can ping all network adapters from other machines. Disconnect adapters that you cannot ping.
    c. Synchronize all servers to the same time.
    d. Install the required Java (Java Development Kit or Java Runtime Environment) version in a folder path that does not contain spaces, and then set the *JAVA_HOME* system environment variable to the correct folder path.

       For example, do not install Java in the default `Program Files` path.
    e. Verify that the 7001, 9704, and 9556 ports are not being used.
    f. Obtain a Secure Socket Layer (SSL) certificate.
    g. Set up or identify the published site URLs for the server to host Oracle Business Intelligence Enterprise Edition and the server to host the Reporting and Analytics web application. What are Published Site URLs? contains more information.
    h. Disable tunnel adapters. Disabling Tunnel Adapters contains information and instructions for checking for and disabling the adapter.
6. For each server that will be running the installation wizard, make sure to free at least 65GB of storage in addition to the server hardware requirements for the installation files and for temporary files created by the installation wizard.
7. If you are performing an upgrade instead of a fresh installation, What do I do when Upgrading? contains a summary of upgrade information and instructions.

Installing Enterprise Back Office on Oracle Database

This chapter describes the prerequisites, instructions, and verification steps for installing the Enterprise Back Office databases on Oracle Database:

- Enterprise Back Office Database Configurations
- Installing the Enterprise Back Office Database

- Verifying the Database Installation

Enterprise Back Office Database Configurations

Oracle MICROS recommends setting the following Oracle Database configurations when creating the database instance and before running an Enterprise Back Office product installer. While some configurations can be changed after the installation, preparing the database instance prior to schema installation can prevent unexpected errors and problems.

Oracle Database Configuration for Enterprise Back Office Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for Enterprise Back Office:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>MM`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PMM`

db_block_size	16384
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.

Oracle Database Tablespaces for Enterprise Back Office Database

Make sure to create the following tablespaces in the Enterprise Back Office database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- COREDB
- PORTALDB
- LOCDB
- LOC_INDX
- RTA
- PENTAHO or SMALLFILE

- CEDB
- SAML_INDX
- ORCLRNA_BIPLATFORM
- ORCLRNA_MDS
- TEMP

Oracle Database Configuration for Enterprise Back Office Aggregation Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for the Aggregation database:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>AGG`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PAGG`

db_block_size	8192
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.
deferred_segment_creation	TRUE
_index_partition_large_extents	FALSE
_partition_large_extents	FALSE

Oracle Database Tablespaces for Enterprise Back Office Aggregation Database

Make sure to create the following tablespaces in the Enterprise Back Office Aggregation database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- AGGREGATE_DB
- AGGREGATE_INDX
- TEMP

Installing the Enterprise Back Office Database

1. Make sure Oracle Database is installed and running. If Oracle Database contains a previous deployment of Oracle Business Intelligence, or if the database installation previously failed or was interrupted, follow the instructions in Uninstalling Oracle Business Intelligence Schemas from Oracle Database.
2. Extract the following from the installation file archive in the same file structure. Do not extract the files to a folder structure that contains spaces.

   `/RCU/`

   `DBInstall.exe`
3. Double-click `DBInstall.exe` to launch the database installation wizard.
4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Oracle Database server with no Reporting and Analytics objects.
5. On the Choose Install Set page, select **myMicros**.
6. On the MyMicros Database Information page:
   a. To set up the Enterprise Back Office database, select **Oracle**, enter the network port used by the database server, and then enter the database SID in **Database SID**. By default, Oracle Database uses port 1521.
   b. Fill out the rest of the form. For new installations, the form allows you to create passwords for the database users. For upgrades, you must enter the existing passwords.
7. On the Oracle Agg DB Config page, set up the Enterprise Back Office aggregation database:
   a. Enter the hostname, port, and SID of the aggregation database server.
   b. For new installations, create a password for the aggregation database. For upgrades, enter the existing aggregation database password.
8. For new installations:
   a. On the Additional Users page, create passwords for the database users.
   b. On the Sys Admin Password page, create a password for the **sys admin** account for the `M` super organization.
   c. On the Tablespace Locations page, enter the path to the folder for storing the database tablespace files.
   d. On the Tablespace location - SAML page, enter the path to the folder for storing the SAML database tablespace file.

      If you are upgrading the database, the installation wizard does not show this page if you did not perform the `versionnum` prerequisite.
9. On the MyMicros Database Information - Master page, enter the database administrator (DBA) login credentials for the Enterprise Back Office database.
10. On the MyMicros Database Information - Aggregation Master page, enter the database administrator (DBA) login credentials for the aggregation database.

11. For new installations:
    a. On the Get 6.2 Oracle Tokens page, create a password for an Online Analytical Processing (OLAP) user account.
    b. On the Repository Creation Utility page, create a password for the MDS and BIPLATFORM database schema.

       This screen shows during upgrades if you deleted or set `OPTIONVALUE=true` for the record in the `CORE_OPTIONS` table containing `MODULENAME=obieeRcu`.
    c. On the Aggregation Users page, create passwords for the Aggregate_DB users.

       If you are installing the Aggregate_DB schema with the Enterprise Back Office database, enter the same password for the **SA**, **RPT**, and **UTIL** users.
    d. On the Get Oracle Aggregation tokens page, enter the path to the folder for storing the aggregation database tablespace and the aggregation database index tablespace.
12. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.
13. After installation completes, increase the `OPEN_CURSORS` parameter for Oracle Database to at least 30,000.

Verifying the Database Installation

1. Verify that there is a `versionnum` entry for the Enterprise Back Office database version to which you upgraded in the following databases:
    - AGGREGATE_DB.AGG_VERSION_DB
    - BIREPOS.BIREPOS_VERSION_DB
    - CEDB.CE_VERSION_DB
    - COREDB.CORE_VERSION_DB
    - LOCATION_ACTIVITY_DB.VERSION_DB
    - PORTALDB.PORTAL_VERSION_DB
    - QUARTZ.QUARTZ_VERSION_DB
    - RTA.RTA_VERSION_DB
2. Check the following logs for errors and exceptions:
    - *root*\temp\DBinstaller.log
    - *root*\temp\Logs\eBusiness_DatabaseUpgrade_Install_*dateandtime*.log

Installing Enterprise Back Office on Microsoft SQL Server

This chapter describes the prerequisites, instructions, and verification steps for installing the Enterprise Back Office databases on Microsoft SQL Server:

- Installing the Enterprise Back Office Database
- Verifying the Database Installation

Installing the Enterprise Back Office Database

1. Make sure Microsoft SQL Server is installed and running. If Microsoft SQL Server contains a previous deployment of Oracle Business Intelligence, or if the database installation previously failed or was interrupted, follow the instructions in Uninstalling Oracle Business Intelligence Schemas from Microsoft SQL Server.
2. Extract the following from the installation file archive in the same file structure. Do not extract the files to a folder structure that contains spaces.

   `/RCU/`

   `DBInstall.exe`
3. Double-click `DBInstall.exe` to launch the database installation wizard.
4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Microsoft SQL Server with no Reporting and Analytics objects.
5. On the Choose Install Set page, select **myMicros**.
6. On the MyMicros Database Information page:
   a. To set up the Enterprise Back Office database, select **SQL Server**, enter the network port used by the database server. By default, the Microsoft SQL Server uses port 1433.
   b. Fill out the rest of the form. For new installations, the form allows you to create passwords for the database users. For upgrades, enter the login credentials to the existing Microsoft SQL database server in the **Upgrade** login and password fields, and then enter the existing database passwords.
7. On the SQL Agg DB Config page, set up the Enterprise Back Office aggregation database:
   a. Enter the hostname and port of the aggregation database server.
   b. If you are performing an upgrade, in the **Upgrade Login** and **Upgrade Password** fields, enter the login credentials to the existing Microsoft SQL database server.
   c. In the **Additional Connection Parameters** field, enter any required connection strings.
8. For new installations:
   a. On the Sys Admin Password page, create a password for the **sys admin** account for the `M` super organization.
   b. On the Tablespace Locations page, enter the path to the folder for storing the database tablespace files.
   c. On the Tablespace location - SAML page, enter the path to the folder for storing the SAML database tablespace file.

      If you are upgrading the database, the installation wizard does not show this page if you did not perform the `versionnum` prerequisite.
9. On the MyMicros Database Information - Master page, enter the database administrator (DBA) login credentials for the Reporting and Analytics database.
10. On the MyMicros Database Information - Aggregation Master page, enter the database administrator (DBA) login credentials for the aggregation database.

11. For new installations:
    a. On the Repository Creation Utility page, create a password for the MDS and BIPLATFORM database schema.

       This screen shows during upgrades if you deleted or set `OPTIONVALUE=true` for the record in the `COREDB.DB_OPTIONS` table containing `MODULENAME=obieeRcu`.

    b. On the RCU File Locations - SQL Server page, enter the path to the folder for the Repository Creation Utility database and log file.

    c. On the Get SQL Server Aggregation tokens page, enter the path to the folder for storing the aggregation database and the database log file.
12. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.

Verifying the Database Installation

1. Verify that there is a `versionnum` entry for the Enterprise Back Office database version to which you upgraded in the following databases:
   - AGGREGATE_DB.AGG_VERSION_DB
   - BIREPOS.BIREPOS_VERSION_DB
   - CEDB.CE_VERSION_DB
   - COREDB.CORE_VERSION_DB
   - LOCATION_ACTIVITY_DB.VERSION_DB
   - PORTALDB.PORTAL_VERSION_DB
   - QUARTZ.QUARTZ_VERSION_DB
   - RTA.RTA_VERSION_DB
2. Check the following logs for errors and exceptions:
   - *root*\temp\DBinstaller.log
   - *root*\temp\Logs\eBusiness_DatabaseUpgrade_Install_*dateandtime*.log

Installing the Oracle Business Intelligence Server

This chapter describes the prerequisites, instructions, and verification steps for installing the Oracle Business Intelligence Server:

- Installing Oracle Business Intelligence
- Verifying the Oracle Business Intelligence Server Installation

Installing Oracle Business Intelligence

1. Set up a static IP address for the Oracle Business Intelligence server.
2. Extract the following from the installation file archive in the same file structure to the Oracle Business Intelligence server. Do not extract the files to a folder structure that contains spaces.

```
/OBIEE/

/OBIEEPatch/

/Weblogic/

Install_version.exe
```

3. Double-click `Install_version.exe` to launch the installation wizard.
4. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
5. On the Before We Begin page:
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
   c. Select **Yes** or **No** for whether you will install Gift and Loyalty (iCare), Inventory Management (myinventory), and the weather service. The installation wizard shows setup and configuration screens for each application that you select **Yes**.
   d. For **Will myLabor be used with this installation?**, select **No**. Labor Management must be installed with Reporting and Analytics.
6. On the Use existing Portal configuration page, make your selection based on your installation:
   a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
7. On the Choose Install Set page, select **OBIEE** and other components that you want to install on this server.
8. On the Check if Cluster Environment page, select **No**.
9. On the WebLogic Info - Obiee Box page, configure the application server settings:

Table 3-1 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.

Table 3-1 (Cont.) Oracle WebLogic Application Server Information

Field	Description
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the Oracle Business Intelligence server, typically 7001.
BI Server Port	Enter the port used by Oracle Business Intelligence, typically 9704.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

10. On the OBIEE Installation page, configure the connection to the OBIEE database and Repository Creation Utility (RCU) schemas:

Table 3-2 Oracle Business Intelligence Enterprise Edition Database Information

Field	Description
RCU Database Location	Enter the hostname of the Enterprise Back Office database containing the RCU installation.
SQL Server or Oracle	Select the database type.
Port and Database Service Name	Enter the port used by the database, and any additional connection parameters as necessary.
BIPLATFORM Schema Password	Enter the schema password you created for the RCU during database installation.
MDS Schema Password	Enter the schema password you created for the RCU during database installation.

11. On the Published URL - OBIEE page, enter the published site URL. What are Published Site URLs? contains more information.
12. On the OBIEE Repository page, create a password for OBIEE RPD files. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
13. (Upgrades only) On the Where would you like to store a backup copy of the existing installation? page, select the folder to store a backup of the installation.
14. On the SSL page, select **Yes** to enable SSL/Transport Layer Security.
15. On the Certificate Configuration - OBIEE page, fill out the form to install the signed certificate:
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *`folder_path/file_name.extension`*
    c. Verify the certificate information, and then click **Next**.
16. On the Database Information page, configure the connection to the Reporting and Analytics database:

Table 3-3 Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

17. On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Table 3-4 Repository Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

18. (InfoDelivery only) On the InfoDelivery Configuration page, enter login credentials to the CE database.
19. On the OBI Database Information page, enter the password to the Oracle Business Intelligence (OBI) database.
20. On the Aggregation DB information for Obiee Repository page, configure the aggregation server to use with the Oracle Business Intelligence Enterprise Edition (OBIEE) repository:

Table 3-5 Aggregation Database Information

Oracle Database	Microsoft SQL Server
a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter the database service name in **Aggregate_DB Service name**.	a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter additional connection parameters.

21. On the Is this an OLAP Portal Instance page, select **DUAL**.
22. On the OLAP *Database Type* Database Information page, configure the OLAP database connection as described in the following table:

Table 3-6 Online Analytical Processing Database Connection

Field	Description
OLAP Login and OLAP Password	Enter the login credentials for the OLAP database.
OLAP Server name or IP	Enter the hostname of the OLAP database.
OLAP DatabasePort	Enter the OLAP database server port.
OLAP DB SID	Enter the SID for the OLAP database.

23. (Gift and Loyalty only) On the Segmentation Data Access Login page, enter the login credentials to the Segmentation Aggregate_DB.
24. (Gift and Loyalty only) On the iCare Database Information page, enter the address, port, and connection properties to the Gift and Loyalty database server.
25. (Admin Server only) On the Posting/Admin Database Information page, enter the address to the server hosting the Aggregate Database server.
26. On the Portal Mail Server page, enter the Simple Mail Transfer Protocol (SMTP) hostname and port of the server that will host the IceWarp Mail Server, and then enter the mail domain, such as `example.com`.

    The Mail Server is typically installed on the Reporting and Analytics application server.
27. (Admin Server only) On the Posting/Admin Mail Server page, enter the mail domain, SMTP port, and POP3 port for the IceWarp Mail Server to be used by the Admin Server.
28. (Master Server only) On the Master Mail Server page, enter the mail domain, SMTP port, and POP3 port for the IceWarp Mail Server to be used by the Master Server.
29. On the InfoDelivery Mail Server page, enter the hostname of the IceWarp Mail Server or the server to host the InfoDelivery service, and then enter the SMTP port.
30. On the Location of Master Server page, enter the hostname of the Master Server.
31. On the Mail Users page, configure the accounts used by Enterprise Back Office:

a. In the **Mail account jobs will be sent to by the client stores** field, enter the email account that the Master Server uses to receive `resultSets` data and deploy jobs.

b. In the **Email account that will receive errors** field, enter the email account to which the Point-of-Sales stores forward error messages.

32. (InfoDelivery only) On the Portal/InfoDelivery Settings - Font page, you can configure custom fonts for InfoDelivery as described in the following table:

Table 3-7 Portal/InfoDelivery Font Settings

Field	Description
Enable User Font	Select whether to allow using a custom font when rendering PDFs. You can then enter the path to the font, or click **Choose** to navigate to the font.
Limit detail query days	Enter a date limit for executing audit/ analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/ analysis summary queries. The Organization configuration can override this setting.
New Line Style for infoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

33. (Admin Server only) On the Admin Server Configuration page, enter the login credentials for the Admin Server database and the CEDB.

34. (InfoDelivery only) On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.

35. (InfoDelivery only) On the InfoDelivery page, leave the **Pentaho Solutions Directory** blank.

36. (Gift and Loyalty only) On the iCare Configuration for Portal page:

a. Enter the URL for Gift and Loyalty campaigning. This is typically `http://`*`Gift and Loyalty URL`*`:80/offers/`

b. Enter the URL for Gift and Loyalty Stored Value. This is typically the hostname of Gift and Loyalty.

c. Enter the URL for Gift and Loyalty for RTA downloads. This is typically the hostname of Gift and Loyalty.

d. Enter the database login credentials for the Gift and Loyalty database. This is typically the **MMSQL** account.

e. Enter the URL of the ExactTarget WSDL file.

37. (Labor Management only) On the myLabor Configuration for Portal page, you can change the port number used for non-secure connections and SSL connections. Do not change the syntax.

a. **Non secure port for myLabor**: `-Dhttp.browser.port=`*`port`*

b. **SSL port for myLabor**: `-Dhttp.sslaccel.port=`*`port`*

38. (Inventory Management only) On the myInventory Settings for Portal page, select the Inventory Management database server type, enter the address and port of the database server, and then enter the external-facing published site URL for Inventory Management.

39. Configure Reporting and Analytics:

    a. On the Portal Specific Settings page, configure Reporting and Analytics as described in the following table:

Table 3-8 Reporting and Analytics Configurations

Field	Description
Names of all Portal Application Servers	Enter the hostnames of all Reporting and Analytics web application servers in a comma-separated list.
Administrator e-mail address	Enter the email address, without the domain, of the administrator account.
What email user will the Portal use to send mail?	Enter the email address, without the domain, that the Portal uses to send mail.
What is the password for the email user?	Enter the password for the portal email user.
Use HTTPS protocol for portal?	Select whether the web application uses the HTTPS protocol. This option requires a Secure Socket Layer (SSL) connection and should typically only be selected when the installation environment has an SSL accelerator.
Password for Messaging Queue	Enter the login credentials for the messaging queue. This field does not show when performing an upgrade.
Username and Password for utility user	Enter the login credentials for the UTIL account created during database installation.
Username and Password for CE user	Enter the login credentials for the CEDB account created during database installation.
New Line Style for Portal CSV display	Select whether to use Windows, Unicode, or HTML line styling when using the CSV export while viewing a report.

    b. On the Portal Specific Settings - Purge page, select whether Reporting and Analytics uses thread pooling to purge threads, and then configure the purge parameters.

    c. On the Portal Specific Settings - Aggregation and Adjustment Service page, enter the hostname of the server that will host the Adjustment and Aggregation Service in the **Adjustment Server Name** field.

    d. (Alert Engine only) On the Portal Specific Settings - Mobile page, enter the login credentials for the Alert Engine server.

40. Configure Info Delivery for Oracle Business Intelligence:

a. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.

b. On the Portal/InfoDelivery Settings - Font page, configure the Report Mail font settings as described in the following table:

Table 3-9 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using custom fonts when rendering PDFs.
Path to user font	Enter the path to a font, or click **Choose** and navigate to a font, to set the font used when rendering PDFs.
Limit detail query days	Enter a date limit for executing audit/ analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/ analysis summary queries. The Organization configuration can override this setting.
New Line Style for InfoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

41. On the Confirm Datasource Name page, enter the OLAP database name in the **OLAPDS database name** field. By default, this field uses `AGGREGATE_DB`.

42. (Master Server only) On the Master Server Configuration page, configure the Master Server as described in the following table:

Table 3-10 Master Server Configurations

Field	Description
RTA database login and RTA database password	Enter the RTA database login credentials for inserting and updating the `RTA_Processed_job` table. The account must have full permissions on the database/ schema.
COREDB login and COREDB password	Enter the COREDB login credentials for file transport. The account must have the same level of permissions on the Core database/ schema.
Email account name for the Errors Administrator and Email account password	Enter the e-mail account credentials for the Error Administrator.
Merak 8.5 or higher	Select whether Merak 8.5 or higher is installed on the environment.
Where is the Merak installation located?	If Merak is installed on the environment, enter the installation path.

Table 3-10 (Cont.) Master Server Configurations

Field	Description
Server1 account password	Enter the password for the server1 login account.
Cache type for the Master Service	Select the Master Service cache type from the drop-down list.

43. (Posting Server only) On the Posting Server Configuration page, configure the Posting server as described in the following table:

Table 3-11 Posting Server Configurations

Field	Description
How many posting threads should run on the server simultaneously?	Enter the number of simultaneous posting threads. Entering a number greater than eight can lead to performance degradation.
How many days of psLogs should be saved?	Enter the amount of days that the posting server preserves the Result sets and the entries in the `RTA_Processed_job` table.
What directory should hold psLogs?	Enter the path to the folder where the posting server saves the logs in .zip format.
Move History by location rather than full server?	Select or deselect whether to move history by location rather than moving history by server. If you deselect this option, the admin server stops posting for the duration of the move.
Limit move history day range	Select or deselect whether to limit moving history by date. You should typically only use this option when you partition databases by date.
What name would you like to use for Temporary Menu Items?	Enter the name the posting server uses for temporary menu items.
What database user should posting use?	Enter the database account name for posting.
What is the password for this user?	Enter the database account password for posting.
Run alignment with definitions posting?	Select or deselect whether to run alignment while posting definitions. Select this option if the environment contains an aggregation engine.

44. On the InfoDelivery Configuration page, enter the Info Delivery email username for sending and receiving emails, and the Info Delivery administrator email account.

45. (Alert Engine only) On the Alert Engine Configuration page, configure the Alert Engine as described in the following table:

Table 3-12 Alert Engine Configurations

Field	Description
Push alert service username and Push alert service password	Enter the login credentials for the push alert service.
Number of alert threads	Enter the number of alert threads.
Portal DB User and Portal DB Password	Enter the Enterprise Back Office database login credentials.
Core DB User and Core DB Password	Enter the core database login credentials.
Location Activity DB User and Location Activity DB Password	Enter the location activity database login credentials.
RTA DB User and RTA DB Password	Enter the RTA database login credentials.
CE DB User and CE DB Password	Enter the CE database login credentials.

46. (Admin Server only) On the Admin Server Configuration page, configure the Admin Server as described in the following table:

Table 3-13 Admin Server Configurations

Field	Description
Trailer to send in alerts from Admin Server	Enter trailer text in the four fields provided.
Email account to send alerts from	Enter the email name, without the domain, that the Admin Server uses to send alerts.
Number of hours before a location is considered out of contact	Enter the maximum number of hours before the Admin Server flags an unresponsive location.
Email addresses to send long alert messages to	Enter the email name, without the domain, to which the Admin Server sends long alert messages. You can separate multiple addresses with a comma.
Email addresses to send short alert messages to	Enter the email name, without the domain, to which the Admin Server sends short alert messages. You can separate multiple addresses with a comma.
Email addresses to send copies of org alerts to	Enter the email name, without the domain, to which the Admin Server sends a copy of all alerts.
Folder containing custom packages for Admin Server	Enter a folder path containing custom packages.

47. (Aggregation and Adjustment only) On the Aggregation and Adjustment Configuration page, configure the database connection to the Aggregation and Adjustment service as described in the following table:

Table 3-14 Aggregation and Adjustment Service Login

Field	Description
Core database login and Core database password	Enter the core database login credentials.

Table 3-14 (Cont.) Aggregation and Adjustment Service Login

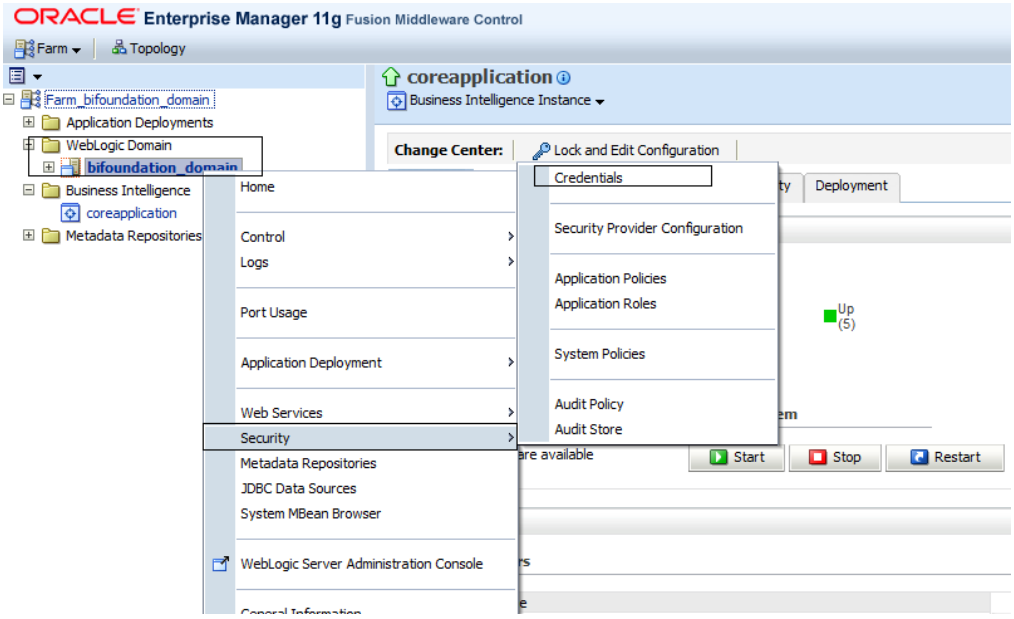
Field	Description
RTA database login and RTA database password	Enter the RTA database login credentials.
Portal database login and Portal database password	Enter the Enterprise Back Office database login credentials.
Location Activity database login and Location Activity database password	Enter the location activity database login credentials.
Name for Analysis/Aggregation Instance	Enter a unique name for this instance of the analysis/aggregation service. The service inserts the name into the database to denote which service processed a job.
Connection Cache Type	Select a connection cache type from the drop-down list.

48. (Weather Service only) On the Weather Configuration page, configure the weather service as described in the following table:

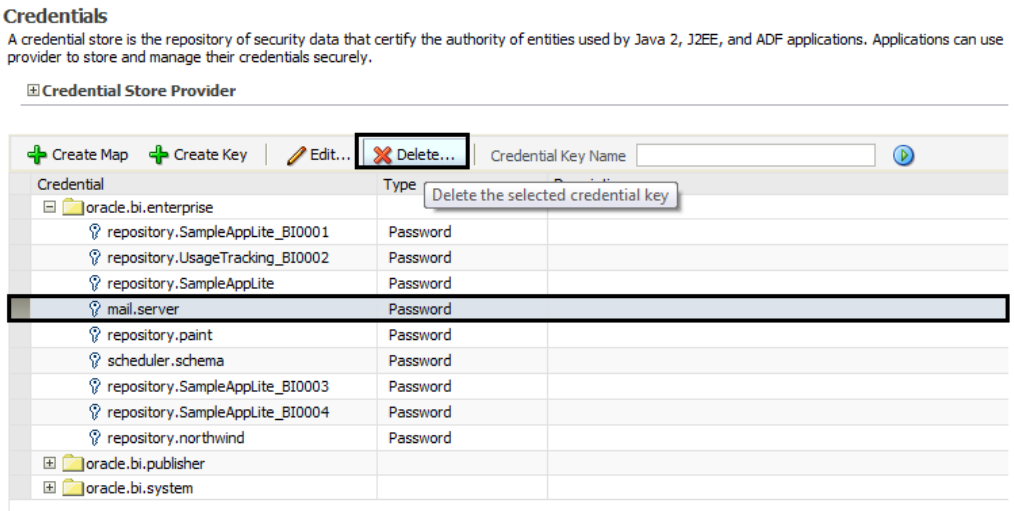
Table 3-15 Weather Configurations

Field	Description
What is the database login for the Weather Service?	Enter the username for the database login, typically `MSSQL`.
What is the database password for the Weather Service?	Enter the password for the database login.
How many days of weather should be stored in the database?	Enter the number of days of weather information that should be stored and retained in the database. Enter `0` to disable database storage.

49. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
50. Review the Pre-Installation Summary, and then click **Install**.
51. If you are performing a fresh installation on the 64-bit version of Microsoft Windows Server 2012, the installation wizard shows the `Oracle Business Intelligence has stopped working` error while the Oracle Universal Installer is copying files. This error is caused by a known issue with the Oracle Business Intelligence installation. Click **Close the program** to ignore the message and continue installation.
52. To set up Report Mail for OBIEE:
    a. Log in to Enterprise Manager and expand the `WebLogic Domain` folder.
    b. Right-click **bifoundation_domain**, select **Security**, and then select **Credentials**.



c. Expand the `oracle.bi.enterprise` folder, select `mail.server`, and then click **Delete**.



d. Click **Deployment** and then click **Mail**. Confirm that the **Username** and **Password** fields are blank.

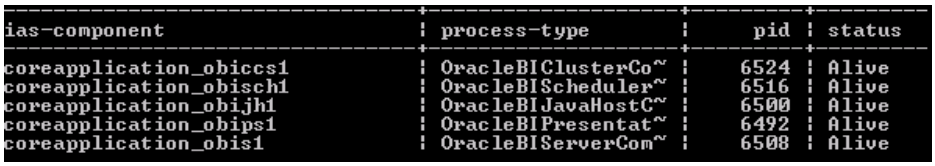
e. Restart the services.

Verifying the Oracle Business Intelligence Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
   - *root*`\temp\MM_Log.log`
   - *root*`\temp\MMInstaller.log`
   - *root*`\myMicros\Uninstall_myMicros\myMicros_Install_`*datetime*`.log`
2. Check the Oracle Business Intelligence log in *root*`\Program Files\Oracle\Inventory\logs\` for error messages.

3. Perform the following checks in the Oracle WebLogic console:
   a. In a web browser, navigate to *OBI server hostname*:7001/console and log in using the WebLogic administrator account credentials created during the installation.
   b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **AdminServer (admin)** and **Bi_server1** as **Running**.
   c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that all components are set as **Active** except for the **portal**.
4. Verify the following Microsoft Windows services are running:
   - **beascv bifoundation_domain_AdminServer**
   - **beasvc bifoundation_domain_bi_server1**
   - **Oracle Process Manager (ORCLRNA)**
   - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**
5. Use opmnctl to verify that all components are set as Alive:
   a. In a command prompt, navigate to *root*\myMicros\Oracle\Middleware\instances\ORCLRNA\bin\
   b. Enter opmnctl status
   c. Verify that the components are set as Alive.

Figure 3-2 Two-Server OBIEE opmnctl Status



Installing the Reporting and Analytics Application Server

This chapter describes the prerequisites, instructions, and verification steps for installing the Reporting and Analytics application server:

- Installing Reporting and Analytics
- Verifying the Reporting and Analytics Application Server Installation

Installing Reporting and Analytics

1. If you are installing Reporting and Analytics on a different drive letter than the one you used on the OBIEE server, change the drive letter for the following properties in the OBIEE server microsConfig.properties file:

   myInsightRootDir=*Drive*:/myMicros/myInsight

   reportDefPath=*Drive*:/myMicros/myInsight/org

   OBIEE.ImageTempPath=*Drive*:/myMicros/myPortal/imagesTemp

`mySecureDocXDir=Drive:/myMicros/myInsight/secureMyDocX` (if you are using the docViewer portlet)

2. Extract the following from the installation file archive in the same file structure to the Reporting and Analytics application server. Do not extract the files to a folder structure that contains spaces.

   `/Weblogic/`

   `Install_version.exe`

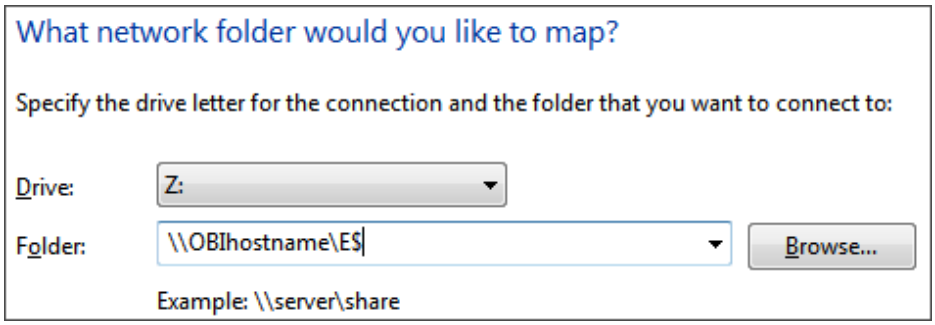
3. Double-click `Install_version.exe` to launch the installation wizard.
4. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
5. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
   c. Select **Yes** or **No** for whether you will install Gift and Loyalty (iCare), Inventory Management (myinventory), and the weather service. The installation wizard shows setup and configuration screens for each application that you select **Yes**.
   d. For **Will myLabor be used with this installation?**, select **Yes** to install Labor Management.
6. On the Use existing Portal configuration page, make your selection based on your installation:
   a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
7. On the Choose Install Set page, select **Portal** and other components that you want to install on this server.
8. On the Check if Cluster Environment page, select **No**.
9. On the WebLogic Info page, configure the application server settings:

Table 3-16 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the Oracle Business Intelligence server, typically 7001.
App Server Host Name	Enter the hostname of the Reporting and Analytics WebLogic application server.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

10. On the Published URL page, enter the published site URL. What are Published Site URLs? contains more information.
11. On the Map Drive page:
    a. Create a mapped network drive to the drive containing the `myMicros` folder on the OBI server. For example, if you installed OBI on the `E:` drive, you can create the mapped drive `Z:\` and enter the path as shown in the following image:

Figure 3-3 Mapped Network Drive to OBI Server



    b. Enter the mapped drive root and the path to the `myMicros` installation folder. For example, `Z:\myMicros\`
12. (Upgrades only) On the Where would you like to store a backup copy of the existing installation? page, select the folder to store a backup of the installation.
13. On the SSL page, select **Yes** to enable SSL/Transport Layer Security.
14. On the Certificate Configuration - Portal page, fill out the form to install the signed certificate:
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.

b. Click **Choose** and select the certificate file, and then click **Next**.

   Make sure the filepath includes the following components: *folder_path/file_name.extension*

c. Verify the certificate information, and then click **Next**.

15. On the Database Information page, configure the connection to the Enterprise Back Office database:

Table 3-17 Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

16. (InfoDelivery only) On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Table 3-18 Repository Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

17. (InfoDelivery only) On the InfoDelivery Configuration page, enter login credentials to the CE database.

18. (Admin Server only) On the Posting/Admin Database Information page, enter the address to the server hosting the Aggregate Database server.

19. (Admin Server only) On the Posting/Admin Mail Server page, enter the mail domain, SMTP port, and POP3 port for the IceWarp Mail Server to be used by the Admin Server.
20. (Master Server only) On the Master Mail Server page, enter the mail domain, SMTP port, and POP3 port for the IceWarp Mail Server to be used by the Master Server.
21. (InfoDelivery only) On the InfoDelivery Mail Server page, enter the hostname of the IceWarp Mail Server or the server to host the InfoDelivery service, and then enter the SMTP port.
22. (InfoDelivery only) On the Portal/InfoDelivery Settings - Font page, you can configure custom fonts for InfoDelivery as described in the following table:

Table 3-19 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using a custom font when rendering PDFs. You can then enter the path to the font, or click **Choose** to navigate to the font.
Limit detail query days	Enter a date limit for executing audit/analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/analysis summary queries. The Organization configuration can override this setting.
New Line Style for infoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

23. (Admin Server only) On the Admin Server Configuration page, enter the login credentials for the Admin Server database and the CEDB.
24. (InfoDelivery only) On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.
25. (InfoDelivery only) On the InfoDelivery page, leave the **Pentaho Solutions Directory** blank.
26. (Gift and Loyalty only) On the iCare Configuration for Portal page:
    a. Enter the URL for Gift and Loyalty campaigning. This is typically `http://` *`Gift and Loyalty URL`*`:80/offers/`
    b. Enter the URL for Gift and Loyalty Stored Value. This is typically the hostname of Gift and Loyalty.
    c. Enter the URL for Gift and Loyalty for RTA downloads. This is typically the hostname of Gift and Loyalty.
    d. Enter the database login credentials for the Gift and Loyalty database. This is typically the **MMSQL** account.

e. Enter the URL of the ExactTarget WSDL file.

27. (Labor Management only) On the myLabor Configuration for Portal page, you can change the port number used for non-secure connections and SSL connections. Do not change the syntax.

    a. **Non secure port for myLabor**: `-Dhttp.browser.port=`*`port`*

    b. **SSL port for myLabor**: `-Dhttp.sslaccel.port=`*`port`*

28. (Inventory Management only) On the myInventory Settings for Portal page, select the Inventory Management database server type, enter the address and port of the database server, and then enter the external-facing published site URL for Inventory Management.

29. (Alert Engine only) On the Portal Specific Settings - Mobile page, enter the login credentials for the Alert Engine server.

30. (Master Server only) On the Master Server Configuration page, configure the Master Server as described in the following table:

Table 3-20 Master Server Configurations

Field	Description
RTA database login and RTA database password	Enter the RTA database login credentials for inserting and updating the `RTA_Processed_job` table. The account must have full permissions on the database/ schema.
COREDB login and COREDB password	Enter the COREDB login credentials for file transport. The account must have the same level of permissions on the Core database/ schema.
Email account name for the Errors Administrator and Email account password	Enter the e-mail account credentials for the Error Administrator.
Merak 8.5 or higher	Select whether Merak 8.5 or higher is installed on the environment.
Where is the Merak installation located?	If Merak is installed on the environment, enter the installation path.
Server1 account password	Enter the password for the server1 login account.
Cache type for the Master Service	Select the Master Service cache type from the drop-down list.

31. (Posting Server only) On the Posting Server Configuration page, configure the Posting server as described in the following table:

Table 3-21 Posting Server Configurations

Field	Description
How many posting threads should run on the server simultaneously?	Enter the number of simultaneous posting threads. Entering a number greater than eight can lead to performance degradation.
How many days of psLogs should be saved?	Enter the amount of days that the posting server preserves the Result sets and the entries in the `RTA_Processed_job` table.

Table 3-21 (Cont.) Posting Server Configurations

Field	Description
What directory should hold psLogs?	Enter the path to the folder where the posting server saves the logs in .zip format.
Move History by location rather than full server?	Select or deselect whether to move history by location rather than moving history by server. If you deselect this option, the admin server stops posting for the duration of the move.
Limit move history day range	Select or deselect whether to limit moving history by date. You should typically only use this option when you partition databases by date.
What name would you like to use for Temporary Menu Items?	Enter the name the posting server uses for temporary menu items.
What database user should posting use?	Enter the database account name for posting.
What is the password for this user?	Enter the database account password for posting.
Run alignment with definitions posting?	Select or deselect whether to run alignment while posting definitions. Select this option if the environment contains an aggregation engine.

32. (Alert Engine only) On the Alert Engine Configuration page, configure the Alert Engine as described in the following table:

Table 3-22 Alert Engine Configurations

Field	Description
Push alert service username and Push alert service password	Enter the login credentials for the push alert service.
Number of alert threads	Enter the number of alert threads.
Portal DB User and Portal DB Password	Enter the Enterprise Back Office database login credentials.
Core DB User and Core DB Password	Enter the core database login credentials.
Location Activity DB User and Location Activity DB Password	Enter the location activity database login credentials.
RTA DB User and RTA DB Password	Enter the RTA database login credentials.
CE DB User and CE DB Password	Enter the CE database login credentials.

33. (Admin Server only) On the Admin Server Configuration page, configure the Admin Server as described in the following table:

Table 3-23 Admin Server Configurations

Field	Description
Trailer to send in alerts from Admin Server	Enter trailer text in the four fields provided.

Table 3-23 (Cont.) Admin Server Configurations

Field	Description
Email account to send alerts from	Enter the email name, without the domain, that the Admin Server uses to send alerts.
Number of hours before a location is considered out of contact	Enter the maximum number of hours before the Admin Server flags an unresponsive location.
Email addresses to send long alert messages to	Enter the email name, without the domain, to which the Admin Server sends long alert messages. You can separate multiple addresses with a comma.
Email addresses to send short alert messages to	Enter the email name, without the domain, to which the Admin Server sends short alert messages. You can separate multiple addresses with a comma.
Email addresses to send copies of org alerts to	Enter the email name, without the domain, to which the Admin Server sends a copy of all alerts.
Folder containing custom packages for Admin Server	Enter a folder path containing custom packages.

34. (Aggregation and Adjustment only) On the Aggregation and Adjustment Configuration page, configure the database connection to the Aggregation and Adjustment service as described in the following table:

Table 3-24 Aggregation and Adjustment Service Login

Field	Description
Core database login and Core database password	Enter the core database login credentials.
RTA database login and RTA database password	Enter the RTA database login credentials.
Portal database login and Portal database password	Enter the Enterprise Back Office database login credentials.
Location Activity database login and Location Activity database password	Enter the location activity database login credentials.
Name for Analysis/Aggregation Instance	Enter a unique name for this instance of the analysis/aggregation service. The service inserts the name into the database to denote which service processed a job.
Connection Cache Type	Select a connection cache type from the drop-down list.

35. (Weather Service only) On the Weather Configuration page, configure the weather service as described in the following table:

Table 3-25 Weather Configurations

Field	Description
What is the database login for the Weather Service?	Enter the username for the database login, typically `MSSQL`.
What is the database password for the Weather Service?	Enter the password for the database login.
How many days of weather should be stored in the database?	Enter the number of days of weather information that should be stored and retained in the database. Enter `0` to disable database storage.

36. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
37. Review the Pre-Installation Summary, and then click **Install**.

Verifying the Reporting and Analytics Application Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
    - *root*`\temp\MM_Log.log`
    - *root*`\temp\MMInstaller.log`
    - *root*`\myMicros\Uninstall_myMicros\Logs\myMicros_Install_`*datetime*`.log`
2. Perform the following checks in the Oracle WebLogic console:
    a. In a web browser, navigate to *`OBI server hostname`*`:7001/console` and log in using the WebLogic administrator account credentials created during the installation.
    b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **appServ1** as **Running**.

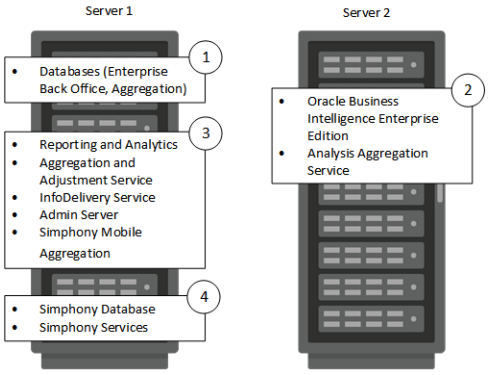
       The status may be set to **Starting** if you check the WebLogic console immediately after completing installation. Verify that the status changes to **Running**.
    c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that the **portal** component is set to **Active**.
    d. In the Domain Structure, click **bifoundation_domain**, click **Security Realms**, and then in the menu, click **myrealm**, click **Providers**, click **Credential Mapping**, click **saml2CMP**, and then click **Management**. Verify that **obiee** is listed.
3. Verify the following Microsoft Windows services are running:
    - **beasvc bifoundation_domain_appServ1**
    - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**

4

Enterprise Back Office with Oracle MICROS Simphony

Enterprise Back Office recommends the following server deployment scenario for Oracle MICROS Simphony. Install Gift and Loyalty and Inventory Management on separate servers (not pictured).

Figure 4-1 Simphony Server Deployment Topography



Install the servers and components in the order shown. Make sure to allow installation to complete for each set of applications and services before starting the next set of installs.

Before starting the installation, review related documentation and prepare your environment.

1. Install the Enterprise Back Office database on Server 1 depending on your database type:
   - Installing Enterprise Back Office on Oracle Database.
   - Installing Enterprise Back Office on Microsoft SQL Server.
2. Installing OBIEE and Analysis Aggregation on Server 2.
3. Installing Reporting and Analytics and other components on Server 1.
4. Follow the instructions in the *Oracle MICROS Simphony Installation Guide* to install Oracle MICROS Simphony on Server 1.

You can then set up organizations and locations in Enterprise Back Office for Simphony.

Before You Begin

1. Review the *Oracle MICROS Enterprise Back Office Server Sizing Guide* for the latest hardware specifications and recommendations.
2. Review the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.

3. Review the *Oracle MICROS Enterprise Back Office Security Guide* and, if you are installing Inventory Management, the *Oracle MICROS Inventory Management Security Guide* for detailed explanations regarding securing your system during and after installation.
4. Review the *Oracle MICROS Simphony Security Guide* for information regarding securing your system in preparation for the Simphony installation.
5. On both servers:
   a. Make sure the operating system accepts filenames and file paths longer than 260 characters.
   b. Make sure you can ping all network adapters from other machines. Disconnect adapters that you cannot ping.
   c. Synchronize the servers to the same time.
   d. Install the required Java (Java Development Kit or Java Runtime Environment) version in a folder path that does not contain spaces, and then set the *JAVA_HOME* system environment variable to the correct folder path.

      For example, do not install Java in the default `Program Files` path.
   e. Free at least 65GB of storage in addition to the server hardware requirements for the installation files and for temporary files created by the installation wizard.
   f. Verify that the 7001, 9704, and 9556 ports are not being used.
   g. Obtain a Secure Socket Layer (SSL) certificate.
   h. Set up or identify the published site URLs. What are Published Site URLs? contains more information.
   i. Disable tunnel adapters. Disabling Tunnel Adapters contains information and instructions for checking for and disabling the adapter.
6. Set up a static IP address for Server 2 (Oracle Business Intelligence).
7. If you are installing Reporting and Analytics on a different drive letter than the one you used on the OBIEE server, change the drive letter for the following properties in the OBIEE server `microsConfig.properties` file:

   `myInsightRootDir=`*`Drive`*`:/myMicros/myInsight`

   `reportDefPath=`*`Drive`*`:/myMicros/myInsight/org`

   `OBIEE.ImageTempPath=`*`Drive`*`:/myMicros/myPortal/imagesTemp`

   `mySecureDoc`*`X`*`Dir=`*`Drive`*`:/myMicros/myInsight/secureMyDoc`*`X`* (for docViewer portlet)
8. If you are performing an upgrade instead of a fresh installation, What do I do when Upgrading? contains a summary of upgrade information and instructions.

Installing Enterprise Back Office on Oracle Database

This chapter describes the prerequisites, instructions, and verification steps for installing the Enterprise Back Office databases on Oracle Database:

- Enterprise Back Office Database Configurations
- Installing the Enterprise Back Office Database

- Verifying the Database Installation

Enterprise Back Office Database Configurations

Oracle MICROS recommends setting the following Oracle Database configurations when creating the database instance and before running an Enterprise Back Office product installer. While some configurations can be changed after the installation, preparing the database instance prior to schema installation can prevent unexpected errors and problems.

Oracle Database Configuration for Enterprise Back Office Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for Enterprise Back Office:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>MM`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PMM`

db_block_size	16384
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.

Oracle Database Tablespaces for Enterprise Back Office Database

Make sure to create the following tablespaces in the Enterprise Back Office database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- COREDB
- PORTALDB
- LOCDB
- LOC_INDX
- RTA
- PENTAHO or SMALLFILE

- CEDB
- SAML_INDX
- ORCLRNA_BIPLATFORM
- ORCLRNA_MDS
- TEMP

Oracle Database Configuration for Enterprise Back Office Aggregation Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for the Aggregation database:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>AGG`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PAGG`

db_block_size	8192
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.
deferred_segment_creation	TRUE
_index_partition_large_extents	FALSE
_partition_large_extents	FALSE

Oracle Database Tablespaces for Enterprise Back Office Aggregation Database

Make sure to create the following tablespaces in the Enterprise Back Office Aggregation database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- AGGREGATE_DB
- AGGREGATE_INDX
- TEMP

Installing the Enterprise Back Office Database

1. If you are installing on an Oracle Database that contained a previous deployment of Oracle Business Intelligence, or if the installation previously failed or was interrupted, follow the instructions in Uninstalling Oracle Business Intelligence Schemas from Oracle Database.
2. Extract the following from the installation file archive in the same file structure. Do not extract the files to a folder structure that contains spaces.

   `/RCU/`

   `DBInstall.exe`
3. Double-click `DBInstall.exe` to launch the database installation wizard.
4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Oracle Database server with no Reporting and Analytics objects.
5. On the Choose Install Set page, select **myMicros**.
6. On the MyMicros Database Information page:
   a. To set up the Enterprise Back Office database, select **Oracle**, enter the network port used by the database server, and then enter the database SID in **Database SID**. By default, Oracle Database uses port 1521.
   b. Fill out the rest of the form. For new installations, the form allows you to create passwords for the database users. For upgrades, you must enter the existing passwords.
7. On the Oracle Agg DB Config page, set up the Enterprise Back Office aggregation database:
   a. Enter the hostname, port, and SID of the aggregation database server.
   b. For new installations, create a password for the aggregation database. For upgrades, enter the existing aggregation database password.
8. For new installations:
   a. On the Additional Users page, create passwords for the database users.
   b. On the Sys Admin Password page, create a password for the **sys admin** account for the `M` super organization.
   c. On the Tablespace Locations page, enter the path to the folder for storing the database tablespace files.
   d. On the Tablespace location - SAML page, enter the path to the folder for storing the SAML database tablespace file.

      If you are upgrading the database, the installation wizard does not show this page if you did not perform the `versionnum` prerequisite.
9. On the MyMicros Database Information - Master page, enter the database administrator (DBA) login credentials for the Enterprise Back Office database.
10. On the MyMicros Database Information - Aggregation Master page, enter the database administrator (DBA) login credentials for the aggregation database.

11. For new installations:
    a. On the Get 6.2 Oracle Tokens page, create a password for an Online Analytical Processing (OLAP) user account.
    b. On the Repository Creation Utility page, create a password for the MDS and BIPLATFORM database schema.

       This screen shows during upgrades if you deleted or set `OPTIONVALUE=true` for the record in the `CORE_OPTIONS` table containing `MODULENAME=obieeRcu`.
    c. On the Aggregation Users page, create passwords for the Aggregate_DB users.

       If you are installing the Aggregate_DB schema with the Enterprise Back Office database, enter the same password for the **SA**, **RPT**, and **UTIL** users.
    d. On the Get Oracle Aggregation tokens page, enter the path to the folder for storing the aggregation database tablespace and the aggregation database index tablespace.
12. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.
13. After installation completes, increase the `OPEN_CURSORS` parameter for Oracle Database to at least 30,000.

Verifying the Database Installation

1. Verify that there is a `versionnum` entry for the Enterprise Back Office database version to which you upgraded in the following databases:
    - AGGREGATE_DB.AGG_VERSION_DB
    - BIREPOS.BIREPOS_VERSION_DB
    - CEDB.CE_VERSION_DB
    - COREDB.CORE_VERSION_DB
    - LOCATION_ACTIVITY_DB.VERSION_DB
    - PORTALDB.PORTAL_VERSION_DB
    - QUARTZ.QUARTZ_VERSION_DB
    - RTA.RTA_VERSION_DB
2. Check the following logs for errors and exceptions:
    - *root*\temp\DBinstaller.log
    - *root*\temp\Logs\eBusiness_DatabaseUpgrade_Install_*dateandtime*.log

Installing Enterprise Back Office on Microsoft SQL Server

This chapter describes the prerequisites, instructions, and verification steps for installing the Enterprise Back Office databases on Microsoft SQL Server:

- Installing the Enterprise Back Office Database
- Verifying the Database Installation

Installing the Enterprise Back Office Database

1. If you are installing on a Microsoft SQL Server database that contained a previous deployment of Oracle Business Intelligence, or if the Oracle Business Intelligence installation previously failed or was interrupted, follow the instructions in Uninstalling Oracle Business Intelligence Schemas from Microsoft SQL Server.
2. Extract the following from the installation file archive in the same file structure. Do not extract the files to a folder structure that contains spaces.

   `/RCU/`

   `DBInstall.exe`
3. Double-click `DBInstall.exe` to launch the database installation wizard.
4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Microsoft SQL Server with no Reporting and Analytics objects.
5. On the Choose Install Set page, select **myMicros**.
6. On the MyMicros Database Information page:
   a. To set up the Enterprise Back Office database, select **SQL Server**, enter the network port used by the database server. By default, the Microsoft SQL Server uses port 1433.
   b. Fill out the rest of the form. For new installations, the form allows you to create passwords for the database users. For upgrades, enter the login credentials to the existing Microsoft SQL database server in the **Upgrade** login and password fields, and then enter the existing database passwords.
7. On the SQL Agg DB Config page, set up the Enterprise Back Office aggregation database:
   a. Enter the hostname and port of the aggregation database server.
   b. If you are performing an upgrade, in the **Upgrade Login** and **Upgrade Password** fields, enter the login credentials to the existing Microsoft SQL database server.
   c. In the **Additional Connection Parameters** field, enter any required connection strings.
8. For new installations:
   a. On the Sys Admin Password page, create a password for the **sys admin** account for the `M` super organization.
   b. On the Tablespace Locations page, enter the path to the folder for storing the database tablespace files.
   c. On the Tablespace location - SAML page, enter the path to the folder for storing the SAML database tablespace file.

      If you are upgrading the database, the installation wizard does not show this page if you did not perform the `versionnum` prerequisite.
9. On the MyMicros Database Information - Master page, enter the database administrator (DBA) login credentials for the Reporting and Analytics database.
10. On the MyMicros Database Information - Aggregation Master page, enter the database administrator (DBA) login credentials for the aggregation database.

11. For new installations:
    a. On the Repository Creation Utility page, create a password for the MDS and BIPLATFORM database schema.

       This screen shows during upgrades if you deleted or set `OPTIONVALUE=true` for the record in the `COREDB.DB_OPTIONS` table containing `MODULENAME=obieeRcu`.

    b. On the RCU File Locations - SQL Server page, enter the path to the folder for the Repository Creation Utility database and log file.

    c. On the Get SQL Server Aggregation tokens page, enter the path to the folder for storing the aggregation database and the database log file.
12. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.

Verifying the Database Installation

1. Verify that there is a `versionnum` entry for the Enterprise Back Office database version to which you upgraded in the following databases:
   - AGGREGATE_DB.AGG_VERSION_DB
   - BIREPOS.BIREPOS_VERSION_DB
   - CEDB.CE_VERSION_DB
   - COREDB.CORE_VERSION_DB
   - LOCATION_ACTIVITY_DB.VERSION_DB
   - PORTALDB.PORTAL_VERSION_DB
   - QUARTZ.QUARTZ_VERSION_DB
   - RTA.RTA_VERSION_DB
2. Check the following logs for errors and exceptions:
   - *root*\temp\DBinstaller.log
   - *root*\temp\Logs\eBusiness_DatabaseUpgrade_Install_*dateandtime*.log

Installing Oracle Business Intelligence and Analysis Aggregation on Server 2

This chapter describes the instructions and verification steps for installing Oracle Business Intelligence on Server 2:

- Installing the Oracle Business Intelligence Server for Oracle MICROS Simphony
- Verifying the Oracle Business Intelligence Server Installation

Installing the Oracle Business Intelligence Server for Oracle MICROS Simphony

1. Extract the following from the installation file archive in the same file structure to the Oracle Business Intelligence server. Do not extract the files to a folder structure that contains spaces.

   `/OBIEE/`

   `/OBIEEPatch/`

   `/Weblogic/`

   `Install_`*`version`*`.exe`

2. Double-click `Install_`*`version`*`.exe` to launch the installation wizard.
3. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
4. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
   c. For **Will iCare be used with this installation?**, select **No**.
   d. For **Will Simphony be used with this installation?**, select **Yes**.
   e. For **Will myInventory be used with this installation?**, select **No**.
   f. For **Will myLabor be used with this installation?**, select **Yes**.
   g. For **Will the weather service be used with this installation?**, select **No**.
5. On the Use existing Portal configuration page, make your selection based on your installation:
   a. If you are performing a new installation or you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
6. On the Choose Install Set page, select **OBIEE** and **Analysis Aggregation**.
7. On the Check if Cluster Environment page, select **No**.
8. On the WebLogic Info - Obiee Box page, configure the application server settings:

Table 4-1 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number..
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the Oracle Business Intelligence server, typically 7001.
BI Server Port	Enter the port used by Oracle Business Intelligence, typically 9704.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

9. On the OBIEE Installation page, configure the connection to the OBIEE database and Repository Creation Utility (RCU) schemas:

Table 4-2 Oracle Business Intelligence Enterprise Edition Database Information

Field	Description
RCU Database Location	Enter the hostname of the Enterprise Back Office database containing the RCU installation.
SQL Server or Oracle	Select the database type.
Port and Database Service Name	Enter the port used by the database, and any additional connection parameters as necessary.
BIPLATFORM Schema Password	Enter the schema password you created for the RCU during database installation.
MDS Schema Password	Enter the schema password you created for the RCU during database installation.

10. On the Published URL - OBIEE page, enter the published site URL. What are Published Site URLs? contains more information.
11. On the OBIEE Repository page, create a password for OBIEE RPD files. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
12. On the SSL page, select **Yes** to enable SSL/Transport Layer Security.
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *folder_path/file_name.extension*

c. Verify the certificate information, and then click **Next**.

13. On the Database Information page, configure the connection to the Reporting and Analytics database:

Table 4-3 Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

14. On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Table 4-4 Repository Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

15. On the OBI Database Information page, enter the password to the Oracle Business Intelligence (OBI) database.

16. On the Aggregation DB information for Obiee Repository page, configure the aggregation server to use with the Oracle Business Intelligence Enterprise Edition (OBIEE) repository:

Table 4-5 Aggregation Database Information

Oracle Database	Microsoft SQL Server
a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter the database SID in **Aggregate_DB Service name**.	a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter additional connection parameters.

17. On the Aggregation Database connection Information page, configure the connection to the Enterprise Back Office, Gift and Loyalty, and Aggregate_DB databases:
    a. Select **Enable Monitor**.
    b. Select **Oracle** or **Sql Server** depending on the Enterprise Back Office database type.
    c. Enter the database SID and server port for the Core database and the Aggregate_DB database.
    d. Enter the hostname for the Core database and the Aggregate_DB database.
    e. Enter the hostname, additional connection properties, and the server port for the Gift and Loyalty database.
    f. Enter login credentials to the Core and Aggregate_DB databases, typically the `AGG` user created during database install.
    g. Enter login credentials to the Gift and Loyalty database, typically the `MMSQL` user created during database install.
18. On the Is this an OLAP Portal Instance page, select **DUAL**.
19. On the OLAP *Database Type* Database Information page, configure the OLAP database connection as described in the following table:

Table 4-6 Online Analytical Processing Database Connection

Field	Description
OLAP Login and OLAP Password	Enter the login credentials for the OLAP database.
OLAP Server name or IP	Enter the hostname of the OLAP database.
OLAP DatabasePort	Enter the OLAP database server port.
OLAP DB Service Name	Enter the SID for the OLAP database.

20. On the Portal Mail Server page, enter the Simple Mail Transfer Protocol (SMTP) hostname and port of the server that will host the IceWarp Mail Server, and then enter the mail domain, such as `example.com`.

    The Mail Server is typically installed on the Reporting and Analytics application server.
21. On the Location of Master Server page, enter the hostname of the Master Server.
22. On the Mail Users page, configure the accounts used by Enterprise Back Office:

a. In the **Mail account jobs will be sent to by the client stores** field, enter the email account that the Master Server uses to receive `resultSets` data and deploy jobs.

b. In the **Email account that will receive errors** field, enter the email account to which the Point-of-Sales stores forward error messages.

23. On the myLabor Configuration for Portal page, you can change the port number used for non-secure connections and SSL connections. Do not change the syntax.
    a. **Non secure port for myLabor**: `-Dhttp.browser.port=`*`port`*
    b. **SSL port for myLabor**: `-Dhttp.sslaccel.port=`*`port`*
24. On the Simphony Configuration for Portal page:
    a. Select the type of database used by Simphony, and then enter the database SID and port.
    b. Enter the name or IP of the Simphony database server, and then enter any additional connection strings.
25. Configure Reporting and Analytics:
    a. On the Portal Specific Settings page, configure Reporting and Analytics as described in the following table:

Table 4-7 Reporting and Analytics Configurations

Field	Description
Names of all Portal Application Servers	Enter the hostnames of all Reporting and Analytics web application servers in a comma-separated list.
Administrator e-mail address	Enter the email address, without the domain, of the administrator account.
What email user will the Portal use to send mail?	Enter the email address, without the domain, that the Portal uses to send mail.
What is the password for the email user?	Enter the password for the portal email user.
Use HTTPS protocol for portal?	Select whether the web application uses the HTTPS protocol. This option requires a Secure Socket Layer (SSL) connection and should typically only be selected when the installation environment has an SSL accelerator.
Password for Messaging Queue	Enter the login credentials for the messaging queue. This field does not show when performing an upgrade.
Username and Password for utility user	Enter the login credentials for the UTIL account created during database installation.
Username and Password for CE user	Enter the login credentials for the CEDB account created during database installation.
New Line Style for Portal CSV display	Select whether to use Windows, Unicode, or HTML line styling when using the CSV export while viewing a report.

    b. On the Portal Specific Settings - Purge page, select whether Reporting and Analytics uses thread pooling to purge threads, and then configure the purge parameters.

c. On the Portal Specific Settings - Aggregation and Adjustment Service page, enter the hostname of the server that will host the Adjustment and Aggregation Service in the **Adjustment Server Name** field.

26. Configure Info Delivery:

a. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.

b. On the Portal/InfoDelivery Settings - Font page, configure the Report Mail font settings as described in the following table:

Table 4-8 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using custom fonts when rendering PDFs.
Path to user font	Enter the path to a font, or click **Choose** and navigate to a font, to set the font used when rendering PDFs.
Limit detail query days	Enter a date limit for executing audit/ analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/ analysis summary queries. The Organization configuration can override this setting.
New Line Style for InfoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

27. On the Confirm Datasource Name page, enter the OLAP database name in the **OLAPDS database name** field. By default, this field uses `AGGREGATE_DB`.

28. On the Review page, select your preferred review type:

- **Normal**: Review the install folder, features, and disk space requirements.
- **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.

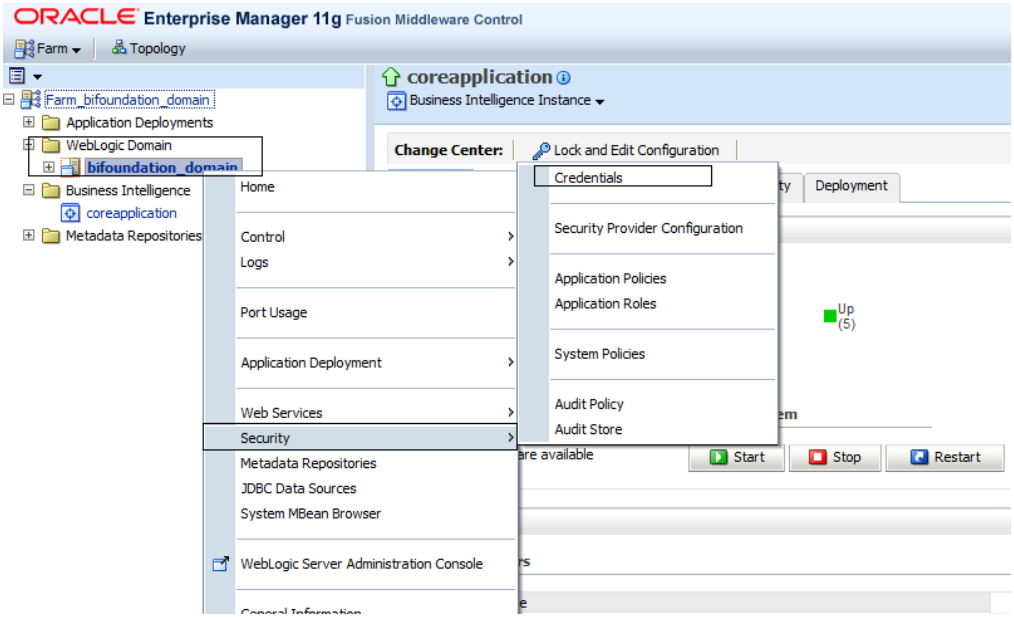
29. Review the Pre-Installation Summary, and then click **Install**.

30. If you are performing a fresh installation on the 64-bit version of Microsoft Windows Server 2012, the installation wizard shows the `Oracle Business Intelligence has stopped working` error while the Oracle Universal Installer is copying files. This error is caused by a known issue with the Oracle Business Intelligence installation. Click **Close the program** to ignore the message and continue installation.

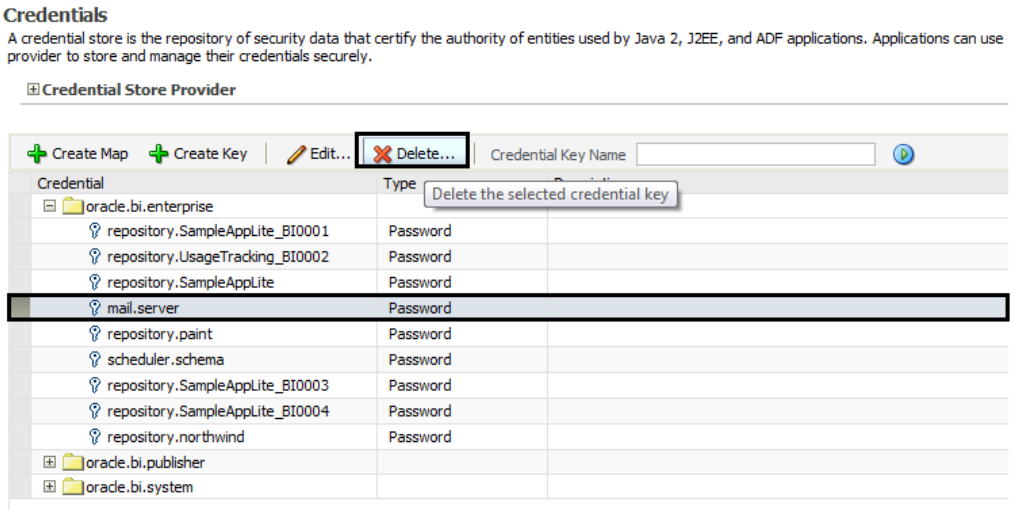
31. To set up Report Mail for OBIEE:

a. Log in to Enterprise Manager and expand the `WebLogic Domain` folder.

b. Right-click **bifoundation_domain**, select **Security**, and then select **Credentials**.



c. Expand the `oracle.bi.enterprise` folder, select `mail.server`, and then click **Delete**.



d. Click **Deployment** and then click **Mail**. Confirm that the **Username** and **Password** fields are blank.

e. Restart the services.

Verifying the Oracle Business Intelligence Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
   - *root*`\temp\MM_Log.log`
   - *root*`\temp\MMInstaller.log`

- *root*\myMicros\Uninstall_myMicros\myMicros_Install_*datetime*.log

2. Check the Oracle Business Intelligence log in *root*\Program Files\Oracle\Inventory\logs\ for error messages.
3. Perform the following checks in the Oracle WebLogic console:
   a. In a web browser, navigate to *OBI server hostname*:7001/console and log in using the WebLogic administrator account credentials created during the installation.
   b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **AdminServer (admin)** and **Bi_server1** as **Running**.
   c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that all components are set as **Active** except for the **portal**.
4. Verify the following Microsoft Windows services are running:
   - **beascv bifoundation_domain_AdminServer**
   - **beasvc bifoundation_domain_bi_server1**
   - **Oracle Process Manager (ORCLRNA)**
   - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**
5. Use opmnctl to verify that all components are set as Alive:
   a. In a command prompt, navigate to *root*\myMicros\Oracle\Middleware\instances\ORCLRNA\bin\
   b. Enter opmnctl status
   c. Verify that the components are set as Alive.

Figure 4-2 Two-Server OBIEE opmnctl Status

Installing Reporting and Analytics and Components on Server 1

This chapter describes the instructions and verification steps for installing Reporting and Analytics on Server 1:

- Installing the Reporting and Analytics Components for Oracle MICROS Simphony
- Verifying the Reporting and Analytics Application Server Installation

Installing the Reporting and Analytics Components for Oracle MICROS Simphony

1. Extract the following from the installation file archive in the same file structure to the Reporting and Analytics application server. Do not extract the files to a folder structure that contains spaces.

   `/Weblogic/`

   `Install_version.exe`

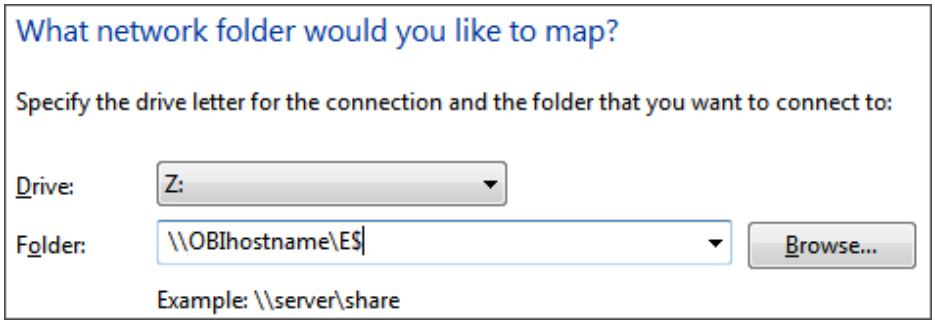
2. Double-click `Install_version.exe` to launch the installation wizard.
3. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
4. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
   c. For **Will iCare be used with this installation?**, select **No**.
   d. For **Will Simphony be used with this installation?**, select **Yes**.
   e. For **Will myInventory be used with this installation?**, select **No**.
   f. For **Will myLabor be used with this installation?**, select **Yes**.
   g. For **Will the weather service be used with this installation?**, select **No**.
5. On the Use existing Portal configuration page, make your selection based on your installation:
   a. If you are performing a new installation or you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
6. On the Choose Install Set page, select **Portal**, **Aggregation and Adjustment Service**, **infoDelivery**, **Admin Server**, , and **Simphony Mobile Aggregation**.
7. On the Check if Cluster Environment page, select **No**.
8. On the WebLogic Info page, configure the application server settings:

Table 4-9 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the Oracle Business Intelligence server, typically 7001.
App Server Host Name	Enter the hostname of the Reporting and Analytics WebLogic application server.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

9. On the Published URL page, enter the published site URL. What are Published Site URLs? contains more information..
10. On the Map Drive page:
    a. Create a mapped network drive to the drive containing the `myMicros` folder on the OBI server. For example, if you installed OBI on the `E:` drive, you can create the mapped drive `Z:\` and enter the path as shown in the following image:

Figure 4-3 Mapped Network Drive to OBI Server



    b. Enter the mapped drive root and the path to the `myMicros` installation folder. For example, `Z:\myMicros\`
11. On the SSL page, select **Yes** to enable SSL/Transport Layer Security, and then click **Next**
    a. On the Certificate Configuration - Portal page, enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

    Make sure the filepath includes the following components: *`folder_path/file_name.extension`*

c. Verify the certificate information, and then click **Next**.

12. On the Database Information page, configure the connection to the Reporting and Analytics database:

Table 4-10 Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

13. On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Table 4-11 Repository Database Information

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SIDe. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	a. In the Database Type section, select **SQL Server**, and then enter the database network port and SID. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

14. On the InfoDelivery Configuration page, enter the CEDB user credentials.
15. On the Posting/Admin Database Information page, enter the hostname of the Admin Server.
16. On the InfoDelivery Mail Server page, enter the hostname of the IceWarp Mail Server or enter the hostname for the separate InfoDelivery server, and then enter the SMTP port.
17. On the Simphony Configuration for Portal page:
    a. Select the type of database used by Simphony, and then enter the database SID and port.

b. Enter the name or IP of the Simphony database server, and then enter any additional connection strings.

18. On the Portal/InfoDelivery Settings - Font page, configure the Report Mail font settings as described in the following table:

Table 4-12 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using custom fonts when rendering PDFs.
Path to user font	Enter the path to a font, or click **Choose** and navigate to a font, to set the font used when rendering PDFs.
Limit detail query days	Enter a date limit for executing audit/ analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/ analysis summary queries. The Organization configuration can override this setting.
New Line Style for InfoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

19. On the Admin Server Configuration page:

a. Enter the credentials for the Admin Server to access the database server.

b. Enter the CEDB user credentials.

20. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.

21. On the InfoDelivery page, leave the **Pentaho Solutions Directory** blank.

22. On the Admin Server Configuration page, configure the Admin Server as described in the following table:

Table 4-13 Admin Server Configurations

Field	Description
Trailer to send in alerts from Admin Server	Enter trailer text in the four fields provided.
Email account to send alerts from	Enter the email name, without the domain, that the Admin Server uses to send alerts.
Number of hours before a location is considered out of contact	Enter the maximum number of hours before the Admin Server flags an unresponsive location.

Table 4-13 (Cont.) Admin Server Configurations

Field	Description
Email addresses to send long alert messages to	Enter the email name, without the domain, to which the Admin Server sends long alert messages. You can separate multiple addresses with a comma.
Email addresses to send short alert messages to	Enter the email name, without the domain, to which the Admin Server sends short alert messages. You can separate multiple addresses with a comma.
Email addresses to send copies of org alerts to	Enter the email name, without the domain, to which the Admin Server sends a copy of all alerts.
Folder containing custom packages for Admin Server	Enter a folder path containing custom packages.

23. On the Simphony Mobile Aggregation page:
    a. Enter the number of **Aggregation Threads**.
    b. Enter the credentials for the Portal DB user, the Core DB user, the Location Activity DB user, and the RTA DB user.
24. On the Aggregation and Adjustment Configuration page, configure the database connection to the Aggregation and Adjustment service as described in the following table:

Table 4-14 Aggregation and Adjustment Service Login

Field	Description
Core database login and Core database password	Enter the core database login credentials.
RTA database login and RTA database password	Enter the RTA database login credentials.
Portal database login and Portal database password	Enter the Enterprise Back Office database login credentials.
Location Activity database login and Location Activity database password	Enter the location activity database login credentials.
Name for Analysis/Aggregation Instance	Enter a unique name for this instance of the analysis/aggregation service. The service inserts the name into the database to denote which service processed a job.
Connection Cache Type	Select a connection cache type from the drop-down list.

25. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
26. Review the Pre-Installation Summary, and then click **Install**.

Verifying the Reporting and Analytics Application Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
   - *root*`\temp\MM_Log.log`
   - *root*`\temp\MMInstaller.log`
   - *root*`\myMicros\Uninstall_myMicros\Logs\myMicros_Install_`*datetime*`.log`
2. Perform the following checks in the Oracle WebLogic console:
   a. In a web browser, navigate to *`OBI server hostname`*`:7001/console` and log in using the WebLogic administrator account credentials created during the installation.
   b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **appServ1** as **Running**.

      The status may be set to **Starting** if you check the WebLogic console immediately after completing installation. Verify that the status changes to **Running**.
   c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that the **portal** component is set to **Active**.
   d. In the Domain Structure, click **bifoundation_domain**, click **Security Realms**, and then in the menu, click **myrealm**, click **Providers**, click **Credential Mapping**, click **saml2CMP**, and then click **Management**. Verify that **obiee** is listed.
3. Verify the following Microsoft Windows services are running:
   - **beasvc bifoundation_domain_appServ1**
   - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**

Setting Up Enterprise Back Office and Simphony

After installing Enterprise Back Office and Simphony, you must perform the following tasks to set up Enterprise Back Office before you can begin configuring the organization in Simphony:

1. In Reporting and Analytics:
   a. Set up the super organization.
   b. Create the Simphony organization.
   c. Import settings from the Simphony organization template.
   d. Configuring Organizations for Remote Transfer Agent.
2. In the Simphony EMC:
   a. Create locations for the organization.
   b. Creating reporting locations for the organization.
   c. Create users and roles.

3. Creating Locations for Remote Transfer Agent
4. Enabling Simphony-Specific Reports

Setting Up the Super Organization

1. Navigate to Reporting and Analytics, and then log in to the `M` organization with system administrator credentials.
2. Click **Admin**, click **System**, click **Organizations**, click **Organizations**, click **MICROS**, and then click **Edit**.
3. To enable the Oracle Business Intelligence server connection, enter the Oracle WebLogic administrator credentials for **WLST** and **SOAP**.
4. Configure the Simphony database credentials:
   a. Enter the **Simphony DB Password**.
   b. If the database supports a single Simphony organization, enter the **Simphony DB User Name**.
   c. If the database supports Simphony multi-tenancy and uses Oracle Database server, leave the Simphony DB User Name field empty, and then enter a **Simphony DB Username Suffix** as an identifier for organization-specific databases.
5. You can click **Save**, log out, log back in to Reporting and Analytics, and then verify that Analysis Reports and Dashboards load the OBI interface.

Creating a Simphony Organization

1. Log in to the `M` organization with system administrator credentials.
2. In Reporting and Analytics, click **Admin**, click **System**, click **Organizations**, click **Organizations**, and then click **Add**.
3. Configure basic organization information:
   a. Enter the **Name** of the organization and a **Short Name** consisting of three alphabetical characters. Both names must not already be used, and the short name is used for logging into Reporting and Analytics.
   b. Select the Reporting and Analytics license type in **Organization Type**.
   c. To select a default market of operations, select **QSR** for quick-service restaurants, select **TSR** for table-service restaurants, and select **HTL** for hotel operations in **Market Segment**.
   d. Enter the number of months that Enterprise Back Office retains data in **Retention Months**.
   e. Select a purge configuration in **Purge Level** for data maintenance.
4. Configure the default password policy:
   a. Select how user accounts can be unlocked after Enterprise Back Office locks an account for multiple login failures in **Lockout Policy**.
   b. Enter the number of login failures allowed by Enterprise Back Office before the account is locked in **Max Login Attempts**.
   c. Enter the number of minutes that a user can be inactive in Enterprise Back Office before their login session is closed in **Allowed Idle Period**.

d. Enter the number of days before requiring a user to change their password in **Password Expiration Period**.

5. Configure the regional settings for the organization:
   a. Select the default **Language** for locations.
   b. Select the day that the calendar week begins in **Start of Week**.
   c. Select **Enable Common Currency** to enable the designating a default currency. You can select a default currency in **Common Currency** after configuring currencies in Reporting and Analytics.
   d. To enable VAT taxes, enter `VATFlag=1` in **Other Options**. Separate entries in the field with new lines.
   e. Enter the international vehicle registration code, separated by spaces, for the countries in which the organization operates in **Reseller**.
6. Configure reports:
   a. Enter a date range limit for detail queries and summary queries in **Detail Query Day Limit** and **Summary Query Day Limit** for Ad Hoc and Interactive reports..
   b. Select **Mask SSN on Report** to hide social security numbers, and select **Do not post SSN as Payroll ID** to avoid social security numbers in payroll reports.
   c. Select whether the organization includes taxes in Net Sales calculations in **Tax Type**.
   d. Enter the maximum number of months that a user can select when running a report in **Calendar Selection Limit**.
   e. Select **Report by Market Segment** to organize data in reports by market segment.
7. Enable or disable Enterprise Back Office components:
   a. Select **Enable Customer Info** to enable Gift and Loyalty.
   b. Select **Enable iCare OLTP** to enable Gift and Loyalty Online Transaction Processing.
   c. Select **Enable CRM Database** to enable the Gift and Loyalty Customer Relationship Management database.
   d. Select **Enable Inventory** to enable Inventory Management.
   e. Select **Enable Enterprise Labor** to enable Labor Management.
   f. Select **Enable Labor Messaging** to enable the Labor Management messaging queue.
   g. Select **Enable Extended Labor** to enable extended Labor Management functionality.
8. Click **Save**.

Importing the Simphony Organization Template

1. In Reporting and Analytics, click **Admin**, click **System**, click **Organizations**, and then click **Copy Organization Shell**.

2. Select **Simphony 2x Template Org** from **Source Organization Name**.
3. Select your organization from **Destination Organization Name**. The drop-down list does not show organizations that have already imported configurations from a template.
4. Create and confirm a password for the `sys admin` user in the new organization.
5. Click **Copy**.

Initializing the Organization in the Database

1. Log in to the DOWNLOAD organization in Reporting and Analytics.
2. Click **Admin**, click **.Connect Admin**, click **System information**, and then click **Organizations**.
3. Click **Add**, or select an organization and then click **Edit**.
4. Select your Reporting and Analytics **Organization**.
5. Enter the organization short name in **Alpha3Code**.
6. Click **OK**, and then click **Save**.

Creating and Adding Locations

Creating and adding locations to the organization in Enterprise Back Office consists of creating the locations in the Reporting Hierarchy, and then setting up the database and mail server address for each location in the DOWNLOAD organization.

1. Log in your organization in Reporting and Analytics.
2. Click **Admin**, click **Portal**, click **Organizational Structure**, and then click **Locations**.
3. For each location that you want to create, click **Add**, and then fill out the location configuration form.
    a. In the **Name** field, type a unique name for the location.

       For example, type `Columbia` for a restaurant location in Columbia, Maryland.

    b. In the **Location Reference** field, type a value to indicate the location position within the organizational hierarchy.

       You can use a number to indicate the position. For example, if the location is the fourth location in a district level, you can use a value of `4`. You can also use text to indicate the position. For example, you can use `East` for a location on the Eastern side of a district level.

    c. Select the **Master Group** to which the location belongs.
4. After creating the necessary locations, log out of Reporting and Analytics.
5. Log in to the DOWNLOAD organization in Reporting and Analytics.
6. Click **.Connect Admin**, click **Location Information**, and then click **Locations**.
7. For each location, click **Add Restaurant**, and then fill out the form:
    a. Select the organization from the **Organization** drop-down list.
    b. Select the Reporting and Analytics counterpart for the location from the **Locations** drop-down list.
    c. Select the Point-of-Sale application from the **System** drop-down list.

d. If applicable, enter the order or subscription number in the **External Reference** field.

e. Leave the **Restaurant ID** and **Password** fields empty. The Remote Transfer Agent generates an ID and password for the location, and then creates a mailbox in the mail server using the generated credentials.

   If you return to this form and change the password, the Remote Transfer Agent does not propagate the change to the mail server. You must update the password in the mail server, or the store download fails.

f. As a reference, you can enter the date that you created the location and the date that you set the location to inactive.

g. Do not select **Beta Code**.

h. Do not select **Beta Script**.

Enabling Simphony-Specific Reports

To use reports specific to Oracle MICROS Simphony, you must assign the reports to roles in the Reporting and Analytics Warehouse configurations.

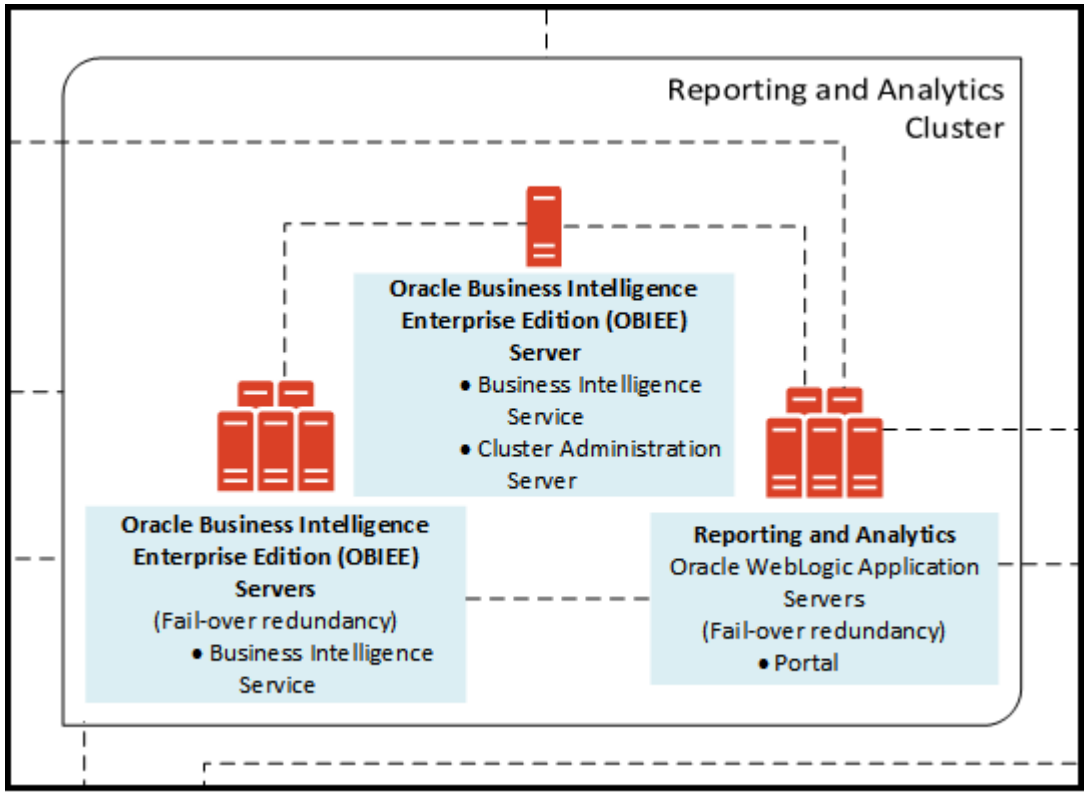
1. In Reporting and Analytics, click **Admin**, click **Warehouse**, click **Reports**, and then click **Report Roles**.
2. Select the role to which you want to assign Simphony reports, click **Select**, and then click **Add**.
3. Find and select the report you want to assign, and then click **Save**.

5

Enterprise Back Office on a Server Cluster

Enterprise Back Office can be installed in a server cluster, with dedicated servers for certain high-load applications and services. This deployment scenario includes a Reporting and Analytics server cluster that consists of at least one Oracle MICROS Reporting and Analytics installation running on an Oracle WebLogic application server. The following diagram shows a high-level overview of the components of the Reporting and Analytics cluster, and the network connections that you must configure when performing installation:

Figure 5-1 Reporting and Analytics in a Server Cluster



Install the servers and components in the following order. Make sure each set of instructions is complete before moving to the next server. You must complete the primary OBIEE server installation, and then complete the primary Reporting and Analytics application server installation. You cannot install additional OBIEE and Reporting and Analytics application servers before both primary servers are ready.

Before starting installation, review related documentation and prepare your environment and servers.

1. Install the Enterprise Back Office database depending on your database type:

- Installing Enterprise Back Office on Oracle Database
- Installing Enterprise Back Office on Microsoft SQL Server

2. Installing the Primary Oracle Business Intelligence Server
3. Installing the Primary Reporting and Analytics Application Server
4. Installing a Non-Primary Oracle Business Intelligence Server
5. Installing Non-Primary Reporting and Analytics Application Servers

Before You Begin

1. Review the *Oracle MICROS Enterprise Back Office Server Sizing Guide* for the latest hardware specifications and recommendations. Determine the hardware requirements for your projected data and user load, and then map what applications and components can be comfortably hosted on each server in your deployment environment.
2. Review the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.
3. Review the *Oracle MICROS Enterprise Back Office Security Guide* and, if you are installing Inventory Management, the *Oracle MICROS Inventory Management Security Guide* for detailed explanations regarding securing your system during and after installation.
4. Make sure the IceWarp Mail Server is set up and accessible on the network.
5. For each server in the environment, make sure that:
   a. Make sure the operating system accepts filenames and file paths longer than 260 characters.
   b. Make sure you can ping all network adapters from other machines. Disconnect adapters that you cannot ping.
   c. Synchronize the servers to the same time.
   d. Install the required Java (Java Development Kit or Java Runtime Environment) version in a folder path that does not contain spaces, and then set the *JAVA_HOME* system environment variable to the correct folder path.

      For example, do not install Java in the default `Program Files` path.
   e. Verify that the 7001, 9704, and 9556 ports are not being used.
   f. Obtain a Secure Socket Layer (SSL) certificate.
   g. Set up or identify the published site URLs for the server to host Oracle Business Intelligence Enterprise Edition and the server to host the Reporting and Analytics web application. What are Published Site URLs? contains more information.
   h. Disable tunnel adapters. Disabling Tunnel Adapters contains information and instructions for checking for and disabling the adapter.
6. For each server that will be running the installation wizard, make sure to free at least 65GB of storage in addition to the server hardware requirements for the installation files and for temporary files created by the installation wizard.
7. If you are performing an upgrade instead of a fresh installation, What do I do when Upgrading? contains a summary of upgrade information and instructions.

Installing Enterprise Back Office on Oracle Database

This chapter describes the prerequisites, instructions, and verification steps for installing the Enterprise Back Office databases on Oracle Database:

- Enterprise Back Office Database Configurations
- Installing the Enterprise Back Office Database
- Verifying the Database Installation

Enterprise Back Office Database Configurations

Oracle MICROS recommends setting the following Oracle Database configurations when creating the database instance and before running an Enterprise Back Office product installer. While some configurations can be changed after the installation, preparing the database instance prior to schema installation can prevent unexpected errors and problems.

Oracle Database Configuration for Enterprise Back Office Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for Enterprise Back Office:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>MM`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PMM`

db_block_size	16384
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.

Oracle Database Tablespaces for Enterprise Back Office Database

Make sure to create the following tablespaces in the Enterprise Back Office database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- COREDB
- PORTALDB
- LOCDB
- LOC_INDX
- RTA
- PENTAHO or SMALLFILE
- CEDB
- SAML_INDX
- ORCLRNA_BIPLATFORM
- ORCLRNA_MDS
- TEMP

Oracle Database Configuration for Enterprise Back Office Aggregation Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for the Aggregation database:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>AGG`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PAGG`

db_block_size	8192
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.

Parameter	Recommended Value
deferred_segment_creation	TRUE
_index_partition_large_extents	FALSE
_partition_large_extents	FALSE

Oracle Database Tablespaces for Enterprise Back Office Aggregation Database

Make sure to create the following tablespaces in the Enterprise Back Office Aggregation database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- AGGREGATE_DB
- AGGREGATE_INDX
- TEMP

Installing the Enterprise Back Office Database

1. Make sure Oracle Database is installed and running. If Oracle Database contains a previous deployment of Oracle Business Intelligence, or if the database installation previously failed or was interrupted, follow the instructions in Uninstalling Oracle Business Intelligence Schemas from Oracle Database.
2. Extract the following from the installation file archive in the same file structure. Do not extract the files to a folder structure that contains spaces.

   `/RCU/`

   `DBInstall.exe`
3. Double-click `DBInstall.exe` to launch the database installation wizard.
4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Oracle Database server with no Reporting and Analytics objects.
5. On the Choose Install Set page, select **myMicros**.
6. On the MyMicros Database Information page:
   a. To set up the Enterprise Back Office database, select **Oracle**, enter the network port used by the database server, and then enter the database SID in **Database SID**. By default, Oracle Database uses port 1521.
   b. Fill out the rest of the form. For new installations, the form allows you to create passwords for the database users. For upgrades, you must enter the existing passwords.
7. On the Oracle Agg DB Config page, set up the Enterprise Back Office aggregation database:
   a. Enter the hostname, port, and SID of the aggregation database server.
   b. For new installations, create a password for the aggregation database. For upgrades, enter the existing aggregation database password.
8. For new installations:

a. On the Additional Users page, create passwords for the database users.

b. On the Sys Admin Password page, create a password for the **sys admin** account for the `M` super organization.

c. On the Tablespace Locations page, enter the path to the folder for storing the database tablespace files.

d. On the Tablespace location - SAML page, enter the path to the folder for storing the SAML database tablespace file.

   If you are upgrading the database, the installation wizard does not show this page if you did not perform the `versionnum` prerequisite.

9. On the MyMicros Database Information - Master page, enter the database administrator (DBA) login credentials for the Enterprise Back Office database.
10. On the MyMicros Database Information - Aggregation Master page, enter the database administrator (DBA) login credentials for the aggregation database.
11. For new installations:

    a. On the Get 6.2 Oracle Tokens page, create a password for an Online Analytical Processing (OLAP) user account.

    b. On the Repository Creation Utility page, create a password for the MDS and BIPLATFORM database schema.

       This screen shows during upgrades if you deleted or set `OPTIONVALUE=true` for the record in the `CORE_OPTIONS` table containing `MODULENAME=obieeRcu`.

    c. On the Aggregation Users page, create passwords for the Aggregate_DB users.

       If you are installing the Aggregate_DB schema with the Enterprise Back Office database, enter the same password for the **SA**, **RPT**, and **UTIL** users.

    d. On the Get Oracle Aggregation tokens page, enter the path to the folder for storing the aggregation database tablespace and the aggregation database index tablespace.

12. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.
13. After installation completes, increase the `OPEN_CURSORS` parameter for Oracle Database to at least 30,000.

Verifying the Database Installation

1. Verify that there is a `versionnum` entry for the Enterprise Back Office database version to which you upgraded in the following databases:
   - AGGREGATE_DB.AGG_VERSION_DB
   - BIREPOS.BIREPOS_VERSION_DB
   - CEDB.CE_VERSION_DB
   - COREDB.CORE_VERSION_DB
   - LOCATION_ACTIVITY_DB.VERSION_DB
   - PORTALDB.PORTAL_VERSION_DB

- QUARTZ.QUARTZ_VERSION_DB
- RTA.RTA_VERSION_DB

2. Check the following logs for errors and exceptions:
   - *root*\temp\DBinstaller.log
   - *root*\temp\Logs\eBusiness_DatabaseUpgrade_Install_*dateandtime*.log

Installing Enterprise Back Office on Microsoft SQL Server

This chapter describes the prerequisites, instructions, and verification steps for installing the Enterprise Back Office databases on Microsoft SQL Server:

- Installing the Enterprise Back Office Database
- Verifying the Database Installation

Installing the Enterprise Back Office Database

1. Make sure Microsoft SQL Server is installed and running. If Microsoft SQL Server contains a previous deployment of Oracle Business Intelligence, or if the database installation previously failed or was interrupted, follow the instructions in Uninstalling Oracle Business Intelligence Schemas from Microsoft SQL Server.
2. Extract the following from the installation file archive in the same file structure. Do not extract the files to a folder structure that contains spaces.

   /RCU/

   DBInstall.exe
3. Double-click DBInstall.exe to launch the database installation wizard.
4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Microsoft SQL Server with no Reporting and Analytics objects.
5. On the Choose Install Set page, select **myMicros**.
6. On the MyMicros Database Information page:
   a. To set up the Enterprise Back Office database, select **SQL Server**, enter the network port used by the database server. By default, the Microsoft SQL Server uses port 1433.
   b. Fill out the rest of the form. For new installations, the form allows you to create passwords for the database users. For upgrades, enter the login credentials to the existing Microsoft SQL database server in the **Upgrade** login and password fields, and then enter the existing database passwords.
7. On the SQL Agg DB Config page, set up the Enterprise Back Office aggregation database:
   a. Enter the hostname and port of the aggregation database server.
   b. If you are performing an upgrade, in the **Upgrade Login** and **Upgrade Password** fields, enter the login credentials to the existing Microsoft SQL database server.

c. In the **Additional Connection Parameters** field, enter any required connection strings.

8. For new installations:

   a. On the Sys Admin Password page, create a password for the **sys admin** account for the `M` super organization.

   b. On the Tablespace Locations page, enter the path to the folder for storing the database tablespace files.

   c. On the Tablespace location - SAML page, enter the path to the folder for storing the SAML database tablespace file.

      If you are upgrading the database, the installation wizard does not show this page if you did not perform the `versionnum` prerequisite.

9. On the MyMicros Database Information - Master page, enter the database administrator (DBA) login credentials for the Reporting and Analytics database.

10. On the MyMicros Database Information - Aggregation Master page, enter the database administrator (DBA) login credentials for the aggregation database.

11. For new installations:

    a. On the Repository Creation Utility page, create a password for the MDS and BIPLATFORM database schema.

       This screen shows during upgrades if you deleted or set `OPTIONVALUE=true` for the record in the `COREDB.DB_OPTIONS` table containing `MODULENAME=obieeRcu`.

    b. On the RCU File Locations - SQL Server page, enter the path to the folder for the Repository Creation Utility database and log file.

    c. On the Get SQL Server Aggregation tokens page, enter the path to the folder for storing the aggregation database and the database log file.

12. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.

Verifying the Database Installation

1. Verify that there is a `versionnum` entry for the Enterprise Back Office database version to which you upgraded in the following databases:

   - AGGREGATE_DB.AGG_VERSION_DB
   - BIREPOS.BIREPOS_VERSION_DB
   - CEDB.CE_VERSION_DB
   - COREDB.CORE_VERSION_DB
   - LOCATION_ACTIVITY_DB.VERSION_DB
   - PORTALDB.PORTAL_VERSION_DB
   - QUARTZ.QUARTZ_VERSION_DB
   - RTA.RTA_VERSION_DB

2. Check the following logs for errors and exceptions:

   - *root*`\temp\DBinstaller.log`

- *root*\temp\Logs\eBusiness_DatabaseUpgrade_Install_*dateandtime*.log

Installing the Primary Oracle Business Intelligence Server

This chapter describes the prerequisites, instructions, and verification steps for installing the primary Oracle Business Intelligence Server:

- Installing Oracle Business Intelligence
- Verifying the Primary Oracle Business Intelligence Server Installation

Installing Oracle Business Intelligence

1. Set up a static IP address for the Oracle Business Intelligence server.
2. Allocate at least 50GB of storage space for the shared drive.
3. Extract the following from the installation file archive in the same file structure to the Oracle Business Intelligence server. Do not extract the files to a folder structure that contains spaces.

   /OBIEE/

   /OBIEEPatch/

   /Weblogic/

   Install_*version*.exe
4. Double-click Install_*version*.exe to launch the installation wizard.
5. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
6. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
7. On the Use existing Portal configuration page:
   a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
8. On the Choose Install Set page, select **OBIEE**.
9. On the Check if Cluster Environment page, select **Yes**.

10. On the Check if Primary Node page, select **Yes**.
11. On the WebLogic Info - Single Box page, configure the application server settings:

Table 5-1 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the primary Oracle Business Intelligence server, typically 7001.
BI Server Port	Enter the port used by Oracle Business Intelligence, typically 9704.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

12. On the OBIEE Installation page, configure the connection to the OBIEE database and RCU schemas:

Table 5-2 Oracle Business Intelligence Enterprise Edition Database Information

Field	Description
RCU Database Location	Enter the hostname of the Enterprise Back Office database containing the Repository Creation Utility installation.
SQL Server or Oracle	Select the database type.
Port and Database Service Name	Enter the network port used by the database, and any additional connection parameters as necessary.
BIPLATFORM Schema Password	Enter the schema password you created for the Repository Creation Utility (RCU) during database installation.
MDS Schema Password	Enter the schema password you created for the Repository Creation Utility (RCU) during database installation.

13. On the Published URL - OBIEE page, enter the published site URL. What are Published Site URLs? contains more information.
14. On the RPD Shared Drive Info page, click **Choose** and select the path to the shared network folder that will store RPD files.

    You must adhere to the Universal Naming Convention if you are manually entering the path: `\\StorageName_or_IP\shared_folder_path\`

15. On the OBIEE Instance page, you can change the name of the OBI instance being installed if you want to apply a naming convention.
16. On the OBIEE Repository page, create the password for the Oracle Business Intelligence Enterprise Edition (OBIEE) repository. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
17. On the SSL page, select **Yes** to enable SSL/Transport Layer Security.
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *`folder_path/file_name.extension`*
    c. Verify the certificate information, and then click **Next**.
18. On the Database Information page, configure the connection to the Reporting and Analytics database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

19. On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SIDe. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	a. In the Database Type section, select **SQL Server**, and then enter the database network port and SID. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

20. On the OBI Database Information page, enter the password to the Oracle Business Intelligence (OBI) database.
21. On the SAML DB Info page, create an administrator login credential to the Security Assertion Markup Language (SAML) database.
22. On the Aggregation DB information for Obiee Repository page, configure the aggregation server to use with the Oracle Business Intelligence Enterprise Edition (OBIEE) repository:

Oracle Database	Microsoft SQL Server
a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter the database service name in **Aggregate_DB Service name**.	a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter additional connection parameters.

23. On the Is this an OLAP Portal Instance page, select **DUAL**.
24. On the OLAP *Database Type* Database Information page, configure the OLAP database connection as described in the following table:

Table 5-3 Online Analytical Processing Database Connection

Field	Description
OLAP Login and OLAP Password	Enter the login credentials for the OLAP database.
OLAP Server name or IP	Enter the hostname of the OLAP database.
OLAP DatabasePort	Enter the OLAP database server port.
OLAP DB SID	Enter the SID for the OLAP database.

25. Set up the following connections:

Connection	Page	Information
IceWarp Mail Server	Portal Mail Server	Enter the Simple Mail Transfer Protocol (SMTP) hostname and port of the server that will host the IceWarp Mail Server, and then enter the mail domain, such as `example.com`.
InfoDelivery Service	InfoDelivery Mail Server	Enter the hostname of the IceWarp Mail Server, or enter the hostname for the separate InfoDelivery server. Enter the SMTP port.
RTA Master Server	Location of Master Server	Enter the hostname of the RTA Master Server.

26. On the Mail Users page, configure the accounts used by Enterprise Back Office:

a. In the **Mail account jobs will be sent to by the client stores** field, enter the email account that the Master Server uses to receive `resultSets` data and deploy jobs.

b. In the **Email account that will receive errors** field, enter the email account to which the Point-of-Sales stores forward error messages.

27. Configure Reporting and Analytics:

a. On the Portal Specific Settings page, configure Reporting and Analytics as described in the following table:

Table 5-4 Reporting and Analytics Configurations

Field	Description
Names of all Portal Application Servers	Enter the hostnames of all Reporting and Analytics web application servers in a comma-separated list.
Administrator e-mail address	Enter the email address, without the domain, of the administrator account.
What email user will the Portal use to send mail?	Enter the email address, without the domain, that the Portal uses to send mail.
What is the password for the email user?	Enter the password for the portal email user.
Use HTTPS protocol for portal?	Select whether the web application uses the HTTPS protocol. This option requires a Secure Socket Layer (SSL) connection and should typically only be selected when the installation environment has an SSL accelerator.
Password for Messaging Queue	Enter the login credentials for the messaging queue. This field does not show when performing an upgrade.
Username and Password for utility user	Enter the login credentials for the UTIL account created during database installation.
Username and Password for CE user	Enter the login credentials for accessing the Microsoft Windows Compact Edition database (CEDB).
New Line Style for Portal CSV display	Select whether to use Windows, Unicode, or HTML line styling when using the CSV export while viewing a report.

b. On the Portal Specific Settings - Purge page, select whether Reporting and Analytics uses thread pooling to purge threads, and then configure the purge parameters.

c. On the Portal Specific Settings - Aggregation and Adjustment Service page, enter the hostname of the server that will host the Adjustment and Aggregation Service in the **Adjustment Server Name** field.

28. Configure Info Delivery:

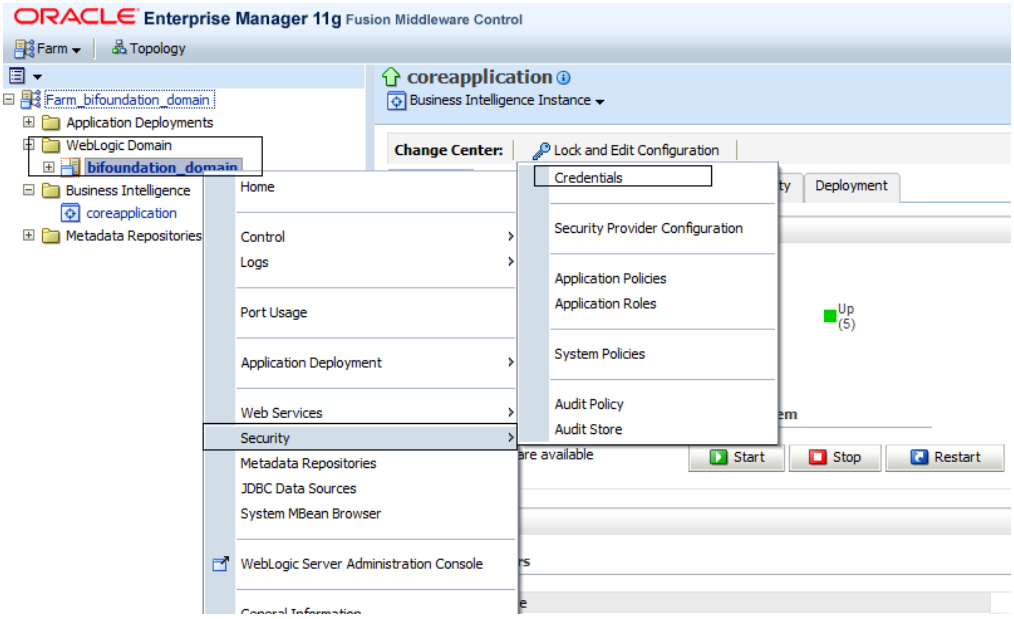
a. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.

b. On the Portal/InfoDelivery Settings - Font page, configure the Report Mail font settings as described in the following table:

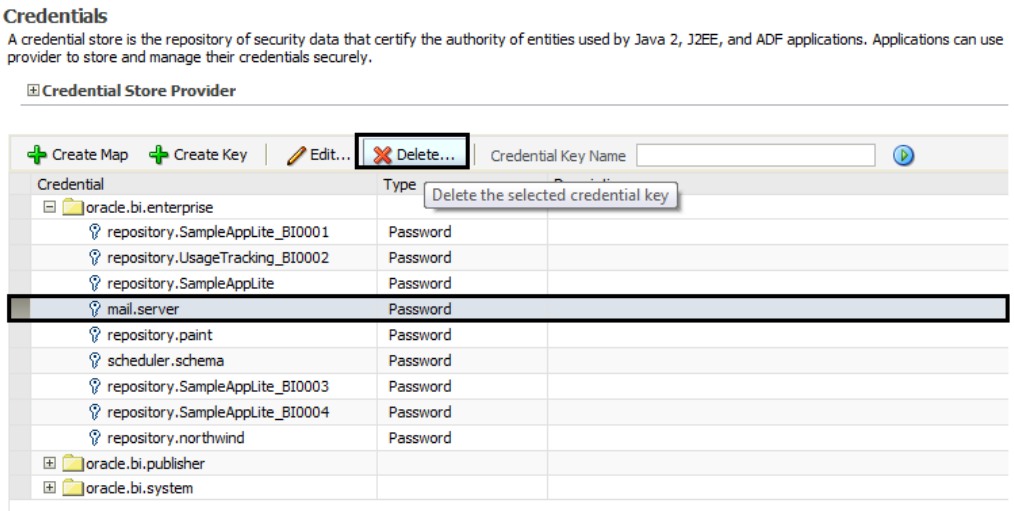
Table 5-5 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using custom fonts when rendering PDFs.
Path to user font	Enter the path to a font, or click **Choose** and navigate to a font, to set the font used when rendering PDFs.
Limit detail query days	Enter a date limit for executing audit/analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/analysis summary queries. The Organization configuration can override this setting.
New Line Style for InfoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

29. On the Confirm Datasource Name page, enter the OLAP database name in the **OLAPDS database name** field. By default, this field uses `AGGREGATE_DB`.
30. On the InfoDelivery Configuration page, enter the Info Delivery email username for sending and receiving emails, and the Info Delivery administrator email account.
31. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
32. Review the Pre-Installation Summary, and then click **Install**.
33. If you are performing a fresh installation on the 64-bit version of Microsoft Windows Server 2012, the installation wizard shows the `Oracle Business Intelligence has stopped working` error while the Oracle Universal Installer is copying files. This error is caused by a known issue with the Oracle Business Intelligence installation. Click **Close the program** to ignore the message and continue installation.
34. To set up Report Mail for OBIEE:
    a. Log in to Enterprise Manager and expand the `WebLogic Domain` folder.
    b. Right-click **bifoundation_domain**, select **Security**, and then select **Credentials**.



c. Expand the `oracle.bi.enterprise` folder, select `mail.server`, and then click **Delete**.



d. Click **Deployment** and then click **Mail**. Confirm that the **Username** and **Password** fields are blank.

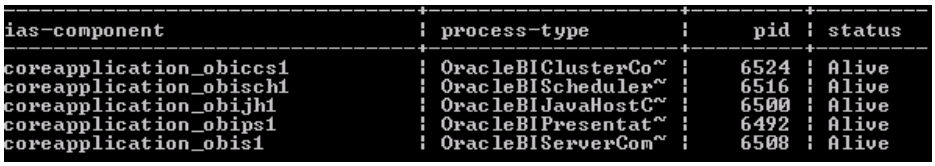
e. Restart the services.

Verifying the Primary Oracle Business Intelligence Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
   - *root*`\temp\MM_Log.log`
   - *root*`\temp\MMInstaller.log`
   - *root*`\myMicros\Uninstall_myMicros\myMicros_Install_`*datetime*`.log`
2. Check the Oracle Business Intelligence log in *root*`\Program Files\Oracle\Inventory\logs\` for error messages.

3. Perform the following checks in the Oracle WebLogic console:
   a. In a web browser, navigate to *Primary OBI server hostname*:7001/console and log in using the WebLogic administrator account credentials created during the installation.
   b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **AdminServer (admin)** and **Bi_server1** as **Running**.
   c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that all components are set as **Active** except for the **portal**.
4. Verify the following Microsoft Windows services are running:
   - **beasvc_bifoundation_domain_AdminServer**
   - **beasvc_bifoundation_domain_bi_server1**
   - **Oracle Process Manager (*hostname*_ORCLRNA)**
   - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**
5. Use opmnctl to verify that all components are set as Alive:
   a. In a command prompt, navigate to *root*\myMicros\Oracle\Middleware\instances*hostname*_ORCLRNA\bin\
   b. Enter opmnctl status
   c. Verify that the components are set as Alive.

Figure 5-2 Primary OBIEE opmnctl Status



```
-------------------------------+--------------------+---------+---------
ias-component                  | process-type       |     pid | status
-------------------------------+--------------------+---------+---------
coreapplication_obiccs1        | OracleBIClusterCo~ |    6524 | Alive
coreapplication_obisch1        | OracleBIScheduler~ |    6516 | Alive
coreapplication_obijh1         | OracleBIJavaHostC~ |    6500 | Alive
coreapplication_obips1         | OracleBIPresentat~ |    6492 | Alive
coreapplication_obis1          | OracleBIServerCom~ |    6508 | Alive
```

Installing the Primary Reporting and Analytics Application Server

This chapter describes the prerequisites, instructions, and verification steps for installing the primary Reporting and Analytics application server:

- Installing Reporting and Analytics
- Verifying the Primary Reporting and Analytics Application Server Installation

Installing Reporting and Analytics

1. If you are installing Reporting and Analytics on a different drive letter than the one you used on the primary OBIEE server, change the drive letter for the following properties in the primary OBIEE server microsConfig.properties file:

   myInsightRootDir=*Drive*:/myMicros/myInsight

`reportDefPath=Drive:/myMicros/myInsight/org`

`OBIEE.ImageTempPath=Drive:/myMicros/myPortal/imagesTemp`

`mySecureDocXDir=Drive:/myMicros/myInsight/secureMyDocX` (if you are using the docViewer portlet)

2. Extract the following from the installation file archive in the same file structure to the Reporting and Analytics application server. Do not extract the files to a folder structure that contains spaces.

   `/Weblogic/`

   `Install_version.exe`

3. Double-click `Install_version.exe` to launch the installation wizard.
4. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
5. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
6. On the Use existing Portal configuration page:
   a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
7. On the Choose Install Set page, select **Portal**.
8. On the Check if Cluster Environment page, select **Yes**.
9. On the Check if Primary Node page, select **Yes**.
10. On the WebLogic Info page, configure the application server settings:

Table 5-6 Oracle WebLogic Application Server Information

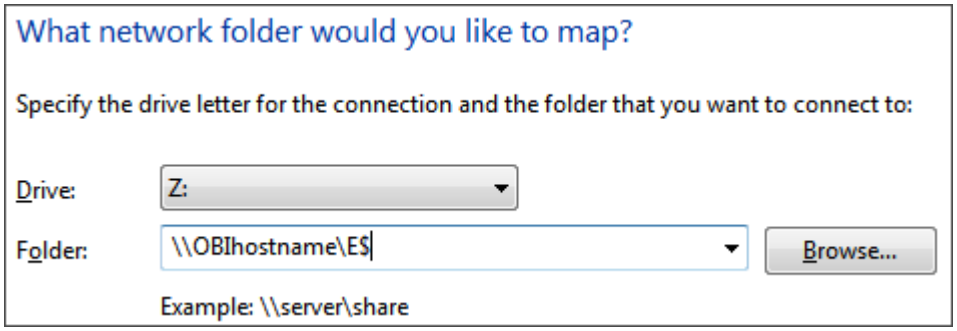
Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.

Table 5-6 (Cont.) Oracle WebLogic Application Server Information

Field	Description
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the primary Oracle Business Intelligence server, typically 7001.
App Server Host Name	Enter the hostname of the primary Reporting and Analytics WebLogic application server.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

11. On the Published URL page, enter the published site URL. What are Published Site URLs? contains more information.
12. On the Map Drive page:
    a. Create a mapped network drive to the drive containing the `myMicros` folder on the OBI server. For example, if you installed OBI on the `E:` drive, you can create the mapped drive `Z:\` and enter the path as shown in the following image:

Figure 5-3 Mapped Network Drive to OBI Server



    b. Enter the mapped drive root and the path to the `myMicros` installation folder. For example, `Z:\myMicros\`
13. On the App Server name page, you can change the name of the Reporting and Analytics instance being installed if you want to apply a naming convention.
14. On the Certificate Configuration - Portal page, fill out the form to install the signed certificate:
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *`folder_path/file_name.extension`*
    c. Verify the certificate information, and then click **Next**.

15. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
16. Review the Pre-Installation Summary, and then click **Install**.

Verifying the Primary Reporting and Analytics Application Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
    - *root*`\temp\MM_Log.log`
    - *root*`\temp\MMInstaller.log`
    - *root*`\myMicros\Uninstall_myMicros\Logs\myMicros_Install_`*datetime*`.log`
2. Perform the following checks in the Oracle WebLogic console:
    a. In a web browser, navigate to *`Primary OBI server hostname`*`:7001/console` and log in using the WebLogic administrator account credentials created during the installation.
    b. Click **Environment** from the menu, and then click **Servers**. Verify that you see ***Hostname*_appserver1** as **Running**.

    The status may be set to **Starting** if you check the WebLogic console immediately after completing installation. Verify that the status changes to **Running**.
    c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that the **portal** component is set to **Active**.
    d. In the Domain Structure, click **bifoundation_domain**, click **Security Realms**, and then in the menu, click **myrealm**, click **Providers**, click **Credential Mapping**, click **saml2CMP**, and then click **Management**. Verify that **obiee** is listed.
3. Verify the following Microsoft Windows services are running:
    - **beasvc_bifoundation_domain_AppServer**
    - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**

Installing a Non-Primary Oracle Business Intelligence Server

This chapter describes the prerequisites, instructions, and verification steps for installing a non-primary Oracle Business Intelligence Server:

- Installing Oracle Business Intelligence
- Verifying the Non-Primary Oracle Business Intelligence Server Installation

Installing Oracle Business Intelligence

1. Set up a static IP address for the Oracle Business Intelligence server.

2. Extract the following from the installation file archive in the same file structure to the Oracle Business Intelligence server. Do not extract the files to a folder structure that contains spaces.

   `/OBIEE/`

   `/OBIEEPatch/`

   `/Weblogic/`

   `Install_version.exe`

3. Double-click `Install_version.exe` to launch the installation wizard.
4. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
5. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
6. On the Use existing Portal configuration page:
   a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
   c. If you are adding a new OBIEE server, you must select **No**.
7. On the Choose Install Set page, select **OBIEE**.
8. On the Check if Cluster Environment page, select **Yes**.
9. On the Check if Primary Node page, select **No**.
10. On the WebLogic Info - Single Box page, configure the application server settings:

Table 5-7 Oracle WebLogic Application Server Information

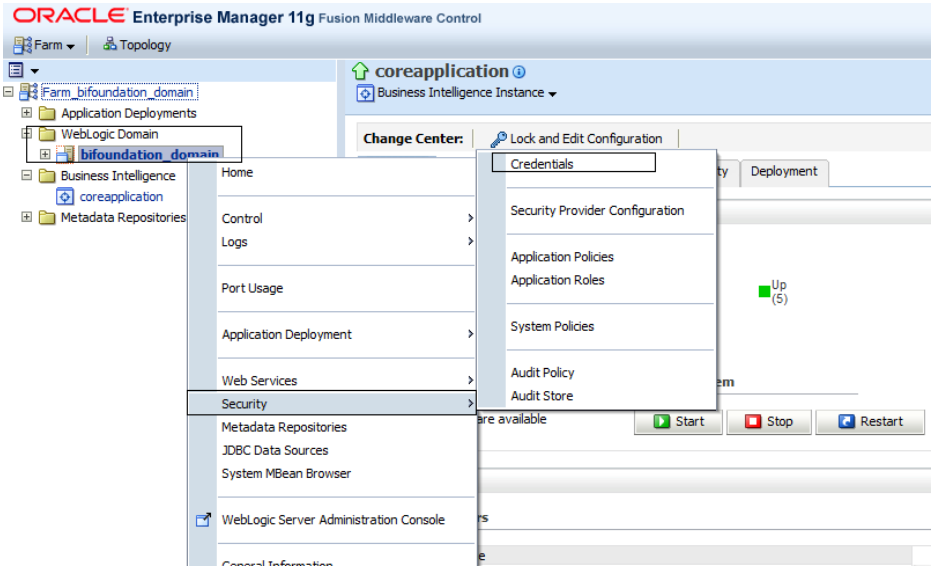
Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.

Table 5-7 (Cont.) Oracle WebLogic Application Server Information

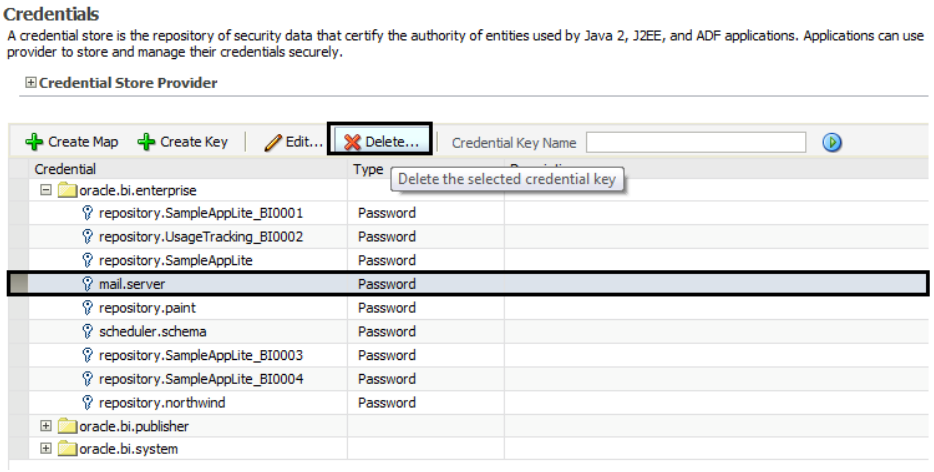
Field	Description
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the primary Oracle Business Intelligence server, typically 7001.
BI Server Port	Enter the port used by Oracle Business Intelligence, typically 9704.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

11. On the Published URL - OBIEE page, enter the published site URL for the primary OBI server. The URL is case sensitive and must match the entry for the primary OBI server. What are Published Site URLs? contains more information.
12. On the OBIEE Instance page, enter the name of the primary OBIEE server.
13. On the Certificate Configuration - OBIEE page, select **Yes** to enable SSL/Transport Layer Security.
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *`folder_path/file_name.extension`*
    c. Verify the certificate information, and then click **Next**.
14. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
15. Review the Pre-Installation Summary, and then click **Install**.
16. If you are performing a fresh installation on the 64-bit version of Microsoft Windows Server 2012, the installation wizard shows the `Oracle Business Intelligence has stopped working` error while the Oracle Universal Installer is copying files. This error is caused by a known issue with the Oracle Business Intelligence installation. Click **Close the program** to ignore the message and continue installation.
17. To set up Report Mail for OBIEE:
    a. Log in to Enterprise Manager and expand the `WebLogic Domain` folder.
    b. Right-click **bifoundation_domain**, select **Security**, and then select **Credentials**.



c. Expand the `oracle.bi.enterprise` folder, select `mail.server`, and then click **Delete**.



d. Click **Deployment** and then click **Mail**. Confirm that the **Username** and **Password** fields are blank.

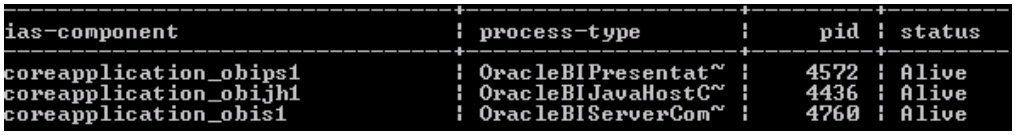
e. Restart the services.

Verifying the Non-Primary Oracle Business Intelligence Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
   - *root*`\temp\MM_Log.log`
   - *root*`\temp\MMInstaller.log`
   - *root*`\myMicros\Uninstall_myMicros\myMicros_Install_`*datetime*`.log`
2. Check the Oracle Business Intelligence log in *root*`\Program Files\Oracle\Inventory\logs\` for error messages.

3. Perform the following checks in the Oracle WebLogic console:
   a. In a web browser, navigate to `Primary OBI server hostname:7001/console` and log in using the WebLogic administrator account credentials created during the installation.
   b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **Bi_server*servernumber*** as **Running**, where *servernumber* increments as you add non-primary OBI servers.
4. Verify the following Microsoft Windows services are running:
   - **beasvc_bifoundation_domain_bi_server*servernumber***
   - **Oracle Process Manager (*hostname*_ORCLRNA)**
   - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**
5. Use opmnctl to verify that all components are set as `Alive`:
   a. In a command prompt, navigate to `root\myMicros\Oracle\Middleware\instances\hostname_ORCLRNA\bin\`
   b. Enter `opmnctl status`
   c. Verify that the components are set as `Alive`.

Figure 5-4 Non-Primary OBIEE opmnctl Status



Installing Non-Primary Reporting and Analytics Application Servers

This chapter describes the prerequisites, instructions, and verification steps for installing a non-primary Reporting and Analytics application server:

- Installing Reporting and Analytics
- Verifying the Non-Primary Reporting and Analytics Application Server Installation

Installing Reporting and Analytics

1. Extract the following from the installation file archive in the same file structure to the Reporting and Analytics application server. Do not extract the files to a folder structure that contains spaces.

   `/Weblogic/`

   `Install_version.exe`
2. Double-click `Install_version.exe` to launch the installation wizard.
3. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.

4. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
    a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
    b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
5. On the Use existing Portal configuration page, make your selection based on your installation:
    a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
    b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
    c. If you are adding a new Reporting and Analytics server, you must select **No**.
6. On the Choose Install Set page, select **Portal**.
7. On the Check if Cluster Environment page, select **Yes**.
8. On the Check if Primary Node page, select **No**.
9. On the WebLogic Info page, configure the application server settings:

Table 5-8 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the primary Oracle Business Intelligence server, typically 7001.
App Server Host Name	Enter the hostname of the primary Reporting and Analytics WebLogic application server.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

10. On the Published URL - Portal page, enter the published site URL for the primary Reporting and Analytics server. The URL is case sensitive and must match the entry for the primary Reporting and Analytics server. What are Published Site URLs? contains more information.
11. On the App Server name page, enter the name of the primary Reporting and Analytics application server.
12. On the Certificate Configuration - Portal page, fill out the form to install the signed certificate:
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *folder_path*/*file_name*.*extension*
    c. Verify the certificate information, and then click **Next**.
13. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
14. Review the Pre-Installation Summary, and then click **Install**.

Verifying the Non-Primary Reporting and Analytics Application Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
    - *root*\temp\MM_Log.log
    - *root*\temp\MMInstaller.log
    - *root*\myMicros\Uninstall_myMicros\Logs\myMicros_Install_*datetime*.log
2. Perform the following checks in the Oracle WebLogic console:
    a. In a web browser, navigate to *Primary OBI server hostname*:7001/console and log in using the WebLogic administrator account credentials created during the installation.
    b. Click **Environment** from the menu, and then click **Servers**. Verify that you see ***Hostname*_appserver1** as **Running**.

       The status may be set to **Starting** if you check the WebLogic console immediately after completing installation. Verify that the status changes to **Running**.
3. Verify the following Microsoft Windows services are running:
    - **beasvc_bifoundation_domain_*hostname*_appServ1**
    - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**

6

Reporting and Analytics on One Server

This section provides instructions for installing and configuring the Oracle Business Intelligence Enterprise Edition and Oracle MICROS Reporting and Analytics on one server.

1. Reporting and Analytics Single Server Prerequisites
2. Enterprise Back Office Database Configurations
3. Installing Oracle Business Intelligence and Reporting and Analytics on One Server
4. Verifying the Single Server Installation

Reporting and Analytics Single Server Prerequisites

Before installing the Oracle Business Intelligence Enterprise Edition and the Reporting and Analytics application on the same server:

1. Verify that your server meets the system requirements. The Application Server Compatibility and Requirements section in the Oracle MICROS Enterprise Back Office Release Notes contains compatibility and requirement information.
2. Install the required Java Development Kit version in a folder path that does not contain spaces. For example, do not install Java in the default `Program Files` path.
3. Set up a static IP address for the Oracle Business Intelligence server.
4. Verify that the 7001, 9704, and 9556 ports are not being used.
5. Obtain separate Secure Socket Layer (SSL) certificates for the OBI hostname and the Reporting and Analytics hostname.
6. Install Oracle Business Intelligence and Reporting and Analytics.
7. If you are performing an upgrade instead of a fresh installation, What do I do when Upgrading? contains a summary of upgrade information and instructions.

Enterprise Back Office Database Configurations

Oracle MICROS recommends setting the following Oracle Database configurations when creating the database instance and before running an Enterprise Back Office product installer. While some configurations can be changed after the installation, preparing the database instance prior to schema installation can prevent unexpected errors and problems.

Oracle Database Configuration for Enterprise Back Office Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for Enterprise Back Office:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>MM`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PMM`

db_block_size	16384
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.

Oracle Database Tablespaces for Enterprise Back Office Database

Make sure to create the following tablespaces in the Enterprise Back Office database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- COREDB
- PORTALDB
- LOCDB
- LOC_INDX
- RTA
- PENTAHO or SMALLFILE
- CEDB
- SAML_INDX
- ORCLRNA_BIPLATFORM
- ORCLRNA_MDS
- TEMP

Oracle Database Configuration for Enterprise Back Office Aggregation Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for the Aggregation database:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>AGG`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PAGG`

db_block_size	8192
open_cursors	20000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.
deferred_segment_creation	TRUE
_index_partition_large_extents	FALSE
_partition_large_extents	FALSE

Oracle Database Tablespaces for Enterprise Back Office Aggregation Database

Make sure to create the following tablespaces in the Enterprise Back Office Aggregation database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- AGGREGATE_DB
- AGGREGATE_INDX
- TEMP

Installing Oracle Business Intelligence and Reporting and Analytics on One Server

1. Extract the following from the installation file archive in the same file structure to the Reporting and Analytics application server. Do not extract the files to a folder structure that contains spaces.

   `/OBIEE/`

   `/OBIEEPatch/`

   `/Weblogic/`

`Install_version.exe`

2. Double-click `Install_version.exe` to launch the installation wizard.
3. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
4. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
5. On the Use existing Portal configuration page, make your selection based on your installation:
   a. If you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
6. On the Choose Install Set page, select **Portal** and **OBIEE**.
7. On the WebLogic Info - Single Box page, configure the application server settings:

Table 6-1 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must contain a number, no special characters, and consist of eight to 20 characters.
Local JVM Path	Verify the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the Oracle Business Intelligence server, typically 7001.
App Server Host Name	Enter the hostname of the Reporting and Analytics WebLogic application server.
BI Server Port	Enter the port used by Oracle Business Intelligence, typically 9704.

Table 6-1 (Cont.) Oracle WebLogic Application Server Information

Field	Description
Node Manager port	Enter the port used by the Node Manager, typically 9556.

8. On the OBIEE Installation page, configure the connection to the OBIEE database and Repository Creation Utility (RCU) schemas:

Table 6-2 Oracle Business Intelligence Enterprise Edition Database Information

Field	Description
RCU Database Location	Enter the hostname of the Enterprise Back Office database containing the RCU schema installation.
SQL Server or Oracle	Select the database type.
Port and Database Service Name	Enter the port used by the database, and any additional connection parameters as necessary.
BIPLATFORM Schema Password	Enter the schema password you created for the Repository Creation Utility (RCU) during database installation.
MDS Schema Password	Enter the schema password you created for the Repository Creation Utility (RCU) during database installation.

9. On the Published URLs page, enter the published site URLs. Use port 9443 instead of port 443 for the OBI server. What are Published Site URLs? contains more information.
10. On the OBIEE Repository page, create the password for the Oracle Business Intelligence Enterprise Edition (OBIEE) repository. The password must contain a number, no special characters, and consist of eight to 20 characters.
11. On the SSL page, select **Yes** to enable SSL/Transport Layer Security.
    a. On the Certificate Configuration - Portal page, enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request for the Reporting and Analytics application.
    b. Click **Choose**, selected the signed certificate file, click **Next**, verify the certificate information, and then click **Next**.

       Make sure the filepath includes the following components: *folder_path/file_name.extension*
    c. On the Certificate Configuration - Obiee page, enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request for the Oracle Business Intelligence Enterprise Edition server.
    d. Click **Choose**, selected the signed certificate file, click **Next**, verify the certificate information, and then click **Next**.

       Make sure the filepath includes the following components: *folder_path/file_name.extension*
12. On the Database Information page, configure the connection to the Reporting and Analytics database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

13. On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. Enter the login credentials to the Business Intelligence Repository database. c. Enter the login credentials to the Quartz Job Scheduler database. d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard. e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

14. On the OBI Database Information page, enter the password to the Oracle Business Intelligence (OBI) database.
15. On the Aggregation DB information for Obiee Repository page, configure the aggregation server to use with the Oracle Business Intelligence Enterprise Edition (OBIEE) repository:

Oracle Database	Microsoft SQL Server
a. Enter the hostname and port for the database server hosting the OBIEE aggregate database. b. Enter the database service name in **Aggregate_DB Service name**.	The installation wizard does not show this configuration screen when upgrading from 9.0 using a Microsoft SQL Server database. a. Enter the hostname for the database server hosting the OBIEE aggregate database. b. Enter additional connection parameters.

16. On the Is this an OLAP Portal Instance page, select **DUAL**.
17. On the OLAP *Database Type* Database Information page, configure the OLAP database connection as described in the following table:

Table 6-3 Online Analytical Processing Database Connection

Field	Description
OLAP Login and OLAP Password	Enter the login credentials for the OLAP database.
OLAP Server name or IP	Enter the hostname of the OLAP database.
OLAP DatabasePort	Enter the OLAP database server port.
OLAP DB SID	Enter the SID for the OLAP database.

18. Set up the following connections:

Connection	Page	Information
IceWarp Mail Server	Portal Mail Server	Enter the Simple Mail Transfer Protocol (SMTP) hostname and port of the server that will host the IceWarp Mail Server, and then enter the mail domain, such as `example.com`.
InfoDelivery Service	InfoDelivery Mail Server	Enter the hostname of the IceWarp Mail Server, or enter the hostname for the separate InfoDelivery server. Enter the SMTP port.
RTA Master Server	Location of Master Server	Enter the hostname of the RTA Master Server.

19. On the Mail Users page, configure the accounts used by Enterprise Back Office:
    a. In the **Mail account jobs will be sent to by the client stores** field, enter the email account that the Master Server uses to receive `resultSets` data and deploy jobs.
    b. In the **Email account that will receive errors** field, enter the email account to which the Point-of-Sales stores forward error messages.
20. Configure Reporting and Analytics:
    a. On the Portal Specific Settings page, configure Reporting and Analytics as described in the following table:

Table 6-4 Reporting and Analytics Configurations

Field	Description
Names of all Portal Application Servers	Enter the hostnames of all Reporting and Analytics web application servers in a comma-separated list.
Administrator e-mail address	Enter the email address, without the domain, of the administrator account.
What email user will the Portal use to send mail?	Enter the email address, without the domain, that the Portal uses to send mail.
What is the password for the email user?	Enter the password for the portal email user.
Use HTTPS protocol for portal?	Select whether the web application uses the HTTPS protocol. This option requires a Secure Socket Layer (SSL) connection and should typically only be selected when the installation environment has an SSL accelerator.
Password for Messaging Queue	Enter the login credentials for the messaging queue. This field does not show when performing an upgrade.
Username and Password for utility user	Enter the login credentials for the UTIL account created during database installation.
Username and Password for CE user	Create login credentials for accessing the Microsoft Windows Compact Edition database (CEDB).
New Line Style for Portal CSV display	Select whether to use Windows, Unicode, or HTML line styling when using the CSV export while viewing a report.

b. On the Portal Specific Settings - Purge page, select whether Reporting and Analytics uses thread pooling to purge threads, and then configure the purge parameters.

c. On the Portal Specific Settings - Aggregation and Adjustment Service page, enter the hostname of the server that will host the Adjustment and Aggregation Service in the **Adjustment Server Name** field.

21. Configure Info Delivery:

a. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.

b. On the Portal/InfoDelivery Settings - Font page, configure the Report Mail font settings as described in the following table:

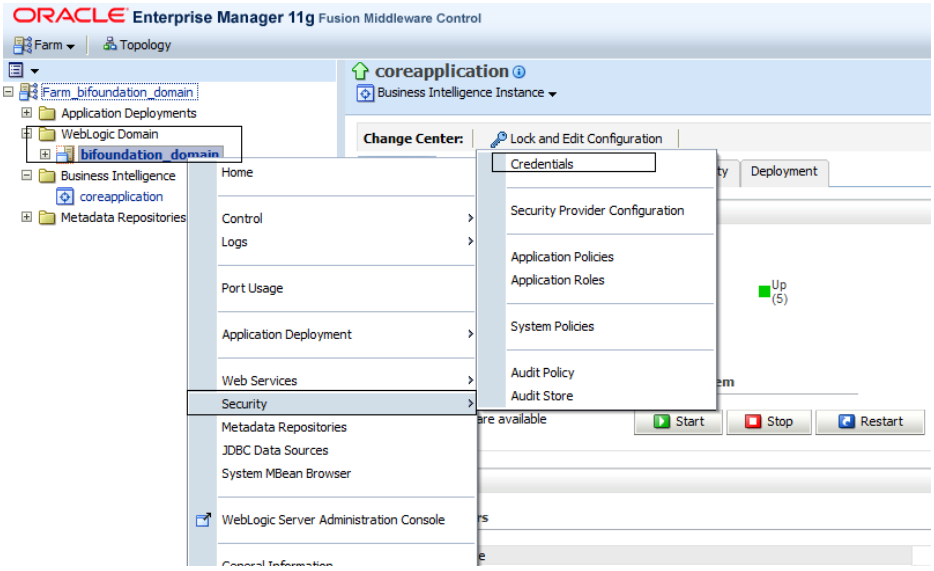
Table 6-5 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using custom fonts when rendering PDFs.

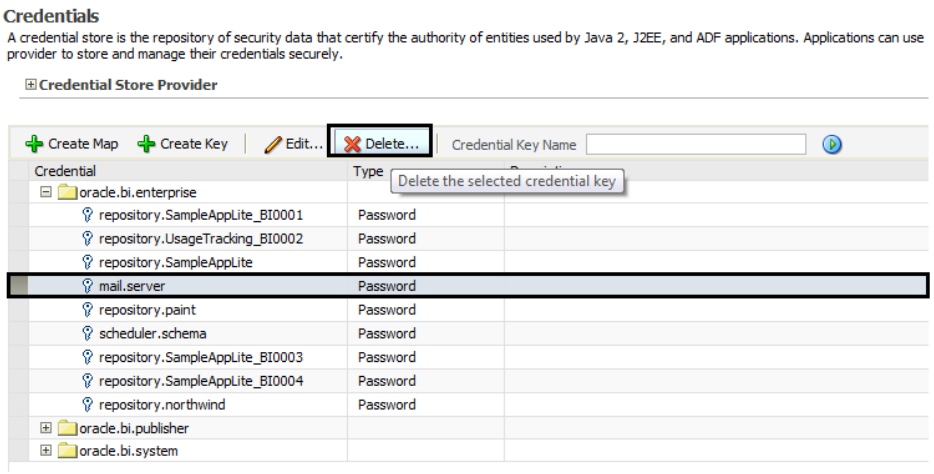
Table 6-5 (Cont.) Report Mail Font Configurations

Field	Description
Path to user font	Enter the path to a font, or click **Choose** and navigate to a font, to set the font used when rendering PDFs.
Limit detail query days	Enter a date limit for executing audit/analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/analysis summary queries. The Organization configuration can override this setting.
New Line Style for InfoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

22. On the Confirm Datasource Name page, enter the OLAP database name in the **OLAPDS database name** field. By default, this field uses `AGGREGATE_DB`.
23. On the InfoDelivery Configuration page, enter the Info Delivery email username for sending and receiving emails, and the Info Delivery administrator email account.
24. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
25. Review the Pre-Installation Summary, and then click **Install**.
26. If you are performing a fresh installation on the 64-bit version of Microsoft Windows Server 2012, the installation wizard shows the `Oracle Business Intelligence has stopped working` error while the Oracle Universal Installer is copying files. This error is caused by a known issue with the Oracle Business Intelligence installation. Click **Close the program** to ignore the message and continue installation.
27. To set up Report Mail for OBIEE:
    a. Log in to Enterprise Manager and expand the `WebLogic Domain` folder.
    b. Right-click **bifoundation_domain**, select **Security**, and then select **Credentials**.



c. Expand the `oracle.bi.enterprise` folder, select `mail.server`, and then click **Delete**.



d. Click **Deployment** and then click **Mail**. Confirm that the **Username** and **Password** fields are blank.

e. Restart the services.

Verifying the Single Server Installation

1. Check the installation wizard logs for `error`, `exception`, and `fail`:
   - *root*`\temp\MM_Log.log`
   - *root*`\temp\MMInstaller.log`
   - *root*`\myMicros\Uninstall_myMicros\Logs\myMicros_Install_`*datetime*`.log`
2. Check the Oracle Business Intelligence log in *root*`\Program Files\Oracle\Inventory\logs\` for error messages.

3. Perform the following checks in the Oracle WebLogic console:
   a. In a web browser, navigate to *OBI server hostname*:7001/console and log in using the WebLogic administrator account credentials created during the installation.
   b. Click **Environment** from the menu, and then click **Servers**. Verify that you see **AdminServer (admin)**, **Bi_server1**, and **appServ1** as **Running**.

      The status may be set to **Starting** if you check the WebLogic console immediately after completing installation. Verify that the status changes to **Running**.
   c. Click **Deployments** from the menu, click **Customize this table**, and then select **Exclude libraries when displaying deployments**. Verify that all components are set to **Active**.
   d. In the Domain Structure, click **bifoundation_domain**, click **Security Realms**, and then in the menu, click **myrealm**, click **Providers**, click **Credential Mapping**, click **saml2CMP**, and then click **Management**. Verify that **obiee** is listed.
4. Verify the following Microsoft Windows services are running:
   - **beasvc bifoundation_domain_AdminServer**
   - **beasvc bifoundation_domain_bi_server1**
   - **beasvc bifoundation_domain_appServ1**
   - **Oracle Process Manager (ORCLRNA)**
   - **Oracle WebLogic NodeManager(*path to Oracle Middleware wlserver installation*)**
5. Use opmnctl to verify that all components are set as Alive:
   a. In a command prompt, navigate to *root*\myMicros\Oracle\Middleware\instances*hostname*_ORCLRNA\bin\
   b. Enter opmnctl status
   c. Verify that the components are set as Alive.

Figure 6-1 Single Server opmnctl Status

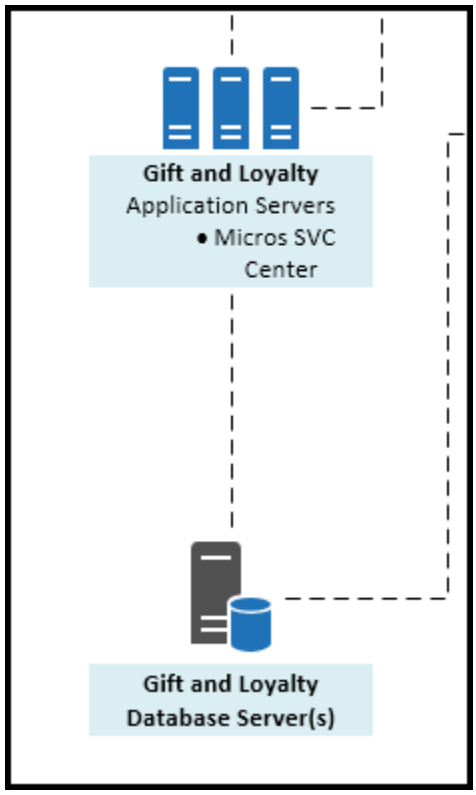
```
--------------------------------+--------------------+----------+---------
ias-component                  | process-type       |      pid | status
--------------------------------+--------------------+----------+---------
coreapplication_obiccs1        | OracleBIClusterCo~ |     6524 | Alive
coreapplication_obisch1        | OracleBIScheduler~ |     6516 | Alive
coreapplication_obijh1         | OracleBIJavaHostC~ |     6500 | Alive
coreapplication_obips1         | OracleBIPresentat~ |     6492 | Alive
coreapplication_obis1          | OracleBIServerCom~ |     6508 | Alive
```

7

Gift and Loyalty

This section provides instructions for installing and configuring Gift and Loyalty.

Figure 7-1 Gift and Loyalty



Install the Gift and Loyalty database, and then install and set up the Gift and Loyalty application server:

- Installing Gift and Loyalty on Microsoft SQL Server Database
- Installing the Gift and Loyalty Application Server

Installing Gift and Loyalty on Microsoft SQL Server Database

1. If you are upgrading the Gift and Loyalty database from 7.0.1 or older, stop all applications, servers, and databases connected to the database that you are upgrading.
2. Extract `DBInstall.exe` from the installation file archive to the Gift and Loyalty database server. Do not extract the file to a folder structure that contains spaces. You can extract the file to another server and run the installation wizard using a network connection.
3. Double-click `DBInstall.exe` to launch the database installation wizard.

4. On the Choose Installation or Upgrade page, select whether you are upgrading an existing database or installing a new shell database.

   If you are installing a new shell database, install a clean Microsoft SQL Server with no Gift and Loyalty objects.

5. On the Choose Install Set page, select `iCare`.
6. On the **iCare Database Information** page, set up the Gift and Loyalty database:
   a. Select **SQL Server**.
   b. Enter the network port used by the database server. The default port is 1433.
   c. If you are performing an upgrade, in the **Upgrade Login** and **Upgrade Password** fields, enter the login credentials to the existing Microsoft SQL database server.
   d. In the **Additional Connection Parameters** field, enter any required connection strings.
7. On the Pre-Installation Summary page, click **Install** and allow the database installation or upgrade to complete.
8. Review the log file in `C:\Temp\DBInstaller.log` to verify that the installation finished without any errors.

Installing the Gift and Loyalty Application Server

This chapter describes the prerequisites and instructions for installing and setting up the Gift and Loyalty application server:

- Prerequisites
- Installing Gift and Loyalty
- Connecting Reporting and Analytics to the Gift and Loyalty Database
- Configuring Gift and Loyalty for Enterprise Back Office
- Changing Gift and Loyalty Ports

Prerequisites

Before installing the Gift and Loyalty application:

- Verify that your server meets the system requirements. The Application Server Compatibility and Requirements section in the Oracle MICROS Enterprise Back Office Release Notes contains compatibility and requirement information.
- Install the required Java Development Kit version in a folder path that does not contain spaces. For example, do not install Java in the default `Program Files` path.
- Verify that the 7001, 9704, and 9556 ports are not being used.
- Verify that the Gift and Loyalty server can connect to the Gift and Loyalty database server.
- Obtain a Secure Socket Layer (SSL) certificate for the Gift and Loyalty application server.
- Disable tunnel adapters. Disabling Tunnel Adapters contains information and instructions for checking for and disabling the adapter.

Installing Gift and Loyalty

1. Extract the following from the installation file archive in the same file structure to the Gift and Loyalty application server. Do not extract the files to a folder structure that contains spaces.

   `/Weblogic/`

   `Install_`*`version`*`.exe`

2. Double-click `install_ `*`version`*`.exe` to launch the installation wizard.
3. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
4. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster RAC environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
   c. For **Will iCare be used with this installation?**, select **Yes**.
5. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
6. On the Choose Install Set page, select **iCare**.
7. On the WebLogic Info page, configure the application server settings:

Table 7-1 Oracle WebLogic Application Server Information

Field	Description
WebLogic User Name and WebLogic Password	Create the login credentials for an administrator account on the WebLogic application server. The password must be eight to 20 characters, must not contain special characters, and must include at least one number.
Local JVM Path	Enter the folder path to the local Java Development Kit installation. This install path must not contain spaces.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the Gift and Loyalty WebLogic application server, typically 7001.
App Server Host Name	Enter the hostname of the Gift and Loyalty application server.

Table 7-1 (Cont.) Oracle WebLogic Application Server Information

Field	Description
Node Manager port	Enter the port used by the Node Manager, typically 9556.

8. On the Database Information page, configure the connection to the Reporting and Analytics database:

Table 7-2 Gift and Loyalty Connection to the Reporting and Analytics Database

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the hostname of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the hostname of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

9. On the OLAP *database type* Database Information page, enter the login credentials and location of the OLAP server:

Table 7-3 OLAP Database Connection

Oracle Database	Microsoft SQL Server
a. Enter the database login credentials in **OLAP Login** and **OLAP Password**. b. Enter the hostname of the OLAP server. c. Enter the **OLAP Database Port**. d. Enter the database SID in **OLAP DB SID**.	a. Enter the database login credentials in **OLAP Login** and **OLAP Password**. b. Enter the hostname of the OLAP server. c. Enter the **OLAP Database Port**.

10. On the Segmentation Data Access Login page, enter the user credentiserals for the aggregation database.
11. On the iCare Database Information page, enter the hostname, port, and additional connection parameters for the Gift and Loyalty database server:
12. On the iCare Messaging Info page, enter the password for setting Gift and Loyalty messages.
13. On the iCare Database Configuration page, enter the database user that Gift and Loyalty should use to access the database, and then enter the passwords for the Gift and Loyalty database and the CE database.

14. On the iCare Configuration page, you can select and enable Gift and Loyalty configurations.
15. On the iCare Configuration (exact target) page, configure the connection to the third-party Exact Target campaign:
    a. Enter the URL of the ExactTarget WSDL file.
    b. Enter the URL of the ExactTarget FTP server.
    c. Enter the location to which Gift and Loyalty stores ExactTarget files before exporting.
16. On the Certificate Configuration page:
    a. Enter the **Keystore Password**, the **Private Key Password**, and the **Alias** that was used when generating the Certificate Signing Request.
    b. Click **Choose** and select the certificate file, and then click **Next**.

       Make sure the filepath includes the following components: *folder_path/file_name.extension*
    c. Verify the certificate information, and then click **Next**.
17. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
18. Review the Pre-Installation Summary, and then click **Install**.
19. After the installation completes, use the Enterprise Back Office Password Change Utility to update the passwords in Enterprise Back Office:
    a. Navigate to *InstallationPath*\PasswordChangeUtility\ and double-click ChangePassword.cmd.
    b. For each database user account that you want to update, select the checkbox next to the account name and enter the new password. You can select **Show Passwords** to unmask the passwords being entered.
    c. Click **Apply Changes** to update the new passwords. The utility creates a backup of the .properties files in the same folder.

Connecting Reporting and Analytics to the Gift and Loyalty Database

1. Extract install_ *version*.exe from the installation file archive to the Oracle Business Intelligence server. Do not extract the file to a folder structure that contains spaces.

   In the case of a Reporting and Analytics cluster installation, perform this installation on the primary Oracle Business Intelligence server.
2. Double-click install_ *version*.exe to launch the installation wizard.
3. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
4. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.

a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.

b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster RAC environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.

c. For **Will iCare be used with this installation?**, select **Yes**.

5. If you are performing an upgrade:

   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.

   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.

6. On the Choose Install Set page, do not select **iCare**.

7. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.

8. On the Segmentation Data Access Login page, enter the user credentials for the aggregation database.

9. On the iCare Database Information page, enter the hostname, port, and additional connection parameters for the Gift and Loyalty database server:

10. On the iCare Configuration for Portal page:

    a. Enter the URL for Gift and Loyalty campaigning. This is typically `http://` *`Gift and Loyalty URL`*`:80/offers/`

    b. Enter the URL for Gift and Loyalty Stored Value. This is typically the hostname of Gift and Loyalty.

    c. Enter the URL for Gift and Loyalty for RTA downloads. This is typically the hostname of Gift and Loyalty.

    d. Enter the database login credentials for the Gift and Loyalty database. This is typically the **MMSQL** account.

    e. Enter the URL of the ExactTarget WSDL file.

11. On the Review page, select your preferred review type:

    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.

12. Review the Pre-Installation Summary, and then click **Install**.

Configuring Gift and Loyalty for Enterprise Back Office

Follow the instructions to configure Gift and Loyalty settings for all organizations in Enterprise Back Office:

1. Log in to Reporting and Analytics using the `M` organization and system administrator credentials.

2. Click **Admin**, click **System**, click **Organizations**, click **Organizations**, click **MICROS**, and then click **Edit**.
3. To set up the ExactTarget FTP, enter the **ExactTarget FTP URL**, the **ExactTarget FTP Username**, and the **ExactTarget FTP Password**.
4. To set up the Messaging Queue, enter the **iCare Messaging Queue Host**, the **iCare Messaging Queue Username**, and the **iCare Messaging Queue Password**.
5. If you installed the Aggregation and Analysis service and you want to perform segmentation and analysis, enter the **iCare Analytics Token**.
6. Select **Disable Segmentation Portlet Control by Org** to restrict access to the Segmentation Portlet for individual organizations.
7. Enter the name of the SSH File Transfer Protocol (SFTP) server to which Gift and Loyalty segmentation operations should export files in **Admin Server Name for Segmentation sFTP Exports**.
8. Enter the maximum number of records to be contained in each segmentation export file in **Max number of records for Segmentation CSV Exports**.
9. Click **Save**.

Changing Gift and Loyalty Ports

By default, Gift and Loyalty uses the same listening ports as Reporting and Analytics. If you installed Gift and Loyalty on the Reporting and Analytics application sever, change the listening ports to unused ports using the following steps:

1. Change the Secure Socket Layer listening port for the iCard front-end:
    a. Log in to the Oracle WebLogic Administration Console.
    b. In the Domain Structure, expand **Environment** under the **iCare_domain**, click **Servers**, and then click **iCare_server**.
    c. On the General tab, click **Lock & Edit**.
    d. Select **Listen Port Enabled**, and then change the port from 80 to an unused port.
    e. Select **SSL Listen Port Enabled**, change the port from 9443 to an unused port, and then click **Save**.
2. Change the network channel listening ports:
    a. In the Domain Structure, expand **Environment** under the **iCare_domain**, click **Servers**, and then click **iCare_server**.
    b. Click the **Protocols** tab, click the **Channels** tab, and then click **Lock & Edit**.
    c. Select the network channel, or click **New**.
    d. Change the **Listen Port** and the **External Listen Port** from 443, and then click **Save**.

8

Inventory Management

Deploy Inventory Management components in the following order:

1. Verify that your installation environment meets the prerequisites.
2. Install the Inventory Management applications.
3. Follow the instructions in the *Inventory Management Security Guide* to set up the encryption keys and configurations.
4. Prepare the Inventory Management database servers.
5. Install or update the Inventory Management databases.
6. Configure the connection to Reporting and Analytics.

This section contains the following topics:

- Installing the Inventory Management Application Server
- Installing Inventory Management on Oracle Database
- Installing Inventory Management on Microsoft SQL Server
- Configuring the Inventory Management Web Application
- Connecting Reporting and Analytics to Inventory Management

Installing the Inventory Management Application Server

This chapter describes the prerequisites and instructions for installing and setting up the Inventory Management application server:

- Prerequisites
- Installing Inventory Management
- Installing Automation Service (MIA2)
- Installing the Automation Service Monitor

Prerequisites

Before installing the Inventory Management application:

- Review the *Oracle MICROS Inventory Management Security Guide* for information pertaining to installing and setting up a secure environment. The Security Guide contains instructions that must be followed prior to starting installation.
- Review the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.
- Install the required full Microsoft .NET Framework version. Do not install the Client Profile distribution.
- Install the required Microsoft Visual C++ Redistributable Package on Microsoft Windows Server 2012 R2.

- Install Oracle Data Provider for Microsoft .NET using the setup file extracted from `ODAC121024Xcopy_x64-30165.zip`. Use the appropriate 32-bit or 64-bit version for your system and for the Oracle Client.
- In a command line prompt, enter the following command: `install.bat odp.net4 root:\oracle odac`
- Copy the Microsoft .NET Infragistics scripts from the Inventory Management package to *root*`\inetpub\wwwroot\aspnet_client\Infragistics\` and verify that it creates the `\2013CLR4\` folder.

If you are performing an upgrade:

- Stop the **IIS Admin Service**, the **DGService**, the **DGNetService**, and the **delegateSys.myinventoryAutomation2** services.
- Uninstall **DGService**.
- Back up the following folders:
  - `\inetpub\wwwroot\`
  - `\myinventoryAutomation2\`
  - `\myinventoryService\` (you can remove this directory after creating the backup)
  - `\Program Files\Materials Control\` (you can exclude the log files)
  - `\Program Files\DBUpdater\` (you can exclude the log files)
- If you are upgrading from a version older than 8.5.0, uninstall existing instances of the Database Maintenance tool.

Installing Inventory Management

1. Extract the installation archive to the application server.
2. Right-click `WebAppInstaller.exe`, and then click **Run as administrator**.
3. On the WebSite page, select the web application port, and then click **Use this Web Site**.
4. Select the web applications and services to install, and then configure the **Web Path** to which they are installed.
5. Select the destination application pool, and then click **Use this App Pool**.

   To create an application pool, enter a name and then click **Add Application Pool**.
6. Allow the installation to complete, and review the summary for installation errors.

Installing Automation Service (MIA2)

1. To install the Automation Service (MIA2), download and extract *date*`_AutomationService (LB) for MYINV` *version*`.zip` to the application server, double-click `setup.exe`, and then follow the installation wizard instructions.
2. On the Inventory Management database server:
   a. Log in to the Inventory Management database.
   b. Enter the following command:

```
update dbo.filiale set FIL_NAME='orgshortname',
FIL_DBUSER='orgshortname',
FIL_NAMEID='orgshortname(capitalized)',FIL_DATABASE='servernam
e', FIL_PASSWORD='databasepassword', ORGANIZATIONID='orgID',
FIL_RETENTION='93' where fil_id=0;
```

You can find the organization short name and organization ID in COREDB.CORE_ORGANIZATION.

3. Start the MIA2 Console, and then fill out the **Configuration** tab:
   a. For the **Database user** and **Database catalog** fields, enter the organization short name.
   b. Make sure to deselect **Disable Notifications per E-Mail**.
   c. Click **Save Configuration** and make sure the database connectivity shows **OK**.
   d. Click **Start** and verify that the service status changes to **Running**.
4. Configure the service:
   a. From Microsoft Windows, click **Start**, click **Run**, enter `services.msg`, right-click the **DelegateSys.myInventoryAutomation2** service, and click **Properties**.
   b. On the **Recovery** tab, set **First failure**, **Second failure**, and **Subsequent failures** to **Restart the Service**.

Installing the Automation Service Monitor

The Automation Service Monitor is a utility for monitoring the job queue and activity of the Activity Service.

1. Extract *date*`_ASAMon_`*version*`.zip` to a temporary directory to create the following folders:
   - ASAMON.Application
   - ASAMon.Config
2. Copy the content of `ASAMON.Application` to the installation path for the Automation Service Monitor, such as *root*`\ASAMon`.
3. Copy the content of `ASAMON.Config` to the installation path for the Automation Service Monitor.
4. In the installation directory, open `fmlogin.ini` in a text editor.
5. Enter the server name for all instances of the `DBLogin` parameter. For example:

```
[BON]
DBLogin = server_name/BON/MICROS,BON,myInvenMenu.ini
```

6. If you are using a Microsoft SQL Server, open `sql.config` in a text editor.
7. Update the server name and service name:

```
<servers>
<server name="server name used in fmlogin.ini">
<DbBrand value="SQLServer" />
<ServiceName value="name of the MSSQL Server instance" />
</server>
```

```
</servers>
```

Installing Inventory Management on Oracle Database

This chapter describes the prerequisites and instructions for installing the Inventory Management database on Oracle Database:

- Inventory Management Database Configurations
- Preparing Oracle Database for Inventory Management
- Installing or Updating the Inventory Management Database

Inventory Management Database Configurations

Oracle MICROS recommends setting the following Oracle Database configurations when creating the database instance and before running the Inventory Management product installer. While some configurations can be changed after the installation, preparing the database instance prior to schema installation can prevent unexpected errors and problems.

Oracle Database Configuration for Inventory Management Database

Use the following table for a set of guidelines for setting up the Oracle Database instance for Inventory Management:

Parameter	Recommended Value

Instance Name	`<CustomerName><Environment ID><EnvironmentPurpose P/S/T>INV`
	For example, for customer `ABC`, environment ID `1`, and environment purpose `P` for production:
	`ABC01PINV`

db_block_size	8192
open_cursors	1000
db_recovery_file_dest_size	Set as the amount of storage allocated to FRA and DATA.
job_queue_processes	64
aq_tm_processes	1
session_cached_cursors	100
optimizer_mode	first_rows_10
optimizer_index_caching	20
optimizer_index_cost_adj	20
cusrsor_sharing	exact
processes	1024
sga_max_size	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
sga_target	Set as the same value as `sga_max_size`.
pga_target	Set as 25% of `sga_target`.

Oracle Database Tablespaces for Inventory Management Database

Make sure to create the following tablespaces in the Inventory Management database. Each tablespace requires Transparent Data Encryption (TDE) encryption.

- USERS
- TEMP

Preparing Oracle Database for Inventory Management

Follow these instructions to set up the Oracle Database shell before installing Inventory Management.

1. Log in to the database using a command prompt and administrator privileges.
2. Enter the following commands:

   ```
   sqlplus sys/password@yourinstance as sysdba

   GRANT create session, resource, create view TO new username
   IDENTIFIED BY password;

   ALTER USER new username DEFAULT TABLESPACE existing tablespace to
   use TEMPORARY TABLESPACE temporary tablespace to use;

   ALTER USER new username QUOTA UNLIMITED ON new username;
   ```

3. To check the location of the `DPUMP_DIR`, enter the following command:

   ```
   SELECT * FROM dba_directories;
   ```

4. Place your DMP file in the directory shown, and then enter the following command:

   ```
   imdpd system/password@yourinstance DIRECTORY=DPUMP_DIR
   DUMPFILE=yourDMPfile PARALLEL=1 LOGFILE=yourlog.log
   REMAP_SCHEMA=sourceschema:targetschema
   REMAP_TABLESPACE=sourcetablespace:targettablespace
   ```

5. Review the log in the same directory for errors.

Installing or Updating the Inventory Management Database

1. Install the Inventory Management Database Updater on the database server:
   a. Download and extract the installation archive to the database server, double-click `setup.exe`, and then follow the installation wizard instructions.
   b. On the Choose Database Connection page, enter any connection name, as the name can be changed in a later step. Ignore the Warning message on the next page.
2. Navigate to *root*`\Program Files\myinventory Database Updater\` and open `sql.ini` in a text editor:
   a. Find the section `[win32client.dll]` and verify the following line:

      ```
      comdll=sqlodb32
      ```

   b. Add the following lines to the end of the file:

      ```
      [odbcrtr]

      remotedbname=orgshortname,DSN=orgshortname
      ```

c. Update the server name and SIDs:

```
<servers>
<server name="servername"><DbBrand value="SQLSERVER" />
<ServiceName value="MSSQL server instance" />
</server>
</servers>
```

3. Navigate to *root*\Program Files\myinventory Database Updater\ and open fmlogini.ini in a text editor:

   a. Add or configure a section for [*orgshortname*]:

   ```
   [orgshortname]
   DBLogin=server name/orgshortname/
   password,orgshortname,myinvenmenu.ini
   AppIINI=settings.ini
   ```

   b. If you are performing parallel database updates, you can set the maximum number of parallel updates by adding or setting the following lines:

   ```
   [BatchUpdate]
   MaxThreads=number of threads
   ```

   Depending on your hardware configuration, enter a value between 10 and 30.

4. Use the Database Updater to install or update the database with the required tables, columns, and views:

   a. From the Microsoft Windows desktop, double-click **Single Database**, and then log in using your Inventory Management administrator credentials.

   b. On the **Settings** tab, select the **Daily Totals** setting for the database.

   c. On the **Database Update** tab, click **Update Database** to insert the tables, columns, and views. Verify that the update completes without errors.

   d. Click **Reorganization** to add and remove database procedures and functions. Verify that the update completes without errors.

5. Log in to the database and enter the following command to add an index to the DAILYTOTALS database. If you are upgrading a database with a large number of records, work with a database administrator to schedule the update because of the amount of time required by the operation.

   ```
   create index DAILYTOTALS_fk_ART_ID on DAILYTOTALS
   ( ART_ID );
   ```

Installing Inventory Management on Microsoft SQL Server

This chapter describes the prerequisites and instructions for installing the Inventory Management database on Microsoft SQL Server:

- Preparing Microsoft SQL Server for Inventory Management
- Installing or Updating the Inventory Management Database

Preparing Microsoft SQL Server for Inventory Management

1. Start MSSQL Server Management Studio and log into the database server.
2. Create the Inventory Management database:
   a. Start MSSQL Server Management Studio and log into the database server.
   b. Find the organization short name in `COREDB.CORE_ORGANIZATION.organizationShortName`.
   c. Right-click **Databases** and click **New Database**. Change the name of the database to the organization short name.
3. If you want to restore the database from a backup:
   a. Right-click **Databases**, click **Tasks**, click **Restore**, and then click **Database**.
   b. Enter the organization short name in **To database**.
   c. Select **From device**, click **Browse**, and then navigate to and select the `.bak` file.
   d. Select **Overwrite the existing database**, and then enter the filepath and filename to which the database files restore.
   e. Select **Leave the database ready to use by rolling back...**, and then click **OK**.
4. Secure the database:
   a. Right-click **Security**, and then click **New**.
   b. Enter the organization short name in **Login name**.
   c. Select **SQL Server authentication** and enter a password.
   d. Deselect **Enforce password policy**.
   e. Click **Server Roles** and verify that **dbcreator** and **sysadmin** are selected.

Installing or Updating the Inventory Management Database

1. Install the Inventory Management Database Updater on the database server:
   a. Download and extract the installation archive to the database server, double-click `setup.exe`, and then follow the installation wizard instructions.
   b. On the Choose Database Connection page, enter any connection name, as the name can be changed in a later step. Ignore the Warning message on the next page.
2. Navigate to *root*`\Program Files\myinventory Database Updater\` and open `sql.ini` in a text editor:
   a. Find the section `[win32client.dll]` and verify the following line:

      ```
      comdll=sqlodb32
      ```

   b. Add the following lines to the end of the file:

      ```
      [odbcrtr]
      remotedbname=orgshortname,DSN=orgshortname
      ```

   c. Update the server name and SIDs:

      ```
      <servers>
      <server name="servername"><DbBrand value="SQLSERVER" />
      ```

```
<ServiceName value="MSSQL server instance" />
</server>
</servers>
```

3. Navigate to *root*\Program Files\myinventory Database Updater\ and open fmlogini.ini in a text editor:
   a. Add or configure a section for [*orgshortname*]:

      ```
      [orgshortname]
      DBLogin=server name/orgshortname/
      password,orgshortname,myinvenmenu.ini
      AppIINI=settings.ini
      ```

   b. If you are performing parallel database updates, you can set the maximum number of parallel updates by adding or setting the following lines:

      ```
      [BatchUpdate]
      MaxThreads=number of threads
      ```

      Depending on your hardware configuration, enter a value between 10 and 30.
4. Use the Database Updater to install or update the database with the required tables, columns, and views:
   a. From the Microsoft Windows desktop, double-click **Single Database**, and then log in using your Inventory Management administrator credentials.
   b. On the **Settings** tab, select the **Daily Totals** setting for the database.
   c. On the **Database Update** tab, click **Update Database** to insert the tables, columns, and views. Verify that the update completes without errors.
   d. Click **Reorganization** to add and remove database procedures and functions. Verify that the update completes without errors.
5. Log in to the database and enter the following command to add an index to the DAILYTOTALS database. If you are upgrading a database with a large number of records, work with a database administrator to schedule the update because of the amount of time required by the operation.

   ```
   create index DAILYTOTALS_fk_ART_ID on DAILYTOTALS
   ( ART_ID );
   ```

Configuring the Inventory Management Web Application

1. Create the following folders to store log files:
   - *root*\myinventory\log\myinv\: stores Inventory Management web application log files.
   - *root*\myinventory\log\web_service\: stores Inventory Management web service log files.
   - *root*\myinventory\log\MIA2log\: stores Automation Service scheduler log files.
2. To configure the Inventory Management web application, navigate to *root*\Inetpub\wwwroot\myinventory\, open web.config in a text editor, and then add or set the following keys:

`<add key="LogPath" value="folder to store logs" />`

`<add key="DefaultMenu" value="default menu style" />`

`<add key="PROFILE" value="settings.ini" />`: you must set this value to `settings.ini`.

`<add key="DbBrand" value="SQLSERVER or ORACLE" />`

`<add key="DbUser" value="orgshortname" />`: this value is only required when using Microsoft SQL Server.

`<add key="SERVER" value="IP address or instance name" />`: enter the server IP address when using Microsoft SQL Server and enter the server instance name when using Oracle Database.

`<add key="ORGANISATIONS" value="orgshortname" />`: enter a comma-separated list of organizations that can be selected during login.

`<add key="myMicrosURL" value="public exposed URL for Oracle Hospitality Reporting and Analytics, such as https://www.mymicros.net/login.jsp" />`

`<add key="MyMicrosProtocol" value="network communication protocol for the myMicrosURL, such as https" />`

`<add key="SecureCookies" value="set as true if HTTPS is used for the exposed URL, otherwise set as false" />`

`<add key="myMicrosAllowedDomains" value="comma-separated list of acceptable domains" />`: The application rejects URLs in HTTP POST requests that do not belong to the listed domains. For example, if you enter `domain1.org,domain2.com`, the application does not start for an HTTP POST passing a URL from `domain3.net`.

3. To configure the Inventory Management web service, navigate to *root*`\Inetpub\wwwroot\myinventoryWebService\`, open `web.config` in a text editor, and then add or set the following keys:

   `<add key="SERVER" value="IP address or instance name" />`: enter the server IP address when using Microsoft SQL Server and enter the server instance name when using Oracle Database.

   `<add key="PROFILE" value="settings.ini" />`: you must set this value to `settings.ini`.

   `<add key="DBUSER" value="orgshortname" />`

   `<add key="CASE" value="SQLSERVER or ORACLE" />`

   `<add key="APPDIR" value="web service log directory from step 1" />`

   `<add key="ORGANISATION" value="short name for master organization" />`

4. To configure custom error pages, open `system.web` in a text editor, and then edit the following parameters:

   ```
   <customErrors mode="On" defaultRedirect="~/Common/Forms/
   Err.html">
   ```

   You can then add error redirects by adding the following line:

   `<error statusCode="error number" redirect="error page URL">`

For example, a redirect for the 500 error could be: `<error statusCode="500" redirect="~/Common/Forms/500_Err.html">`

Connecting Reporting and Analytics to Inventory Management

1. Log in to the `M` organization in Reporting and Analytics.
2. Navigate to **System**, and then click **Organization**.
3. Select your organization, click **Edit**, select **Enable Inventory**, enter the Inventory Management web service URL and administrator login credentials, and then click **Save**.

   The web service URL is typically `https://`*`hostname`*`:`*`port`*`/myinventoryWebService/HTNGListener.asmx`
4. Select the MICROS organization, click **Edit**, enter the Inventory Management database login credentials in the **myInventory DB Password** field, and then click **Save**.
5. On the Reporting and Analytics application server:
   a. Open the Microsoft Windows `hosts` file in a text editor and add the following two entries:

      `IP address of Inventory Management Web Application Server customer name`

      `IP address of Inventory Management Web Application Server` `myinventory.`*`customer name`*

   b. Navigate to *`installation path`*`\MyMicros\myPortal\`, open `microsconfig.properties` in a text editor, and then set the following lines:

      `inventoryURL=http://`*`hostname`*`:`*`port`*`/`*`inventory_subdomain`*

      `myInventory.version=`*`version`*

   c. Restart the Reporting and Analytics web services.
6. On the Inventory Management application server, navigate to `https://`*`localhost`*`:8000/myInventory` in a web browser, and then log in to the `Admin` organization.
7. Click **Organizations**, and then click **Web Services**.
8. Set up the default Reporting and Analytics web service:
   a. In the **Host** field, enter `https://`*`Reporting and Analytics hostname`*`/htng/services/HTNGListenerSoap`
   b. Enter administrator login credentials.
   c. Select **Override Custom Definitions** to override custom web service configurations for each organization.
9. Set up the default Inventory Management web service:
   a. In the **Host** field, enter `https://`*`Inventory Management hostname`*`:`*`port`*`/myinventoryWebService/HTNGListener.asmx`

b. Enter administrator login credentials.

c. Select **Override Custom Definitions** to override custom web service configurations for each organization.

10. If you are not overriding custom web service definitions, you can configure the web service settings for a specific organization:

    a. Log in to your organization in Inventory Management.

    b. Click **Organizations**, and then click **Edit**.

    c. Configure the **Reporting and Analytics Web Service** and the **Inventory Management Web Service**. Select **Use default** to use the default web service configuration.

11. You can now configure the Inventory Management portlet in Reporting and Analytics.

9

Enterprise Back Office Components and Services

This chapter provides instructions for installing Enterprise Back Office components and services. What Components Do I Need to Install? contains information regarding

- Installing Labor Management
- Installing the Admin Server
- Installing the Aggregation and Adjustment Service
- Installing the Analysis Aggregation Service
- Installing the Remote Transfer Agent Master Server
- Installing the Remote Transfer Agent Posting Server
- Installing the InfoDelivery Service
- Installing the Alert Engine Service
- Installing the Enterprise Maintenance Services Batch Services
- Installing the Weather Service
- Installing the Simphony Mobile Aggregation

Installing Labor Management

Labor Management installation is not performed as a standalone component.

1. Download `install_ version.exe` to the Reporting and Analytics application server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
    a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
    b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster RAC environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
    c. For **Will myLabor be used with this installation?**, select **Yes**.

4. If you are performing an upgrade:
    a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
    b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, do not select **Portal**.
6. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.
7. On the myLabor Configuration for Portal page, you can change the port number used for non-secure connections and SSL connections. Do not change the syntax.
    a. **Non secure port for myLabor**: `-Dhttp.browser.port=`*`port`*
    b. **SSL port for myLabor**: `-Dhttp.sslaccel.port=`*`port`*
8. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
9. Review the Pre-Installation Summary, and then click **Install**.
10. Enable Labor Management in the Reporting and Analytics application:
    a. In a web browser, navigate to `https://`*`published Reporting and Analytics URL`*
    b. Log in to the M organization.
    c. Click **Admin**, click **System**, click **Organizations**, click your organization, and then click **Edit**.
    d. Select **Enable Enterprise Labor**.
    e. Click **Save**, log out, log back in to Reporting and Analytics, and then set up Labor Management.

Installing the Admin Server

To install the Admin Server:

- Installing Admin Server
- Connecting Reporting and Analytics to the Admin Server

Installing Admin Server

1. Download `install_ `*`version`*`.exe` to the Admin Server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the

selections allow you to enter database connection information for the selected modules.

a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.

b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.

4. On the Use existing Portal configuration page:

   a. If you are performing a new installation or you want to install with a clean set of configurations, select **No** to install and configure a new installation set.

   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.

5. On the Choose Install Set page, select **Admin Server**.

6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Posting/Admin Database Information page, enter the address of the aggregation database server.

8. On the Posting/Admin Mail Server page, enter the mail server information to be used by the Admin Server, and then set the port to 25.

9. On the Admin Server Configuration page, enter the credentials for the database user and the CEDB user.

10. On the Admin Server Configuration page, configure the Admin Server as described in the following table:

Table 9-1 Admin Server Configurations

Field	Description
Trailer to send in alerts from Admin Server	Enter trailer text in the four fields provided.
Email account to send alerts from	Enter the email name, without the domain, that the Admin Server uses to send alerts.
Number of hours before a location is considered out of contact	Enter the maximum number of hours before the Admin Server flags an unresponsive location.
Email addresses to send long alert messages to	Enter the email name, without the domain, to which the Admin Server sends long alert messages. You can separate multiple addresses with a comma.

Table 9-1 (Cont.) Admin Server Configurations

Field	Description
Email addresses to send short alert messages to	Enter the email name, without the domain, to which the Admin Server sends short alert messages. You can separate multiple addresses with a comma.
Email addresses to send copies of org alerts to	Enter the email name, without the domain, to which the Admin Server sends a copy of all alerts.
Folder containing custom packages for Admin Server	Enter a folder path containing custom packages.

11. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
12. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Connecting Reporting and Analytics to the Admin Server

1. Download `install_ version.exe` to the Reporting and Analytics application server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
    a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
    b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
    a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
    b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Portal**.

6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.
8. On the Posting/Admin Database Information page, enter the hostname of the Admin Server.
9. On the Posting/Admin Mail Server page, enter the hostname, SMTP port, and POP3 port of the mail server to be used by the Admin Server.
10. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
11. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Aggregation and Adjustment Service

To install the Aggregation and Adjustment Service:

- Installing Aggregation and Adjustment
- Connecting Reporting and Analytics to the Aggregation and Adjustment Service

Installing Aggregation and Adjustment

1. Download `install_ version.exe` to the Aggregation and Analysis server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:

a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.

b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.

5. On the Choose Install Set page, select **Aggregation and Adjustment Service**.

6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Aggregation Database connection Information page, configure the connection to the Enterprise Back Office, Gift and Loyalty, and Aggregate_DB databases:

   a. Select **Enable Monitor**.

   b. Select **Oracle** or **Sql Server** depending on the Enterprise Back Office database type.

   c. Enter the database SID and server port for the Core database and the Aggregate_DB database.

   d. Enter the hostname for the Core database and the Aggregate_DB database.

   e. Enter the hostname, additional connection properties, and the server port for the Gift and Loyalty database.

   f. Enter login credentials to the Core and Aggregate_DB databases, typically the `AGG` user created during database install.

   g. Enter login credentials to the Gift and Loyalty database, typically the `MMSQL` user created during database install.

8. On the Aggregation and Adjustment Configuration page, configure the database connection to the Aggregation and Adjustment service as described in the following table:

Table 9-2 Aggregation and Adjustment Service Login

Field	Description
Core database login and Core database password	Enter the core database login credentials.
RTA database login and RTA database password	Enter the RTA database login credentials.
Portal database login and Portal database password	Enter the Enterprise Back Office database login credentials.
Location Activity database login and Location Activity database password	Enter the location activity database login credentials.
Name for Analysis/Aggregation Instance	Enter a unique name for this instance of the analysis/aggregation service. The service inserts the name into the database to denote which service processed a job.

Table 9-2 (Cont.) Aggregation and Adjustment Service Login

Field	Description
Connection Cache Type	Select a connection cache type from the drop-down list.

9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.
11. Connecting Reporting and Analytics to the Aggregation and Adjustment Service provides instructions for setting up Reporting and Analytics to connect to the Aggregation and Analysis service.

Connecting Reporting and Analytics to the Aggregation and Adjustment Service

1. Download `install_ version.exe` to the Reporting and Analytics application server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Portal**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.
8. On the Portal Specific Settings - Aggregation and Adjustment Service page, enter the hostname and port of the server with the Aggregation and Analysis service installation.
9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.
11. Set the Aggregation Service memory configurations for your environment.

Installing the Analysis Aggregation Service

1. Download `install_ version.exe` to the Aggregation and Analysis server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Analysis Aggregation**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Aggregation Database connection Information page, configure the connection to the Enterprise Back Office, Gift and Loyalty, and Aggregate_DB databases:
   a. Select **Enable Monitor**.
   b. Select **Oracle** or **Sql Server** depending on the Enterprise Back Office database type.
   c. Enter the database SID and server port for the Core database and the Aggregate_DB database.
   d. Enter the hostname for the Core database and the Aggregate_DB database.
   e. Enter the hostname, additional connection properties, and the server port for the Gift and Loyalty database.
   f. Enter login credentials to the Core and Aggregate_DB databases, typically the `AGG` user created during database install.
   g. Enter login credentials to the Gift and Loyalty database, typically the `MMSQL` user created during database install.
8. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
9. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Remote Transfer Agent Master Server

To install the Master Server for Remote Transfer Agent:

- Installing the Master Server
- Connecting Reporting and Analytics to the Remote Transfer Agent Master Server

Installing the Master Server

1. Download `install_ version.exe` to the Remote Transfer Agent Master server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an

Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.

4. If you are performing an upgrade:
   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Posting**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.
7. On the Database Information page, configure the connection to the Enterprise Back Office database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the domain name or IP of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the domain name or IP of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

8. On the Master Server Configuration page, configure the Master Server as described in the following table:

Table 9-3 Master Server Configurations

Field	Description
RTA database login and RTA database password	Enter the RTA database login credentials for inserting and updating the `RTA_Processed_job` table. The account must have full permissions on the database/schema.
COREDB login and COREDB password	Enter the COREDB login credentials for file transport. The account must have the same level of permissions on the Core database/schema.

Table 9-3 (Cont.) Master Server Configurations

Field	Description
Email account name for the Errors Administrator and Email account password	Enter the e-mail account credentials for the Error Administrator.
Merak 8.5 or higher	Select whether Merak 8.5 or higher is installed on the environment.
Where is the Merak installation located?	If Merak is installed on the environment, enter the installation path.
Server1 account password	Enter the password for the server1 login account.
Cache type for the Master Service	Select the Master Service cache type from the drop-down list.

9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Connecting Reporting and Analytics to the Remote Transfer Agent Master Server

1. Download `install_ version.exe` to the Reporting and Analytics application server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.

5. On the Choose Install Set page, select **Portal**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.
7. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.
8. On the Location of Master Server page, enter the hostname and port of the Remote Transfer Agent Master Server.
9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Remote Transfer Agent Posting Server

1. Download `install_ version.exe` to the Remote Transfer Agent Posting server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Posting**.

6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Database Information page, configure the connection to the Enterprise Back Office database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the domain name or IP of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the domain name or IP of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

8. On the Posting Server Configuration page, configure the Posting server as described in the following table:

Table 9-4 Posting Server Configurations

Field	Description
How many posting threads should run on the server simultaneously?	Enter the number of simultaneous posting threads. Entering a number greater than eight can lead to performance degradation.
How many days of psLogs should be saved?	Enter the amount of days that the posting server preserves the Result sets and the entries in the `RTA_Processed_job` table.
What directory should hold psLogs?	Enter the path to the folder where the posting server saves the logs in .zip format.
Move History by location rather than full server?	Select or deselect whether to move history by location rather than moving history by server. If you deselect this option, the admin server stops posting for the duration of the move.
Limit move history day range	Select or deselect whether to limit moving history by date. You should typically only use this option when you partition databases by date.
What name would you like to use for Temporary Menu Items?	Enter the name the posting server uses for temporary menu items.
What database user should posting use?	Enter the database account name for posting.

Table 9-4 (Cont.) Posting Server Configurations

Field	Description
What is the password for this user?	Enter the database account password for posting.
Run alignment with definitions posting?	Select or deselect whether to run alignment while posting definitions. Select this option if the environment contains an aggregation engine.

9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the InfoDelivery Service

1. Download `install_ version.exe` to the InfoDelivery server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
   a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
   b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. On the Use existing Portal configuration page:
   a. If you are performing a new installation or you want to install with a clean set of configurations, select **No** to install and configure a new installation set.
   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.
5. On the Choose Install Set page, select **infoDelivery**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID.	a. In the Database Type section, select **SQL Server**, and then enter the database network port.
b. Enter the login credentials to the Business Intelligence Repository database.	b. Enter the login credentials to the Business Intelligence Repository database.
c. Enter the login credentials to the Quartz Job Scheduler database.	c. Enter the login credentials to the Quartz Job Scheduler database.
d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard.	d. Enter the hostname of the Business Intelligence Repository database server. The information is typically filled by the installation wizard.
e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.	e. Enter the externally-facing address for access to Enterprise Back Office. This is typically the published URL for Reporting and Analytics.

8. On the InfoDelivery Configuration page, enter the credentials to the CE database.
9. On the InfoDelivery Mail Server page, enter the address of the mail server, and then set the port to 25.
10. On the Portal/InfoDelivery Settings - Font page, configure the Report Mail font settings as described in the following table:

Table 9-5 Report Mail Font Configurations

Field	Description
Enable User Font	Select whether to allow using custom fonts when rendering PDFs.
Path to user font	Enter the path to a font, or click **Choose** and navigate to a font, to set the font used when rendering PDFs.
Limit detail query days	Enter a date limit for executing audit/ analysis detail queries. The Organization configuration can override this setting.
Limit summary query days	Enter a date limit for executing audit/ analysis summary queries. The Organization configuration can override this setting.
New Line Style for InfoDelivery CSV format	Select whether to use **Windows**, **Unicode**, or **HTML** line styling when formatting Report Mail items in CSV.
Load reports by market segment	Select whether to load reports dynamically by appending the organization or role market segment to the template name.

11. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.
12. On the InfoDelivery page, leave the **Pentaho Solutions Directory** blank.
13. On the Review page, select your preferred review type:
    - **Normal**: Review the install folder, features, and disk space requirements.
    - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
14. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Alert Engine Service

1. Download `install_ version.exe` to the Alert Engine server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
    a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
    b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
    a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
    b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Alert Engine**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

    The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.
7. On the Database Information page, configure the connection to the Reporting and Analytics database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the domain name or IP of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the domain name or IP of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

8. On the Alert Engine Configuration page, configure the Alert Engine as described in the following table:

Table 9-6 Alert Engine Configurations

Field	Description
Push alert service username and Push alert service password	Enter the login credentials for the push alert service.
Number of alert threads	Enter the number of alert threads.
Portal DB User and Portal DB Password	Enter the Enterprise Back Office database login credentials.
Core DB User and Core DB Password	Enter the core database login credentials.
Location Activity DB User and Location Activity DB Password	Enter the location activity database login credentials.
RTA DB User and RTA DB Password	Enter the RTA database login credentials.
CE DB User and CE DB Password	Enter the CE database login credentials.

9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Enterprise Maintenance Services Batch Services

1. Download `install_ version.exe` to the Alert Engine server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect

whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.

a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.

b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.

4. If you are performing an upgrade:

   a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.

   b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.

5. On the Choose Install Set page, select **EMS Batch Service**.

6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Database Information page, configure the connection to the Reporting and Analytics database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the domain name or IP of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the domain name or IP of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

8. On the EMS Configuration page, you can **Enable** extended EMS configurations to support HR Employee Import and SAP Imports. Do not enable extended EMS if your environment will not use the two imports, because they can cause problems with EMS batch creation.

9. On the Review page, select your preferred review type:

   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.

10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Weather Service

1. Download `install_ version.exe` to the Weather server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.
    a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.
    b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.
4. If you are performing an upgrade:
    a. On the Use existing Portal configuration page, select **Yes** to use the existing configurations, or select **No** to configure a new install set.
    b. On the Additional Features page, select **No** to continue using the existing set of features, or select **Yes** to add features to the existing install set.
5. On the Choose Install Set page, select **Weather**.
6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

    The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.
7. On the Database Information page, configure the connection to the Reporting and Analytics database:

Oracle Database	Microsoft SQL Server
a. In the Database Type section, select **Oracle**, and then enter the database network port and SID. b. Enter the database login credentials. c. Enter the domain name or IP of the database server. d. In the **Preferred Cache Type** drop-down list, select **Oracle**.	a. In the Database Type section, select **SQL Server**, and then enter the database network port. b. In the **Additional Connection Parameters** field, enter any required connection strings. c. Enter the database login credentials. d. Enter the domain name or IP of the database server. e. In the **Preferred Cache Type** drop-down list, select **Generic**.

8. On the Weather Configuration page, configure the weather service as described in the following table:

Table 9-7 Weather Configurations

Field	Description
What is the database login for the Weather Service?	Enter the username for the database login, typically `MSSQL`.
What is the database password for the Weather Service?	Enter the password for the database login.
How many days of weather should be stored in the database?	Enter the number of days of weather information that should be stored and retained in the database. Enter `0` to disable database storage.

9. On the Review page, select your preferred review type:
   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.
10. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

Installing the Simphony Mobile Aggregation

1. Download `install_ version.exe` to the Simphony Mobile Aggregaton server, and then double-click the executable to launch the installation wizard. Do not extract the file to a folder structure that contains spaces.
2. On the Choose Install Folder page, enter the installation path or click **Choose** to select the installation path.
3. On the Before We Begin page, select **Yes** or **No** for the questions shown to help the installation wizard understand your installation environment. The selections do not affect whether or not the wizard installs the selected modules, but the selections allow you to enter database connection information for the selected modules.

a. For **Would you like to install or upgrade a database with this installation for either myMicros or iCare?**, select **No**.

b. For **Will different features connect to the myMicros Database using different database IP Addresses**, select **Yes** if you expect to use more than one IP/SID to connect to the Enterprise Back Office database. For example, select **Yes** in an Oracle Real Application Cluster (RAC) environment that does not use a virtual IP and when features such as Remote Transfer Agent connect to a different node. If you select **No**, you can still modify the connection strings, but you cannot view individual database information screens by feature.

4. On the Use existing Portal configuration page:

   a. If you are performing a new installation or you want to install with a clean set of configurations, select **No** to install and configure a new installation set.

   b. If you are performing an upgrade and want to keep old settings, select **Yes** to use existing configurations. You can then select whether to configure the feature set on the Additional Features page.

5. On the Choose Install Set page, select **Simphony Mobile Aggregation**.

6. On the Choose Backup Path page, enter a folder path or click **Choose** and select a folder path for storing a backup of the existing installation.

   The wizard creates and names folders using incremental numbers. For example, RTA_1, RTA_2, and RTA. The latest backup folder does not have an appended number, and the wizard only stores up to three backup copies.

7. On the Simphony Mobile Aggregation page:

   a. Enter the number of **Aggregation Threads**.

   b. Enter the credentials for the Portal DB user, the Core DB user, the Location Activity DB user, and the RTA DB user.

8. On the Review page, select your preferred review type:

   - **Normal**: Review the install folder, features, and disk space requirements.
   - **Advanced**: Review and edit individual variables in the installation files, then review the install folder, features, and disk space requirements.

9. Review the log files for errors. The installation wizard writes logs to the `C:\temp\` folder during installation, and to the installation path after completing installation.

10

Post-Installation Configuration

This section provides instructions for setting up and configuring Enterprise Back Office after completing installation.

- Setting Up the Super Organization
- Entering the Organization Passwords
- Configuring the OHGBU_ADMIN User Group
- Enabling Secure Socket Layer (SSL)
- Template Organizations
- Creating an Organization
- Importing Organization Configurations from a Template
- Setting Up Remote Transfer Agent in the Download Organization
- Setting Up Gift and Loyalty for an Organization
- Configuring HTTPS Ports for Gift and Loyalty
- Setting Aggregation Service Memory Configurations
- Setting Aggregation Retention Periods

Setting Up the Super Organization

1. Navigate to Reporting and Analytics, and then log in to the `M` organization with system administrator credentials.
2. Click **Admin**, click **System**, click **Organizations**, click **Organizations**, click **MICROS**, and then click **Edit**.
3. To enable the Oracle Business Intelligence server connection, enter the Oracle WebLogic administrator credentials for **WLST** and **SOAP**.
4. You can click **Save**, log out, log back in to Reporting and Analytics, and then verify that Analysis Reports and Dashboards load the OBI interface.

Entering the Organization Passwords

After you install Enterprise Back Office, log in to the m organization and enter the following passwords to enable the respective functionality:

- External Application
- Forecasting Messaging Queue (for Forecasting and Budget)
- ExactTarget FTP (for Gift and Loyalty)
- Urban Airship (for Alert Engine)
- Bounce eMail (for Gift and Loyalty CRM)

- iCare Messaging Queue (for Gift and Loyalty)
- WLST (for Reporting and Analytics WebLogic AdminServer)
- SOAP (for Reporting and Analytics WebLogic AdminServer)
- myInventory DB (for Inventory Management)
- Simphony DB (for Simphony Point-of-Sale)

Configuring the OHGBU_ADMIN User Group

After you install Enterprise Back Office, update the OHGBU_ADMIN group to include the users who will administer the Enterprise Back Office system. Users must log out before the change takes effect.

Enabling Secure Socket Layer (SSL)

If you installed Enterprise Back Office without enabling SSL, follow these steps to enable SSL:

1. Log in to the Oracle WebLogic console, and then upload the security certificate and enable SSL. Refer to the Oracle WebLogic help for information and instructions.
2. Change the Published URL to comply with SSL requirements.

> **WARNING:**
>
> If you do not enable TSL 1.2, your deployment will not be compliant with security standards.

Template Organizations

The Enterprise Back Office database installation includes the following template organizations:

- Micros MSA
- Simphony Managed Organization
- TSR Template Organization
- Simphony 2x Template Org

You can log into the template organizations using the `sys admin` credentials and set configurations such as the side menu, users, roles, and portlets. You can then import the configurations from the template into a new organization. You cannot import configurations into an organization more than once.

Creating an Organization

1. Log in to the MICROS organization with system administrator credentials.
2. In Reporting and Analytics, click **Admin**, click **System**, click **Organizations**, click **Organizations**, and then click **Add**.
3. Configure basic organization information:
    a. Enter the **Name** and **Short Name** for the organization. Both names must not already be used.
    b. Select the Reporting and Analytics license type in **Organization Type**.
    c. To select a default market of operations, select **QSR** for quick-service restaurants, select **TSR** for table-service restaurants, and select **HTL** for hotel operations in **Market Segment**.
    d. Enter the number of months that Enterprise Back Office retains data in **Retention Months**.
    e. Select a purge configuration in **Purge Level** for data maintenance.
4. Configure the default password policy:
    a. Select how user accounts can be unlocked after Enterprise Back Office locks an account for multiple login failures in **Lockout Policy**.
    b. Enter the number of login failures allowed by Enterprise Back Office before the account is locked in **Max Login Attempts**.
    c. Enter the number of minutes that a user can be inactive in Enterprise Back Office before their login session is closed in **Allowed Idle Period**.
    d. Enter the number of days before requiring a user to change their password in **Password Expiration Period**.
5. Configure the regional settings for the organization:
    a. Select the default **Language** for locations.
    b. Select the day that the calendar week begins in **Start of Week**.
    c. Select **Enable Common Currency** to enable the designating a default currency. You can select a default currency in **Common Currency** after configuring currencies in Reporting and Analytics.
    d. To enable VAT taxes, enter `VATFlag=1` in **Other Options**. Separate entries in the field with new lines.
    e. Enter the international vehicle registration code, separated by spaces, for the countries in which the organization operates in **Reseller**.
6. Configure reports:
    a. Enter a date range limit for detail queries and summary queries in **Detail Query Day Limit** and **Summary Query Day Limit** for Ad Hoc and Interactive reports..
    b. Select **Mask SSN on Report** to hide social security numbers, and select **Do not post SSN as Payroll ID** to avoid social security numbers in payroll reports.
    c. Select whether the organization includes taxes in Net Sales calculations in **Tax Type**.
    d. Enter the maximum number of months that a user can select when running a report in **Calendar Selection Limit**.

e. Select **Report by Market Segment** to organize data in reports by market segment.

7. Enable or disable Enterprise Back Office components:
   a. Select **Enable Customer Info** to enable Gift and Loyalty.
   b. Select **Enable iCare OLTP** to enable Gift and Loyalty Online Transaction Processing.
   c. Select **Enable CRM Database** to enable the Gift and Loyalty Customer Relationship Management database.
   d. Select **Enable Inventory** to enable Inventory Management.
   e. Select **Enable Enterprise Labor** to enable Labor Management.
   f. Select **Enable Labor Messaging** to enable the Labor Management messaging queue.
   g. Select **Enable Extended Labor** to enable extended Labor Management functionality.
8. Click **Save**.
9. You can now configure the organization.
   - Importing Organization Configurations from a Template
   - Setting Up Gift and Loyalty for an Organization
   - The *Oracle MICROS Reporting and Analytics User Guide* contains information and instructions for setting up and configuring the organization in Reporting and Analytics.

Importing Organization Configurations from a Template

1. Log in to the M organization with system administrator credentials.
2. In Reporting and Analytics, click **Admin**, click **System**, click **Organizations**, and then click **Copy Organization Shell**.
3. Select an organization template in **Source Organization Name**.
4. Select the organization you created in **Destination Organization Name**. The drop-down list does not show organizations that have already imported configurations from a template.
5. Create and confirm a password for the `sys admin` user in the new organization.
6. Click **Copy**.

Setting Up Remote Transfer Agent in the Download Organization

If your Enterprise Back Office environment uses the Remote Transfer Agent Posting service, creating and adding organizations and locations requires configurations in the DOWNLOAD organization.

- Configuring Organizations for Remote Transfer Agent
- Creating Locations for Remote Transfer Agent

- Working with Job Scripts for Remote Transfer Agent
- Configuring and Deploying Jobs for Remote Transfer Agent
- Configuring Deployment Lists for Remote Transfer Agent
- Setting Up Point-of-Sale Workstations for Remote Transfer Agent

Configuring Organizations for Remote Transfer Agent

1. Log in to the DOWNLOAD organization in Reporting and Analytics.
2. Click **Admin**, click **.Connect Admin**, click **System information**, and then click **Organizations**.
3. Click **Add**, or select an organization and then click **Edit**.
4. Select your Reporting and Analytics **Organization**.
5. Enter an abbreviation for the organization consisting of up to three characters in **Alpha3Code**. The Alpha3Code is used as the organization name during login.

Creating Locations for Remote Transfer Agent

Follow the instructions to create and set up a location using Remote Transfer Agent. Make sure to set up a Master Group structure before creating the location.

1. Log in your organization in Reporting and Analytics.
2. Click **Admin**, click **Portal**, click **Organizational Structure**, and then click **Locations**.
3. Click **Add**, and then fill out the location configuration form.
   a. In the **Name** field, type a unique name for the location.

      For example, type `Columbia` for a restaurant location in Columbia, Maryland.

   b. In the **Location Reference** field, type a value to indicate the location position within the organizational hierarchy.

      You can use a number to indicate the position. For example, if the location is the fourth location in a district level, you can use a value of `4`. You can also use text to indicate the position. For example, you can use `East` for a location on the Eastern side of a district level.

   c. Select the **Master Group** to which the location belongs.
4. Log in to the DOWNLOAD organization in Reporting and Analytics.
5. Click **.Connect Admin**, click **Location Information**, and then click **Locations**.
6. Click **Add Restaurant**, and then fill out the form:
   a. Select the RTA organization from the **Organization** drop-down list.
   b. Select the Reporting and Analytics counterpart for the location from the **Locations** drop-down list.
   c. Select the Point-of-Sale application from the **System** drop-down list.
   d. If applicable, enter the order or subscription number in the **External Reference** field.
   e. Leave the **Restaurant ID** and **Password** fields empty. The Remote Transfer Agent generates an ID and password for the location, and then creates a mailbox in the mail server using the generated credentials.

If you return to this form and change the password, the Remote Transfer Agent does not propagate the change to the mail server. You must update the password in the mail server, or the store download fails.

f. As a reference, you can enter the date that you created the location and the date that you set the location to inactive.

g. Do not select **Beta Code**.

h. Do not select **Beta Script**.

Working with Job Scripts for Remote Transfer Agent

You can import, view, and toggle the status of job scripts for Remote Transfer Agent.

1. Log in to the DOWNLOAD organization in Reporting and Analytics.
2. Click **.Connect Admin**, click **Location Information**, and then click **Job Scripts**.
3. To import a script:
   a. Click **Load Script**.
   b. Select the **Supported Systems**. Hold `CTRL` to select more than one system.
   c. Click **Choose Files**, select the file containing the script, and then click **Import**.
4. To view the code for a script, select a script, and then click **Display Script**.
5. To deactivate a script, select a script, and then click **Set Inactive**.

Configuring and Deploying Jobs for Remote Transfer Agent

You can configure jobs to run one or more scripts to a posting class.

1. Log in to the DOWNLOAD organization in Reporting and Analytics.
2. Click **.Connect Admin**, click **Location Information**, and then click **Jobs**.
3. To create a job:
   a. Click **Create Job**.
   b. Select the **Scripts** to be run by this job. Hold `CTRL` to select more than one system.
   c. Select the class to which the job posts data from the **Posting Classes** field.
   d. To add a custom job, click **Choose Files**, and then select the file containing the script.
   e. Click **Create**.
4. To view the code for a script, select a job, and then click **Display Script**.
5. To configure deployment variables for a job:
   a. Click **Deployment Variables**.
   b. Click **Add** to add a new variable, or select a variable and then click **Edit**.
   c. Double-click and then enter a value in the the organization level, variable name, and value fields.
6. To deploy the job for this organization, select the job, and then click **Deploy**.
7. To deploy the job for other organizations:

a. Click **.Connect Admin**, click **Location Information**, and then click **Deploy job**.
b. Select the organization from the **Organizations** drop-down list.
c. Select the deployment list or job, and then click **Deploy job**.

8. To deploy all jobs for any organization:
   a. Click **.Connect Admin**, click **Location Information**, and then click **Deploy all jobs**.
   b. Select the organization from the **Organizations** drop-down list.
   c. Use the **Lists/Locations/Sources** list to narrow the scope of the job deployment.
   d. Click **Deploy all jobs**.

Configuring Deployment Lists for Remote Transfer Agent

You can create and maintain a list of jobs for each organization in the Remote Transfer Agent.

1. Log in to the DOWNLOAD organization in Reporting and Analytics.
2. Click **.Connect Admin**, click **Location Information**, and then click **Deployment Lists**.
3. To create a list:
   a. Click **Add**, select the organization, enter a name for the list, and then click **OK**.
   b. Select the list, click **Edit List**, and then click **Yes** to allow the database to update with the new deployment list.
4. To add locations to the deployment list:
   a. Select the list, and then click **Edit List**.
   b. Click **Add Location**, select the location, and then click **OK**.

Setting Up Point-of-Sale Workstations for Remote Transfer Agent

1. Make sure you know your location ID and download password:
   a. In Reporting and Analytics, click **Reports**, click **More Reports**, click **Admin Reports**, and then click **Download Report**.
   b. Make a note of the **Restaurant ID** for your location.
   c. Navigate to the **.Connect Admin** portlet, select your location, and select **Display Password**.

      If the **.Connect Admin** portlet does not populate a list of locations, then you do not have the **Can View Download passwords** portlet permission enabled for your role.
   d. Make a note of the **Download Password**.
2. On each Point-of-Sale workstation, download and install Remote Transfer Agent for your location:
   a. In Reporting and Analytics, click **Admin**, and then click **Store Download**.
   b. Click **Install RTA Client**, enter the **Restaurant ID** and the **Download Password**, and then click **Next**.

      If the installation fails, Reporting and Analytics shows the error log in a text editor.

Setting Up Gift and Loyalty for an Organization

1. Log in to Reporting and Analytics using the `M` organization and system administrator credentials.
2. Click **Admin**, click **System**, click **Organizations**, click **Organizations**, click your organization, and then click **Edit**.
3. To enable Gift and Loyalty, select **Enable Customer Info**.
4. To enable Online Transaction Processing (OLTP), select **Enable iCare OLTP**.
    a. Select the segmentation generator criteria threshold in **Segmentation Generator Criteria Selection**.
    b. Select the segmentation generator storage amount in **Segmentation Generator Data Storage**.
    c. Select **Enable Segmentation Portlet** to allow users in this organizations to access segmentation configurations.
5. To enable Gift and Loyalty Customer Relationship Management, select **Enable CRM Database**.
    a. To use SalesForce Marketing Cloud campaigning, select **Enable ExactTarget Campaigning**.
    b. You can then enter the campaign URL and login credentials for interfacing with SalesForce Marketing Cloud.
6. Click **Save**, and then log out.
7. Log into Reporting and Analytics using your organization and administrator credentials.
8. Navigate to the **iCare GPL** portlet, and then click **Organization Configuration**.
9. To enable ExactTarget campaigning, on the **ExactTarget** tab:
    a. Select **Enable ExactTarget Campaigning**.
    b. Enter the **ExactTarget WSDL URL** and the **ExactTarget FTP** information.

Configuring HTTPS Ports for Gift and Loyalty

You can enable other ports for HTTPS in Gift and Loyalty, such as 443:

1. Log in to the Gift and Loyalty Oracle WebLogic console.
2. In the Domain Structure, click **iCare_Domain**, click **Environment**, click **Servers**, and then in the table of servers, click **icare_server**.
3. Click the **Protocol** tab, click the **Channels** tab, click **Lock & Edit**, and then click **New**.
4. Fill out the **Create a New Network Channel** form:
    a. Enter a name, and then select https from the **Protocol** drop-down list.
    b. Enter 443 (or another open and unused port) in **Listen Port** and **External Listen Port**. Do not enter 7001 or 9443.

c. Select **Enabled** and **HTTP Enabled for This Protocol**.

d. If you installed a security for 9443 during the Gift and Loyalty installation, select **Use Server's SSL Identity** from the **Channel Identity** drop-down list. Select **Customize Identity** to enter a new SSL certificate.

5. Click **Finish** and activate the changes.

Setting Aggregation Service Memory Configurations

After installing the Aggregation Service, set memory configurations for your environment based on the following guidelines:

Table 10-1 Aggregation Service Memory Sizing

Load Guideline	RAM	maxJobExecution	readThreadPoolSize	processThreadPoolSize	writeThreadPoolSize	cacheSize
Total Number of Users: 1 Concurrent Users: 1 Queries at Peak Times: 1	8 GB	2	10	2	10	25
Total Number of Users: 500 Concurrent Users: 12 Queries at Peak Times: 12	16 GB	3	15	5	15	35
Total Number of Users: 1000 Concurrent Users: 25 Queries at Peak Times: 25	40 GB	5	30	5	30	65

1. On the server hosting the Aggregation service, open *INSTALLATION_DIR*`/AnalysisAggregation/config/aggregation.conf` in a text editor.

2. Set the value of `wrapper.java.additional.2` to the RAM allocation for the service in megabytes. For example, if you are allocating 8 GB of RAM, enter `-Xmx8192M`,

3. Open *INSTALLATION_DIR*`/AnalysisAggregation/config/aggregation.properties` in a text editor.

4. Set the values for `maxJobExecution`, `readThreadPoolSize`, `processThreadPoolSize`, and `writeThreadPoolSize`.

5. Open *INSTALLATION_DIR*/AnalysisAggregation/config/db.xml in a text editor.
6. Set the value for cacheSize.
7. Restart the server.

Setting Aggregation Retention Periods

Configure the amount of time that the aggregation service retains data for each organization:

1. In Reporting and Analytics, navigate to the **Production Management** portlet, and then click the **Agg. Retention** tab.

   If you do not have the Production Management portlet on your sidebar, add the **Production Management** portlet from the **Portlet** type to your role, and then log back in to Reporting and Analytics.
2. Double-click the **Retention Months** column for the organization you want to configure, enter the number of months for data retention, and then click **Save**.

Improving the Performance for Exporting Large Analysis Reports to Excel

For organizations that export analysis reports with large amounts of data to Microsoft Excel format, you can make the following configuration changes:

1. In a command prompt, navigate to *root*\myMicros\Oracle\Middleware\instances\ORCLRNA\bin, and then enter opmnctl stopall.
2. In the Microsoft Windows Services Manager, stop all **beasvc bifoundation_domain_bi_server*X***, and then stop **beascv bifoundation_domain_AdminServer**.
3. In the file explorer, navigate to *root*\myMicros\Oracle\Middleware\instances\ORCLRNA\OracleBIJavaHostComponent\coreapplication_obijh1.
   a. Open config.xml in a text editor and configure the XMLP tag:

      ```
      <XMLP>
          <InputStreamLimitInKB>0</InputStreamLimitInKB>
          <ReadRequestBeforeProcessing>false</
      ReadRequestBeforeProcessing>
      </XMLP>
      ```

   b. Open xdo.cfg and add the following in the properties tag:

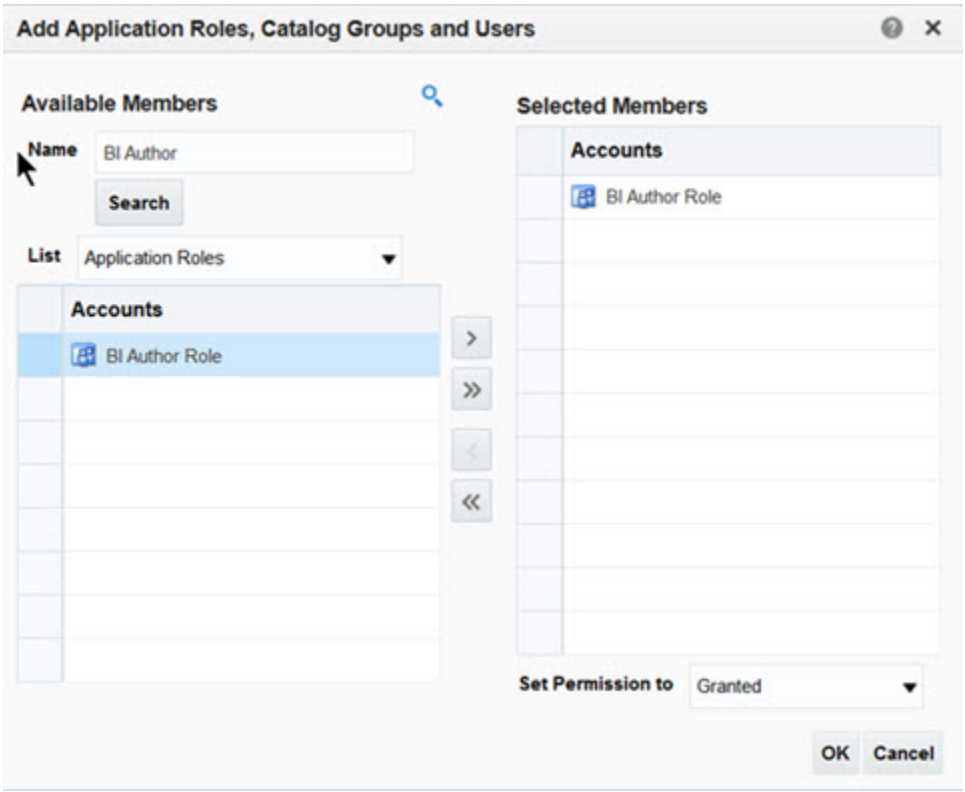
      ```
      <property name="xlsx-keep-values-in-same-column">true</property>
      ```
4. In the Microsoft Windows Services Manager, start **beascv bifoundation_domain_AdminServer**, and then start all **beasvc bifoundation_domain_bi_server*X***.

5. Log in to the Oracle WebLogic Administration Console, click **Deployments**, and then verify or wait for all services to become **Active**.
6. In a command prompt, navigate to `root\myMicros\Oracle\Middleware\instances\ORCLRNA\bin`, and then enter `opmnctl startall`.

Enabling HTML Support in Oracle Business Intelligence

Complete this procedure so users can save analysis reports that contain HTML markup.

1. In Reporting and Analytics, log in to the M organization with the sys admin account.
2. In a new browser tab, go to `http://OBI Server Address:9704/analytics/saw.dll?Admin`.
3. Click **Manage Privileges**.
4. On the Manage Privileges screen, find the **Save Content with HTML Markup** privilege.
5. If the privilege role is not set to **BI Author Role**:
   a. Click the current role value.
   b. On the **Privilege: Save Content with HTML Markup** screen, click **Add**, search for the **BI Author Role**, and then add the role to the **Selected Members** table.



   c. Click **OK**.

11

Administration and Maintenance

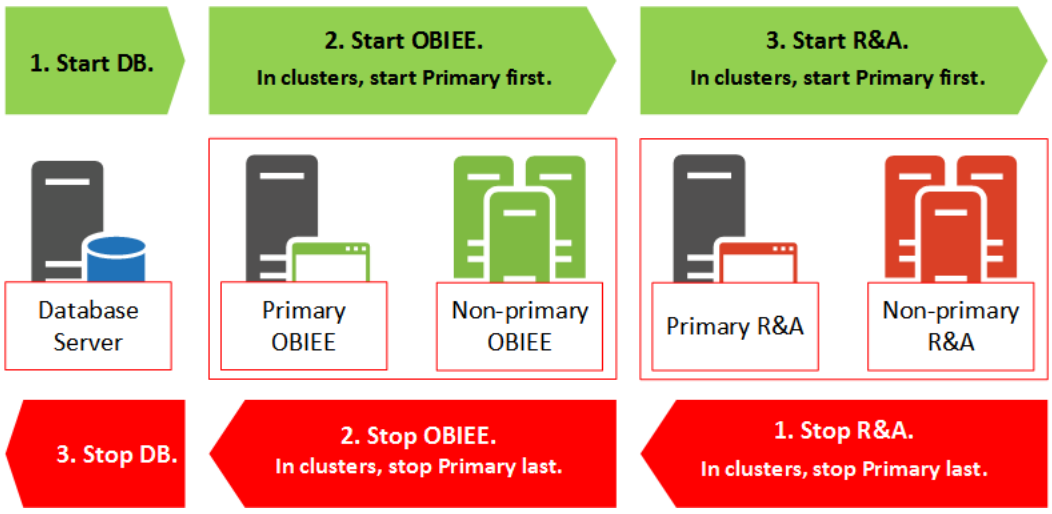
This section provides instructions for administrative and maintenance-related tasks, such as password changes, URL changes, and server restarts.

- Restarting Reporting and Analytics Servers
- Changing Microsoft SQL Server Information
- Changing the Reporting and Analytics Published Site URL
- Changing the Oracle Business Intelligence Server Published Site URL
- Maintaining Supported Point-of-Sale Application Versions
- Updating Enterprise Back Office with New Gift and Loyalty Passwords
- Re-Deploying Reporting and Analytics Applications
- Re-Deploying Gift and Loyalty

Restarting Reporting and Analytics Servers

To prevent conflicts due to server dependencies when starting or shutting down Reporting and Analytics, use the following diagram as a guideline for the order you should follow. For environments with server clusters, make sure to start the primary servers first, and to shut down the primary servers last.

Figure 11-1 Shutdown and Startup Order for Reporting and Analytics Servers



Changing Microsoft SQL Server Information

Use the SQL Server Database Configuration for OBIEE utility to change the hostname or instance name of a Microsoft SQL Server.

1. Navigate to and double-click *root*\MyMicros\SQLServerOBIEEConfiguration\SQLServerOBIEEConfiguration.exe to start the **SQL Server Database Configuration for OBIEE** utility.
2. The **Driver** field shows the file path to the Microsoft Open Database Connectivity (ODBC) driver. You can enter the file path in the field if the utility cannot find the ODBC dll file.
3. For the **AGGREGATION** server:
   a. The **Server** field shows the hostname and instance name (if applicable) of the Aggregation database server. You can edit the name using this field.
   b. The **Database** field shows the database to which you are currently connected.
4. For the **REPORTING & ANALYTICS** server:
   a. The **Server** field shows the hostname and instance name (if applicable) of the Reporting and Analytics database server. You can edit the name using this field.
   b. The **CORE Database** field shows the core database to which you are currently connected.
   c. The **LOCATION ACTIVITY Database** field shows the location activity database to which you are currently connected.
5. Click **Save** to make the changes to the database server names.

Changing the Reporting and Analytics Published Site URL

These instructions provide a high-level overview and basic guidance to the areas within the Oracle WebLogic console that apply to this task. The *Oracle WebLogic Server* documentation contains detailed information and instructions for understanding and performing configurations within the Oracle WebLogic console.

1. In the Oracle WebLogic console, navigate to the **Summary of Servers** page, click the ***application server name*** (typically appServ*number*), click **Configuration**, click **Federation Services**, click **SAML 2.0 General**, and then change the **Published Site URL**.

   The Published Site URL is case sensitive in server cluster deployments.
2. Publish the metadata to the following location: *INSTALLATION_DIR*\Oracle\Middleware\user_projects\domains\bifoundation_domain\app_metadata.xml

   In a two-box or cluster installation, the WebLogic console creates the metadata file on the Reporting and Analytics application server. You must copy the file to the OBI server running the Oracle WebLogic Administration Server.
3. Navigate to **Security Realms**, click **myrealm**, click **Providers**, click **Authentication**, click the **saml2AP** identity assertion provider, and then click **Management**.
   a. Delete and then re-create the **app_data** service provider partner.
   b. Use the metadata file you created for the new published site URL.
   c. Select **Enabled**, enter `/analytics/*` in the **Redirect URIs** field, and then select **Only Accept Signed Artifact Requests**.

4. Change the value for **portalDomainURL** in `microsConfig.properties`.
5. If you are not changing the OBIEE published URL, redeploy `portal.ear`. Re-Deploying Reporting and Analytics Applications contains instructions for redeploying applications.

Changing the Oracle Business Intelligence Server Published Site URL

These instructions provide a high-level overview and basic guidance to the areas within the Oracle WebLogic console that apply to this task. The *Oracle WebLogic Server* documentation contains detailed information and instructions for understanding and performing configurations within the Oracle WebLogic console.

1. In the Oracle WebLogic console, navigate to the **Summary of Servers** page, click ***OBI server name*** (typically bi_server*number*), click **Configuration**, click **Federation Services**, click **SAML 2.0 General**, and then change the **Published Site URL**.

   The Published Site URL is case sensitive in server cluster deployments.
2. Publish the metadata to the following location: *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\obiee_metadata.xml`
3. Navigate to **Security Realms**, click **myrealm**, click **Providers**, click **Credential Mapper**, click the **saml2CMP** credential mapping provider, and then click **Management**.
   a. Delete and then re-create the **obiee** service provider partner.
   b. Use the metadata file you created for the new published site URL.
   c. Select **Enabled**, select **Key Info Included**, and then select **Only Accept Signed Artifact Requests**.
4. Change the value for **OBIEE.PUBLISH_URL** in `microsConfig.properties`.
5. Change the values for **OBIEE.SOAPWSDLURL** and **OBIEE.URL** in `obieeConfig.properties`.
6. Redeploy `portal.ear` and `obieeWebService.war`. Re-Deploying Reporting and Analytics Applications contains instructions for redeploying applications.

Maintaining Supported Point-of-Sale Application Versions

Maintain the list of supported versions for applications that interface with Reporting and Analytics, such as Point-of-Sale applications and Property Management Systems. The Posting service does not accept data from versions that are not listed under each application.

1. In Reporting and Analytics, navigate to the **Production Management** portlet, and then click the **Pos. Configuration** tab.

   If you do not have the Production Management portlet on your sidebar, add the **Production Management** portlet from the **Portlet** type to your role, and then log back in to Reporting and Analytics.
2. Double-click the **Supported Version** column for a Point-of-Sale application.
3. Enter the version number for which you want to add support. You can enter more than one version number using a comma and no spaces. For example, `3.4,5.6,5.6.1`

Version numbers added or removed this way do not affect versions officially supported by Enterprise Back Office, which are denoted by an asterisk.

Updating Enterprise Back Office with New Gift and Loyalty Passwords

After changing passwords for Gift and Loyalty database users, follow the instructions to update the passwords in Enterprise Back Office:

1. On the Gift and Loyalty application server, navigate to *InstallationPath*\PasswordChangeUtility\ and double-click ChangePassword.cmd.
2. For each database user account that you want to update, select the checkbox next to the account name and enter the new password. You can select **Show Passwords** to unmask the passwords being entered.
3. Click **Apply Changes** to update the new passwords. The utility creates a backup of the .properties files in the same folder.
4. Re-deploy Gift and Loyalty.

Re-Deploying Reporting and Analytics Applications

Perform the following steps to manually re-deploy applications without using the update functionality in the Oracle WebLogic Administration Console.

1. In the Oracle WebLogic console, navigate to the Summary of Deployments page, and then delete the applications that you want to re-deploy.
2. Click **Install** and use the following table as a reference to deploy the applications:

Table 11-1 Application Deployment Reference

EAR/WAR Location	Deployment Target	Deployment Name
INSTALLATION_DIR\myPortal\portal.ear	micros_cluster	portal
INSTALLATION_DIR\OBIEE\analyticsRes.war	bi_cluster	analyticsRes
INSTALLATION_DIR\OBIEE\LogoutApp.war	bi_cluster	logoutApp
INSTALLATION_DIR\OBIEE\obieeWebService.war	bi_cluster	ObieeWebService

   a. Navigate to the Enterprise Application Archive (EAR) or Web Application Archive (WAR) file for the application.
   b. Select **Install this deployment as an application**.
   c. Select the deployment target corresponding to the selected EAR or WAR file.
   d. Enter the deployment name corresponding to the selected EAR or WAR file.
   e. Select **Copy this application onto every target for me**.

3. Click **Activate Changes**, click **Start**, and then click **Servicing all requests**.
4. If the deployment times out, increase the `Max Stuck Thread Time` server environment parameter to increase the time-out allowance. Deployment Time Outs contains information and instructions.

Re-Deploying Gift and Loyalty

Perform the following steps to manually re-deploy Gift and Loyalty without using the update functionality in the Oracle WebLogic Administration Console.

1. In the Oracle WebLogic console, navigate to the Summary of Deployments page, and then delete the Gift and Loyalty application.
2. Click **Install**:
   a. Navigate to *`INSTALLATION_DIR`*`\iCare\icare.ear`.
   b. Select **Install this deployment as an application**.
   c. Select `icare_server` as the deployment target.
   d. Enter `icare` as the deployment name.
   e. Select **Copy this application onto every target for me**.
3. Click **Activate Changes**, click **Start**, and then click **Servicing all requests**.
4. If the deployment times out, increase the `Max Stuck Thread Time` server environment parameter to increase the time-out allowance. Deployment Time Outs contains information and instructions.

Setting Server-Wide Notifications

System Administrators can use Enterprise Message to create server-wide notification messages to be shown on the Reporting and Analytics login screen. This lets system administrators communicate information to all hosted organizations, such as upcoming downtime for maintenance, application version updates with a link to a change log, and security warnings.

1. Log in to Reporting and Analytics using system administrator credentials for the `M` organization.
2. Navigate to the **Enterprise Message** portlet. If you do not see the portlet, create and assign an instance of the portlet to the system administrator role.
3. Click **Add**, or select an existing message and then click **Edit**.
4. Fill out the form to configure the message, and then click **Save**:
   a. Enter a name to identify the message instance.
   b. Enter a header and up to three lines of messages using HTML tags for text formatting and hyperlinks. These fields block script tags.
   c. Select the date and time range that Reporting and Analytics shows the message.

12 Uninstallation

This section provides instructions for uninstalling Enterprise Back Office.

Uninstalling Enterprise Back Office 9.0 or Later

This topic provides instructions for creating a backup and then running the uninstallation wizard to remove Oracle MICROS Enterprise Back Office. Refer to the Oracle WebLogic help and the Oracle Business Intelligence help when uninstalling the respective software.

1. Uninstall the Reporting and Analytics application server. If you installed Reporting and Analytics in a server cluster, uninstall each non-primary server before uninstalling the primary server.
    a. Navigate to the `myMicros` installation directory.
    b. Copy the `myMicros` folder to create a backup.
    c. Make sure the current Microsoft Windows user has **Change** permissions for the `myMicros` folder.
    d. Navigate to *`installation path`*`\myMicros\Uninstall_myMicros\` and double-click `Change myMicros Installation`.
    e. Follow the instructions, and then click **Next** to uninstall the Enterprise Back Office components on the current server. You cannot stop or cancel the uninstallation process.
    f. Uninstall Oracle WebLogic.
    g. Delete the `myMicros` folder to remove all files that were not removed by the uninstallation wizard.
    h. Restart the server.
2. Uninstall the Oracle Business Intelligence (OBI) server. If you installed Reporting and Analytics in a server cluster, uninstall each non-primary OBI server before uninstalling the primary server.
    a. Uninstall Oracle Business Intelligence.
    b. Navigate to the `myMicros` installation directory.
    c. Copy the `myMicros` folder to create a backup.
    d. Make sure the current Microsoft Windows user has **Change** permissions for the `myMicros` folder.
    e. Navigate to *`installation path`*`\myMicros\Uninstall_myMicros\` and double-click `Change myMicros Installation`.
    f. Follow the instructions, and then click **Next** to uninstall the Enterprise Back Office components on the current server. You cannot stop or cancel the uninstallation process.
    g. Uninstall Oracle WebLogic.

h. Back up log files and delete the following folders:
   - *root*\bea
   - *root*\temp
   - *root*\Program Files\Oracle\Inventory\logs

i. Delete the myMicros folder to remove all files that were not removed by the uninstallation wizard.

j. Clear the content of the TMP and TEMP folders. Microsoft Windows stores the location of these folders as user variables in the system environments.

k. Restart the server.

3. Uninstall Enterprise Back Office components and services from each server.

   a. Navigate to the myMicros installation directory.

   b. Copy the myMicros folder to create a backup.

   c. Make sure the current Microsoft Windows user has **Change** permissions for the myMicros folder.

   d. Navigate to *installation path*\myMicros\Uninstall_myMicros\ and double-click Change myMicros Installation.

   e. Follow the instructions, and then click **Next** to uninstall the Enterprise Back Office components on the current server. You cannot stop or cancel the uninstallation process.

   f. Delete the myMicros folder to remove all files that were not removed by the uninstallation wizard.

   g. Restart the server.

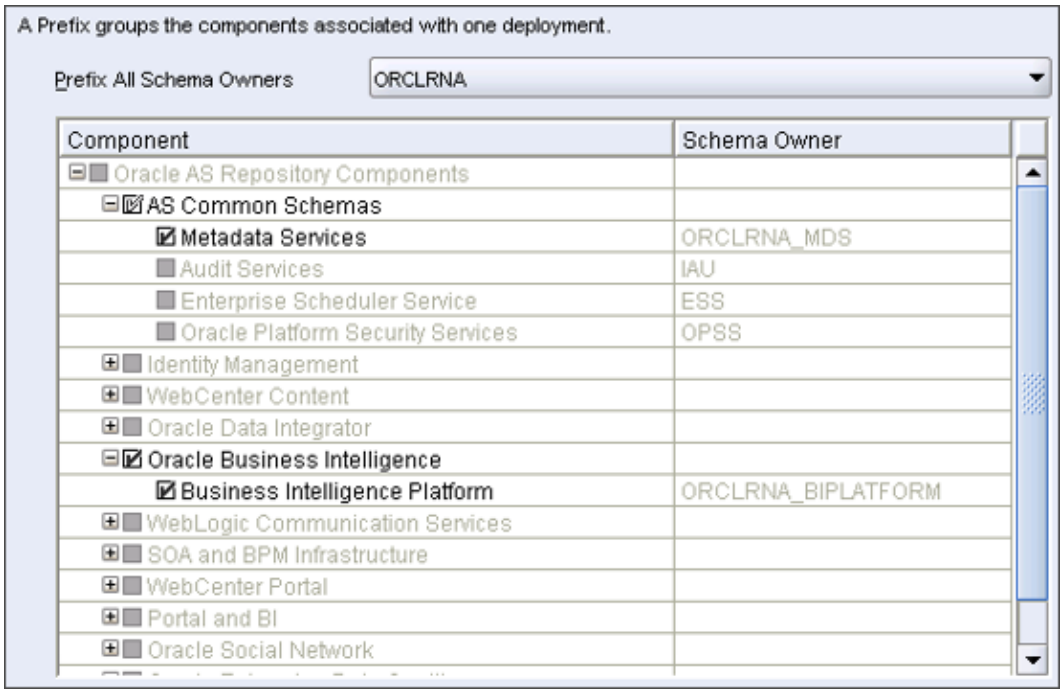
Uninstalling the Inventory Management Application

Remove the Inventory Management application through the Microsoft Windows Control Panel.

Uninstalling Oracle Business Intelligence Schemas from Oracle Database

1. Uninstall Oracle Business Intelligence Enterprise Edition.
2. Navigate to \RCU\BIN\ from the installation archive, and then double-click the rcu batch file to start the Oracle Repository Creation Utility (RCU).
3. On the Drop Repository screen, select **Drop**.
4. On the Database Connection Details screen, enter the database information, and then enter credentials for a SYSDBA account.
5. Click **OK** after the RCU wizard checks for prerequisites.
6. On the Select Components screen, make sure **Metadata Services** and **Business Intelligence Platform** are selected, as shown in the following screenshot:

Figure 12-1 Oracle RCU Components Selection for Oracle Database



7. Click **OK** to confirm schema removal despite affecting current applications, and after the wizard checks for prerequisites.
8. Click **Drop**, verify the completion summary, and then click **Close**.
9. Using a database connectivity tool, verify that the `orclrna_biplatform` and `orclrna_mds` users no longer exist.
10. Navigate to *root*`\Oracle\`*databaseInstanceName*`\mymicros\` and verify that `ORCLRNA_BIPLATFORM.DBF`, `ORCLRNA_MDS.DBF`, and `ORCLRNA_IASTEMP.DBF` have been deleted.
11. Use the following query to delete the `System.SCHEMA_VERSION_REGISTRY$` entry:

    ```
    delete from System.SCHEMA_VERSION_REGISTRY$ where
    mrc_name='ORCLRNA';
    ```

12. Use the following query to delete `obieeRcu` records from the `CORE_OPTIONS` table:

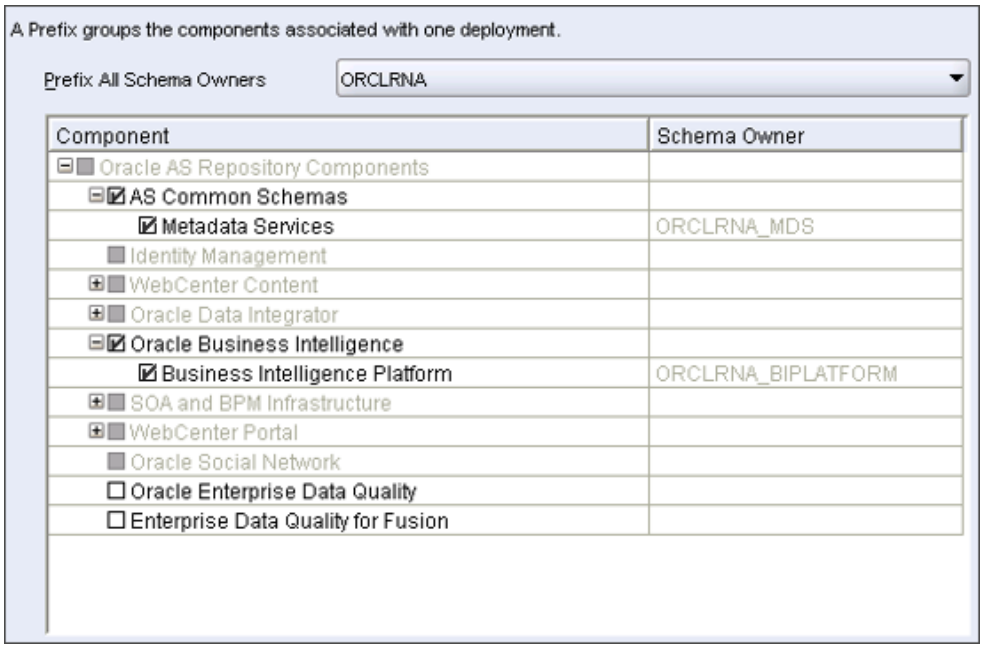
    ```
    delete from CORE_OPTIONS where modulename='obieeRcu';
    ```

Uninstalling Oracle Business Intelligence Schemas from Microsoft SQL Server

1. Uninstall Oracle Business Intelligence Enterprise Edition.
2. Navigate to `\RCU\BIN\` from the installation archive, and then double-click the `rcu` batch file to start the Oracle Repository Creation Utility (RCU).
3. On the Drop Repository screen, select **Drop**.
4. On the Database Connection Details screen, enter the database information, and then enter credentials for a DBA or SYSDBA account.

5. Click **OK** after the RCU wizard checks for prerequisites.
6. On the Select Components screen, make sure **Metadata Services** and **Business Intelligence Platform** are selected, as shown in the following screenshot:

Figure 12-2 Oracle RCU Components Selection for Microsoft SQL Server



7. Click **OK** to confirm schema removal despite affecting current applications, and after the wizard checks for prerequisites.
8. Click **Drop**, verify the completion summary, and then click **Close**.
9. Using a database connectivity tool, verify that the `ORCLRNA_BIPLATFORM` and `ORCLRNA_MDS` tables no longer exist.
10. Delete or set `optionvalue='true'` for the record in the `CORE_OPTIONS` table with the module name `obieeRcu`.
11. Navigate to the folder that you stored database files and verify that the `ORCLRNA_RCU` primary data file and the `ORCLRNA_RCU_log` transaction log file have been removed.

Uninstalling Enterprise Back Office 8.5 or Earlier

1. If you are upgrading to Enterprise Back Office 9.0 or later and you want to generate metadata outputs of legacy reports, you must generate metadata for legacy reports before uninstalling Enterprise Back Office. You will not be able to recover the reports after you uninstall the earlier version of Enterprise Back Office.
2. On each server hosting an Enterprise Back Office component or service:
   a. Navigate to the `myMicros` installation directory.
   b. To create a backup of the configurations, copy the `myMicros` folder to a backup location.

You cannot restore the configurations from older versions. You can only use the backup as a configuration reference.

c. Make sure the current Microsoft Windows user has **Change** permissions for the `myMicros` folder.

d. Navigate to *`installation path`*`\myMicros\Uninstall_myMicros\`, and then double-click `Change myMicros Installation`.

e. Follow the instructions, and then click **Next** to uninstall the Enterprise Back Office components on the current server. You cannot stop or cancel the uninstallation process.

f. Delete the `myMicros` folder to remove all files that were not removed by the uninstallation wizard.

g. Restart the server.

Generating Metadata for Legacy Reports

If you are upgrading Oracle MICROS Enterprise Back Office from 8.5.1.5 to 9.0 or later and you want to generate the subject area mapping report for Interactive Reports and Ad Hoc reports, you must use the Interactive and Ad Hoc Reports metadata extraction tool before uninstalling Reporting and Analytics. If you are using an early Enterprise Back Office version, you must upgrade to 8.5.1 and apply patch 5 before you can perform these steps.

1. Download and extract the archive to a folder on the Reporting and Analytics application server.
2. Copy `ntlmauth.dll` from `/x64/` for 64-bit operating systems and `/x86/` for 32-bit operating systems to *`%JAVA_HOME%`*`\bin\`
3. Copy the following files to the folder containing the tool:
   - *myPorta*l\microsConfig.properties
   - *myPorta*l\bin\c.properties
   - *myPorta*l\bin\myportal
4. Create a folder to store output metadata .CSV files and migration log files. For example, *`root`*`:\Output`
5. In a command prompt, navigate to the folder to which you extracted the tool.
6. Enter the following command and arguments to run the tool:

   `java –jar MetadataExtract.jar` *`argument1 argument2 argument3 argument4 argument5`*

   a. *argument1*: Enter the path to the folder containing the organization ID folders. By default, this path is *`root`*`:\myMicros\pentaho-solutions\myMicros\`

   b. *argument2*: Enter the path to the output folder you created in Step 4.

   c. *argument3*: Enter `true` to export a .CSV file and insert the metadata into the Enterprise Back Office database, or enter `false` to create the .CSV file without inserting the metadata into the database.

   d. *argument4*: Enter the Reporting and Analytics major and minor version from which you are upgrading: `8.5` or `8.4`.

   e. *argument5*: Enter the path to the folder to which you copied the files in Step 3.

For example: `java –jar MetadataExtract.jar C:\myMicros\pentaho-solutions\myMicros C:\Output true 8.5 C:\MigrationTool`

7. Navigate to the output directory and verify the metadata files and the logs.

13
Troubleshooting

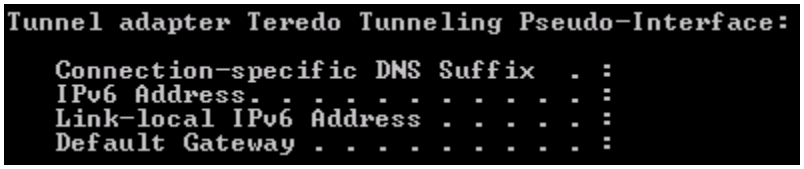
This section provides troubleshooting instructions for common or significant installation problems.

- Disabling Tunnel Adapters
- Troubleshooting Oracle Business Intelligence Server Installation Errors
- Server Failed to Remove the Staged Files
- Installation Stops Progressing at OBIEE Configuration
- Error Messages in MM_Log
- Installation Fails When Reinstalling the Enterprise Back Office Database
- HTTP Error 400 or 403 when Accessing Analysis Reports and Dashboards
- Charts Not Generating in Core Reports
- Deployment Time Outs
- OBI Self-Service Portlet Stops at Signing In

Disabling Tunnel Adapters

1. In the command prompt, enter `ipconfig /all` and check for **Tunnel adapter *Tunneling Interface Name***. The following screenshot shows an example containing the Teredo Tunneling Pseudo-Interface.

Figure 13-1 Teredo Tunneling Pseudo-Interface in Command Prompt



2. If you find a tunnel adapter with an assigned IP address:
   a. Identify the adapter name from the **Description**, typically either **Teredo** or **Isatap**.
   b. Enter the following command in the command shell to disable to the adapter:

      `netsh interface adapter name set state disabled`

      In this example, the *adapter name* is `teredo`.
3. Enter `ipconfig` and verify that the tunnel adapter no longer appears.
4. Restart the application server.

Troubleshooting Oracle Business Intelligence Server Installation Errors

When the installation wizard encounters a problem, it shows the message `The following component did not install successfully` followed by the name of the installation component that failed to install. The following table provides a reference of the components, possible reasons for the component to fail installing, and steps for troubleshooting the installation failure.

Table 13-1 Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• Weblogic Installation	• The port specified for Oracle WebLogic Node Manager is not open. • Incompatible Java version.	Verify that the port specified for Oracle WebLogic Node Manager, which is by default 9556, is open and not used. Verify that the required Java version is installed on the server. The *Oracle MICROS Enterprise Back Office Release Notes* lists environment requirements for the release. Review the *root*`\temp\MM_Log.log` log file and refer to the Oracle WebLogic help.
• Obiee Install • Obiee Patch	• Incorrect file structure for the installation files.	Verify that the file structure for the installation files matches the file structure in the downloaded installation archive. Review the *root*`\Program Files\Oracle\Inventory\logs` log file and refer to the Oracle Business Intelligence Enterprise Edition help.
• Nodemanager Start	• The port specified for Oracle WebLogic Node Manager may not be open. The installation wizard allows you to continue after receiving this message.	Verify that the port specified for Oracle WebLogic Node Manager, which is by default 9556, is open and not used. Review the following log files: • *root*`\temp\MM_Log.log` • *install directory*`\Oracle\Middleware\wlserver_`*version*`\common\node manager` • If the Microsoft Windows service failed, check the Microsoft Windows system log using the Event Viewer. Refer to the Oracle WebLogic Node Manager help.

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• Domain Creation	• Oracle WebLogic Node Manager failed or is not running. • Oracle WebLogic AdminServer failed or is not running.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:`*`port`*`/console` where the default port is 7001. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *`root`*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs`
• Storing Configuration • Getting BI Server Name • App Cluster Creation • Remote Managed Server Creation • Node Manager Enrollment • JMS Creation (Add Modules, Add User, Add Policy) • JMS Server Creation • Enable Validate Basic Auth Credentials • Enable SSL (Portal, Obiee) • SAML EM Changes • Session Timeout	• Oracle WebLogic AdminServer failed or is not running.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:`*`port`*`/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server is running. Use the console to manually start the AdminServer if it is not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *`root`*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs`

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• OBIEE Configuration	• OBI server could not connect to Enterprise Back Office database server. • OBI server could not assign ports because they were closed or being used. • OBI server is using a dynamic IP address instead of a static IP address. • Java Development Kit installed in a folder containing spaces. • In cluster environments, non-primary server could not connect to the primary OBIEE server. • In cluster environments, the OBIEE managed server (bi_server) or OBIEE services are not running correctly on the primary OBIEE server.	Review the *root*\Program Files\Oracle\Inventory\logs log file. • If the log contains errors regarding the AdminServer, review the logs in *INSTALLATION_DIR*\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs • If the log contains errors regarding the bi_server, review the logs in *INSTALLATION_DIR*\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\bi_server\logs Installation Stops Progressing at OBIEE Configuration contains information and instructions for cases where the installation stops progressing but does not add an error to the log files.

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• BI Cluster Configuration • SAML Enable SSO • SAML Primary Obiee	One or more of the following failed or is not running: • Oracle WebLogic Admin Server • Managed Servers • Oracle Process Manager (*hostname*_ORCLRNA) Server	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:`*`port`*`/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *`root`*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs` • If the log contains errors regarding the bi_server, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\bi_server\logs` • If the log contains errors regarding the Oracle Process Manager, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\instances\`*`INSTANCE_NAME`*`\diagnostics\logs`, where *INSTANCE_NAME* can be `ORCLRNA` or *`HOSTNAME`*`_ORCLRNA`. Refer to the Oracle WebLogic or the Oracle Business Intelligence Enterprise Edition help.

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• Restart Admin Server and BI Server • Restart AppServer • Restart BI Server	• Oracle WebLogic AdminServer failed or is not running. • Managed Server failed or is not running. • The port specified for Oracle WebLogic AdminServer may not be open. • The port specified for Managed Servers may not be open.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:`*`port`*`/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Verify that the port specified for Managed Servers (bi_server and AppServer) are open and not used. • Review the *`root`*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs` • If the log contains errors regarding the bi_server, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\bi_server\logs`

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• BIPChart DS creation • CoreDB DS creation • UserGroup DS creation • CoreDS creation • CEDS creation	• Oracle WebLogic AdminServer failed or is not running. • Connection to database server failed. • Authentication for database user failed.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:port/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *root*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *INSTALLATION_DIR*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs`
• SAML Create EM Roles	• Oracle WebLogic AdminServer failed or is not running. • UserGroup data source created, but unable to connect to the database.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:port/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *root*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *INSTALLATION_DIR*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs`

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• SAML Configuration Portal Primary • SAML Configuration Portal Secondary	This error message occurs in cluster installations, and the component name identifies whether the error occurred on the primary OBI server or the non-primary OBI server. • The Oracle WebLogic AdminServer failed or is not running. • The Mapped Drive path for the OBIEE server installation is incorrect or inaccessible.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:`*`port`*`/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Verify that the port specified for Managed Servers (bi_server) is open and not used. • Review the *root*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *INSTALLATION_DIR*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs` • If the log contains errors regarding the bi_server, review the logs in *INSTALLATION_DIR*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\bi_server\logs` • If the log contains errors regarding the AppServer, review the logs in *INSTALLATION_DIR*`\Oracle\Middleware\user_projects\domain\servers\`*APPSERVER_NAME*`\logs`, where *APPSERVER_NAME* is `appServ1` or *HOSTNAME*`_appServ1`.
• Start OPMN Service • Stop OPMN Service	• Refer to the Oracle Process Manager and Notification help.	• Review the *root*`\temp\MM_Log.log` log file. • If the log contains errors regarding the Oracle Process Manager, review the logs in *INSTALLATION_DIR*`\Oracle\Middleware\instances\`*INSTANCE_NAME*`\diagnostics\logs`, where *INSTANCE_NAME* can be `ORCLRNA` or *HOSTNAME*`_ORCLRNA`.

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• OBI DB Password Generation • Generate RPD Output File	• Refer to the Oracle Database and the Oracle BI Repository (RPD) help.	• Review the *root*\temp\MM_Log.log log file.
• Add Policy to OBIEE Role	• Oracle WebLogic Node Manager failed or is not running. • Oracle WebLogic AdminServer failed or is not running.	In a web browser, navigate to http://*WebLogic_AdminServer_Hostname*:*port*/console where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *root*\temp\MM_Log.log log file. • If there is an issue regarding the AdminServer, review the logs in *INSTALLATION_DIR*\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• Refresh GUID • Global Cache • Setup mail in OBIEE EM • RPD Deployment • WebCatalog Deployment	• Oracle WebLogic AdminServer failed or is not running. • Oracle Process Manager failed or is not running.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:p ort/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server and the bi_server*number* is running. Use the console to manually start the AdminServer and the bi_server if they are not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *`root`*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *`INSTALLATION_DIR`*`\Oracle\Midd leware\user_projects\domains \bifoundation_domain\servers \AdminServer\logs` • If the log contains errors regarding the bi_server, review the logs in *`INSTALLATION_DIR`*`\Oracle\Midd leware\user_projects\domains \bifoundation_domain\servers \bi_server\logs` • If the log contains errors regarding the Oracle Process Manager, review the logs in *`INSTALLATION_DIR`*`\Oracle\Midd leware\instances\`*`INSTANCE_NA ME`*`\diagnostics\logs`, where *INSTANCE_NAME* can be `ORCLRNA` or *`HOSTNAME`*`_ORCLRNA`. Refer to the Oracle WebLogic or the Oracle Process Manager help.

Table 13-1 (Cont.) Oracle Business Intelligence Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
• Portal Deployment • ObieeWebService Deployment • LogoutApp Deployment • AnalyticsRes Deployment • Undeploy Application • Undeploy Portal • Undeploy ObieeWebService • Undeploy LogoutApp • Undeploy AnalyticsRes	• Oracle WebLogic AdminServer failed or is not running. • Installation wizard could not remove staged files.	In a web browser, navigate to `http://`*`WebLogic_AdminServer_Hostname`*`:`*`port`*`/console` where the default port is 7001. If you can access the WebLogic console, verify that the AdminServer(admin) server is running. Use the console to manually start the AdminServer if it is not running. If you cannot access the WebLogic console: • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the *`root`*`\temp\MM_Log.log` log file. • If there is an issue regarding the AdminServer, review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs` If problems occur after attempting to remove or redeploy the application: • In the WebLogic console, verify that the **AnalyticsRes**, **ObieeWebService**, and **LogoutApp** web applications are **Active** in the Deployments list. • Review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\`*`SERVER_NAME`*`\logs` to verify the deployment status of Reporting and Analytics. • Review the logs in *`INSTALLATION_DIR`*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\bi_server\logs` to verify the deployment status of the web applications. Server Failed to Remove the Staged Files contains instructions for identifying and resolving the staged files issue.

Server Failed to Remove the Staged Files

Problem

When using the installation wizard to upgrade, or when using the Oracle WebLogic console to re-deploy an application, the deployment fails and shows the `DeploymentException` error message `Server failed to remove the staged files`. You can also find the error message in the log file corresponding to your deployment method:

- If you were using the installation wizard, you can verify this error message in *`root`*`\temp\MM_Log.log`.
- If you were using the Oracle WebLogic console, you can verify this error message in *`Oracle WebLogic installation path`*`\Oracle\Middleware\user_projects\domains\`*`WebLogic domain`*`\servers\AdminServer\logs\`. The *WebLogic domain* is typically `bifoundation_domain` for Reporting and Analytics and `icare_domain` for Gift and Loyalty.

The error message is logged as follows:

```
Deployment command type : deploy

Deployment State : failed

Deployment Message : weblogic.management.DeploymentException:
[Deployer:ID]Server failed to remove the staged files.
```

Cause

The Oracle WebLogic installation could not remove a file from the *`Oracle WebLogic installation path`*`\Oracle\Middleware\user_projects\domains\`*`WebLogic domain`*`\servers\`*`application server domain`*`\stage\` folder.

The *WebLogic domain* is typically `bifoundation_domain` for Reporting and Analytics and `icare_domain` for Gift and Loyalty.

Resolution

1. Stop the application server.
2. Remove the `\stage\` folder.
3. Start the application server, and then attempt installation again.

Installation Stops Progressing at OBIEE Configuration

Problem

The installation does not progress past the OBIEE configuration step and does not add information to the OBIEE and MM_Log log files.

Cause

The operating system must support long file names, such as filenames and file paths longer than 260 characters.

Resolution

Go to the Microsoft Support web site for details.

Error Messages in MM_Log

root\temp\MM_Log.log can contain the following error messages:

shortenPaths.cmd

```
root\myMicros\Oracle\Middleware\Oracle_BI1
'"root\myMicros\Oracle\Middleware\Oracle_BI1\bin\shortenPaths.cmd"'
is not recognized as an internal or external command, operable
program or batch file.
```

This error message is logged by the Oracle Business Intelligence installation, but does not cause any problems with the installation.

Error while encrypting password for *username*

On the Before We Begin page of the Reporting and Analytics application server installation, if you select **No** for **Will iCare be used with this installation?**, the installation logs the following messages:

```
Error while encrypting password for icare

Error while encrypting password for customer

Error while encrypting password for aggregate
```

When you install the Reporting and Analytics with **Will iCare be used with this installation?** set to **Yes**, the installation wizard creates the Gift and Loyalty passwords and resolves the issue.

Ignore the error messages if your environment does not require Gift and Loyalty.

Installation Fails When Reinstalling the Enterprise Back Office Database

Make sure version number in the following databases is lower than the version to which you are upgrading, and delete equal or higher version numbers. For example, if you are upgrading to version 9.0, delete all `versionnum` entries that are equal to or greater than 9.0.

- AGGREGATE_DB.AGG_VERSION_DB
- BIREPOS.BIREPOS_VERSION_DB
- CEDB.CE_VERSION_DB
- COREDB.CORE_VERSION_DB
- LOCATION_ACTIVITY_DB.VERSION_DB

- PORTALDB.PORTAL_VERSION_DB
- QUARTZ.QUARTZ_VERSION_DB
- RTA.RTA_VERSION_DB

HTTP Error 400 or 403 when Accessing Analysis Reports and Dashboards

Problem

When attempting to access Analysis Reports or a dashboard in Reporting and Analytics, the web browser returns HTTP error `400 - Bad Request` or `403 - Forbidden`.

Causes

The following problems can cause the error messages:

- The server times may have de-synchronized.
- The Published URL for the OBIEE server or the Reporting and Analytics server may be incorrect.

Resolutions

- Make sure the server times are synchronized to the second. Use a domain controller or other time synchronization method to ensure that the servers do not become out of sync.
- Verify the published site URLs:
  1. In the Oracle WebLogic console, navigate to the **Summary of Servers** page, click **appServ1**, click **Configuration**, click **Federation Services**, click **SAML 2.0 General**, and then and confirm and make note of the **Published Site URL**.
  2. A SAML 2.0 Identity Provider partner is an entity that generates SAML 2.0 assertions consumed by the Service Provider site. Navigate to **Security Realms**, click **myrealm**, click **Providers**, click **Authentication**, click the **saml2AP** identity assertion provider, click **Management**, and then click the **app_data** identity provider partner. Verify that the published site URL is used by the service endpoints.
  3. A SAML 2.0 Service Provider partner is an entity that consumes the SAML 2.0 assertions generated by the Identity Provider site. Navigate to **Security Realms**, click **myrealm**, click **Providers**, click **Credential Mapper**, click the **saml2CMP** credential mapping provider, click **Management**, and then click the **obiee** service provider partner. Verify that the published site URL is used by the service endpoints.
- Change the Published URLs if necessary:
  - Changing the Reporting and Analytics Published Site URL
  - Changing the Oracle Business Intelligence Server Published Site URL

  These instructions provide a high-level overview and basic guidance to the areas within the Oracle WebLogic console that apply to this task. The *Oracle WebLogic Server* documentation contains detailed information and instructions for understanding and performing configurations within the Oracle WebLogic console.

HTTP Error 500 when Accessing Analysis Reports and Dashboards

Problem

When attempting to access Analysis Reports or a dashboard in Reporting and Analytics, the web browser returns the HTTP error `500 – Internal Server Error`.

Cause

The HTTP error `500 – Internal Server Error` is a generic server status code that signifies a problem with the web server.

Resolution

Review log files for the Oracle Business Intelligence server and the Reporting and Analytics server for error messages:

- *root*`\temp\MM_Log.log`
- *INSTALLATION_DIR*`\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\`*server_name*`\logs`

One possible cause for the error message is a server outage. For example, if **beasvc bifoundation_domain_bi_server*X*** is not online, all operations related to Analysis Reports and dashboards return `500 – Internal Server Error`. Check the Oracle WebLogic Administration Console for the status of servers, and start or restart any servers that are not active.

Charts Not Generating in Core Reports

Problem

Users do not see embedded charts in core reports.

Cause

Oracle Business Intelligence Publisher may have incorrect login configurations.

Resolution

1. Navigate to *Fusion_Middleware_path*`\user_projects\domains\bifoundation_domain\config\bipublisher\` and open `xmlp-server-config.xml` in a text editor.
2. Find and replace the file path resource and config element as described in the following table:

Table 13-2 XML Change for Embedded Charts

Find and Replace	With This
<resource> <saw path=”/”><connection><version>v7</version> <sessionTimeOut>90</sessionTimeOut></connection> <init><source>*middleware_installation_path*/ user_projects/domains/bi_foundation_domain/ config/bipublisher/repository</source> </init></saw></resource> </resource> <config> <file path="${xdo.server.config.dir}/repository"/> </config> </xmlpConfig>	<resource> <file path="${xdo.server.config.dir}/repository"/> </resource> <config> <file path="${xdo.server.config.dir}/repository"/> </config> </xmlpConfig>

3. Restart the **beasvc bifoundation_domain_bi_server1** service.

If the problem persists, the *Oracle Business Intelligence Publisher* documentation contains more troubleshooting information and instructions.

Deployment Time Outs

Problem

When manually deploying or re-deploying the web service Enterprise Application Archive (EAR) files, the Oracle WebLogic server times out.

Cause

Depending on your deployment, the web service EAR files can become large, causing the Oracle WebLogic Administration Server to time out despite still processing the file.

Resolution

1. Log in to the Oracle WebLogic console.
2. In the Domain Structure, click **Environment**, click **Servers**, and then click **micros_cluster**.
3. Click the **Configuration** tab, click the **Tuning** tab, and then enter a larger time in seconds in the **Stuck Thread Max Time** field.
4. In the Domain Structure, click your domain name.

5. Click the **Configuration** tab, click the **JTA** tab, and then enter a larger time in seconds in the **Timeout Seconds** field.

If the problem persists, the *Oracle Business WebLogic* documentation contains more troubleshooting information and instructions.

OBI Self-Service Portlet Stops at Signing In

The Oracle Business Intelligence (OBI) Self-Service portlet shows the message `Signing In` but does not progress. Possible reasons and resolutions include:

1. Make sure you are not attempting to access Reporting and Analytics from an Oracle Business Intelligence server or a Reporting and Analytics web server. Access from these servers can encounter problems due to security configurations.
2. Configure the WLST and SOAP credentials for the `M` super organization. Setting Up the Super Organization contains instructions for these settings.
3. If you are using Microsoft Internet Explorer, add the Oracle WebLogic and Reporting and Analytics servers to the list of Trusted Sites.
4. Sync the time on the Oracle Business Intelligence servers and Reporting and Analytics servers.
5. Match the **Published site URL** in the WebLogic Console with `microsconfig.properties` and `obieeConfig.properties`.
6. Use the full domain name (https://*servername.fulldomainname*).
7. If the OBI and the Reporting and Analytics web applications are not registered with a domain name service, add the IP and hostname of the servers to host file.

Password Change Utility Sets Passwords to Null

Problem

The Password Change Utility sets password to `Null` instead of encrypting the given password.

Cause

This problem is caused after upgrading the Operating System of one or more servers hosting an Enterprise Back Office component, for example from Microsoft Windows Server 2008 to Microsoft Windows Server 2012. This problem does not occur when installing a Service Pack, for example to upgrade from Microsoft Windows Server 2012 R2 to Microsoft Windows Server 2012 R2 Update.

Resolution

Reinstall Enterprise Back Office.