

Oracle[®] MICROS Enterprise Back Office

Installation Guide



Release 9.1

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April 2024

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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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

Product documentation is available on the Oracle Help Center at <http://docs.oracle.com/en/industries/food-beverage/>.

Revision History

Date	Description of Change
March 2019	Initial publication.
May 2019	Updated Inventory Management installation information.
September 2019	Updated Gift and Loyalty information.

Date	Description of Change
February 2020	Updated the Installing Enterprise Back Office on Oracle Database section.
August 2020	<ul style="list-style-type: none"> • Updated the Connecting Reporting and Analytics to Inventory Management section. • Updated the Inventory Management Prerequisites section. • Updated the Installing the Inventory Management Web Application and Web Services section. • Updated the Installing Automation Service section.
September 2020	Updated the Installing Inventory Management on Microsoft SQL Server section.
November 2020	Added the Modifying Autosequence section.
December 2020	Updated the Inventory Management installation details section.
January 2021	Updated the Loading the Shell Database for the New User section.
July 2021	Updated the Installing Automation Service section.
September 2021	Updated the Oracle Data Provider for Microsoft .NET section.
November 2021	<ul style="list-style-type: none"> • Updated the Update Inventory Management Web Application section. • Updated the Update Shell Database section.
August 2022	<ul style="list-style-type: none"> • Updated the installation procedures and post-installation configuration procedures for Reporting and Analytics and Gift and Loyalty for the 9.1 New Tech Stack release. • Added Release Variations section. • Updated Oracle Data Provider for Microsoft .NET with new link and release number. • Updated How Do I Upgrade? • Updated Do I Need Security Certificates Before Installation? • Updated Installing Portal WebLogic AdminServer and Reporting and Analytics. • Updated Completing the Installation.

Date	Description of Change
September 2022	<ul style="list-style-type: none"> • Updated Installing Portal WebLogic AdminServer • Updated Before You Begin • Updated Installing Portal WebLogic AdminServer and Reporting and Analytics • Updated Single-Server Prerequisites • Updated Do I Need Security Certificates Before Installation?
October 2022	<ul style="list-style-type: none"> • Updated Overview • Updated How Do I Upgrade? • Updated Migration Path
March 2023	<ul style="list-style-type: none"> • Updated Creating an Organization • Updated Release Variations • Updated How Do I Upgrade? • Updated Do I Need Security Certificates Before Installation? • Updated Verifying the Database Installation • Updated Verifying the Portal WebLogic AdminServer Installation • Updated Installing Reporting and Analytics • Updated Verifying the Reporting and Analytics Installation • Updated Completing the Installation • Updated WebLogic Configuration for Enterprise Back Office • Updated Enforce TLSv1.2 or Above for the 9.1 New Tech Stack Release • Updated Installing Portal WebLogic AdminServer • Updated Installing Portal WebLogic AdminServer and Reporting and Analytics
April 2023	<ul style="list-style-type: none"> • Updated Release Variations Overview • Updated Migrate to the 9.1 New Tech Stack Release • Updated WebLogic Configuration for Enterprise Back Office
August 2023	Updated guide title.
April 2024	<ul style="list-style-type: none"> • Updated Overview. • Added Pentaho information to Release Variations.

1

Release Variations

This chapter explains the differences among Enterprise Back Office 9.1 release variations. It is intended to help you select the right one for your installation scenario.

All new installations must use the **Enterprise Back Office 9.1 New Tech Stack** variation. Oracle also recommends this release variation for those interested in upgrading their existing environment to the latest technology stack. This helps you stay compliant and continue to receive security updates.

Existing customers using Pentaho Interactive Reports can use the 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho release variations. Oracle recommends that you migrate existing Pentaho Interactive Reports to iQuery. Instructions on how to do that can be found here:

- [How to: Capture Configuration of Interactive Reports](#)
- [How to: Migrate Reports to iQuery](#)

CVE-2019-17571, CVE-2020-9488, CVE-2021-4104, CVE-2022-23302, CVE-2022-23305, CVE-2022-23307, CVE-2023-26464 in Apache Log4j 1.x used by Pentaho are non-exploitable for Oracle MICROS Enterprise Back Office 9.1 in supported configurations with the latest patches applied. Those security bugs will not be fixed. Oracle recommends upgrading to the Enterprise Back Office 9.1 New Tech Stack variation and migrating existing Interactive Reports to iQuery.

The earlier releases are still available if a replacement medium is needed to re-install an existing environment with exactly the same software, on the same underlying server machines. Those release variations are only available for existing environments and must be downloaded from My Oracle Support (MOS).

Overview

The Enterprise Back Office Release 9.1 has four release variations. The main differences are the support for underlying technology stack, the inclusion of Oracle Business Intelligence, and the support for Interactive Reports (Pentaho).

Topic	Enterprise Back Office 9.1	Enterprise Back Office 9.1 With Oracle Business Intelligence Enterprise Edition (OBIEE)	Enterprise Back Office 9.1 New Tech Stack with Pentaho	Enterprise Back Office 9.1 New Tech Stack
Release variations	Referred to as <i>9.1 release</i> in this guide.	Referred to as <i>9.1 with OBIEE release</i> in this guide.	Referred to as <i>9.1 New Tech Stack with Pentaho release</i> in this guide.	Referred to as <i>9.1 New Tech Stack release</i> in this guide.
Initial Release	April 2019	June 2018	November 2022	March 2023

Topic	Enterprise Back Office 9.1	Enterprise Back Office 9.1 With Oracle Business Intelligence Enterprise Edition (OBIEE)	Enterprise Back Office 9.1 New Tech Stack with Pentaho	Enterprise Back Office 9.1 New Tech Stack
New or existing install	Can only be used for existing installs	Can only be used for existing installs	Can only be used for existing installs	Must be used for new installs
Oracle Business Intelligence Enterprise Edition (OBIEE) included	No	Yes	No	No
Support for Pentaho Interactive Reports included	Yes	Yes	Yes	No
Location where general release media is downloaded.	My Oracle Support (MOS)	My Oracle Support (MOS)	My Oracle Support (MOS)	Oracle Software Delivery Cloud https://edelivery.oracle.com/
Download Package name in Oracle Software Delivery Cloud	N/A	N/A	N/A	Oracle MICROS eBusiness Suite 9.1.0.0.0 (Oracle MICROS Reporting and Analytics)
File Name(s) included in Download Package	N/A	N/A	N/A	V1034346-01.zip Oracle MICROS Enterprise Back Office 9.1.0 New Tech Stack
File Name(s) in MOS	General Release 9.1.0.0	General Release 9.1.0.0 with Oracle Business Intelligence	General Release 9.1.0.0 New Tech Stack with Pentaho	N/A

Topic	Enterprise Back Office 9.1	Enterprise Back Office 9.1 With Oracle Business Intelligence Enterprise Edition (OBIEE)	Enterprise Back Office 9.1 New Tech Stack with Pentaho	Enterprise Back Office 9.1 New Tech Stack
High-level supported technology stack	<ul style="list-style-type: none"> • Microsoft Windows Server 2012R2 • Oracle Database 12cR1 • Microsoft SQL Server 2012 • Java 1.7 • WebLogic 11g 	<ul style="list-style-type: none"> • Microsoft Windows Server 2012R2 • Oracle Database 12cR1 • Microsoft SQL Server 2012 • Java 1.7 • WebLogic 11g • OBIEE 11g 	<ul style="list-style-type: none"> • Microsoft Windows Server 2016 • Oracle Database 19c • Microsoft SQL Server 2016 • Oracle Database 12cR1 • Microsoft SQL Server 2012 • Java 1.8 • WebLogic 12c 	<ul style="list-style-type: none"> • Microsoft Windows Server 2016 • Oracle Database 19c • Microsoft SQL Server 2016 • Oracle Database 12cR1 • Microsoft SQL Server 2012 • Java 1.8 • WebLogic 12c
SSL Certificate requirements	Recommended	Recommended	CA-signed certificate required at the time of application install.	CA-signed certificate required at the time of application install.
POS compatibility	Review the Compatibility Matrix	Review the Compatibility Matrix	Review the Compatibility Matrix	Review the Compatibility Matrix
Patchset availability	Yes, future Enterprise Back Office patchsets can be applied.	Yes, future Enterprise Back Office patchsets can be applied.	Yes, future Enterprise Back Office patchsets can be applied.	Yes, future Enterprise Back Office patchsets can be applied.

Topic	Enterprise Back Office 9.1	Enterprise Back Office 9.1 With Oracle Business Intelligence Enterprise Edition (OBIEE)	Enterprise Back Office 9.1 New Tech Stack with Pentaho	Enterprise Back Office 9.1 New Tech Stack
Required patchsets	None are required, though Oracle strongly recommends applying the latest application patchsets and apply all WebLogic and Java security patchsets. Log in to the Support Portal and then click Document 6389 for more information. If Pentaho Interactive Reports are being used, the Pentaho Patch installer needs to be applied after 9.1.35 Patch.	None are required, though Oracle strongly recommends applying the latest application patchsets and apply all WebLogic, OBIEE, and Java security patchsets. Log in to the Support Portal and then click Document 6389 for more information. If Pentaho Interactive Reports are being used, the Pentaho Patch installer needs to be applied after 9.1.35 Patch.	Yes, patchset 9.1.35 or higher needs to be applied after installing the general release media from MOS. If Pentaho Interactive Reports are being used, the Pentaho Patch installer needs to be applied Oracle strongly recommends applying the latest application patchsets and apply all WebLogic and Java security patchsets. Log in to the Support Portal and then click Document 6389 for more information.	Yes, patchset 9.1.35 or higher must be applied after installing the general release media from the Oracle Software Delivery Cloud. Oracle strongly recommends applying the latest application patchsets and apply all WebLogic and Java security patchsets. Log in to the Support Portal and then click Document 6389 for more information.
Long-term technology support	No. Support timelines for the underlying tech stack components (operating system, database, WebLogic, and Java) have ended or will end soon.	No. Support timelines for the underlying tech stack components (operating system, database, WebLogic, and Java) have ended or will end soon.	Yes. Support timelines for the underlying tech stack components (operating system, database, WebLogic, and Java) extend into 2025 and some components even go beyond that date.	Yes. Support timelines for the underlying tech stack components (operating system, database, WebLogic, and Java) extend into 2025 and some components even go beyond that date.

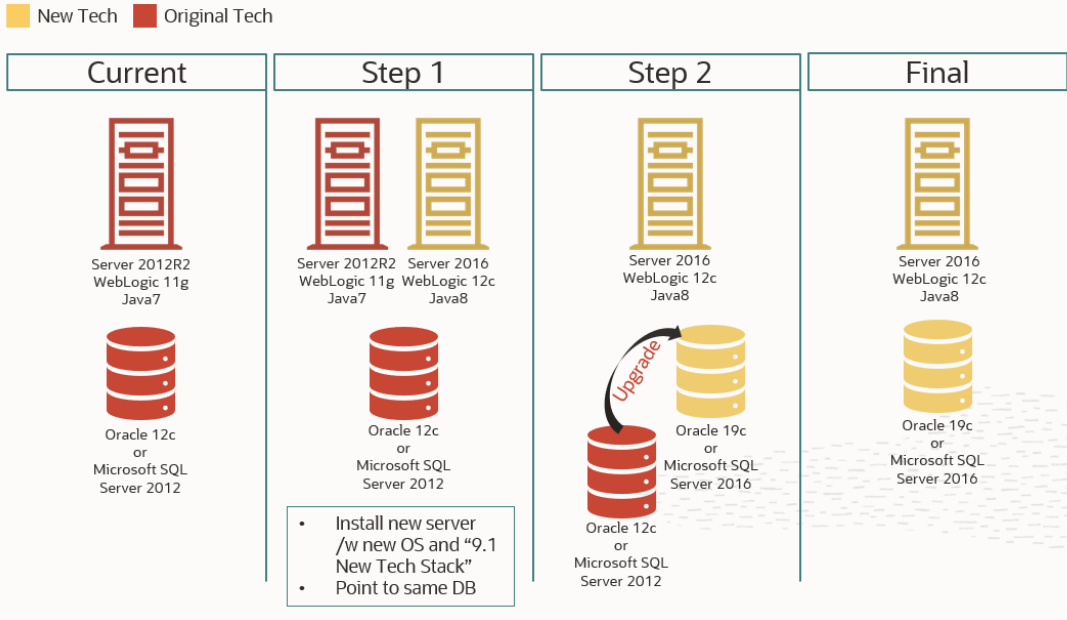
Migration Path

If Enterprise Back Office 9.1 is already installed, you can migrate to the new release variation by installing the software on a new server with a new operating system (Microsoft Windows Server 2016). An in-place upgrade of the operating system from Microsoft Windows Server 2012 R2 to Windows Server 2016 is not supported. You can then upgrade the database from Oracle Database 12c R1 to 19c or from Microsoft

SQL Server 2012 to Microsoft SQL Server 2016. The following image illustrates this process.

Note:
Oracle Business Intelligence is no longer supported with the Enterprise Back Office 9.1 New Tech Stack.

How to migrate to 9.1 New Tech Stack



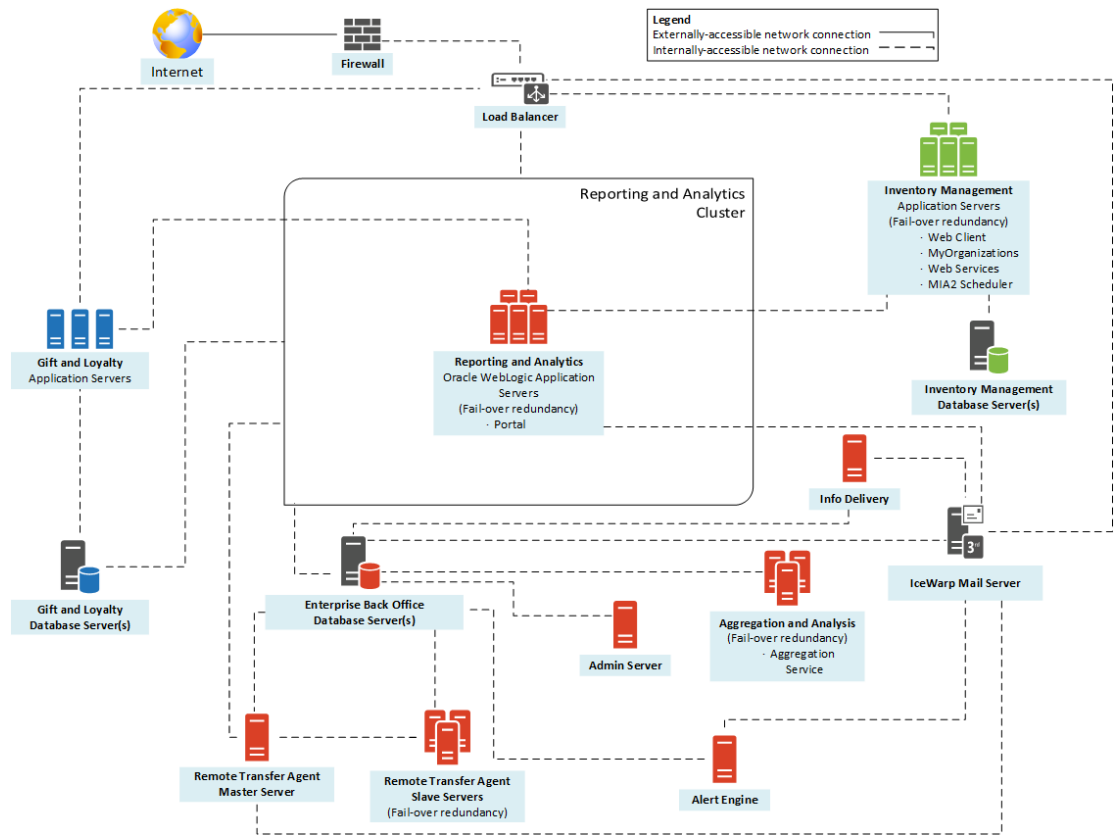
2

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 2-1 Enterprise Back Office System Architecture Diagram



3

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 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 Components Do I 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 3-1 Enterprise Back Office Components

Component	Description
Portal WebLogic AdminServer	This component is required and installs Oracle WebLogic and Oracle WebLogic Administration Server.
Portal Managed Server (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.
infoDelivery	This service interfaces with the mail server to process, schedule, and send reports by mail.

Table 3-1 (Cont.) Enterprise Back Office Components

Component	Description
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 RES 3700, e7, and 9700 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 Hospitality 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 3-2 Reporting and Analytics Deployment Scenarios

Deployment Scenario	Description
Server Cluster	<p>You install components on multiple servers in the environment as follows:</p> <ul style="list-style-type: none"> Portal WebLogic AdminServer on one server. Only one server in the environment can host Portal WebLogic AdminServer. Optionally, install Reporting and Analytics on the same server. Reporting and Analytics on other servers. <p>This deployment is typically used by data centers and high-volume customers and supports load-balancing and fail-over redundancy. 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.</p>

Table 3-2 (Cont.) Reporting and Analytics Deployment Scenarios

Deployment Scenario	Description
Single Server	You install Portal WebLogic AdminServer and Reporting and Analytics on the same server.

How Do I Upgrade?

Upgrade from Version 8.5.1 to Version 9.1

If you are upgrading Enterprise Back Office from version 8.5 or earlier, remove all components and services of the existing installation. [Uninstalling Enterprise Back Office 8.5 or Earlier](#) contains instructions for removing Enterprise Back Office.

If you are upgrading from Enterprise Back Office from version 8.5.1 to version 9.1, follow these high-level steps:

1. Uninstall Enterprise Back Office version 8.5.1, as described in [Uninstalling Enterprise Back Office 8.5 or Earlier](#).
2. Uninstall Java version 1.6.
3. Install the Java version for your release variation. See the *Oracle MICROS Enterprise Back Office 9.1 Release Notes* for more information on system requirements.
4. Upgrade the Enterprise Back Office 8.5.1 database with the Enterprise Back Office 9.1 database installer.
5. Run the Enterprise Back Office 9.1 installer.

Migrate to the 9.1 New Tech Stack Release

Follow these steps to migrate from a 9.1 or 9.1 with OBIEE environment to the 9.1 New Tech Stack or 9.1 New Tech Stack with Pentaho release:

1. Ensure that the existing 9.1 environment is on patch 9.1.30 or newer.
2. Provision new server with the Microsoft Windows Server 2016 operating system.
3. Install JDK 1.8 update 361. See My Oracle Support (MOS) Doc ID 2330734.1 for the latest supported JDK update.
4. Run the Enterprise Back Office installer.
5. Provide existing database details in the installer.

Note:

You can perform an in-place upgrade of Oracle Database 12c to Oracle Database 19c. You can also perform an in-place upgrade of Microsoft SQL Server 2012 to Microsoft SQL Server 2016. Oracle recommends you complete the application migration and the database upgrade in separate steps.

6. Follow the verification steps and post-installation configuration described in the Installation Guide.

7. Apply Patch 9.1.35 or higher.
8. If using 9.1 New Tech Stack with Pentaho release, apply Pentaho Patch Package.

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.

For the 9.1 and 9.1 with OBIEE release, 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. See the *Oracle MICROS Enterprise Back Office Security Guide* for more details on how to enable SSL security, as well as how to request and renew an SSL Certificate, and how to create a Java keystore.

For both 9.1 New Tech Stack releases, CA signed certificates are mandatory for Enterprise Back Office and Gift and Loyalty installations. Installation will not proceed without a CA signed certificate. Follow instructions outlined in the *Oracle MICROS Enterprise Back Office Security Guide* to request and renew an SSL Certificate as well

as create a Java keystore prior to starting the installation. Make sure to follow the keystore and certificate password requirements. Passwords can only use alphanumeric characters. Special characters, symbols, or spaces are not allowed

Gift and Loyalty

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

4

Enterprise Back Office on Multiple Servers

You can install Enterprise Back Office in a server cluster, with dedicated servers for certain high-load applications and services. One server hosts the Portal WebLogic AdminServer component. The same server can host Reporting and Analytics or other servers in the environment can host Reporting and Analytics. Only one server in the environment can host the Portal WebLogic AdminServer component.

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 Portal WebLogic AdminServer](#)
3. [Installing Reporting and Analytics](#)

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 Enterprise Back Office 9.1 [Release Variations](#), determine which one is right for your environment and requirements, and then download the appropriate general release installation media.
3. Review the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.
4. 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.
5. Make sure the IceWarp Mail Server is set up and accessible on the network.
6. For each server in the environment, make sure that:
 - a. The operating system accepts filenames and file paths longer than 260 characters.
 - b. You can ping all network adapters from other machines. Disconnect adapters that you cannot ping.
 - c. All servers are synchronized to the same time.
 - d. You verify that ports 7001 and 9556 are not being used.

- e. Obtain separate Secure Socket Layer (SSL) certificates for the Reporting and Analytics hostnames and create a Java keystore. See Appendix D of the [Oracle MICROS Enterprise Back Office Security Guide](#) for instructions. Confirm that the SSL certificate password as well as the keystore password only contain alphanumeric characters. Special characters, symbols, or spaces are not allowed for the password.
 - f. You disable tunnel adapters. [Disabling Tunnel Adapters](#) contains information and instructions for checking for and disabling the adapter.
7. For each server that will be running the installation wizard, make sure to free at least 65 GB of storage in addition to the server hardware requirements for the installation files and for temporary files created by the installation wizard.
 8. If you are performing an upgrade instead of a fresh installation, [How Do I Upgrade?](#) 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
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
cursor_sharing	exact
processes	1024

Parameter	Recommended Value
<code>sga_max_size</code>	Set as 50% of database RAM, to be tuned by the DBA during the life of the environment.
<code>sga_target</code>	Set as the same value as <code>sga_max_size</code> .
<code>pga_target</code>	Set as 25% of <code>sga_target</code> .

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
 - Not applicable for 9.1 New Tech Stack
- CEDB
- TEMP

Installing the Enterprise Back Office Database

1. Make sure Oracle Database is installed and running.
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.

```
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 service name. 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 database:
 - a. Enter the hostname, port, and SID of the Enterprise Back Office database server.

- b. For new installations, create a password for the Enterprise Back Office database. For upgrades, enter the existing 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.
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 Enterprise Back Office 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 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.
 - c. On the Get Oracle Aggregation tokens page, enter the path to the folder for storing the Enterprise Back Office database tablespace and the Enterprise Back Office 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
 - Not applicable for 9.1 New Tech Stack
 - CEDB.CE_VERSION_DB
 - COREDB.CORE_VERSION_DB
 - LOCATION_ACTIVITY_DB.VERSION_DB
 - PORTALDB.PORTAL_VERSION_DB
 - QUARTZ.QUARTZ_VERSION_DB
 - Not applicable for 9.1 New Tech Stack
 - 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

1. Make sure Microsoft SQL Server is installed and running.
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.

`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 database:
 - a. Enter the hostname and port of the Enterprise Back Office 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.
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 Enterprise Back Office database.
11. For new installations, on the Get SQL Server Aggregation tokens page, enter the path to the folder for storing the Enterprise Back Office 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
 - Not applicable for 9.1 New Tech Stack
 - CEDB.CE_VERSION_DB
 - COREDB.CORE_VERSION_DB
 - LOCATION_ACTIVITY_DB.VERSION_DB
 - PORTALDB.PORTAL_VERSION_DB
 - QUARTZ.QUARTZ_VERSION_DB
 - Not applicable for 9.1 New Tech Stack
 - 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 Portal WebLogic AdminServer

1. Extract the following from the installation file archive. 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 or database service name 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:
 - 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 WebLogic AdminServer**.
7. On the WebLogic Info - Single 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.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname and port of the server that hosts Portal WebLogic AdminServer.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

8. If you are completing a 9.1 release installation, on the SSL page select **Yes** to enable SSL/Transport Layer Security.
9. If you are completing a 9.1 New Tech Stack release installation or completed Step 8, on the Certificate Configuration - Portal page fill out the form to install the signed certificate. It is not possible to continue installation without providing a CA signed certificate:
 - a. 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.

 **Note:**

Both passwords can only contain alphanumeric characters. Special characters, symbols, or spaces are not allowed.

- b. Click **Choose**, select the keystore file, and then click **Next**. See the [Oracle MICROS Enterprise Back Office Security Guide](#) for instructions on how to select the keystore file.

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

Oracle Database	Microsoft SQL Server
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.

11. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Oracle Database	Microsoft SQL Server
<ul style="list-style-type: none"> a. In the Database Type section, select Oracle, and then enter the database network port and database service name. 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 customer-facing, Internet URL for Reporting and Analytics. 	<ul style="list-style-type: none"> 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 customer-facing, Internet URL for Reporting and Analytics.

12. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the Is this an OLAP Portal Instance page, select **DUAL**.

13. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the OLAP *Database Type* Database Information page, configure the OLAP database connection as described in the following table:

Table 4-2 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.

Table 4-2 (Cont.) Online Analytical Processing Database Connection

Field	Description
OLAP DatabasePort	Enter the OLAP database server port.
OLAP DB SID	Enter the SID for the OLAP database.

14. 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 <code>example.com</code> .
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.

15. 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 `resultSet`s 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.

16. Configure Reporting and Analytics:

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

Table 4-3 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.

Table 4-3 (Cont.) Reporting and Analytics Configurations

Field	Description
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.
17. 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 4-4 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.

Table 4-4 (Cont.) Report Mail Font Configurations

Field	Description
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.

18. On the Confirm Datasource Name page, enter the OLAP database name in the **OLAPDS database name** field. By default, this field uses `AGGREGATE_DB`.
19. On the InfoDelivery Configuration page, enter the Info Delivery email username for sending and receiving emails, and the Info Delivery administrator email account.
20. 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.
21. Review the Pre-Installation Summary, and then click **Install**.

Verifying the Portal WebLogic AdminServer 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. Perform the following checks in the Oracle WebLogic console:
 - a. In a web browser on the Portal WebLogic AdminServer computer, 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)** 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**.
3. Verify the following Microsoft Windows services are running:

For the 9.1 or 9.1 with OBIEE release:

 - **beasvc_bifoundation_domain_AdminServer**
 - **Oracle WebLogic NodeManager (<Path to Oracle Middleware wlsrver installation>)**

For the 9.1 New Tech Stack or 9.1 New Tech Stack with Pentaho release:

 - **wlsvc bifoundation_domain_AdminServer**
 - **Oracle Weblogic bifoundation_domain NodeManager**

Installing Reporting and Analytics

1. If you are installing Reporting and Analytics on different drive than Portal WebLogic AdminServer, change the drive letter for the following properties in the server `microConfig.properties` file on Portal WebLogic AdminServer and then redeploy the portal using the WebLogic Admin server console:

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

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

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

2. Extract the following from the installation file archive. Do not extract the files to a folder structure that contains spaces.

```
/Weblogic/
```

```
Install_version.exe
```

3. Double-click `Install_version.exe`.
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 or database service name 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 Managed Server**.
8. On the WebLogic Info page, configure the application server settings:

Table 4-5 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.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the name of the server that hosts Portal WebLogic AdminServer.
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 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.
10. 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**.
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**.
13. Verify the installation as described in [Verifying the Reporting and Analytics Installation](#).
14. Install patch 9.1.35 or higher.
15. For 9.1, 9.1 with OBIEE, and 9.1 New Tech Stack with Pentaho release installations and if Pentaho Interactive Reports are in use, install the Pentaho Patch Package.
16. For 9.1 New Tech Stack and 9.1 New Tech Stack with Pentaho release installation details, see [WebLogic Configuration for Enterprise Back Office](#).

Verifying the Reporting and Analytics 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_date\time.log`
2. Perform the following checks in the Oracle WebLogic console:
 - a. In a web browser, go to the console and log in using the WebLogic administrator account credentials created during the installation.
 - b. Click **Environment** from the menu, and then click **Servers**.
 - c. Start the **HOSTNAME_appServ1** service, where:
 - *HOSTNAME* is the name of the host server.
 - *appServ1* is the default name of the Reporting and Analytics application server instance. If you changed the default name when you installed Reporting and Analytics, that name appears instead of the default.
 - d. 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**.
 3. Verify the following Microsoft Windows services are running:

For the 9.1 or 9.1 with OBIEE release:

 - **beasvc_bifoundation_<HOSTNAME>_appServ1**.
 - **Oracle WebLogic NodeManager (<Path to Oracle Middleware wserver installation>)**

For the 9.1 New Tech Stack or 9.1 New Tech Stack with Pentaho release:

 - **wlsvc bifoundation_domain_<HOSTNAME>_appServ1**
 - **Oracle Weblogic bifoundation_domain NodeManager**

5

Enterprise Back Office on One Server

This section provides instructions for installing and configuring Oracle MICROS Reporting and Analytics on one server.

Important:

Review all the information in this section before starting the software installation.

If you are installing Symphony on the same server, install these components in one operation with the installer:

- Portal WebLogic AdminServer and Reporting and Analytics
- Admin Server (optional if needed)
- Aggregation and Adjustment Service
- InfoDelivery Service
- Alert Engine Service
- Symphony Mobile Aggregation

Single-Server Prerequisites

Before installing Portal WebLogic AdminServer and Reporting and Analytics 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. Review [Enterprise Back Office 9.1 Release Variations](#) to determine which one is right for your environment and requirements. Then download the appropriate general release installation media.
3. Review the [System Requirements, Supported Systems, and Compatibility](#) section of the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.
4. Review the [Oracle MICROS Enterprise Back Office Security Guide](#) and, if you are installing Inventory Management, review the [Oracle MICROS Inventory Management Security Guide](#) for detailed explanations regarding securing your system during and after installation.
5. Make sure the operating system accepts file names and file paths longer than 260 characters.
6. Verify that ports 7001 and 9556 are not being used.
7. Obtain separate Secure Socket Layer (SSL) certificates for the Reporting and Analytics hostname and create a Java keystore. See Appendix D of the [Oracle MICROS Enterprise](#)

- [Back Office Security Guide](#) for instructions. Confirm that the SSL certificate password as well as the keystore password only contain alphanumeric characters. Special characters, symbols, or spaces are not allowed for the password.
8. Make sure that at least 65 GB of storage is free in addition to the server hardware requirements for the installation files and for temporary files created by the installation wizard.
 9. If you are performing an upgrade instead of a brand-new installation, [How Do I Upgrade?](#) 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
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
cursor_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 <code>sga_max_size</code> .
pga_target	Set as 25% of <code>sga_target</code> .

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
 - Not applicable for 9.1 New Tech Stack
- CEDB
- TEMP

Starting the Installation

1. Extract the following from the installation file archive. 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** to use more than one IP or database service name 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. If your environment uses Labor Management, select **Yes** for **Will myLabor be used with this installation?**
6. To install Symphony on the same server, select **Yes** for **Will Symphony be used with this installation?**
7. Select the features to install.

If you are installing Symphony on the same server, make sure to select these services.

- Portal WebLogic AdminServer
- Portal Managed Server
- Alert Engine
- Aggregation and Adjustment Service
- infoDelivery
- Admin Server (optional)

- Symphony Mobile Aggregation

Installing Portal WebLogic AdminServer and Reporting and Analytics

1. 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 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.
WebLogic Admin Server Host Name and WebLogic Admin Server Port	Enter the hostname of the server that hosts Portal WebLogic AdminServer.
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.

2. If you are completing a 9.1 release installation, on the SSL page select **Yes** to enable SSL/Transport Layer Security.
3. If you are completing a 9.1 New Tech Stack installation or completed Step 2, 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 for the Reporting and Analytics application.

 **Note:**

Both passwords can only contain alphanumeric characters. Special characters, symbols, or spaces are not allowed.

- b. Click **Choose**, select the keystore file, and then click **Next**. See the [Oracle MICROS Enterprise Back Office Security Guide](#) for instructions on how to select the keystore file.
Make sure the file path includes the following components: *folder_path/file_name.extension*
 - c. Verify the certificate information, and then click **Next**.
4. On the Database Information page, configure the connection to the Reporting and Analytics database:

Oracle Database	Microsoft SQL Server
<ul style="list-style-type: none"> a. In the Database Type section, select Oracle, and then enter the database network port and Service Name. 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. 	<ul style="list-style-type: none"> 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.

5. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Oracle Database	Microsoft SQL Server
<ul style="list-style-type: none"> a. In the Database Type section, select Oracle, and then enter the database network port and Service Name. 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 customer-facing, Internet URL for Reporting and Analytics. 	<ul style="list-style-type: none"> 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 customer-facing, Internet URL for Reporting and Analytics.

6. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the Is this an OLAP Portal Instance page, select **DUAL**.
7. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the OLAP *Database Type* Database Information page, configure the OLAP database connection as described in the following table:

Table 5-2 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.

Table 5-2 (Cont.) Online Analytical Processing Database Connection

Field	Description
OLAP DB SID	Enter the SID/database service name for the OLAP database.

8. 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 <code>example.com</code> .
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.

9. 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.
10. Configure Reporting and Analytics:
- a. On the Portal Specific Settings page, configure Reporting and Analytics as described in the following table:

Table 5-3 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.

Table 5-3 (Cont.) Reporting and Analytics Configurations

Field	Description
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. This must be enabled if you are completing 9.1 New Tech Stack release installations.
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.
11. 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 5-4 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.

Table 5-4 (Cont.) Report Mail Font Configurations

Field	Description
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.

12. On the Confirm Datasource Name page, enter the OLAP database name in the **OLAPDS database name** field. By default, this field uses `AGGREGATE_DB`.
13. On the InfoDelivery Configuration page, enter the Info Delivery email username for sending and receiving emails, and the Info Delivery administrator email account.

Installing Admin Server

1. On the Posting/Admin Database Information page, enter the address of the aggregation database server.
2. 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.
3. On the Admin Server Configuration page, enter the credentials for the database user and the CEDB user.
4. On the Admin Server Configuration page, configure the Admin Server as described in the following table:

Table 5-5 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 5-5 (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.

Connecting Reporting and Analytics to the Admin Server

1. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.
2. On the Posting/Admin Database Information page, enter the hostname of the Admin Server.
3. 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.

Installing Aggregation and Adjustment

1. 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.
2. On the Aggregation and Adjustment Configuration page, configure the database connection to the Aggregation and Adjustment service as described in the following table:

Table 5-6 Aggregation and Adjustment Service Login

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

Table 5-6 (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.

Connecting Reporting and Analytics to the Aggregation and Adjustment Service

1. Follow the instructions for the installation wizard. You do not need to change values from the Reporting and Analytics installation.
2. 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.
3. 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.
4. [Set the Aggregation Service memory configurations for your environment.](#)

Installing the InfoDelivery Service

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

Table 5-7 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.

Table 5-7 (Cont.) Report Mail Font Configurations

Field	Description
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.

4. On the InfoDelivery Configuration page, enter the infoDelivery email login credentials for sending and receiving emails.
5. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the InfoDelivery page, leave the **Pentaho Solutions Directory** blank.

Installing the Alert Engine Service

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

Table 5-8 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.

Installing the Symphony Mobile Aggregation

1. On the Symphony Mobile Aggregation page, enter the number of **Aggregation Threads**.
2. Enter the credentials for the Portal DB user, the Core DB user, the Location Activity DB user, and the RTA DB user.

Completing the Installation

1. 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.
2. Review the Pre-Installation Summary, and then click **Install**.
3. Verify the installation as described in [Verifying the Installation](#).
4. Apply Patch 9.1.35 or higher.
5. For 9.1, 9.1 with OBIEE, and 9.1 New Tech Stack with Pentaho release installations and if Pentaho Interactive Reports are in use, install Pentaho Patch Package.
6. For 9.1 New Tech Stack and 9.1 New Tech Stack with Pentaho release installation details, see [WebLogic Configuration for Enterprise Back Office](#).

Verifying the 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_date\time.log`
2. Perform the following checks in the Oracle WebLogic console:
 - a. In a web browser, go to `PortalWebLogicAdminServerHOSTNAME:7001/console` and log in using the WebLogic administrator account credentials created during the installation.

Port 7001 is the default port. If your environment uses a different port, replace 7001 with that port value in the URL.
 - b. Click **Environment** from the menu, and then click **Servers**. Verify that the **AdminServer (admin)** service is running.
 - c. Start the **HOSTNAME_appServ1** service, where:
 - `HOSTNAME` is the name of the host server.
 - `appServ1` is the default name of the Reporting and Analytics application server instance. If you changed the default name when you installed Reporting and Analytics, that name appears instead of the default.
 - d. 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**.
3. Verify the following Microsoft Windows services are running:

For the 9.1 or 9.1 with OBIEE release:

 - **beasvc bifoundation_domain_AdminServer**
 - **beasvc bifoundation_domain_<HOSTNAME>_appServ1**

- **Oracle WebLogic NodeManager (<Path to Oracle Middleware wlsrver installation>)**

For the 9.1 New Tech Stack or 9.1 New Tech Stack with Pentaho release:

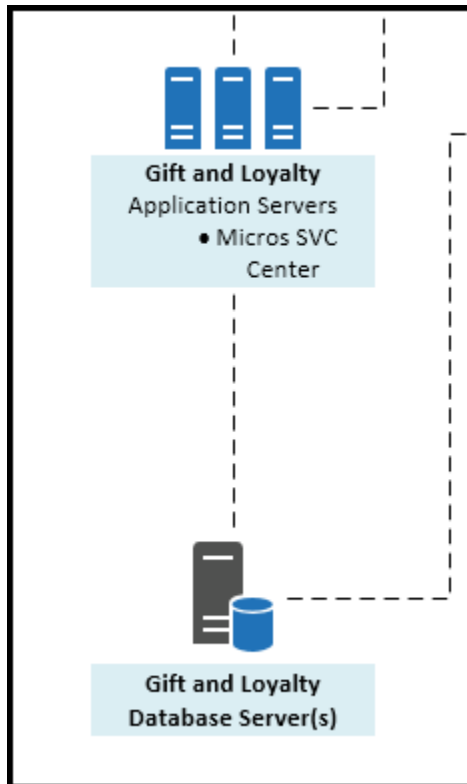
- **wlsvc bifoundation_domain_AdminServer**
- **wlsvc bifoundation_domain_<HOSTNAME>_appServ1**
- **Oracle Weblogic bifoundation_domain NodeManager**

6

Gift and Loyalty

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

Figure 6-1 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](#)

For more information about security settings within Weblogic when configuring Gift and Loyalty with a Symphony POS Workstation, see the *Oracle MICROS Enterprise Back Office Security Guide*.

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 following ports are not being used:

- For 9.1 or 9.1 with OBIEE: 7001, 9704, and 9556
- For the 9.1 New Tech Stack: 7002, 9704, and 9556
- Verify that the Gift and Loyalty server can connect to the Gift and Loyalty database server.
- Obtain separate Secure Socket Layer (SSL) certificates for the Gift and Loyalty application server. Ensure that the SSL certificate password is alphanumeric and does not contain any special characters.
- 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 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 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: <ul style="list-style-type: none"> For 9.1 or 9.1 with OBIEE, use 7001 For the 9.1 New Tech Stack, use 7002
App Server Host Name	Enter the hostname of the Gift and Loyalty application server.
Node Manager port	Enter the port used by the Node Manager, typically 9556.

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

Table 6-2 Gift and Loyalty Connection to the Reporting and Analytics Database

Oracle Database	Microsoft SQL Server
<ol style="list-style-type: none"> In the Database Type section, select Oracle, and then enter the database network port and SID. Enter the database login credentials. Enter the hostname of the database server. In the Preferred Cache Type drop-down list, select Oracle. 	<ol style="list-style-type: none"> In the Database Type section, select SQL Server, and then enter the database network port. In the Additional Connection Parameters field, enter any required connection strings. Enter the database login credentials. Enter the hostname of the database server. In the Preferred Cache Type drop-down list, select Generic.

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

Table 6-3 OLAP Database Connection

Oracle Database	Microsoft SQL Server
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 credentials 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.
20. For 9.1 New Tech Stack release installation details, see [WebLogic Configuration for Gift and Loyalty](#).

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 Messaging Queue, enter the **iCare Messaging Queue Host**, the **iCare Messaging Queue Username**, and the **iCare Messaging Queue Password**.
4. If you installed the Aggregation and Analysis service and you want to perform segmentation and analysis, enter the **iCare Analytics Token**.
5. Select **Disable Segmentation Portlet Control by Org** to restrict access to the Segmentation Portlet for individual organizations.
6. 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**.
7. Enter the maximum number of records to be contained in each segmentation export file in **Max number of records for Segmentation CSV Exports**.
8. 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**.

Configuring the Gift and Loyalty Web Service URL

This procedure is required for the 9.1 New Tech Stack Release.

1. Open `INSTALL_HOME/iCare/iCare.ear/iCare.war/WEB-INF/iCardConfig.properties` and search for the `webServiceUrl=` parameter.
2. Update the `webServiceUrl=localhost` parameter value to reflect your server name or domain name and secure port, making sure to use the `https` protocol. For example:

```
webServiceUrl=https://example.myorg.com:9443
```
3. Save your changes and re-deploy Gift and Loyalty as described in [Re-Deploying Gift and Loyalty](#).

7

Inventory Management

This chapter provides instructions for installing Inventory Management with an Oracle Database connection to Reporting and Analytics.

Deploy Inventory Management components in the following order:

1. Verify that your installation environment meets the prerequisites.
2. Install and update the Inventory Management database.
3. Install Inventory Management, Inventory Management/Organizations, and Web Services.
4. Configure the connection to Reporting and Analytics.
5. Install Automation Services.
6. Follow the instructions in the *Inventory Management Security Guide* to set up the encryption keys and configurations.

Prerequisites

Before installing the Inventory Management application:

- Review the *Oracle MICROS Enterprise Back Office Release Notes* for the latest operating system, database server, and software requirements.
- 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.

Complete the instructions in the following sections:

Microsoft.NET Framework

Install the latest full version of Microsoft .NET Framework. Do not install the Client Profile distribution.

1. Launch **Server Manager** (based on Windows Server 2019).
2. Select **Add roles and features** and then click **Next**.
3. Select **Role-based or feature-based installation** and then click **Next**.
4. Select the server and then click **Next**.
5. Check .NET Framework 3.5 Features (includes .NET 2.0 and 3.0).
6. Check .NET Framework 4.7 Features.
7. Select **Next** and then click **Install**.

You may need the original server installation media to define the source for the installation.

Web Server Internet Information Services

1. Launch the Server Manager (based on Windows Server 2019).
2. Select **Add roles and features** and then click **Next**.
3. Select **Role-based or feature-based installation** and then click **Next**.
4. Select the server and then click **Next**.
5. Check Web Server Information Services (IIS) and then add required features.
6. Click **Next** and then click **Next**.
7. From the Web Server Role IIS page, click **Next**.
8. Check the following fields in the Web Server page:
 - a. In the **Common HTTP features** field, select:
 - **Default Document**
 - **Directory Browsing**
 - **HTTP Errors**
 - **Static Content**
 - b. In the **Health and Diagnostics** field, select **HTTP Logging**.
 - c. In the **Performance** field, select **Static Content**.
 - d. In the **Security** field, select **Request Filtering**.
 - e. In the **Application Development** field, select:
 - **.NET Extensibility 3.5 and add required features**
 - **.NET Extensibility 4.7**
 - **ASP.NET 3.5 and add required features**
 - **ASP.NET 4.7**
 - **ISAPI Extensions**
 - **ISAPI Filters**
 - f. In the **Management Tools** field, select **IIS Management Console**.
9. Click **Next** and then click **Install**.

Microsoft Visual C++ Redistributable Package

Install the required Microsoft Visual C++ Redistributable Package on Microsoft Windows Server 2008 R2, Microsoft Windows Server 2012 R2, Microsoft Windows Server 2016, or Microsoft Windows Server 2019.

This will automatically be installed by DBMaintenance if not available

**Note:**

Installation is detailed in the [Update Shell Database](#) section.

Oracle Database

Install one of the supported Oracle Database versions. To prevent future errors, the table below shows the recommended Oracle Database configuration values. Set these values before running the Inventory Management installer.

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
cursor_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.

Installation Media for Inventory Management

1. Download **Inventory Management release 9.1** from the Oracle Software Delivery Cloud.
2. Create the folder <drive>:\IMSetup and extract media to it. These files will be used in the following sections.
3. Download **Inventory Management release 9.1** patch installation media from My Oracle Support.
4. Create the folder Patch91x in the folder <drive>:\IMSetup and extract patch media to it. These files will be used in the following sections.

Oracle Data Provider for Microsoft .NET

1. Download and extract the latest Oracle Data Access Components Runtime (ODAC XCopy) containing the Oracle Data Provider for Microsoft .NET (unmanaged) version 12.1.0.X.X from <https://www.oracle.com/database/technologies/dotnet-odacdev-downloads.html>.
2. In an elevated command line prompt, enter the following command:
`install.bat odp.net4 %systemdrive%\oracle odac.`
3. Click **Microsoft Windows System**, click **Advanced System Settings**, click **Environmental Variables**, click **Path**, and then add the paths `c:\oracle` and `c:\oracle\bin` in front of other Oracle paths.
4. Copy `tnsnames.ora` and `sqlnet.ora` from the Oracle client installation to `c:\oracle\network\admin`.
5. Restart your system.

Install the Inventory Management Database

Complete the instruction in the following sections:

Create Oracle Database User for Inventory Management

1. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip `Shell_DB_ORA_910.zip` in `<drive>:\IMSetup\Patch91x`. There is a choice of either a Metric (MET) or Imperial (IMP) unit of measure shell database. See [Mymaster Database](#) for multi-tenant environments.

 **Note:**

You must use the most recent patch to retrieve the shell database.

2. Create a table space for Inventory Management. This should be completed by a database administrator familiar with the installation environment. See [Sample Table Space Script](#) for an example.
3. A temporary table space and its name is required to exist.
4. Open a command prompt with administrative privileges and connect to the database using the following command:

```
sqlplus sys/<password>@<yourinstance> as sysdba
```
5. Create new user for your Inventory Management installation. The user name must correspond to the short name of the Reporting and Analytics Organization.

To find the short name, sign in to the M Organization of Reporting and Analytics, navigate to the M Org, click **System**, and then click **Organizations**.

```
GRANT create session, resource, create view TO < User(Organization Short Name)> IDENTIFIED BY <password>;
```

If there are multiple Inventory Management database users in the same environment, the password must be the same for all users.

6. **Configure the new user:** ALTER USER <User(Organization Short Name)> DEFAULT TABLESPACE <Default Table Space Name> to use TEMPORARY TABLESPACE <Temporary Table Space Name>; ALTER USER <User(Organization Short Name)> QUOTA UNLIMITED ON < User(Organization Short Name)>;

Loading the Shell Database for the New User

1. To check the location of the DPUMP_DIR, enter the following command SELECT * FROM dba_directories;.

Shell database DMP files are provided with the release and patches in My Oracle Support and are named SHELL_<UnitofMeasure>_<Version>. The options for unit of measure are **MET** for metric units and **IMP** for imperial units. An example name for a shell DMP with metric units and version 9.1.X.X is SHELL_MET_910.DMP.

The source user and source table space are represented in the same file name format but without .DMP. Step 3 shows this in the example.

2. Copy the selected DMP file into the DPUMP_DIR of the Oracle server.
3. Open a command prompt with administrative privileges and run the following command:

```
impdp system/<password>@<yourinstance> DIRECTORY=DPUMP_DIR
DUMPFILE=SHELL_MET_910.DMP PARALLEL=1 LOGFILE=<yourlog>.log
REMAP_SCHEMA= SHELL_MET_910:<YOURSHEMA>
REMAP_TABLESPACE=SHELL_MET_910:<YOURTABLESPACE> TRANSFORM=OID:N
Replace SHELL_MET_910 with the DMP you selected.
```

Update Shell Database

1. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip <date>_HIM_DBMaintenance(64-bit)_9.1.x.x.x.zip in <drive:>\IMSetup\91Patchx. Use the appropriate 32-bit or 64-bit version for your system and for the Oracle Client.
2. During the installation, select a path other than default one. Do not install in the Program Files folder. Then, enter the Oracle instance name.
3. From installation directory of the Database Maintenance application, edit sql.config in a text editor. Verify server names and add others if necessary. The values in bold are specific to your environment:

```
<servers>
<server name="<Oracle Server Instance>"><DbBrand value="ORACLE"/>
<ServiceName value="<Oracle Server Instance>">/>
```

```
</server>
</servers>
```

4. From the installation directory of the Database Maintenance application:

a. Edit FMLOGIN.INI and update and save:

```
DBLogin=<Oracle Server Instance>/<User(Organization Short Name)>/
<user password>,<Organization Short Name>,myinvenMenu.ini
```

b. Refer to the *Oracle MICROS Inventory Management Security Guide* to configure the FMLOGIN.INI.

c. 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 for MaxThreads.

5. Run the database update for either a single database or multiple databases. On your desktop open either:

- **Single Database Maintenance** and then sign in with the user Admin and password changeme.
 - a. Click **Settings** and then select **Daily Totals**.
 - b. Click **Database Update** and then select **Database Update** to insert the tables, columns, and views. Verify that the update completes without errors.
 - c. Select **Reorganization** to add and remove database procedures and functions. Verify that the update completes without errors.
- **Batch Database Maintenance**, select one or more databases, and then click **Update and Reorganize** or **Reorganize Only**.

Install Inventory Management, Inventory Management/Organizations, and Web Services

For Oracle internal use during Oracle Cloud installations.

This installation process uses the Installer. Manual installation instructions can be found in the [Inventory Management Appendix](#).

1. Unzip `Installer.zip` in `<drive>:\IMSetup`.
2. Go to `<drive>:\IMSetup\Installer` right-click `WebAppInstaller.exe`, and select **Run as administrator**.
3. Select the web applications and services to install. You can change the web path, which will then update the local path if another location is preferred to the default.

4. 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**.
5. After the installation is complete, review the summary for errors.
6. Navigate to Internet Information Services (IIS) Manager, select **Applications Pools**. Verify that for the DefaultAppPool, **v4.0** is set for the **.NET CLR Version** and that **Managed pipeline mode = Integrated**.

Install Inventory Management

1. Navigate to the Internet Information Services (IIS) Manager and click **Stop IIS**.
2. In the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_InventoryManagement_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
3. Create the folder `v91Backup` in `<drive>:\IMSetup\`.
4. Back up the folder `InventoryManagement` at `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`
5. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_InventoryManagement_9.1.x.x.x \HIM_InventoryManagement.Application` to replace the files in `c:\inetpub\wwwroot\InventoryManagement`.
6. Unzip the `infragistics Scripts 2010` folder from `<drive>:\IMSetup\Patch91x\<date>_HIM_InventoryManagement_9.1.x.x.x\Infragistics Scripts\` and copy to `c:\inetpub\wwwroot\aspnet_client\`.

Inventory Management web.config

1. Create the folder `root\Inventory Management\log\InventoryManagement\` to store Inventory Management web application log files.
2. Copy the `web.config` folder from `<drive>:\IMSetup\Patch91x\<date>_HIM_InventoryManagement_9.1.x.x.x\HIM_InventoryManagement.Config` to replace the files in `c:\inetpub\wwwroot\InventoryManagement`
3. Navigate to `c:\inetpub\wwwroot\InventoryManagement` and launch WebConfig Wizard.
4. Move the `web.config` file from `c:\inetpub\wwwroot\InventoryManagement` to the Web.Config Wizard.
5. In Web.Config Wizard, click **Database Connectivity**, and then complete the fields:
 - **Brand** — select **Oracle**.
 - **Server** — enter the Oracle instance name.
 - **Password** — enter the Oracle Database user password for the schema.

 **Note:**

To support multitenant use of the web application, all database users for Inventory Management must have the same password.

6. Click **Login and Menu** and in the **Organizations** field, enter the short name for the organizations as defined in Reporting and Analytics.

To find the organization short name, sign in to the M Organization of Reporting and Analytics, navigate to the **M Org**, click **System**, and then click **Organizations**.

 **Note:**

If left empty, you must enter the short name each time you sign in. If there are multiple organizations, separate each with a comma and you can select one when signing in.

7. Click **Files and Paths** and in the **Log Path** field, enter the path to the log folder created in Step 1.
8. Click **Visuals/Other** and then complete the fields:
 - **R&A Protocol** — the default is **http**, change to **https** if applicable.
 - **R&A Allowed Domains** — enter a list of domains and separate each with a comma. 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`.
 - **R&A URL** — enter the public URL for Reporting and Analytics, such as `https://www.mymicros.net/`.
9. Click **Save**.

Validate Inventory Management Install

1. Navigate to the Internet Information Services (IIS) Manager and click **Start IIS**.
2. Navigate to `http://localhost/InventoryManagement`.
3. Sign in with the user `Admin` and password `changeme`. Follow directions to change the password.

Install Inventory Management/Organizations

For Oracle internal use during Oracle Cloud installations.

The Inventory Management/Organizations application configures the translation between Reporting and Analytics and Inventory Management web service.

1. Navigate to the Internet Information Services (IIS) Manager and click **Stop IIS**.
2. In the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_myOrganizations_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
3. Back up the folder `myOrganizations` at `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
4. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_myOrganizations_9.1.x.x.x\HIM_myOrganizations.Application` to replace the files in `c:\inetpub\wwwroot\myOrganizations`.

Inventory Management/Organizations web.config

For Oracle internal use during Oracle Cloud installations.

1. Create the folder `root\Inventory Management\log\IM_Organizations\` to store the Inventory Management/Organizations web application log files.
2. Copy the `web.config` file from `<drive>:\IMSetup\Patch91x\<date>_HIM_myOrganizations_9.1.x.x.x\HIM_myOrganizations.Config` to replace the file in `c:\inetpub\wwwroot\myOrganizations`.
3. Navigate to `c:\inetpub\wwwroot\myOrganizations` and launch WebConfig Wizard.
4. Move the `web.config` folder from `c:\inetpub\wwwroot\myOrganizations` to the Web.Config Wizard.
5. In Web.Config Wizard, click **Database Connectivity**, and then complete the fields:
 - **Brand** — select **Oracle**.
 - **Server** — enter the Oracle instance name.
 - **Password** — enter the Oracle Database user password for the schema.

Note:

To support multitenant use of the web application, all database users for Inventory Management must have the same password.

6. Click **Login and Menu** and in the **Organizations** field, enter the short name for the organizations as defined in Reporting and Analytics. This is also the Oracle Database user. In a multitenant environment, you can create a separate master database that is not a Reporting and Analytics organization.

 **Note:**

If left empty, you must enter the short name each time you sign in. If there are multiple organizations, separate each with a comma and you can select one when signing in.

7. Click **Files and Paths** and in the **Log Path** field, enter the path to the log folder created in Step 1.

Install Reporting and Analytics Web Service

Allows Reporting and Analytics to communicate with Inventory Management

1. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_RA_WebService_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
2. Back up the folder `RA_WebService` at `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_RA_WebService_9.1.x.x.x\HIM_RA_WebService.Application` to replace the files in `c:\inetpub\wwwroot\RA_WebService`.

Reporting and Analytics Web Service web.config

1. Create the folder `root\Inventory Management\log\RA_Web_Service\` to store Reporting and Analytics Web Service log files.
2. Copy the `web.config` file from `<drive>:\IMSetup\Patch91x\<date>_RA_WebService_9.1.x.x.x\RA_WebService.Config` to replace the files in `c:\inetpub\wwwroot\RA_WebService`.
3. Navigate to `c:\inetpub\wwwroot\InventoryManagement` and launch WebConfig Wizard.
4. Move the `web.config` file from `c:\inetpub\wwwroot\RA_WebService` to the Web.Config Wizard.
5. In Web.Config Wizard, click **Database Connectivity**, and then complete the fields:
 - **Brand** — select **Oracle**.
 - **Server** — enter the Oracle instance name.
 - **Password** — enter the Oracle Database user password for the schema.
 - **Profile** — enter `settings.ini`.
6. Click **Login and Menu** and in the **Organizations** field, enter the short name for the organizations as defined in Reporting and Analytics. This is also the Oracle

Database user. In a multitenant environment, you can create a separate master database that is not a Reporting and Analytics organization.

 **Note:**

If left empty, you must enter the short name each time you sign in. If there are multiple organizations, separate each with a comma and you can select one when signing in.

7. Click **Files and Paths** and in the **Log Path** field, enter the path to the log folder created in Step 1.

Install POS Web Service

Used for some interfaces and access to other applications.

1. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_POSWebService_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
2. Back up the folder `POSWebService` at `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_POSWebService_9.1.x.x.x\HIM_POSWebService.Application` to replace the files in `c:\inetpub\wwwroot\POSWebService`.

POS Web Service web.config

1. Create the folder `root\Inventory Management\log\POSWebService\` to store POS Web Service log files.
2. Copy the `web.config` folder from `<drive>:\IMSetup\Patch91x\<date>_HIM_POSWebService_9.1.x.x.x\HIM_POSWebService.Config` to replace the files in `c:\inetpub\wwwroot\POSWebService`.
3. Navigate to `c:\inetpub\wwwroot\POSWebService` and edit `web.config` in a text editor.
4. Enter the following inputs in `<EncryptedAppSettingsGroup>` and `<appSettings>` and then save:
 - **PASSWORD** — enter Oracle Database user's password (to be encrypted after installation).
 - **LogPath** — defined in Step 1.
 - **DbBrand** — enter Oracle.
 - **SERVER** — enter Oracle instance.
 - **CATALOG**
 - For a single tenant, enter the short organization name.

- For a multitenant, enter the master Oracle Database user for each organization.
- **USER**
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
- **PROFILE** — enter `Settings.ini`.

Install Mobile Web Service

Allows for mobile solutions to communicate with Inventory Management.

1. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_MobileWebService_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
2. Back up the folder `MobileWebService` at `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_MobileWebService_9.1.x.x.x\HIM_MobileWebService.Application` to replace the files in `c:\inetpub\wwwroot\mobileWebService`.

Mobile Web Service web.config

1. Create the folder `root\Inventory Management\log\MobileWebService\` to store Mobile Web Service log files.
2. Copy the `web.config` folder from `<drive>:\IMSetup\ Patch91x\<date>_HIM_MobileWebService_9.1.x.x.x\HIM_MobileWebService.Config` to replace the files in `c:\inetpub\wwwroot\MobileWebService`.
3. Navigate to `c:\inetpub\wwwroot\MobileWebService` and edit `web.config` in a text editor.
4. Enter the following inputs in `<EncryptedAppSettingsGroup>` and `<appSettings>` and then save:
 - **PASSWORD** — enter Oracle Database user's password (to be encrypted after installation).
 - **LogPath** — defined in Step 1.
 - **DbBrand** — enter `Oracle`.
 - **SERVER** — enter Oracle instance.
 - **CATALOG**
 - For a single tenant, enter the short organization name.

- For a multitenant, enter the master Oracle Database user for each organization.
 - **USER**
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
 - **ConnectToMaster**
 - For a single tenant, set to `True`.
 - For a multitenant with no master database, set to `False`.
5. Navigate to Internet Information Services (IIS) Manager and click **Start IIS**.

Configure the Connection to Reporting and Analytics

To configure the connection between Inventory Management and Reporting and Analytics release 20.1, see the internal My Oracle Support Doc ID 2731838.1.

To configure the connection between Inventory Management and Reporting and Analytics release 9.1:

Sign in to Inventory Management/Organizations

For Oracle internal use during Oracle Cloud installations.

1. Sign in as an admin user at `http://localhost/myOrganizations/`. Use the organization short name in the **Company** field.
2. Navigate to the myOrganization main page, click **Create**, and then complete the following fields:
 - **Organization** — enter the organization short name that is the same as the user.
 - **Database** — enter the Oracle instance.
 - **Password** — enter the user's password.
 - **OrgID** — enter the Reporting and Analytics ID assigned to the organization.
3. Click **Save**.
4. Click **Web Services**.
5. For the default **Reporting and Analytics Web Service**, enter:
 - a. `http://<Reporting and Analytics Service Name>/htng/Server/HTNGListenerSoap`
 - b. The user name and password of the Inventory Management admin user.
 - c. Select **Override Custom Definitions** to override custom web service configurations for each organization.
6. For the **Inventory Management Web Service**, enter:
 - a. `http://<Inventory Management Server Name>/RA_WebService/HTNGListener.asmx`
 - b. The user name and password of the Inventory Management admin user.

- c. Select **Override Custom Definitions** to override custom web service configurations for each organization.
7. Click **Save**.
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 RA Web Service**.
 - d. Select **Use default** to use the default web service configuration.

Configure M Organization

1. Navigate to Reporting and Analytics and log in to the M organization.
2. Click **System**, click **Organizations**, select the organization that you want to connect to Inventory Management, and then click **Edit**.
3. In the **Organization** field, select **Enable Inventory**, and then enter the following:
 - a. In the **Inventory Web Services URL**, enter `http://<Inventory Management Server Name>/RA_WebService/HTNGListener.asmx`
 - b. Administrator login credentials as defined in Inventory Management/Organizations.
4. Click **Save**.
5. Select the **MICROS** organization and then click **Edit**.
6. In the **myInventory DB Password** field, enter the Inventory Management database login credentials.
7. Click **Save**.
8. Navigate to the Reporting and Analytics application server.
9. Open the Microsoft Windows hosts file `C:\Windows\System32\drivers\etc` in a text editor and add:
 - a. The IP address of Inventory Management Web Application Server customer name.
 - b. The IP address of Inventory Management Web Application Server `myinventory.customer name`.
10. Navigate to `installation path\myPortal\portal.ear\portal.war\config\`, open `microsConfig.properties` in a text editor, and then set the following lines:

```
db.vendor.inventory=Oracle-9i
db.server.inventory=<Inventory Management Database Server Name>
db.serviceName.inventory=<Oracle Instance Name>
db.port.inventory=<Oracle Database Port>
inventoryUrl=<e.g. http://<Application Server Name>/
```

```
InventoryManagement>  
myInventory.version=9.1
```

11. Redeploy `portal.ear`. For more details on redeployment, see the “Re-Deploying Reporting and Analytics” section of the *Oracle Enterprise Back Office Installation Guide*.

Configure Organization Settings

The steps below document how to add the Inventory Management portlet, enable a location, complete the sync, and validate the settings.

1. Sign in to the organization.
2. Click **Admin**, click **Portal**, click **Portlets**, and then click **Portlets**.
3. Click **Add** and then complete the fields:
 - a. Enter a name.
 - b. Select **Portlet**.
 - c. Select **myinventory**.
 - d. Enter a description.
 - e. Set **Effective Date**.
 - f. Click **Save**.
4. Click **Cancel**.
5. Click **Roles**, click **Portlets**, select a role, and then click **Configure**.
6. Click **Add**.
7. Select the **myInventory Portlet**, click **Side Menu Title**, and then click **Sort Order**.
8. Click **Save**.
9. To enable the locations that will be using Inventory Management:
 - a. Click **Admin**, click **Portal**, click **Organization Structure**, and then click **Locations**.
 - b. Select a **Location**, click **Edit**, and then click **Enable Inventory**.
10. Complete the sync:
 - a. Navigate to **Admin**, click **Warehouse**, click **Miscellaneous**, and then click **myinventory Sync**.
 - b. In the **Choose Subject** field, select **Organizations**, and then click **Sync**.
 - c. Repeat Step 10 with **Users** and then click **Sync**.
11. Validate the settings:
 - a. Sign out of Reporting and Analytics then sign back into the Organization.
 - b. Navigate to the Inventory Management side menu and then access Inventory Management.

Install Automation Services

Complete the instruction in the following sections:

Installing Automation Service

1. Create the folder `root\Inventory Management\log\AutomationService\` to store the Automation Service log files.
2. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_AutomationService_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
3. Navigate to `<drive>:\IMSetup\Patch91x\<date>_HIM_AutomationService_9.1.x.x.x` and run `setup.exe` as the administrator.
4. Go to the installation path for the Automation Services and run `AutomationServiceConsole` as the administrator. Click **OK** to create a new configuration file if one is not found.
5. From the Automation Service Console complete the following:
 - a. In the **Database type** field, select **Oracle**.
 - b. In the **Database server** field, enter the Oracle instance.
 - c. In the **Database user** field, enter the user, which is the organization short name.
 - d. In the **Database password** field, enter the user's password.
 - e. In the **Database catalog** field, enter the user.
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
 - f. In the log file folder, enter the path created for the log in Step 1.
 - g. In the **Allowed Job Types** field, select which jobs are allowed for use on this machine. The options include:
 - **Book invoice to B/O:** This job processes invoices which are set to **Booked to Accounts Payable** within the Invoicing module if configured. Afterwards an export file or files can be generated which can be used by an accounts payable solution.
 - **Book sales from myInventory:** This job handles stock depletion based on sales when booking sales manually within the Maintenance | Booking Sales module.
 - **Close financial period export per client:** This job creates export files when closing the financial period per client within the Closed Financial Period module if configured at Maintenance | Settings | General and scheduler is activated for export at Master Data | Clients.
 - **Close financial period export per location:** This job creates export files when closing the financial period per location within the Closed Financial Period module if configured at Maintenance | Settings | General and scheduler is activated for export at Master Data | Clients.

- **Import Master data:** This job processes Master Data when consuming the Master Data Web Service. However, this job is not used when using the Master Data Web Service Delta call.
- **Sales History Compression:** If configured in the Organizations web application, this job aggregates sales inventory item activities per day. For example, if bottled watered was sold 200 times per day per restaurant, then this job will turn the 200 inventory item records which are linked to the sales item into one record with a quantity of 200 which reduces the table size.
- **Send Notification:** This job sends Scheduler notifications after a job has been completed if configured at the Maintenance | Scheduler module.
- **Send Vendor Discrepancy:** This job sends an email with discrepancy information between ordered and received quantities when using the Vendor Rating functionality in Receiving.
- **Send Vendor Rating:** This job sends an email with Vendor Rating information when using the Vendor Rating functionality in Receiving.

 **Note:**

For a list of all other jobs, see the “Scheduler Jobs” section in the *Oracle MICROS Inventory Management User Guide*.

6. Deselect **Disable Notifications per E-Mail**.
7. Click **Save Configuration** and then confirm that the database connectivity shows **OK**.
8. Click **Start** and then confirm that the service status shows **Running**.
9. To configure the service, navigate to **Microsoft Windows**, click **Start**, click **Run**, enter `services.msc`, right-click **Oracle.Hospitality.Inventory.AutomationService**, and then click **Properties**.
10. Click **Recovery**, set First failure, Second failure, and Subsequent failures to restart the service.

Installing Automation Service Monitor

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

1. Navigate to the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_ASAMon_9.1.x.x.x.zip` to `<drive>:\IMSetup\Patch91x`.
2. Create the folder `<drive>:\ASMonitor`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_ASAMon_9.1.x.x.x\HIM_ASAMon.Application\<x64 or x86>` to `<drive>:\ASMonitor`.
4. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_ASAMon_9.1.x.x.x\HIM_ASAMon.Config` to `<drive>:\ASMonitor`.

5. Navigate to <drive>:\ASMonitor and edit fmlogin.ini in a text editor. Enter the server name for all instances of the DBLogin parameter.

For example: DBLogin=<Oracle Server Instance>/<User(Organization Short Name)>/<User password>, <Organization Short Name>,myinvenMenu.ini.

Alternatively, you can copy fmlogin.ini from DBMaintenance.

6. Navigate to <drive>:\ASMonitor and edit sql.config in a text editor.

For example:

```
<servers>
<server name="<As entered in fmlogin.ini>"><DbBrand value="ORACLE" /
><ServiceName value="<Instance>" /></server>
</servers>
```

7. To run the Automation Service Monitor, launch the ASAMon application in the installation path.

Security Configuration

Perform the security configurations listed. See the *Oracle Inventory Management Security Guide* for more information and instructions on securing your application.

1. Use the **SecureConfig** tool to create or import key container.
2. Define the encryption key parameters.
3. Encrypt configurations.

Patches and Updates

Getting Started

Patch and update the Inventory Management components in the following order:

1. Patch and update the Inventory Management database.
2. Patch and update Inventory Management, Inventory Management/Organizations, and Web Services.
3. Patch and update Automation Services.
4. Follow the instructions in the *Inventory Management Security Guide* to set up the encryption keys and configurations.

Installation Media for Patches

The Inventory Management patch media contains the following files, which are available at My Oracle Support. Each patch is cumulative, so the most recent file contains all previous patch updates.

- <date>_HIM_MobileSolutionSetup_18.1.xx.xxxx.zip

- <date>_HIM_MSClient_9.10.xx.xxxx.zip
- <date>_HIM_POSWebService_9.1.0.xx.xxxx.zip
- <date>_HIM_MobileWebService_9.1.0.xxx.xxxx.
- <date>_HIM_ASAMon_9.1.0.xxx.xxxx.zip
- <date>_HIM_myOrganizations_9.1.0.xx.xxxx.zip
- <date>_HIM_RA_WebService_9.1.0.xx.xxxx.zip
- <date>_HIM_AutomationService_9.1.0.xxx.xxxx.zip
- <date>_HIM_DBMaintenance(32-bit)_9.1.0.xxx.xxxx.zip
- <date>_HIM_DBMaintenance(64-bit)_9.1.0.xxx.xxxx.zip
- <date>_HIM_InventoryManagement_9.1.0.xxx.xxxx.zip
- Installer.zip
- ODAC121024Xcopy_x64-30165.zip
- SecureConfig.zip
- Shell_DB_MSSQL.zip
- Shell_DB_ORA.zip

Complete the instruction in the following sections:

Update the Inventory Management Database

1. Create folder **DBMaintenance** at <drive>:\IMSetup\v91Backup.
2. Back up **FMLOGIN.INI** and **sql.config** from the **myinventory Database Maintenance** installation path to <drive>:\IMSetup\v91Backup\DBMaintenance.
3. Uninstall **myinventory Database Maintenance** by navigating to the **Control Panel** and then click **Uninstall Program**.
4. Unzip <date>_HIM_DBMaintenance(64-bit)_9.1.0.xxx.xxxx.zip in <drive>:\IMSetup\Patch91x. Use the appropriate 32-bit or 64-bit version for your system and for the Oracle Client.
5. Install the Database Maintenance application by running the **setup.exe** in <drive>:\IMSetup\Patch91x\<date>_HIM_DBMaintenance(64-bit)_9.1.0.xxx.xxxx. During the install, enter the Oracle Instance name.
6. Copy the backed up **FMLOGIN.INI** and **sql.config** files to the Database Maintenance installation path
7. To run a single database, either navigate to the installation directory and run **DatabaseUpdater.exe** or from the desktop run **Oracle MICROS Inventory Management Single Database Maintenance**. To run a batch update, navigate to the installation directory and run **UpdateOrg.exe** or from the desktop run **Oracle MICROS Inventory Management Single Database Maintenance**.
 - a. If **Single Database**, sign in to the organization to update.
 - b. Click **Settings** and then select **Daily Totals** for the database.

- c. Click **Database Update** and then select **Database Update** to insert the tables, columns, and views. Verify that the update completes without errors.
- d. Select **Reorganization** to add and remove database procedures and functions. Verify that the update completes without errors.

Update Inventory Management Web Application

1. Navigate to the Internet Information Services (IIS) Manager and click **Stop IIS**.
2. **Unzip** <date>_HIM_InventoryManagement_9.1.x.x.x.zip in <drive>:\IMSetup\Patch91x.
3. **Create the folder** v91Backup in <drive>:\IMSetup\.
4. **Back up the folder** InventoryManagement at c:\inetpub\wwwroot\ to <drive>:\IMSetup\v91Backup.
5. **Copy the contents of** <drive>:\IMSetup\Patch91x\180606_HIM_InventoryManagement_9.1.x.x.x\HIM_InventoryManagement.Application to replace the files in c:\inetpub\wwwroot\InventoryManagement.
6. Check the patch Readme and update the web.config if necessary. If no update is needed, move on to [Update Inventory Management/Organizations](#). If an update is needed, navigate to c:\inetpub\wwwroot\InventoryManagement and launch the WebConfig Wizard.
7. **Move web.config from** <drive>:\IMSetup\Patch91x\<date>_HIM_InventoryManagement_9.1.0.xxx.xxxx\HIM_InventoryManagement.Config to the Web.Config Wizard using the drag-and-drop method. Complete based on the current backed up web.config and then make any adjustments as advised in the patch Readme.
8. Click **Save**.
9. **Copy the web.config from** <drive>:\IMSetup\Patch91x\<date>_HIM_InventoryManagement_9.1.0.xxx.xxxx\HIM_InventoryManagement.Config to replace the current file in c:\inetpub\wwwroot\InventoryManagement.
10. **Unzip the** infragistics Scripts 2010 file from <drive>:\IMSetup\Patch91x\<date>_HIM_InventoryManagement_9.1.0.xxx.xxxx\Infragistics Scripts\ and then copy the unzipped infragistics folder to c:\inetpub\wwwroot\aspnet_client\.

Update Inventory Management/Organizations

For Oracle internal use during Oracle Cloud installations.

1. **Unzip** <date>_HIM_myOrganizations_9.1.x.x.x.zip in <drive>:\IMSetup\Patch91x.

2. **Back up the folder myOrganizations at** `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
3. **Copy the contents of** `<drive>:\IMSetup\Patch91x\
<date>_HIM_myOrganizations_9.1.0.xx.xxxx\
HIM_myOrganizations.Application` to replace the files in `c:\inetpub\wwwroot\myOrganizations`.
4. **Check the patch Readme and update the web.config if necessary.** If no update is needed, move on to [Update Reporting and Analytics Web Service](#). If an update is needed, navigate to `c:\inetpub\wwwroot\InventoryManagement` and launch the WebConfig Wizard.
5. **Move web.config from** `<drive>:\IMSetup\Patch91x\
\<date>_HIM_myOrganizations_9.1.x.xx.xxxx\HIM_myOrganizations.Con
fig` to the Web.Config Wizard. Complete based on the current `web.config` and then make any adjustments as advised in the patch Readme.
6. **Click Save.**
7. **Copy the web.config from** `<drive>:\IMSetup\Patch91x\
<date>_HIM_myOrganizations_9.1.x.xx.xxxx\HIM_myOrganizations.Conf
ig` to replace the current file in `c:\inetpub\wwwroot\myOrganizations`.

Update Reporting and Analytics Web Service

1. **Unzip** `<date>_HIM_RA_WebService_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
2. **Back up the folder RA_WebService at** `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
3. **Copy the contents of** `<drive>:\IMSetup\Patch91x\
<date>_HIM_RA_WebService_9.1.0.xx.xxxx\
HIM_RA_WebService.Application` to replace files in `c:\inetpub\wwwroot\RA_WebService`.
4. **Check the patch Readme and update the web.config if necessary.** If no update is needed, move on to [Update POS Web Service](#). If an update is needed, navigate to `c:\inetpub\wwwroot\InventoryManagement` and launch the WebConfig Wizard.
5. **Move web.config from** `<drive>:\IMSetup\Patch91x\
<date>_HIM_RA_WebService_9.1.0.xx.xxxx\HIM_InventoryManagement.Co
nfig` to the Web.Config Wizard. Complete based on the current backed up `web.config` and then make any adjustments as advised in the patch Readme.
6. **Click Save.**

Update POS Web Service

1. Unzip `<date>_HIM_POSWebService_9.1.x.x.x.zip` in `<drive>:\IMSetup\Patch91x`.
2. Back up the folder `POSWebService` at `c:\inetpub\wwwroot\` to `<drive>:\IMSetup\v91Backup`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\
<date>_HIM_POSWebService_9.1.0.xxx.xxxx\
HIM_POSWebService.Application` to replace the files in `c:\inetpub\wwwroot\POSWebService`.
4. Check the patch Readme and update the `web.config` if necessary. If no update is needed, move on to [Update Mobile Web Service](#). If an update is needed, open the `web.config` in a text editor from `<drive>:\IMSetup\Patch91x\
<date>_HIM_POSWebService_9.1.0.xx.xxxx\HIM_POSWebService.Co
nfig`. Complete based on the current backed up `web.config` and then make any adjustments as advised in the patch Readme.
5. Click **Save**.
6. Copy the `web.config` from `<drive>:\IMSetup\Patch91x\
<date>_HIM_POSWebService_9.1.0.xx.xxxx\HIM_POSWebService.Co
nfig` to replace the current file in `c:\inetpub\wwwroot\POSWebService`.

Update Mobile Web Service

1. Unzip `<date>_HIM_MobileWebService_9.1.0.xx.xxxx.zip` in `<drive>:\IMSetup\Patch91x`.
2. Back up the folder `mobileWebService` to `<drive>:\IMSetup\v91Backup`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\
<date>_HIM_MobileWebService_9.1.0.xx.xxxx\
HIM_MobileWebService.Application` to replace the files in `c:\inetpub\wwwroot\mobileWebService`.
4. Check the patch Readme and update the `web.config` if necessary. If no update is needed, move on to [Verify Installation](#). If an update is needed, open the `web.config` in a text editor from `<drive>:\IMSetup\Patch91x\
<date>_HIM_MobileWebService_9.1.0.xx.xxxx\HIM_MobileWebServi
ce.Config`. Complete based on the current backed up `web.config` and then make any adjustments as advised in the patch Readme.
5. Click **Save**.
6. Copy the `web.config` from `<drive>:\IMSetup\
<date>_HIM_MobileWebService_9.1.0.xx.xxxx\
HIM_MobileWebService.Config` to replace the current file in `c:\inetpub\wwwroot\MobileWebService`.

Verify Installation

Sign in to Inventory Management

1. Navigate to Internet Information Services (IIS) Manager and click **Start IIS**.
2. Open a browser and navigate to `http://localhost/InventoryManagement`.
3. Sign in to verify install.

Sign in to Inventory Management/Organizations

1. Open a browser and navigate to `http://localhost/myorganizations`.
2. Sign in to verify install.

Update Automation Services

Complete the instruction in the following sections:

Update Automation Service

1. Unzip `<date>_HIM_AutomationService_9.1.0.xxx.xxxx.zip` in `<drive>:\IMSetup\Patch91x`.
2. Navigate to **Microsoft Windows**, click **Start**, click **Run**, enter `services.msc`, right-click **Oracle.Hospitality.Inventory.AutomationService**, and then click **Stop**.
3. Create the folder `AutomationService` at `<drive>:\IMSetup\v91Backup`.
4. Back up the folder `AutomationService.exe.config` from its installation path to `<drive>:\IMSetup\v91Backup\AutomationService`.
5. Navigate to the **Control Panel**, click **Uninstall Program**, and then uninstall **AutomationService**.
6. Navigate to `<drive>:\IMSetup\Patch91x\<date>_HIM_AutomationService_9.1.0.xxx.xxxx` and run `setup.exe` as the administrator.
7. Navigate to the installation path for the **Automation Services** and run `AutomationServiceConsole` as the administrator.
8. Verify the configuration and start the service.

Update Automation Service Monitor

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

1. Unzip `<date>_HIM_ASAMon_9.1.0.xx.xxxx.zip` to `<drive>:\IMSetup\Patch91x`.

2. Create the folder `ASMonitor` at `<drive>:\IMSetup\v91Backup` and copy to it `FMLOGIN.INI`, `sql.config`, and `ASMAON.exe.config`.
3. Copy the contents of `<drive>:\IMSetup\Patch91x\<date>_HIM_ASAMon_9.1.0.xx.xxxx\HIM_ASAMon.Application\x64` or `x86` to `<drive>:\ASMonitor`.
4. Copy `FMLOGIN.INI`, `sql.config`, and `ASMAON.exe.config` from `<drive>:\IMSetup\v91Backup\ASMon` to `<drive>:\ASMonitor`.

Security Configuration

Perform the security configurations listed. See the *Oracle Inventory Management Security Guide* for more information and instructions on securing your application.

1. Use the **SecureConfig** tool to create or import key container.
2. Define the encryption key parameters.
3. Encrypt configurations.

8

Enterprise Back Office Components and Services

This chapter provides instructions for installing Enterprise Back Office components and services. [What Components Do I 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 Symphony 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 8-1 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 8-1 (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 8-2 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 8-2 (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
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 8-3 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 8-3 (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
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 8-4 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 8-4 (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. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, on the Repository Database Information page, configure the connection to the Business Intelligence Repository database (BiRepos):

Oracle Database	Microsoft SQL Server
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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.

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 8-5 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.

Table 8-5 (Cont.) Report Mail Font Configurations

Field	Description
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. If you are completing a 9.1, 9.1 with OBIEE, or 9.1 New Tech Stack with Pentaho installation, 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
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 8-6 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
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 8-7 Weather Configurations

Field	Description
What is the database login for the Weather Service?	Enter the username for the database login, typically <code>MSSQL</code> .
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 Symphony Mobile Aggregation

1. Download `install_ version.exe` to the Symphony Mobile Aggregation 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 Symphony 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.

9

Post-Installation Configuration

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

- [Entering the Organization Passwords](#)
- [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](#)

WebLogic Configuration for Enterprise Back Office

After installing the 9.1 New Tech Stack or 9.1 New Tech Stack with Pentaho release, follow these steps to configure WebLogic:

1. Log in to the WebLogic admin console, navigate to **Environment**, and then click **Servers**.
2. Select **App Server**.
3. Click **Lock & Edit**.
4. Navigate to **Configuration** and then click **General**.
5. Select **Listen Port Enabled**.
6. Click **Save**, and then click **Activate Changes**.
7. Navigate to **Environment**, click **Machines**, and then click **<machine name> Node Manager**.
8. Use a fully qualified domain name for the **Listen Address** (for example, `reporting.mydomain.com`)
9. Click **Save** and then click **Activate Changes**.
10. For 9.1 New Tech Stack with Pentaho installations only:
 - a. Navigate to **Environment**, and then click **Clusters**.

- b. Select **micros_cluster**.
 - c. Click **Lock & Edit**.
 - d. Navigate to **Replication**.
 - e. Select **Secure Replication Enabled**.
 - f. Click **Save** and then click **Activate Changes**.
11. Start the App Server.

WebLogic Configuration for Gift and Loyalty

After installing the 9.1 New Tech Stack release, follow these steps to configure WebLogic:

1. Log in to the WebLogic admin console, navigate to **Environment**, and then click **Servers**.
2. Select **App Server**.
3. Click **Lock & Edit**.
4. Navigate to **Configuration** and then click **General**.
5. Select **Listen Port Enabled**.
6. Click **Save** and then click **Activate Changes**.

Updating Server Names in Application Server and Services Configurations

The following server and service configurations may need to be updated after installing a new application server.

If you are running services on separate servers, reinstall the services using the installation media to ensure the services are configured with the new server name where applicable.

- Gift and Loyalty changes:
 1. Change the execution server for Gift and Loyalty DB syncs.
 2. Navigate to iCare GPL, Initial iCare GPL Setup and Configuration, DB Sync Schedule, and then change all server name instances to point to the newly installed Gift and Loyalty Server name.
- Admin server service changes:
 1. Change the execution server for admin server exports.
 2. Navigate to the MICROS Org, Admin, Admin schedule and edit the execution server for each schedule.
- Inventory Management changes:

1. Update the Inventory to Reporting and Analytics webservice for posting report data.
Sign in to the Inventory Management/Organizations application, navigate to Web Services Definitions (or edit the Organization if default has been overridden), and then update the Reporting and Analytics Web Service with the new Reporting and Analytics host name.
2. Update Inventory Management web.config
Open the `c:\inetpub\wwwroot\InventoryManagement\web.config` file and then edit `Allowed Domains` by entering the new Reporting and Analytics host name.
- Symphony changes:
Change the Reporting and Analytics and Gift and Loyalty server names in the Symphony EMC:
 1. In the EMC, go to Setup, Enterprise Parameters, Reporting and Analytics, and update the following fields:
 - **Reporting & Analytics Machine name**
 - **Enterprise Labor Management URL**
 - **Property Labor Management URL**
 2. If labor is enabled at property level, navigate to Property parameters, Timekeeping, and then click **Update labor Management URL**.
 3. If Gift and Loyalty is enabled:
 - a. Within the enterprise or property, click **Setup**, and then click **Loyalty Driver**.
 - b. Update **WebAddress** with the new Gift and Loyalty host.
 - c. Within the enterprise or property, click **Setup**, and then click **Stored Value Driver**.

Entering the Organization Passwords

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. 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)
 - myInventory DB (for Inventory Management)
 - Symphony DB (for Symphony Point-of-Sale)
4. Save the settings.

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:

- 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.

WARNING:

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

Enforce TLSv1.2 or Above for the 9.1 New Tech Stack Release

CA-signed SSL certificates are required for 9.1 New Tech Stack installations. See Appendix D of the [Oracle MICROS Enterprise Back Office Security Guide](#) for instructions. Confirm that the SSL certificate password as well as the keystore password only contain alphanumeric characters. Special characters, symbols, or spaces are not allowed for the password.

Follow these steps to enforce usage of the TLSv1.2 protocol:

1. Navigate to the `myMicros` installation directory.
2. Modify `myMicros/oracle/Middleware/wlserver/common/bin/commEnv.cmd`

- Add the following code to the top of the file:

```
set JAVA_OPTIONS=%JAVA_OPTIONS% -  
Dweblogic.security.SSL.protocolVersion=TLSv1.2 -  
Dweblogic.security.SSL.minimumProtocolVersion=TLSv1.2
```

3. Modify `myMicros/oracle/Middleware/oracle_common/common/bin/setWlstEnv_internal.cmd`

- a. Find the code line that starts with `SET JVM_ARGS`.
- b. Add the following code:

```
-Dweblogic.security.SSL.minimumProtocolVersion=TLSv1.2
```

The new code line now reads as:

```
SET JVM_ARGS=%WLST_PROPERTIES% %UTILS_MEM_ARGS%  
%CONFIG_JVM_ARGS% -  
Dweblogic.security.SSL.minimumProtocolVersion=TLSv1.2
```

Template Organizations

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

- Micros MSA
- Symphony Managed Organization
- TSR Template Organization
- Symphony 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. 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.
 - b. Select whether the organization includes taxes in Net Sales calculations in **Tax Type**.
 - c. Enter the maximum number of months that a user can select when running a report in **Calendar Selection Limit**.
 - d. 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 to 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 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.

Modifying Autosequences for RES 3700

To ensure that all employee shifts and sales are collected by the Daily Totals script, all employee shifts must fall within 5 minutes before the business start time and 5 minutes after the business end time. Verify that the following are set in the end of day autosequence:

- Increment Employee Shift
- Set Business Day

If an auto-increment is set to run on the server, confirm that this occurs after the end of day autosequence.

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.

Configuring Gift and Loyalty for Unlocking Accounts

When you enable the **Unlock Account** privilege for the Account Admin portlet, system administrators can manually unlock customer accounts.

1. In Reporting and Analytics, click **Admin**, click **Portal**, click **Roles**, and then click **Portlets**.
2. Select **Sys Admin** and then click **Configure**.

3. Select the **Account Admin** portlet and then click **Edit**.
4. In the Portlet Privileges list, select **Unlock Account**, and then click **Save**.

Configuring Gift and Loyalty Lockout Settings

After you install the Gift and Loyalty application and database, you can configure database settings that control how the system handles account lockouts.

1. Connect to the Gift and Loyalty database.
2. Configure the following options in the `iCare_config_Options` table:

Option	Description
<code>iCard.lockout.numTries</code>	The unsuccessful login attempt on which the system locks the account or blocks the IP address. The default value is 10.
<code>iCard.lockout.evaluationTimeInSecs</code>	Number of seconds over which the system tracks successful and unsuccessful login requests. The default value is 5 seconds.
<code>iCard.lockout.lockoutTimeInMins</code>	Number of minutes for which the system locks the account. The default is 240 minutes.

3. To whitelist IP addresses, add the addresses to the `icare_whitelisted_ips` database table.

The system evaluates `iCare_config_Options` settings as follows:

- The system evaluates the `iCard.lockout.numTries` and `iCard.lockout.evaluationTimeInSecs` values to determine if an IP address is blocked. It is possible for an IP address to be blocked even if an account is not locked.
Using the default values as an example, if 10 attempts are made from the same IP address within 5 seconds, the IP address is blocked for the duration defined in `iCard.lockout.lockoutTimeInMins` (default: 240).
- The system evaluates the `iCard.lockout.numTries` to determine if the account is locked.
Using the default values as an example, if 10 consecutive unsuccessful login attempts are made to an account, the account is locked for the duration defined in `iCard.lockout.lockoutTimeInMins` (default: 240).

When you make changes to the `icare_whitelisted_ips` table and `iCare_config_Options` table, the changes do not take effect for approximately 15 minutes. Restart the Gift and Loyalty application server to immediately implement the changes.

Setting Aggregation Service Memory Configurations

After installing the Aggregation Service, set memory configurations for your environment based on the following guidelines:

Table 9-1 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**.

10

Administration and Maintenance

This section provides instructions for administrative and maintenance-related tasks, such as password changes, URL changes, and server restarts.

- [Maintaining Supported Point-of-Sale Application Versions](#)
- [Updating Enterprise Back Office with New Gift and Loyalty Passwords](#)
- [Re-Deploying Reporting and Analytics](#)
- [Re-Deploying Gift and Loyalty](#)

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

Perform the following steps to manually re-deploy Reporting and Analytics 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:

Table 10-1 Application Deployment Reference

EAR/WAR Location	Deployment Target	Deployment Name
<code>INSTALLATION_DIR\myPortal\portal.ear</code>	<code>micros_cluster</code>	<code>portal</code>

- 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.

11

Uninstallation

This section provides instructions for uninstalling Enterprise Back Office.

- [Uninstalling Enterprise Back Office 9.0 or Later](#)
- [Uninstalling the Inventory Management Application](#)
- [Uninstalling Enterprise Back Office 8.5 or Earlier](#)

Uninstalling Enterprise Back Office 9.0 or Later

This topic provides instructions for creating a backup and then running the wizard to remove Oracle MICROS Enterprise Back Office. Refer to the Oracle WebLogic help when uninstalling the respective software.

1. Uninstall the Reporting and Analytics application server. If you installed Reporting and Analytics on multiple servers, uninstall each instance of Reporting and Analytics.
 - 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 Portal WebLogic AdminServer.
 - 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. Back up log files and delete the following folders:
 - `root\bea`
 - `root\temp`
 - h. Delete the `myMicros` folder to remove all files that were not removed by the uninstallation wizard.
 - i. Clear the content of the `TMP` and `TEMP` folders. Microsoft Windows stores the location of these folders as user variables in the system environments.
 - j. 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 Enterprise Back Office 8.5 or Earlier

- On each server hosting an Enterprise Back Office component or service:
 1. Navigate to the `myMicros` installation directory.
 2. 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.
 3. Make sure the current Microsoft Windows user has **Change** permissions for the `myMicros` folder.
 4. Navigate to `installation_path\myMicros\Uninstall_myMicros\`, and then double-click `Change myMicros Installation`.
 5. 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.

6. Delete the `myMicros` folder to remove all files that were not removed by the uninstallation wizard.
7. Restart the server.

12

Troubleshooting

This section provides troubleshooting instructions for common or significant installation problems.

- [Disabling Tunnel Adapters](#)
- [Troubleshooting Server Installation Errors](#)
- [Server Failed to Remove the Staged Files](#)
- [Error Messages in MM_Log](#)
- [Installation Fails When Reinstalling the Enterprise Back Office Database](#)
- [Deployment Time Outs](#)

Disabling Tunnel Adapters

1. In the command prompt, enter `ipconfig /all` and check for **Tunnel adapter Tunneling Interface Name**. The following graphic shows an example containing the Teredo Tunneling Pseudo-Interface.

Figure 12-1 Teredo Tunneling Pseudo-Interface in Command Prompt

```
Tunnel adapter Teredo Tunneling Pseudo-Interface:
    Connection-specific DNS Suffix  . : 
    IPv6 Address. . . . .           : 
    Link-local IPv6 Address . . . . .: 
    Default Gateway . . . . .       :
```

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 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 12-1 Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
<ul style="list-style-type: none"> Weblogic Installation 	<ul style="list-style-type: none"> The port specified for Oracle WebLogic Node Manager is not open. Incompatible Java version. 	<p>Verify that the port specified for Oracle WebLogic Node Manager, which is by default 9556, is open and not used.</p> <p>Verify that the required Java version is installed on the server. The <i>Oracle MICROS Enterprise Back Office Release Notes</i> lists environment requirements for the release.</p> <p>Review the <code>root\temp\MM_Log.log</code> log file and refer to the Oracle WebLogic help.</p>
<ul style="list-style-type: none"> Nodemanager Start 	<ul style="list-style-type: none"> The port specified for Oracle WebLogic Node Manager may not be open. The installation wizard allows you to continue after receiving this message. 	<p>Verify that the port specified for Oracle WebLogic Node Manager, which is by default 9556, is open and not used.</p> <p>Review the following log files:</p> <ul style="list-style-type: none"> <code>root\temp\MM_Log.log</code> <code>install directory\Oracle\Middleware\wlserver_version\common\nodemanager</code> If the Microsoft Windows service failed, check the Microsoft Windows system log using the Event Viewer. <p>Refer to the Oracle WebLogic Node Manager help.</p>
<ul style="list-style-type: none"> Domain Creation 	<ul style="list-style-type: none"> Oracle WebLogic Node Manager failed or is not running. Oracle WebLogic AdminServer failed or is not running. 	<p>In a web browser, navigate to <code>http://WebLogic_AdminServer_Hostname:port/console</code> where the default port is 7001.</p> <p>If you cannot access the WebLogic console:</p> <ul style="list-style-type: none"> Verify that the port specified for the WebLogic AdminServer during installation is open and not used. Review the <code>root\temp\MM_Log.log</code> log file. If there is an issue regarding the AdminServer, review the logs in <code>INSTALLATION_DIR\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs</code>

Table 12-1 (Cont.) Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
<ul style="list-style-type: none"> • Storing Configuration • 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) 	<ul style="list-style-type: none"> • Oracle WebLogic AdminServer failed or is not running. 	<p>In a web browser, navigate to <code>http://WebLogic_AdminServer_Hostname:port/console</code> where the default port is 7001.</p> <p>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.</p> <p>If you cannot access the WebLogic console:</p> <ul style="list-style-type: none"> • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Review the <code>root\temp\MM_Log.log</code> log file. • If there is an issue regarding the AdminServer, review the logs in <code>INSTALLATION_DIR\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs</code>
<ul style="list-style-type: none"> • Restart Admin Server • Restart AppServer 	<ul style="list-style-type: none"> • 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. 	<p>In a web browser, navigate to <code>http://WebLogic_AdminServer_Hostname:port/console</code> where the default port is 7001.</p> <p>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.</p> <p>If you cannot access the WebLogic console:</p> <ul style="list-style-type: none"> • Verify that the port specified for the WebLogic AdminServer during installation is open and not used. • Verify that the port specified for Managed Servers (AppServer) is open and not used. • Review the <code>root\temp\MM_Log.log</code> log file. • If there is an issue regarding the AdminServer, review the logs in <code>INSTALLATION_DIR\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs</code>

Table 12-1 (Cont.) Server Installation Errors

The Following Component Did Not Install Successfully	Cause(s)	Corrective Action(s)
<ul style="list-style-type: none"> Portal Deployment Undeploy Portal 	<ul style="list-style-type: none"> Oracle WebLogic AdminServer failed or is not running. Installation wizard could not remove staged files. 	<p>In a web browser, navigate to <code>http://WebLogic_AdminServer_Hostname:port/console</code> where the default port is 7001.</p> <p>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.</p> <p>If you cannot access the WebLogic console:</p> <ul style="list-style-type: none"> Verify that the port specified for the WebLogic AdminServer during installation is open and not used. Review the <code>root\temp\MM_Log.log</code> log file. If there is an issue regarding the AdminServer, review the logs in <code>INSTALLATION_DIR\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\AdminServer\logs</code> <p>If problems occur after attempting to remove or redeploy the application, review the logs in <code>INSTALLATION_DIR\Oracle\Middleware\user_projects\domains\bifoundation_domain\servers\SERVER_NAME\logs</code> to verify the deployment status of Reporting and Analytics.</p> <p>Server Failed to Remove the Staged Files contains instructions for identifying and resolving the staged files issue.</p>

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.

Error Messages in MM_Log

`root\temp\MM_Log.log` can contain the following error messages:

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

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.

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.

A

Inventory Management Appendix

This appendix includes:

Inventory Management Web Application Manual Installation

1. In the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_InventoryManagement_9.1.x.x.x.zip` in `<drive>:\IMSetup\`.
2. Create the folder `InventoryManagement` at `c:\inetpub\wwwroot\`.
3. Copy the contents of `<drive>:\IMSetup\<>date>_HIM_InventoryManagement_9.1.x.x.x\HIM_InventoryManagement.Application` to `c:\inetpub\wwwroot\InventoryManagement`.
4. Copy the contents of `<drive>:\IMSetup\<>date>_HIM_InventoryManagement_9.1.x.x.x\HIM_InventoryManagement.Config` to `c:\inetpub\wwwroot\InventoryManagement`.
5. Unzip the `infragistics Scripts 2010` folder from `<drive>:\IMSetup\<>date>_HIM_InventoryManagement_9.1.x.x.x\Infragistics Scripts\` and copy to `c:\inetpub\wwwroot\aspnet_client\`.
6. Navigate to Internet Information Services (IIS) Manager.
7. Click **Server Name**, click **Sites**, click **Default Web Site**, right-click **InventoryManagement**, and then click **Convert to Application**.
8. Right-click **Server Name**, click **Sites**, click **Default Web Site**, and then click **Add Virtual Directory**.
 - a. In the **Alias** field, enter `ig_common`.
 - b. In the **Physical path** field, enter `c:\inetpub\wwwroot\aspnet_client\infragistics`.
 - c. Set to **DefaultAppPool**.
9. Select **Applications Pools**. Verify that in **DefaultAppPool**, that **.NET CLR Version** is set to **v4.0** and that **Managed Pipeline Mode = Integrated**.
10. Create the folder `root\Inventory Management\log\HIM\` to store Inventory Management web application log files.
11. Navigate to `c:\inetpub\wwwroot\InventoryManagement` and launch WebConfig Wizard.
12. Move the `web.config` folder from `c:\inetpub\wwwroot\InventoryManagement` to the Web.Config Wizard.
13. In Web.Config Wizard, click **Database Connectivity**, and then complete the fields:

- **Brand** — select **Oracle**.
 - **Server** — enter the Oracle instance name.
 - **Password** — enter the Oracle Database user password.
14. Click **Login and Menu** and in the **Organizations** field, enter the short name for the organizations as defined in Reporting and Analytics.

 **Note:**

If left empty, you must enter the short name each time you sign in. If there are multiple organizations, separate each with a comma and you can select one when signing in.

15. Click **Files and Paths** and in the **Log Path** field, enter the path to the log folder created in Step 10.
16. Click **Visuals/Other** and then complete the fields:
- **R&A Protocol** — the default is **http**, change to **https** if applicable.
 - **R&A Allowed Domains** — enter a list of domains and separate each with a comma. 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`.
 - **R&A URL** — enter the public URL for Reporting and Analytics, such as `https://www.mymicros.net`.

Validate Inventory Management Install

1. Navigate to the Internet Information Services (IIS) Manager and click **Start IIS**.
2. Navigate to `http://localhost/InventoryManagement`.
3. Sign in with the user `Admin` and password `changeme`. Follow directions to change the password.

Inventory Management/Organizations Manual Installation

For Oracle internal use during Oracle Cloud installations.

Allows for the configuration of the translation between Reporting and Analytics and Inventory Management Web service.

1. Create the folder `root\Inventory Management\log\myOrganization\` to store the Inventory Management web application log files.
2. In the latest Inventory Management release 9.1 patch installation media, unzip `<date>_HIM_myOrganizations_9.1.x.x.x.zip` in `<drive>:\IMSetup`.

3. Create the folder `myOrganizations` at `c:\inetpub\wwwroot\`.
4. Copy the contents of `<drive>:\IMSetup\<date>_HIM_myOrganizations_9.1.x.x.x\HIM_myOrganizations.Application` to `c:\inetpub\wwwroot\Organizations`.
5. Copy the contents of `<drive>:\IMSetup\<date>_HIM_myOrganizations_9.1.x.x.x\HIM_myOrganizations.Config` to `c:\inetpub\wwwroot\myOrganizations`.
6. Navigate to the Internet Information Services (IIS) Manager and click **Server Name**, click **Sites**, click **Default Web Site**, right-click **myinventoryWebServices**, select **Convert to Application**, and then select **DefaultAppPool**.
7. Navigate to `c:\inetpub\wwwroot\inventoryManagement` and launch WebConfig Wizard.
8. Move the `web.config` folder from `c:\inetpub\wwwroot\myOrganizations` to the Web.Config Wizard
9. In Web.Config Wizard, click **Database Connectivity**, and then complete the fields:
 - **Brand** — select **Oracle**.
 - **Server** — enter the Oracle instance name.
 - **Password** — enter the Oracle Database user password.
10. Click **Login and Menu** and in the **Organizations** field, enter the short name for the organizations as defined in Reporting and Analytics. This is also the Oracle Database user.

 **Note:**

If left empty, you must enter the short name each time you sign in. If there are multiple organizations, separate each with a comma and you can select one when signing in.

11. Click **Files and Paths** and in the **Log Path** field, enter the path to the log folder created in Step 1.

Reporting and Analytics Web Service Manual Installation

Allows Reporting and Analytics to communicate with Inventory Management.

1. In the latest Inventory Management release 9.1 patch installation media unzip `<date>_HIM_RA_WebService_9.1.x.x.x.zip` in `<drive>:\IMSetup`.
2. Create the folder `RA_WebServices` at `c:\inetpub\wwwroot\`.
3. Copy the contents of `<drive>:\IMSetup\<date>_HIM_RA_WebService_9.1.x.x.x\HIM_RA_WebService.Application` to `c:\inetpub\wwwroot\RA_WebService`.
4. Copy the contents of `<drive>:\IMSetup\<date>_HIM_RA_WebService_9.1.x.x.x\HIM_RA_WebService.Config` to `c:\inetpub\wwwroot\RA_WebService`.

5. Navigate to the Internet Information Services (IIS) Manager and click **Server Name**, click **Sites**, click **Default Web Site**, right-click **RA_WebServices**, select **Convert to Application**, and then select **DefaultAppPool**.
6. Create the folder `root\Inventory Management\log\RA_Web_Service\` to store Reporting and Analytics web service log files.
7. Navigate to `c:\inetpub\wwwroot\InventoryManagement` and launch WebConfig Wizard.
8. Move the `web.config` folder from `c:\inetpub\wwwroot\RA_WebService` to the Web.Config Wizard.
9. In Web.Config Wizard, click **Database Connectivity**, and then complete the fields:
 - **Brand** — select **Oracle**.
 - **Server** — enter the Oracle instance name.
 - **Password** — enter the Oracle Database user password for the schema.
 - **Profile** — enter `settings.ini`.
10. Click **Login and Menu** and in the **Organizations** field, enter the short name for the organizations as defined in Reporting and Analytics. In a multitenant environment, you can create a separate master database that is not a Reporting and Analytics organization.
11. Click **Files and Paths** and in the In the **Log Path** field, enter the path to the log folder created in Step 6.

POS Web Service Manual Installation

Used for some interfaces and access to other applications.

1. In the latest Inventory Management release 9.1 patch installation media unzip `<date>_HIM_POSWebService_9.1.x.x.x.zip` in `<drive>:\IMSetup`.
2. Create the folder `POSWebService` at `c:\inetpub\wwwroot\`.
3. Copy the contents of `<drive>:\IMSetup\<date>_HIM_POSWebService_9.1.x.x.x \HIM_POSWebService.Application` to `c:\inetpub\wwwroot\POSWebService`.
4. Copy the contents of `<drive>:\IMSetup\<date>_HIM_POSWebService_9.1.x.x.x \HIM_POSWebService.Config` to `c:\inetpub\wwwroot\POSWebService`.
5. Navigate to the Internet Information Services (IIS) Manager and click **Server Name**, click **Sites**, click **Default Web Site**, right-click **POSWebServices**, select **Convert to Application**, and then select **DefaultAppPool**.
6. Create the folder `root\Inventory Management\log\POSWebService\` to store POS Web Service log files.
7. Navigate to `c:\inetpub\wwwroot\POSWebService` and edit `web.config` in a text editor.

8. Enter the following inputs in `<EncryptedAppSettingsGroup>` and `<appSettings>` and then save:
 - **PASSWORD** — enter Oracle Database user's password (to be encrypted after installation).
 - **LogPath** — defined in Step 6.
 - **DbBrand** — enter Oracle.
 - **SERVER** — enter Oracle instance.
 - **CATALOG**
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
 - **USER**
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
 - **PROFILE** — enter `Settings.ini`.

Mobile Web Service Manual Installation

Allows for mobile solutions to communicate with Inventory Management.

1. In the latest Inventory Management release 9.1 patch installation media unzip `<date>_HIM_MobileWebService_9.1.x.x.x.zip` in `<drive>:\IMSetup`.
2. Create the folder `MobileWebService` at `c:\inetpub\wwwroot\`.
3. Copy the contents of `<drive>:\IMSetup\<date>_HIM_MobileWebService_9.1.x.x.x\HIM_MobileWebService.Application` to `c:\inetpub\wwwroot\mobileWebService`.
4. Copy the contents of `<drive>:\IMSetup\<date>_HIM_MobileWebService_9.1.x.x.x \HIM_MobileWebService.Config` to `c:\inetpub\wwwroot\MobileWebService`.
5. Navigate to the Internet Information Services (IIS) Manager and click **Server Name**, click **Sites**, click **Default Web Site**, right-click **mobileWebServices**, select **Convert to Application**, and then select **DefaultAppPool**.
6. Create the folder `root\Inventory Management\log\MobileWebService\` to store Mobile Web Service log files.
7. Navigate to `c:\inetpub\wwwroot\MobileWebService` and edit `web.config` in a text editor.
8. Enter the following inputs in `<EncryptedAppSettingsGroup>` and `<appSettings>` and then save:
 - **PASSWORD** — enter Oracle Database user's password (to be encrypted after installation).
 - **LogPath** — defined in Step 6.

- **DbBrand** — enter Oracle.
- **SERVER** — enter Oracle instance.
- **CATALOG**
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
- **USER**
 - For a single tenant, enter the short organization name.
 - For a multitenant, enter the master Oracle Database user for each organization.
- **ConnectToMaster**
 - For a single tenant, set to `True`.
 - For a multitenant with no master database, set to `False`.

Sample Table Space Script

```
create SMALLFILE tablespace <Organization Short Name> datafile '<Path to
database store>\<User(Organization Short Name)>.dbf' size 200M autoextend
ON NEXT 100M;
```

Real-Time Sales, Inventory Definitions, and Totals

Prerequisites

- The Reporting and Analytics Admin Server is required for transferring sales to Inventory Management. See the “Installing the Admin Server” section of the *Oracle Enterprise Back Office Installation Guide*.
- The Reporting and Analytics Master and Posting Server is required for processing data from Inventory Management to Reporting and Analytics. See the “Installing the Remote Transfer Agent Master Server” and the “Installing the Remote Transfer Agent Posting Server” sections of *Oracle Enterprise Back Office Installation Guide*.

Sales Interface Configuration

Navigate to the Admin Server and configure `adminSchedule.xml` from the RTA folder as follows:

```
<schedule operation="myInvIntfExport"
  freq="900"
  parameter1="RealTime"
  parameter2="XXXXX"
/>
```

XXXXX is the organizationID of the scheduled organization. This will repeat every 900 seconds, or every 15 minutes.

Mymaster Database

The purpose of the Inventory Management mymaster database is to give an Administrator of a multitenant environment the option to configure the link between Reporting and Analytics and Inventory Management. Reporting and Analytics Web Service is then able to split incoming Web Service Payloads identified by OrganizationID to the corresponding Inventory Management.

To maintain this table, see the internal *Inventory Management/Organizations Tool Reference*, with My Oracle Support Doc ID 2731231.1.

For this a shell database need to be loaded. The suggested user name is MYMASTER.

Follow the steps in [Oracle Database User Creation for Inventory Management](#) and [Loading the Shell Database for the New User](#) to load the mymaster database. This database is not used as customer production database, so you may use metric or imperial unit system for this.