

# MLEB Software Suites Mobile Corporate Banking Installation Guidelines (Version 0.1)

## **Confidentiality**

*This document contains proprietary information that is confidential to Silverlake. Disclosure of this document in full or in part, may result in material damage to Silverlake. Written permission must be obtained from Silverlake prior to the disclosure of this document to third party.*

## Document Information

Document Name : MLEB\_MCB\_Installation\_Guidelines\_v0.1

Document Code :

Document Description : This document is designed to help you to install MLEB MCB to WebLogic & Oracle DB

Document Author : Woon Kok Choon

Document Category :

Date Created : 13<sup>th</sup> September 2019

Date Released : -

Document Version : Please refer to the file name or first page of the document.

## Document Revision History

Version #	Revised By	Revision Date	Descriptions
0.1	Woon Kok Choon	13 Sept 2019	1. First version of document.
0.2	Woon Kok Choon	19 Sept 2019	2. Include JVM Environment Setup - section 9.2

## Document Release History

Release #	Release Date	References

## Document Approval History

Name	Designation	Date

## Table of Contents

---

1. Overview	7
2. Target Audience	8
3. References	9
4. Terminology and Conventions	10
5. Abbreviations	11
6. MLEB DB Script Setup	12
7. WebLogic Share Library Setup	12
8. MLEB MCB Properties Setup	13
9. WebLogic Application Environment Setup	14
10. MLEB Application Deployment	Error! Bookmark not defined.

## **1. Overview**

1. This document records the following information with the aim to provide a single point of reference and up to date information for the target audiences.
2. This MLEB MBK installation process consists of the following phases:
  - a.) MLEB DB script setup
  - b.) WebLogic share library setup
  - c.) MLEB properties setup
  - d.) WebLogic application environment setup
  - e.) MLEB application deployment

## **2. Target Audience**

1. Development Team
2. System Integration / Implementation Team
3. Application support



### 3. References

No.	References	Details
1.	Weblogic	1. <a href="https://docs.oracle.com/en/">https://docs.oracle.com/en/</a>
2.	Oracle DB	1. <a href="https://docs.oracle.com/en/">https://docs.oracle.com/en/</a>

**Table 1 List of References**

## 4. Terminology and Conventions

No.	Definitions	Description
1.	MLEB	1. Mobility Lifestyle Ecosystem Backbone
2.	SMECO	1. Silverlake Mobility Ecosystem
3.	JRE	1. Java Runtime Environment

**Table 2 List of Definitions**

## 5. Abbreviations

No.	Abbreviations	Description
-----	---------------	-------------

1.		
----	--	--

2.		
----	--	--

Table 3 List of Abbreviations

## 6. MLEB DB Script Setup

1. Putty to DB server
2. Login to sqlplus
3. Run the script file by entering command below:
4. @<sql\_script\_file>
5. Example  
@mleb\_script.sql

## 7. WebLogic Share Library Setup

1. The share library consist of jar file as listed below:
  - a. antlr-2.7.6.jar
  - b. cglib-2.2.jar
  - c. commons-collections-3.2.1.jar
  - d. dom4j-1.6.1.jar
  - e. hibernate-commons-annotations-3.2.0.Final.jar
  - f. hibernate-core-3.6.10.Final.jar
  - g. hibernate-entitymanager-3.6.10.Final.jar
  - h. hibernate-jpa-2.0-api-1.0.1.Final.jar
  - i. javassist-3.12.0.GA.jar
  - j. jta-1.1.jar
  - k. slf4j-api-1.7.2.jar
2. Before you begin, Silverlake will provide All the jar file in a folder called "lib-jpa".
3. FTP/Upload the lib-jpa folder to the WebLogic Application domain lib folder
4. Example path (\*after upload):

```

[administrator@UAT-MBANKING-APP lib-jpa]$
[administrator@UAT-MBANKING-APP lib-jpa]$ pwd
/app/oracle/middleware/user_projects/domains/mleb/lib/lib-jpa
[administrator@UAT-MBANKING-APP lib-jpa]$ ls -l
total 5896
-rwxrwxr-x 1 administrator administrator 443432 Dec  2  2015 antlr-2.7.6.jar
-rwxrwxr-x 1 administrator administrator 278682 Dec  2  2015 cglib-2.2.jar
-rwxrwxr-x 1 administrator administrator 575389 Jul 18  2009 commons-collections-3.2.1.jar
-rwxrwxr-x 1 administrator administrator 313898 Nov 13  2014 dom4j-1.6.1.jar
-rwxrwxr-x 1 administrator administrator  71283 Dec  2  2015 hibernate-commons-annotations-3.2.0.Final.jar
-rwxrwxr-x 1 administrator administrator 3123360 Jan 20  2016 hibernate-core-3.6.10.Final.jar
-rwxrwxr-x 1 administrator administrator 426671 Jan 20  2016 hibernate-entitymanager-3.6.10.Final.jar
-rwxrwxr-x 1 administrator administrator 102661 Dec  2  2015 hibernate-jpa-2.0-api-1.0.1.Final.jar
-rwxrwxr-x 1 administrator administrator 633312 Dec  2  2015 javassist-3.12.0.GA.jar
-rwxrwxr-x 1 administrator administrator  15071 Dec  2  2015 jta-1.1.jar
-rwxrwxr-x 1 administrator administrator  26083 Jun 30  2014 slf4j-api-1.7.2.jar

```

## 8. MLEB MCB Properties Setup

1. Silverlake will provide All the application properties in a folder called “properties”
2. FTP/Upload the properties folder to Application Server directory “/home/<user>/ocbc/apps/
3. Example path (\*after upload)

```
[oracle@uat-app-mleb ~]$ cd ocbc/apps/properties/  
[oracle@uat-app-mleb properties]$ ls -l  
total 12  
-rw-r--r-- 1 oracle oinstall 320 Aug 29 15:45 ccmcb.properties  
-rw-r--r-- 1 oracle oinstall 378 Aug 19 12:00 mcb.properties  
-rw-r--r-- 1 oracle oinstall 1773 Apr 29 13:41 mleb.properties  
[oracle@uat-app-mleb properties]$
```

If need to deploy ccmcb app to another WebLogic server, the **ccmcb.properties** required to move to another WebLogic server with same location.

4. Include System Properties setting in server start Arguments :

-Dapp.store.path=/home/oracle/ocbc/apps

-Dapp.log.path=/home/oracle/ocbc/logs

### Arguments:

```
XX:+ScavengeBeforeFullGC -XX:+CMSScavengeBeforeRemark -  
Dsun.net.inetaddr.ttl=60 -  
Dapp.store.path=/home/oracle/ocbc/apps -  
Dapp.log.path=/home/oracle/ocbc/logs/ServerCws1 -  
Dhb.dialect=org.hibernate.dialect.Oracle10gDialect -  
Dweblogic.threadpool.MinPoolSize=5 -
```

## 9. WebLogic Application Environment Setup

### 9.1 Configure WebLogic Domain environment

1. Open WebLogic setDomainEnv.sh using putty
2. Example : vi  
`<weblogic_home>/user_project/domain/<application>/bin/setDomainEnv.sh`
3. Add the command below: (replace the <user> to the owner of the WebLogic server)

```
export CLASSPATH=$CLASSPATH:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/antlr-
2.7.6.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/cglib-
2.2.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/commons-collections-
3.2.1.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/dom4j-
1.6.1.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/hibernate-commons-annotations-
3.2.0.Final.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/hibernate-core-
3.6.10.Final.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/hibernate-entitymanager-
3.6.10.Final.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/hibernate-jpa-2.0-api-
1.0.1.Final.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/javassist-
3.12.0.GA.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/jta-
1.1.jar:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/slf4j-api-1.7.2.jar
```

#### 4. Example(\*after added the command):

```
#!/bin/sh
# WARNING: This file is created by the Configuration Wizard.
# Any changes to this script may be lost when adding extensions to this configuration.

# --- Start Functions ---

export CLASSPATH=$CLASSPATH:/app/oracle/middleware/user_projects/domains/velomobile/lib/lib-jpa/antlr-2.7.6.jar:/app/oracle/middleware/user_projects/d
BP=100
SP=$BP

pushd()
{
    if [ -z "$1" ]
    then
        return
    fi
    SP=`expr $SP - 1`
    eval _stack$SP=`pwd`
    cd $1
    return
}

popd()
```

### 9.2 JVM Configuration

1. Include **ccmcb** managed server JVM setting in server start Arguments :  
`-Xms1024m -Xmx2048m -XX:PermSize=512m -XX:MaxPermSize=1024m`
2. Include **mcb** managed server JVM setting in server start Arguments :  
`-Xms2048m -Xmx4096m -XX:PermSize=512m -XX:MaxPermSize=1024m`

### 9.3 Enable Secure HTTP port (HTTPS)

1. Login to WebLogic console
2. Go to the path > Environment > Servers > AdminServer
3. Check the SSL Listen Port Enabled
4. Save and Active the changes
5. Example :


Home > Summary of Environment > Summary of Servers > AdminServer


#### Settings for AdminServer

**Configuration** Protocols Logging Debug Monitoring Control Deployments Services Security Notes

**General** Cluster Services Keystores SSL Federation Services Deployment Migration Tuning Overload

Use this page to configure general features of this server such as default network communications.

[View JNDI Tree](#) 

<b>Name:</b>	AdminServer
<b>Machine:</b>	(None)
<b>Cluster:</b>	(Standalone)
 <b>Listen Address:</b>	<input type="text"/>
<input checked="" type="checkbox"/> <b>Listen Port Enabled</b>	
<b>Listen Port:</b>	<input type="text" value="7001"/>
<input checked="" type="checkbox"/> <b>SSL Listen Port Enabled</b>	
<b>SSL Listen Port:</b>	<input type="text" value="7002"/>

### 9.4 Configure WebLogic Data Source

1. Login to WebLogic Console
2. Go to the path Service > Data Sources
3. Click New and Choose Generic Data Source

Home &gt; Summary of Deployments &gt; Summary of Services &gt; Summary of JDBC Data Sources

**Summary of JDBC Data Sources**

**Configuration** | Monitoring

A JDBC data source is an object bound to the JNDI tree that provides database connectivity through database connection from a data source.

This page summarizes the JDBC data source objects that have been created in this domain.

[Customize this table](#)

**Data Sources (Filtered - More Columns Exist)**

New ▾ Delete

	Type
Generic Data Source	Generic

New ▾ Delete

- Configure Name and JNDI NAME as below:

Name : JDBC MLEB

JNDI Name : jndi/mleb

Home &gt; Summary of Deployments &gt; Summary of Services &gt; Summary of JDBC Data Sources

**Create a New JDBC Data Source**

Back | Next | Finish | Cancel

**JDBC Data Source Properties**

The following properties will be used to identify your new JDBC data source.

\* Indicates required fields

What would you like to name your new JDBC data source?

**Name:** JDBC MLEB

What JNDI name would you like to assign to your new JDBC Data Source?

**JNDI Name:** jndi/mleb

What database type would you like to select?

**Database Type:** Oracle

Back | Next | Finish | Cancel

- Click Next
- Choose the **Oracle's Driver(Thin XA) for Instance connections;Version:Any**
- Click Next until the Connection Properties page
- Fill in below:  
Database Name : <oracle DB name>  
Host Name: <oracle hostname/IP>  
Port: <oracle DB port>



Database username: <DB username>

Password: <DB password>

Example:

Back Next Finish Cancel

### Connection Properties

Define Connection Properties.

What is the name of the database you would like to connect to?

**Database Name:** DBMLEB

What is the name or IP address of the database server?

**Host Name:** 10.255.6.9

What is the port on the database server used to connect to the database?

**Port:** 1521

What database account user name do you want to use to create database connections?

**Database User Name:** sys as sysdba

What is the database account password to use to create database connections?

**Password:** .....

**Confirm Password:** .....|

Additional Connection Properties:

**oracle.jdbc.DRCPConnectionClass:**

Back Next Finish Cancel

9. Click next , then click finish.
  10. Save and Active the changes.
  11. Repeat above all the step to configure another data source
- Datasource details :

Name : JDBCSESSION  
JNDI Name : JDBCSESSION  
Database : SESSION\_OCBC

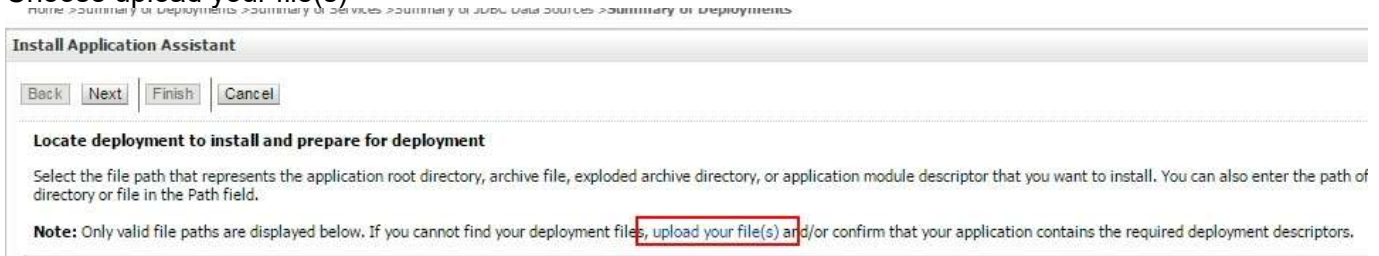
Data Sources (Filtered - More Columns Exist)

New ▾ Delete		Showing 1 to 4 of 4 Previous   Next		
<input type="checkbox"/> Name ↕	Type	JNDI Name	Targets	
<input type="checkbox"/> JDBCSESSION	Generic	JDBCSESSION	ServerMleb, ServerCows	
<input type="checkbox"/> MLEB JDBC	Generic	jdbc/mleb	ServerMleb, ServerCows	

12. Targets should point to **ccmcb** and **mcb** managed server

## 10. MLEB Application Deployment

1. Login to WebLogic console
2. MLEB Application consist of **ccmcbs.war,mcb.war,mleb\_core.war**
3. Do repeat the step below for all the application deployment.
4. Click on Deployments
5. To install new app, click install button
6. To update existing app, select/check the application and click update
7. Choose upload your file(s)



8. Click upload **Deployment Archive**, and select MLEB application war/ear file and click next to upload.
9. Click next or finish button to complete the deployment step.
10. Click save and active the changes.
11. If the deployed application state is not active, select/check the application and click on start and choose servicing all request.