



Installing MCA Services on WebLogic 8.1

Version 2005

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1

What's New in This Release

What's New in Installing MCA Services on WebLogic 8.1, Version 2005

Table 1 lists changes in this version of the documentation to support release 2005 of the software.

Table 1. What's New in Installing MCA Services on WebLogic 8.1, Version 2005

Topic	Description
MCA Services Deployment Platform, page 7	Added reference to the Foundation Services System Requirements and Supported Platforms document. The SRSP document should be referred to for all platform and third party software version information.
Configuring the Oracle tnsnames.ora File, page 10	Replaced the SID variable ORCL with database_instance_name.
Creating the JMS Connection Factory, page 12	The JMS Connection Factory Name has been changed from exampleTopic to exampleTopicConnectionFactory.
Creating the JMS Topic, page 13	The JMS Topic JNDI Name has been changed from eontec.jms.topic to eontec.jms.exampleTopic.
Configuring startWebLogic.cmd, Page 14	Replaced startWLS.cmd with startWebLogic.cmd. Added <code><oracle_library_dir></code> variable.
Configuring startWebLogic.sh, Page 14	Replaced startWLS.sh - with startWebLogic.sh. Added <code><oracle_library_dir></code> variable.
Deploying the MCA Services Enterprise Application, page 16	Added step to start the WebLogic Administration Console for the MCA Services Enterprise Application domain.

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Deployment Platform and Prerequisites

This chapter covers the MCA Services Enterprise Application deployment platform and installation prerequisites. It includes the following topics:

- MCA Services Deployment Platform
- MCA Services Installation Prerequisites

MCA Services Deployment Platform

The steps described in this document to deploy MCA Services (Multi Channel Architecture Services) support Windows and UNIX environments. In this documentation the terms MCA Services and Foundation Services are interchangeable. MCA Services encompasses the Financial Process Integrator engine and the Statemachine.

NOTE: For all supported platform version information, including the supported database, application server and third-party software versions, refer to the Siebel Foundation Services System Requirements and Supported Platforms (SRSP) document. The SRSP document is available on Siebel SupportWeb (<http://supportweb.siebel.com>) or from your Siebel representative.

MCA Services Installation Prerequisites

The following are the prerequisites for installing the MCA Services Enterprise Application on Weblogic:

- BEA WebLogic 8.1.0 must be correctly installed and configured.
- The target server machine is not running any other WebLogic applications, including any previous version of MCA Services.
- A supported database must be installed and configured.
- The Java utilities `java`, `javac`, and `jar` must be available at the command line.

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Deploying on WebLogic 8.1

This chapter covers deploying the MCA Services Enterprise Application on the WebLogic application server. It includes the following topics:

- Extracting the MCA Services Files
- Configuring the Oracle tnsnames.ora File
- Creating the MCA Services Tables
- Inserting the Sample Data
- Creating the Default MCA Services Routes
- Changing the User Password
- Creating the WebLogic Domain
- Configuring startWebLogic.cmd
- Configuring startWebLogic.sh
- Configuring the WebLogic Connection Pool
- Configuring the WebLogic Data Source
- Configuring the MCA Services Property Files
- Deploying the MCA Services EAR
- Configuring JMS Settings

Extracting the MCA Services Files

The MCA Services installation files for WebLogic 8.1 are available on the installation CD at `packs\FoundationServices<vx.x>WebLogic81forOracle.jar`. The installation files need to be extracted from the installation JAR file before deploying MCA Services.

To extract the MCA Services installation files

- 1 Copy the installation files from the CD to a temporary folder.
- 2 Type the following commands at a command prompt:

```
cd <tmp>
```

```
jar xvf <tmp>\<foundationservices_install.jar>
```

where `tmp` is the folder you have copied the installation files to and `foundationservices_install.jar` is the name of the JAR file to be extracted.

Configuring the Oracle tnsnames.ora File

The database needs to be added to the Oracle tnsnames.ora file, which is used to read database connection configurations.

To configure the Oracle tnsnames.ora file

- 1 Open tnsnames.ora in a text editor.
- 2 Add the following entry to the end of the file:

```
<database_name> =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(Host = <hostname>)(Port = 1521))
    (CONNECT_DATA = (SID = <database_instance_name>))
  )
```

where <database_name> is the name of the MCA Services database, <hostname> is the name of the Oracle database server and <database_instance_name> is the name of the MCA Services database instance.

Creating the MCA Services Tables on Oracle

To create the MCA Services database tables and schemas the bankframemca.sql script needs to be run. See your Oracle documentation for information on how to create databases and users.

Prerequisites for Creating the MCA Services Tables

The following are the prerequisites for creating the MCA Services database tables:

- The Oracle command line utilities must be available at the command line.
- An Oracle database and Oracle database user with DBA rights for the database must be created.

Creating the MCA Services Database Tables on Windows

On Windows, the MCA Services database tables are created by running the bankframemca.sql script, which is provided in the deploy directory.

To create the MCA Services database tables on Windows

- 1 Start SQL Plus with the following command:
sql pl us <database_user> /<password> @<database_name>

- 2 Run the following script:

```
@' d: \tmp\si ebel \Foundati onServi ces\depl oy\database\oracl e\bankframemca. sql '
```

Creating the MCA Services Database Tables on UNIX

On Windows, the MCA Services database tables are created by running the bankframemca.sql script, which is provided in the deploy directory.

To create the MCA Services database tables on UNIX

- 1 Start SQL Plus using the following command:

```
$ORACLE_HOME/bin/sql pl us <database_user>/<password>@<database_name>
sql pl us <database_user>/<password>@<database_name>
```

- 2 Run the following script:

```
@' /tmp/si ebel /Foundati onServi ces/depl oy/database/oracl e/bankframemca. sql '
```

Inserting the Sample Data

This section covers populating the Financial Process Integrator and Routing database tables with sample data.

Inserting the Sample Data on Windows

This topic covers populating the MCA Services tables with sample data on Windows.

To insert the sample data on Windows

- 1 Start SQL Plus using the following command:

```
sql pl us <database_user>/<password>@<database_name>
```

- 2 Run the following scripts:

```
@' d: \tmp\si ebel \Foundati onServi ces\depl oy\database\oracl e\txnsampl edata. sql '
@' d: \tmp\si ebel \Foundati onServi ces\depl oy\database\oracl e
default routes. sql '
```

Inserting the Sample Data on UNIX

This topic covers populating the MCA Services tables with sample data on UNIX.

To insert the sample data on UNIX

- 1 Start SQL Plus with the following command:

```
$ORACLE_HOME/bin/sqlplus <database_user> /<password>@<database_name>
```

- 2 Run the following scripts:

```
@' /tmp/sibel /FoundationServices/deploy/database/oracle/txnsampled.sql '
```

```
@' /tmp/sibel /FoundationServices/deploy/database/oracle/defaultroutes.sql '
```

Configuring the WebLogic JMS Settings

To configure Java Message Service settings for a single instance of the WebLogic server the following tasks need to be performed:

- Create the JMS Connection Factory.
- Create the JMS Server.
- Create the JMS Topic.

The steps required for these tasks are detailed in the following topics.

Creating the JMS Connection Factory

This task creates a new JMS Connection Factory.

To create the JMS Connection Factory

- 1 Navigate to the Services > JMS > Connection Factories > Configure a new JMS Connection Factory screen.
- 2 Select the General tab.
- 3 Configure the following fields:

Field	Value
Name	exampleTopicConnectionFactory
JNDI Name	eontec.jms.TopicConnectionFactory

- 4 Click Create.
- 5 Select the Target and Deploy tab.
- 6 Select the server to which you want to apply the connection factory.
- 7 Click Apply.

Creating the JMS Server

This task creates a JMS Server. There can be a maximum of one JMS servers per node in the administrative domain.

To create the JMS Server

- 1 Navigate to the Services > JMS > Servers > Configure a new JMS Server screen.
- 2 Select the General tab.
- 3 Configure the Name field as myJMSServer.
- 4 Click Create.
- 5 Select the target on which you want to deploy the JMS server.
- 6 Click Apply.

Creating the JMS Topic

This task creates a JMS Topic for publish and subscribe messaging.

To create the JMS Topic

- 1 Navigate to the Services> JMS> Server > myJMSServer > Destinations screen.
- 2 Click Configure a new JMS Topic.
- 3 Navigate to the General > Configuration tab.
- 4 Configure the following fields:

Field	Value
Name	exampleTopic
JNDI Name	eontec.jms.exampleTopic

- 5 Click Create.

The JMS settings are now configured.

Creating the WebLogic Domain

To start WebLogic from a clean installation it is necessary to create a domain. To do this you must start WebLogic in console mode. When run in console mode, the Configuration Wizard is executed in a text-based environment.

To create the WebLogic domain

- 1 Log in to the target system on which the product installation resides.

- 2 Open a command-line shell.
- 3 Change directory to the weblogicx.x\common\bin subdirectory of the product installation directory.
- 4 Run one of the following scripts to start the Configuration Wizard in console mode:
Windows: `config.cmd -mode=console`
UNIX: `sh config.sh -mode=console`
- 5 Click Create new WebLogic configuration.
- 6 Click Next.
- 7 Select a domain configuration template.
- 8 Click on one of the following options when prompted:

Value	Description
Express Configuration	Accepts all the default settings
Custom Configuration	Enables modification of the default settings

Configuring startWebLogic.cmd

If you are deploying MCA Services on Windows the WebLogic start script `startWebLogic.cmd` needs to be configured.

To configure startWebLogic.cmd

- 1 Open the `startWebLogic.cmd` file in a text editor.
- 2 Add the following entry after the `java` command:


```
set PATH=<WL_HOME>\server\bin\<oracle_library_dir>; %PATH%
```

where `<WL_HOME>` is the home directory of the WebLogic installation and `<oracle_library_dir>` is the library directory that supports your version of Oracle.

Configuring startWebLogic.sh

If you are deploying MCA Services on UNIX the WebLogic start script `startWebLogic.sh` needs to be configured.

To configure startWebLogic.sh

- 1 Open the `startWebLogic.sh` file in a text editor.
- 2 Add the following entry after the `java` command:


```
set PATH=<WL_HOME>/server/bin/<oracle_library_dir>; %PATH%
```

where `<WL_HOME>` is the home directory of the WebLogic installation and `<oracle_library_dir>` is the library directory that supports your version of Oracle.

Configuring the WebLogic Connection Pool

An MCA Services Connection Pool must be configured in the application server web console.

To configure the connection pool on WebLogic

- 1 Navigate to the Services > JDBC > Connection Pools screen.
- 2 Select WebLogic's Oracle Driver Type 2.
- 3 Click Continue.
The Define Connection Properties screen displays.
- 4 Configure the Connection Pool Name, Database Name, Database User Name and Password fields.
- 5 Click Continue.
The Test Database Connection screen displays.
- 6 Click Test Driver Configuration to verify that the connection is set up correctly.
- 7 Select the Target and Deploy tab.
- 8 Select the server to which you want to apply the connection pool, and click Apply.

Configuring the WebLogic Data Source

This topic covers configuring access to a relational database.

To configure the data source on WebLogic

- 1 Navigate to the Services > JDBC > Data Sources > Configure the Data Source screen.
- 2 Configure the data source Name and the JNDI Name.
- 3 Click Continue.
The Connect to Connection Pool screen displays.
- 4 Select the MCA Services Connection Pool.
- 5 Click Continue.
The Target the Data Source screen displays.
- 6 Select the server to which you want to apply the data source and click Create.

Configuring the MCA Services Property Files

The MCA Services property files need to be customized with application server specific and implementation specific values.

Configuring BankframeResource.properties

For configuring BankframeResource.properties refer to *MCA Services Configuration and Administration Guide* on the Foundation Services Bookshelf.

Configuring TestCustomerData.properties

For configuring TestCustomerData.properties refer to *MCA Services Configuration and Administration Guide* on the Foundation Services Bookshelf.

Deploying the MCA Services Enterprise Application

This topic covers deploying the MCA Services Enterprise Application on the Weblogic application server. The MCA Services Enterprise Application is deployed as an EAR (Enterprise Archive) file.

To deploy the MCA Services Enterprise Application

- 1 Start the WebLogic Administration Console for the MCA Services Enterprise Application domain.
- 2 Navigate to the Deployments > Applications screen.
- 3 Click Deploy a new Application.
The Deploy an Application screen displays.
- 4 Browse to where the MCA Services EAR file is saved on the application server host, and select the EAR file.
- 5 Click Continue.
The Deploy screen then displays.
- 6 Click Deploy button.

The application is deployed when Active is displayed in the Module Status column for each module.