

# **IBM Forms Experience Builder 8.6 Cluster Installation with Oracle**

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# 1 Information

This document will help with an installation of IBM Forms Experience Builder 8.6 cluster.

Before IBM Forms Experience Builder 8.6 can be installed, IBM Installation Manager, and WebSphere Application Server is required. The document will help with the installation of both software.

IBM Forms Experience Builder 8.6 supports multiple types of databases such as DB2, Oracle and Derby. Oracle will be the database focus for this document. Oracle must be pre-installed and configured before the IBM Forms Experience Builder installation.

The images and steps in the document are based from a Linux installation unless specified. This document will have examples for Windows and AIX to help with installation on those environments.

Useful links:

- IBM Forms 8.6 Infocenter  
[http://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/Welcome/FEB\\_Welcome.html](http://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/Welcome/FEB_Welcome.html)
- IBM Forms Experience Builder 8.6.X Detailed System Requirements  
<http://www-01.ibm.com/support/docview.wss?uid=swg27044505>
- WebSphere Application Server 8.5.5 Infocenter  
[http://www-01.ibm.com/support/knowledgecenter/?lang=en#/SSAW57\\_8.5.5/as\\_ditamaps/was855\\_welcome\\_ndmp.html](http://www-01.ibm.com/support/knowledgecenter/?lang=en#/SSAW57_8.5.5/as_ditamaps/was855_welcome_ndmp.html)
- Installation Manager Documentation  
[http://pic.dhe.ibm.com/infocenter/install/v1r7/index.jsp?topic=%2Fcom.ibm.cic.agent.ui.doc%2Fhelpindex\\_imic.html](http://pic.dhe.ibm.com/infocenter/install/v1r7/index.jsp?topic=%2Fcom.ibm.cic.agent.ui.doc%2Fhelpindex_imic.html)

This document is not written or supported by IBM Support

Name	Date	Version	Description
Loc Dang	03/22/17	V1	IBM Forms Experience Builder 8.6 Cluster Installation

## 2 Media

The assembly media used in this document is...

**IBM Forms Experience Builder V8.6 Multiplatform Multilingual eAssembly  
(CRU63ML)**

### 2.1 IBM Forms Experience Builder 8.6

1. Download the IBM Forms Experience Builder media file from Passport advantage. Save the file to a temporary media location <MEDIA>

MEDIA = \_\_\_\_\_

Example:

WIN	F:\Media
LINUX	/opt/tmp/Media
AIX	/usr/tmp/Media

Media	File Name	Description
CN68BML	FormsExpBuilder_8.6.0.1_Win.exe	IBM Forms Experience Builder V8.6.0.1 Windows Multilingual
CN68CML	FormsExpBuilder_8.6.0.1_Linux.tar.gz	IBM Forms Experience Builder V8.6.0.1 Linux Multilingual
CN68DML	FormsExpBuilder_8.6.0.1_AIX.tar.gz	IBM Forms Experience Builder V8.6.0.1 AIX Multilingual

NOTE: IBM Forms Experience Build also supports Linux for System z (CN68EML) but the instructions in this document has not been reviewed for the operating system

2. Create a directory where the extracted files of the IBM Forms Experience Builder will be extracted to <MFEB>

MFEB = \_\_\_\_\_

Example:

WIN	F:\MFEB
LINUX	/opt/tmp/MFEB
AIX	/usr/tmp/MFEB

3. Extract the file to the following directory <MFEB>

Example: WINDOWS

<MFEB>\documentation\...
<MFEB>\FormsImage\...
<MFEB>\IIM\...

```

<MFEB>\launchpad\...
<MFEB>\autorun.inf
<MFEB>\launchpad.exe
<MFEB>\launchpad.ini
<MFEB>\launchpad64.exe
<MFEB>\launchpad64.ini

```

**Example: UNIX**

```

<MFEB>/documentation/...
<MFEB>/FormsImage/...
<MFEB>/IIM/...
<MFEB>/launchpad/...
<MFEB>/launchpad.sh
<MFEB>/autorun.inf

```

## 2.2 WebSphere Application Server

1. Download the following WebSphere Application Server media files from Passport advantage. Save the files to a temporary media location <MEDIA>

MEDIA = \_\_\_\_\_

**Example:**

WIN	F:\Media
LINUX	/opt/tmp/Media
AIX	/usr/tmp/Media

Media	File Name	Description
CIK2HTML	WASND_v8.5.5_1of3.zip	IBM WebSphere Application Server Network Deployment V8.5.5 (1 of 3) for Multiplatform Multilingual
CIK2IML	WASND_v8.5.5_2of3.zip	IBM WebSphere Application Server Network Deployment V8.5.5 (2 of 3) for Multiplatform Multilingual
CIK2JML	WASND_v8.5.5_3of3.zip	IBM WebSphere Application Server Network Deployment V8.5.5 (3 of 3) for Multiplatform Multilingual

2. Create a directory where the extracted files of the WebSphere Application Server media will be extracted to <MWASND>

MWASND = \_\_\_\_\_

**Example:**

WIN	F:\MWASND
UNIX	/opt/tmp/MWASND

3. Extract all files to the same directory <MWASND>

Example:

```
<MWASND>/disk1/...
<MWASND>/disk2/...
<MWASND>/disk3/...
<MWASND>/lafiles/...
<MWASND>/readme/...
<MWASND>/Remote_Installation_Tool_for_IBM_i/...
<MWASND>/responsefiles/...
<MWASND>/Copyright.txt
<MWASND>/repository.config
```

## 2.3 WebSphere Supplements

The WebSphere Supplements contains the IBM HTTP Server, WebSphere Plugins and WebSphere Customization tool installation media files.

1. Download the following WebSphere Suppliment media files from Passport advantage. Save the files to a temporary media location <MEDIA>

MEDIA = \_\_\_\_\_

Example:

WIN	F:\Media
LINUX	/opt/tmp/Media
AIX	/usr/tmp/Media

Media	File Name	Description
CIK1VML	WAS_V8.5.5_SUPP_1_O F_3.zip	IBM WebSphere Application Server V8.5.5 Supplements (1 of 3) for Multiplatform Multilingual
CIK1WML	WAS_V8.5.5_SUPP_2_O F_3.zip	IBM WebSphere Application Server V8.5.5 Supplements (2 of 3) for Multiplatform Multilingual
CIK1XML	WAS_V8.5.5_SUPP_3_O F_3.zip	IBM WebSphere Application Server V8.5.5 Supplements (3 of 3) for Multiplatform Multilingual

2. Create a directory where the extracted files of the WebSphere Application Server media will be extracted to <MWASSUP>

MWASSUP = \_\_\_\_\_

Example:

WIN	F:\MWASSUPP
LINUX	/opt/tmp/MWASSUPP
AIX	/usr/tmp/MWASSUPP

3. Extract all files to the same directory <MWASSUPP>

**Example:**

```
<MWASSUPP>/disk1/...
<MWASSUPP>/disk2/...
<MWASSUPP>/disk3/...
<MWASSUPP>/lafiles/...
<MWASSUPP>/readme_appclient/...
<MWASSUPP>/readme_ihs/...
<MWASSUPP>/readme_plugclient/...
<MWASSUPP>/readme_plugins/...
<MWASSUPP>/readme_wct/...
<MWASSUPP>/Remote_Installation_Tool_for_IBM_i/...
<MWASSUPP>/responsefiles/...
<MWASSUPP>/Copyright.txt
<MWASSUPP>/repository.config
```

### **3 Pre-requisite**

1. Verify the Operating System used for IBM Forms Experience Builder is supported. (Operating Systems)

<http://www-01.ibm.com/support/docview.wss?uid=swg27044505>

2. If you are not using the Installation Manager that comes with IBM Forms, verify the version is supported. (Prerequisites)

<http://www-01.ibm.com/support/docview.wss?uid=swg27044505>

3. If you are not using the WebSphere Application Server that comes with IBM Forms, verify the version is supported. (Prerequisites)

<http://www-01.ibm.com/support/docview.wss?uid=swg27044505>

4. Verify the Database used with IBM Forms Experience Builder is supported (Prerequisites)

<http://www-01.ibm.com/support/docview.wss?uid=swg27044505>

## 4 Database

An external database is required for a production environment. The following section will help with the creation and configuration of the Oracle database for an IBM Forms Experience Builder installation.

### 4.1 Create Database

Follow the Oracle documentation to create an Oracle database. There are no IBM Forms Experience Builder requirements for the creation of the database.

FEBDB = \_\_\_\_\_

Example: FEBDB

### 4.2 Configure Database User

Only one of the following section needs to be followed for creating an Oracle User and giving it the correct permission.

- Full Administrative Permission
- Limited Permission

#### 4.2.1 Full Administrative Permission

[https://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/in\\_oracle\\_creating\\_db.html](https://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/in_oracle_creating_db.html)

1. Login to the Oracle Database Server
2. Login to Oracle SQLPlus using the SYS DBA role sysdba

```
sqlplus <SYS_USER>/<PASSWORD>@<FEBDB> as sysdba
```

Example:

```
sqlplus sys/XXXX@FEBDB as sysdba
```

3. Create the following 3 users

```
CREATE USER FREEDOM IDENTIFIED BY <PASSWORD>;
CREATE USER IF_CMIS IDENTIFIED BY <PASSWORD>;
CREATE USER APP_DATA IDENTIFIED BY <PASSWORD>;
```

4. Set table space quotas for the users

```
GRANT UNLIMITED TABLESPACE TO FREEDOM;
GRANT UNLIMITED TABLESPACE TO IF_CMIS;
GRANT UNLIMITED TABLESPACE TO APP_DATA;
```

5. Create and administrative user

```
CREATE USER <FEBDB_ADMIN> IDENTIFIED BY <PASSWORD>;
```

Example:

```
CREATE USER ORAFORM IDENTIFIED BY XXXX;
```

6. Set the following permission for the Oracle Forms Database Admin

```
GRANT ALL PRIVILEGES TO <FEBDB_ADMIN>;
GRANT EXECUTE ANY PROCEDURE TO <FEBDB_ADMIN>;
```

Example:

```
GRANT ALL PRIVILEGES TO ORAFORM;
GRANT EXECUTE ANY PROCEDURE TO ORAFORM;
```

#### 4.2.2 Limited Permission

[https://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/in\\_oracle\\_creating\\_db.html](https://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/in_oracle_creating_db.html)

1. Login to the Oracle Database Server
2. Login to Oracle SQLPlus using the SYS DBA role sysdba

```
sqlplus <SYS_USER>/<PASSWORD>@<FEBDB> as sysdba
```

Example:

```
sqlplus sys/XXXX@FEBDB as sysdba
```

3. Create the following 3 users

```
CREATE USER FREEDOM IDENTIFIED BY <PASSWORD>;
CREATE USER IF_CMIS IDENTIFIED BY <PASSWORD>;
CREATE USER APP_DATA IDENTIFIED BY <PASSWORD>;
```

4. Set table space quotas for the users

```
GRANT UNLIMITED TABLESPACE TO FREEDOM;
GRANT UNLIMITED TABLESPACE TO IF_CMIS;
GRANT UNLIMITED TABLESPACE TO APP_DATA;
```

5. Create and administrative user

```
CREATE USER <FEBDB_ADMIN> IDENTIFIED BY <PASSWORD>;
```

Example:

```
CREATE USER ORAFORM IDENTIFIED BY XXXX;
```

6. Set the following permission for the Oracle Forms Database Admin

```
GRANT CREATE SESSION TO <FEBDB_ADMIN>;
```

**Example:**

```
GRANT CREATE SESSION TO ORAFORM;
```

7. Create Oracle Role with the following permission

```
CREATE ROLE <FEBDB_ROLE>;  
  
GRANT CREATE ANY TABLE, ALTER ANY TABLE, DROP ANY TABLE TO  
<FEBDB_ROLE>;  
  
GRANT SELECT ANY TABLE, INSERT ANY TABLE, UPDATE ANY TABLE, DELETE ANY  
TABLE TO <FEBDB_ROLE>;  
  
GRANT CREATE ANY TRIGGER, ALTER ANY TRIGGER, DROP ANY TRIGGER TO  
<FEBDB_ROLE>;  
  
GRANT CREATE ANY SEQUENCE, ALTER ANY SEQUENCE, DROP ANY SEQUENCE TO  
<FEBDB_ROLE>;  
  
GRANT SELECT ANY SEQUENCE TO <FEBDB_ROLE>;  
  
GRANT CREATE ANY INDEX, ALTER ANY INDEX, DROP ANY INDEX TO  
<FEBDB_ROLE>;  
  
GRANT CREATE ANY PROCEDURE TO <FEBDB_ROLE>;
```

**Example:**

```
CREATE ROLE ORAFORM_ROLE;  
  
GRANT CREATE ANY TABLE, ALTER ANY TABLE, DROP ANY TABLE TO  
ORAFORM_ROLE;  
  
GRANT SELECT ANY TABLE, INSERT ANY TABLE, UPDATE ANY TABLE, DELETE ANY  
TABLE TO ORAFORM_ROLE;  
  
GRANT CREATE ANY TRIGGER, ALTER ANY TRIGGER, DROP ANY TRIGGER TO  
ORAFORM_ROLE;  
  
GRANT CREATE ANY SEQUENCE, ALTER ANY SEQUENCE, DROP ANY SEQUENCE TO  
ORAFORM_ROLE;  
  
GRANT SELECT ANY SEQUENCE TO ORAFORM_ROLE;  
  
GRANT CREATE ANY INDEX, ALTER ANY INDEX, DROP ANY INDEX TO  
ORAFORM_ROLE;  
  
GRANT CREATE ANY PROCEDURE TO ORAFORM_ROLE;
```

8. Add the Forms Experience Builder database administrator to the Forms Experience Builder database role

```
GRANT <FEBDB_ROLE> to <FEBDB_ADMIN>;
```

Example:

```
GRANT ORAFORM_ROLE to ORAFORM;
```

### 4.3 JDBC Driver

1. Login to the IBM Forms Experience Builder file system as an administrator
2. Create a directory to store the JDBC driver for the database

JDBC\_DRIVER = \_\_\_\_\_

Example:

WIN	E:\JDBC\
LINUX	/opt/JDBC/
AIX	/usr/JDBC

3. Copy the Database Driver to the <JDBC\_DRIVER> directory

From:

```
<ORACLE_HOME>/products/<ORACLE_VERSION>/dbhome_1/jdbc/lib/ojdbc6.jar
```

To:

```
<JDBC_DRIVER>/ojdbc6.jar
```

## 5 Mail Server

During the installation of IBM Forms Experience Builder, the mail server information is required. The mail information can be changed in the WebSphere Application Server administrative console after the installation is complete if required.

Gather the following mail server information.

Mail Server name: \_\_\_\_\_

Protocol (smtp): \_\_\_\_\_

Mail server user ID: \_\_\_\_\_

Mail server user password: \_\_\_\_\_

Return email address: \_\_\_\_\_

Example:

```
Mail Server name: mailserver.ibm.com
Protocol (smtp): smtp
Mail server user ID: mailuser
Mail server user password: XXXX
Return email address: form@ibm.com
```

## 6 IBM Installation Manager

If the Installation Manager is already installed, this step may be skipped. Verify the version of Installation Manager is supported by IBM Forms Experience Builder

1. Login to the IBM Forms Experience Builder file system as an administrator/root
2. Navigate to the IIM directory of the Forms Media

```
# cd <MFEB>/IIM/
```

Example:

WIN	# cd F:\MFEB\IIM
UNIX	# cd /opt/tmp/MFEB/IIM

3. Navigate to the OS directory

WIN32	Win32
WIN64	WinX64
LINUX	Linux
LINUX 64	LinuxX64
AIX	AIX

Example:

WIN32	F:\MFEB\IIM\Win32
WIN64	F:\MFEB\IIM\WinX64
LINUX	/opt/tmp/MFEB/IIM/Linux
LINUX 64	/opt/tmp/MFEB/IIM/LinuxX64
AIX	/opt/tmp/MFEB/IIM/AIX

4. Run the following command on one line to install the IBM Installation Manager

```
installc.exe  
-installationDirectory "<IIM_ECLIPSE_DIR>"  
-log <LOGLOCATION and LOGFILE> -acceptLicense
```

Example: WINDOWS

```
installc.exe -installationDirectory E:\IBM\InstallationManager\eclipse  
-log E:\IBM\IIM_Install.log -acceptLicense
```

Example: LINUX

```
./installc -installationDirectory /opt/IBM/InstallationManager/eclipse  
-log /opt/IBM/IIM_Install.log -acceptLicense
```

Example: AIX

```
./installc -installationDirectory /usr/IBM/InstallationManager/eclipse  
-log /usr/IBM/IIM_Install.log -acceptLicense
```

5. Verify the following message is returned

```
Installed com.ibm.cic.agent_1.8.0.20140902_1503 to <IIM_ECLIPSE_DIR>  
directory.
```

Example: WINDOWS

```
Installed com.ibm.cic.agent_1.8.0.20140902_1503 to  
E:\IBM\InstallationManager\eclipse directory.
```

**Example: LINUX**

```
Installed com.ibm.cic.agent_1.8.0.20140902_1503 to  
/opt/IBM/InstallationManager/eclipse directory.
```

**Example: AIX**

```
Installed com.ibm.cic.agent_1.8.0.20140902_1503 to  
/usr/IBM/InstallationManager/eclipse directory.
```

# 7 WebSphere Application Server

## 7.1 Install

If WebSphere Application Server has already been installed this section can be skipped as long as the version is supported by the IBM Forms Experience Builder. Only one installation method is required.

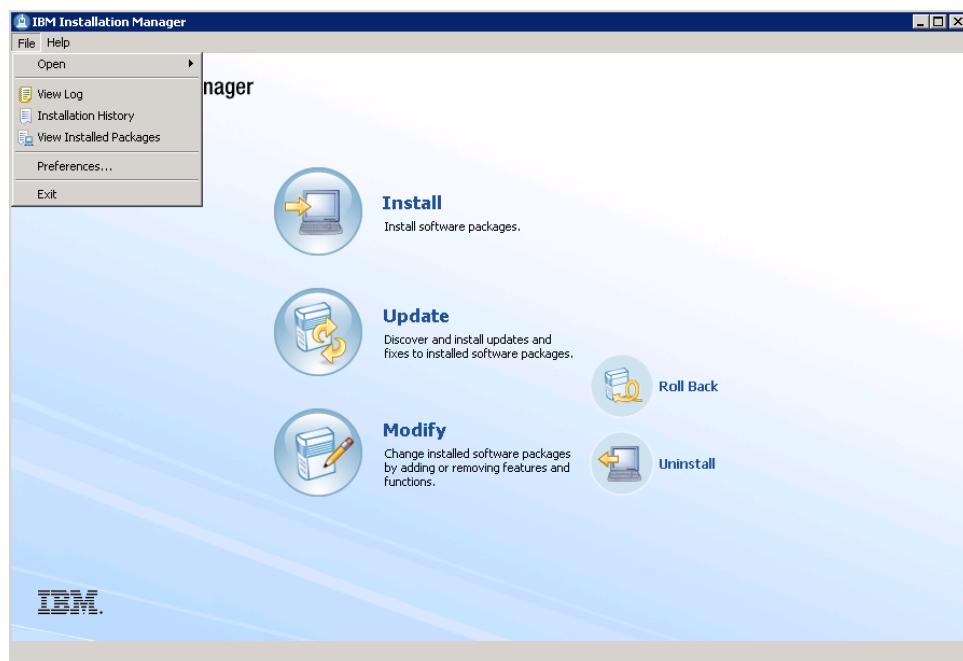
### 7.1.1 Graphical User Interface

If you are using the graphical user interface to install on a UNIX environment, verify the UNIX environment is configured to display a remote graphical user interface.

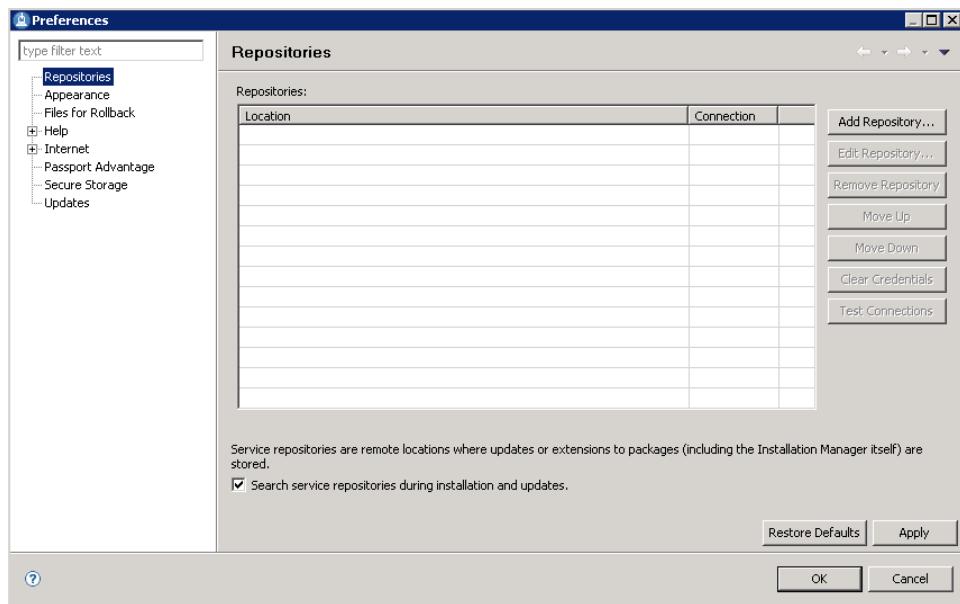
1. Login to the IBM Forms Experience Builder file system as an administrator/root
2. Run the **IBMIM** command to start the IBM Installation Manager

Example:

WIN	E:\IBM\InstallationManager\eclipse\IBMIM.exe
LINUX	/opt/IBM/InstallationManager/eclipse/IBMIM
AIX	/usr/IBM/InstallationManager/eclipse/IBMIM



3. Click Files > Preferences...



4. In the left menu, click Repositories
5. On the right side, click Add Repository...

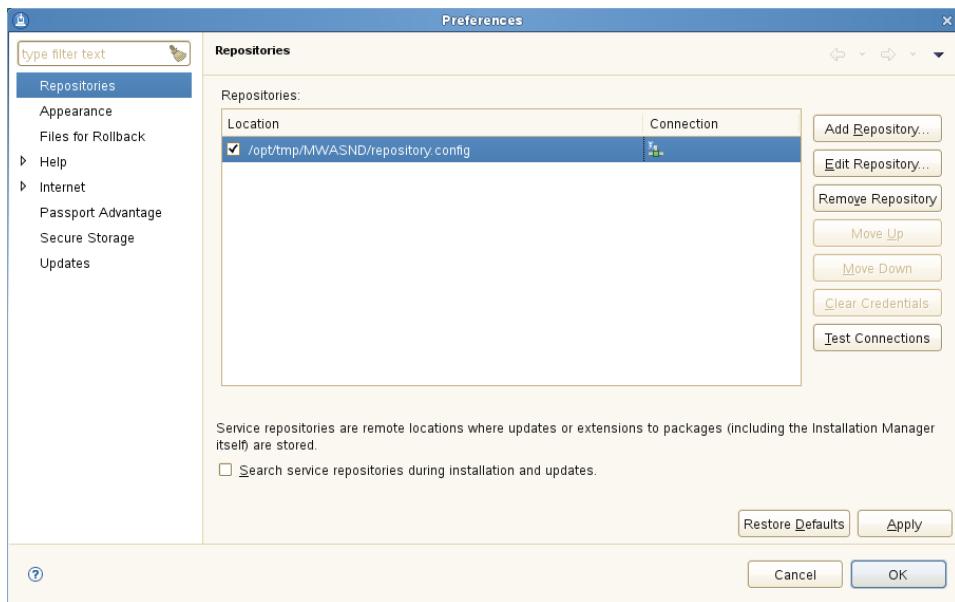


6. Browse-to/Enter the repository.config in the WebSphere Application Server media

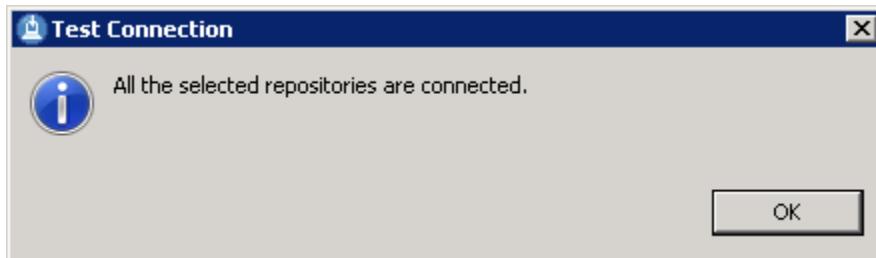
**Example:**

WIN	F:\temp\MWASND\repository.config
LINUX	/opt/tmp/MWASND/repository.config
AIX	/usr/tmp/MWASND/repository.config

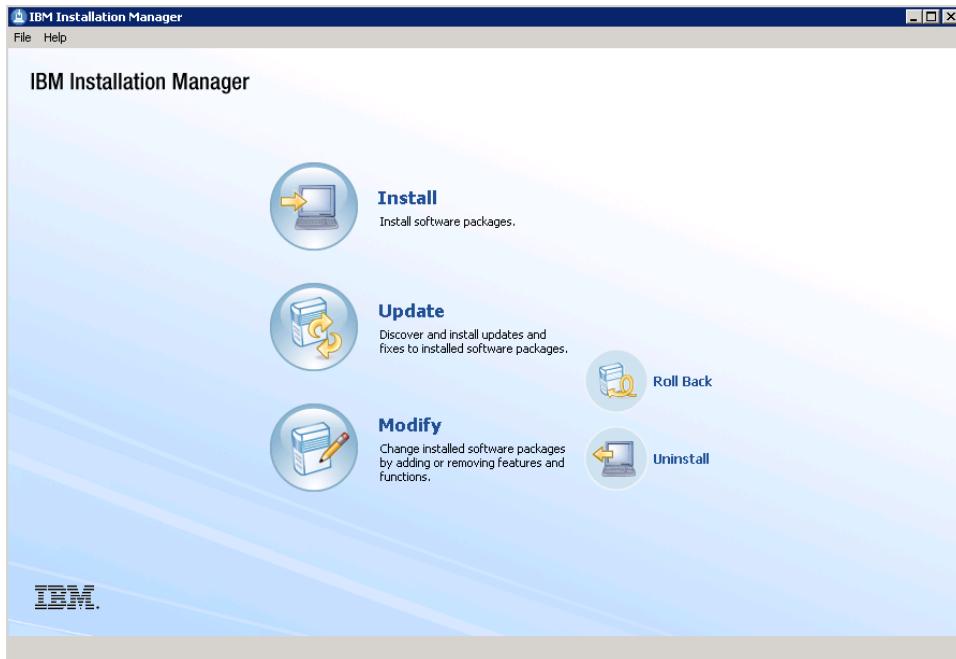
7. Click OK



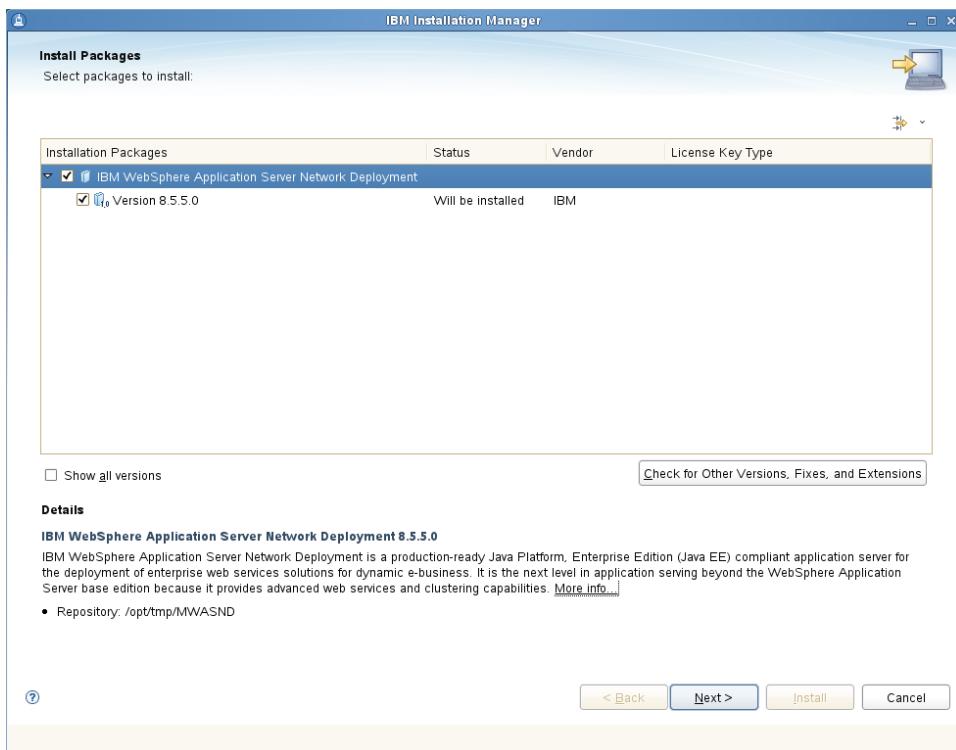
8. Click Test Connections



9. Verify the pop-up message "All the selected repositories are connected." If the repositories can not be connected, update the repository locations and try again.
10. Click OK to close the message
11. Uncheck "Search service repositories during installation and updates."
12. Click OK

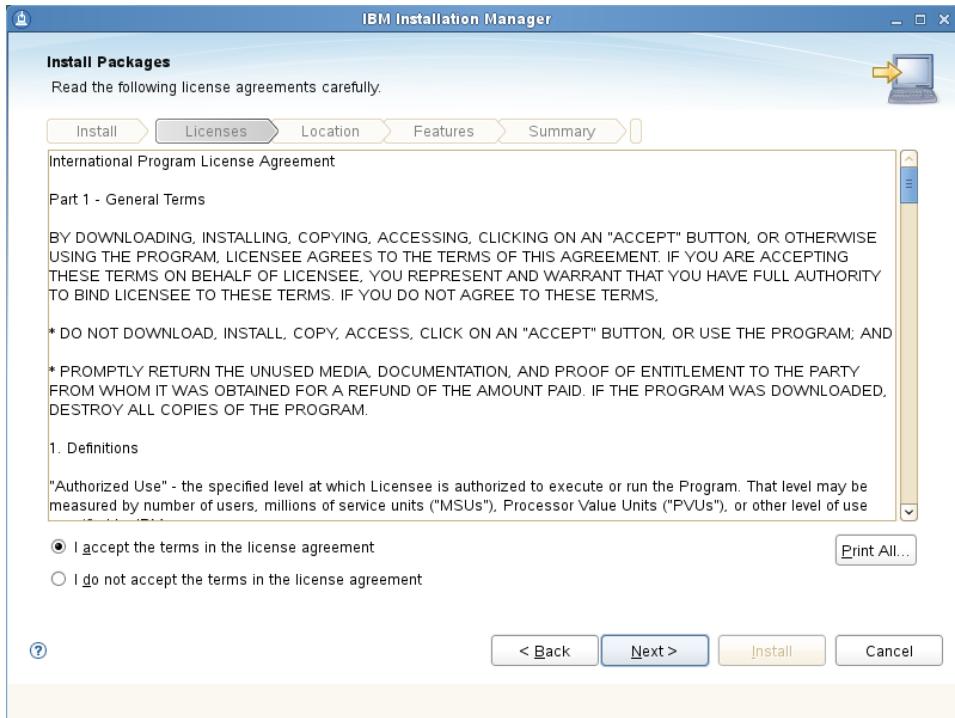


### 13. Click Install



### 14. Check the checkbox by “IBM WebSphere Application Server Network Deployment”

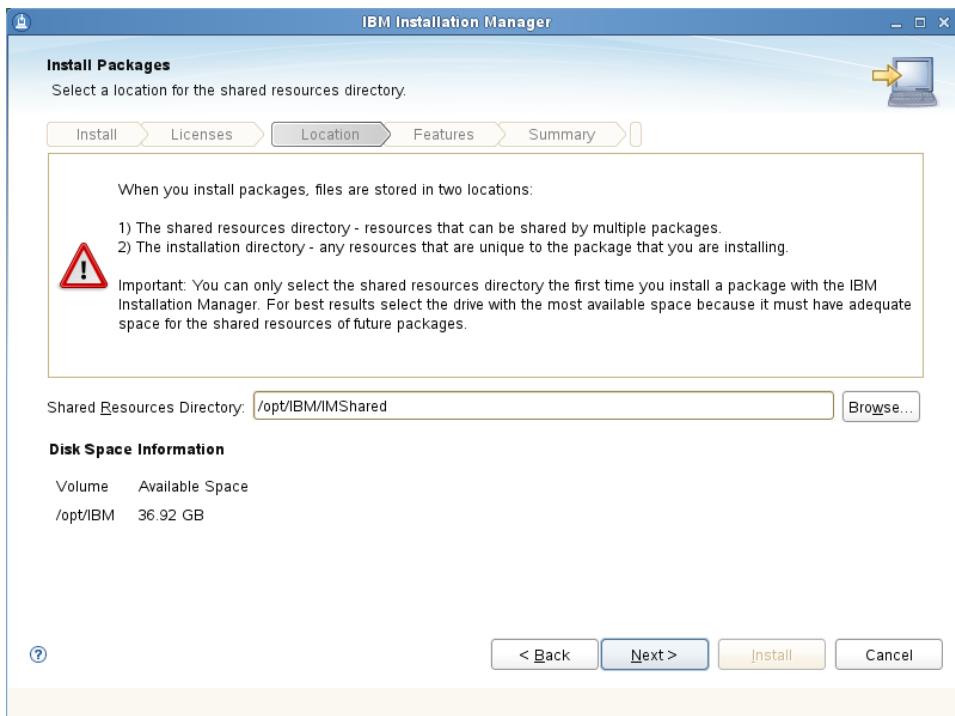
### 15. Click Next



16. Review the International Program License Agreement

17. Select “I accept the terms in the license agreement”

18. Click Next



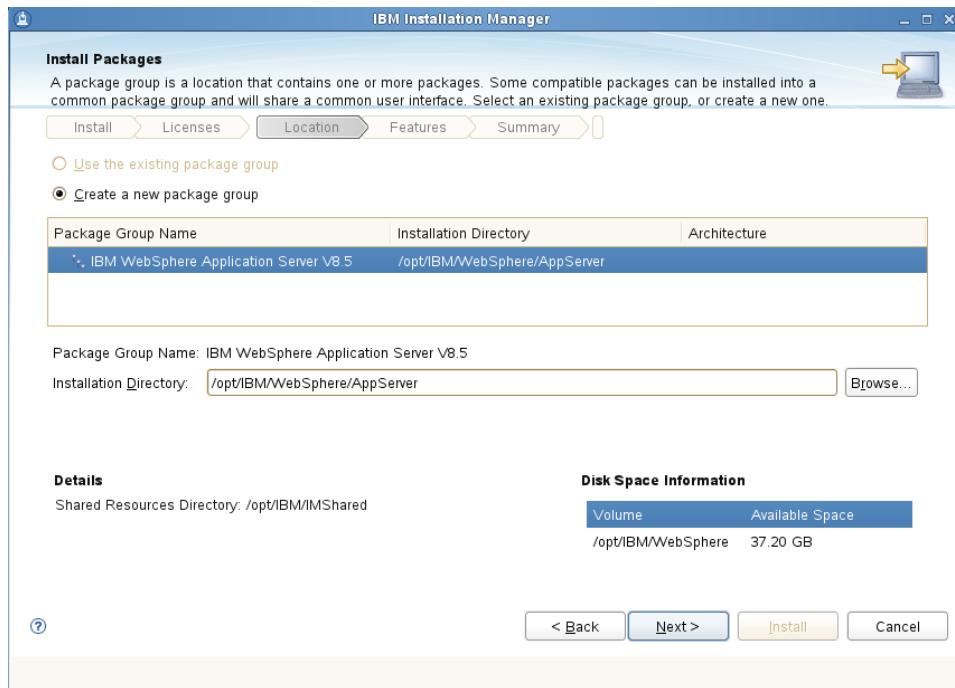
19. Browse-to/Enter the location of the Shared resource directory

SHARED\_DIR = \_\_\_\_\_

Example:

WIN	E:\IBM\IMShared
LINUX	/opt/IBM/IMShared
AIX	/usr/IBM/IMShared

20. Click Next



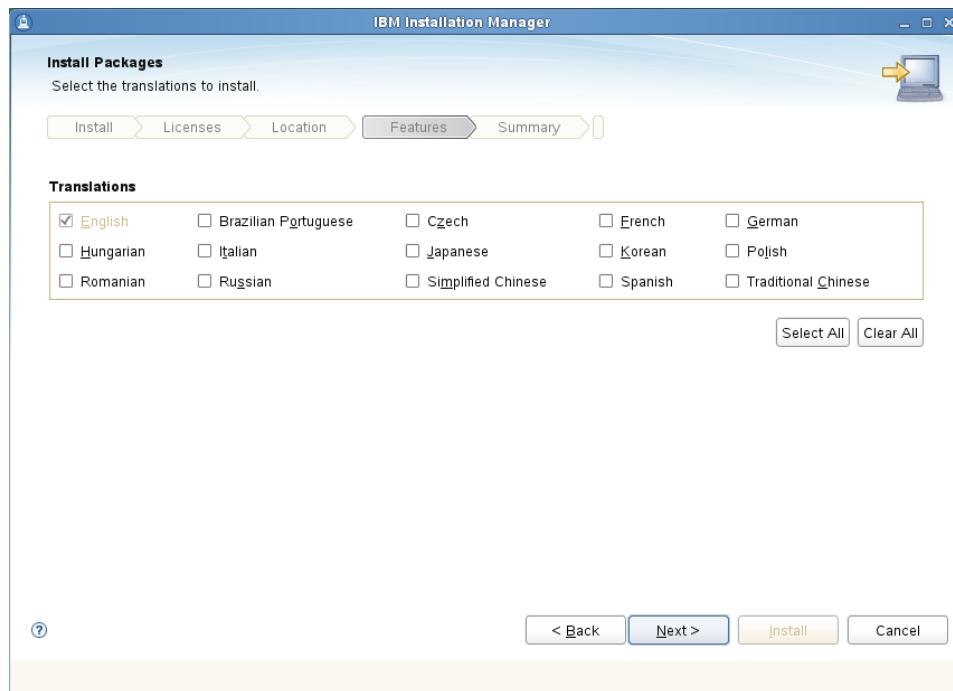
21. Under Package Group Name, click IBM WebSphere Application Server V8.5
22. Verify/Update the Installation Directory

WAS\_HOME = \_\_\_\_\_

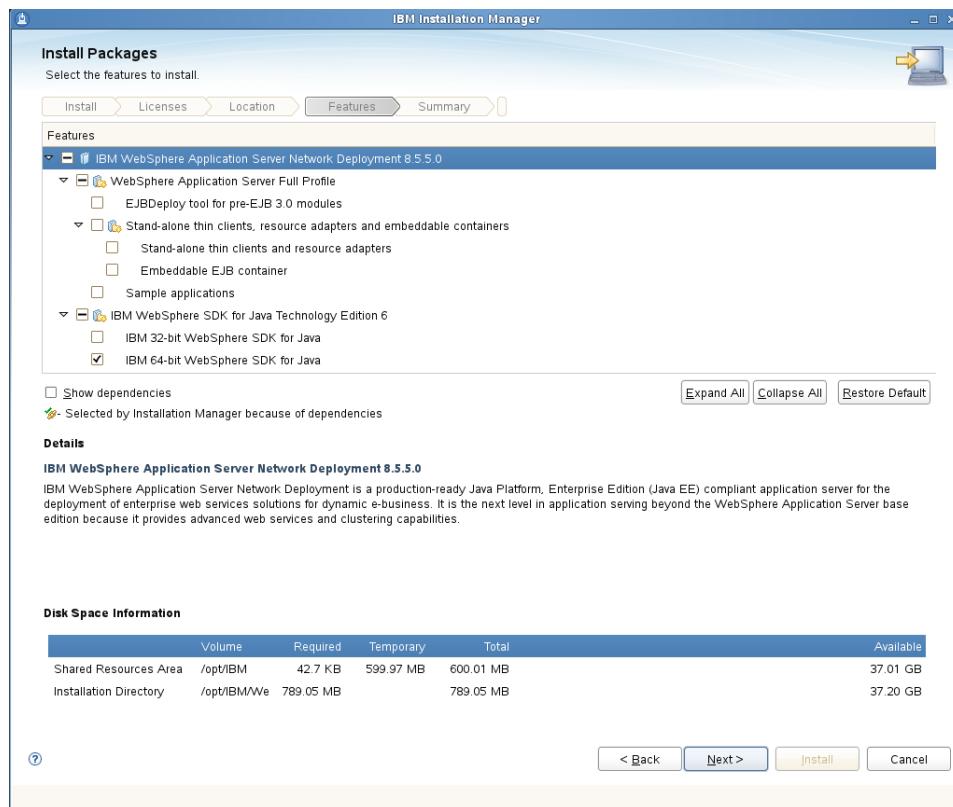
Example:

WIN	E:\IBM\WebSphere\AppServer
LINUX	/opt/IBM/WebSphere/AppServer
AIX	/usr/IBM/WebSphere/AppServer

23. Click Next



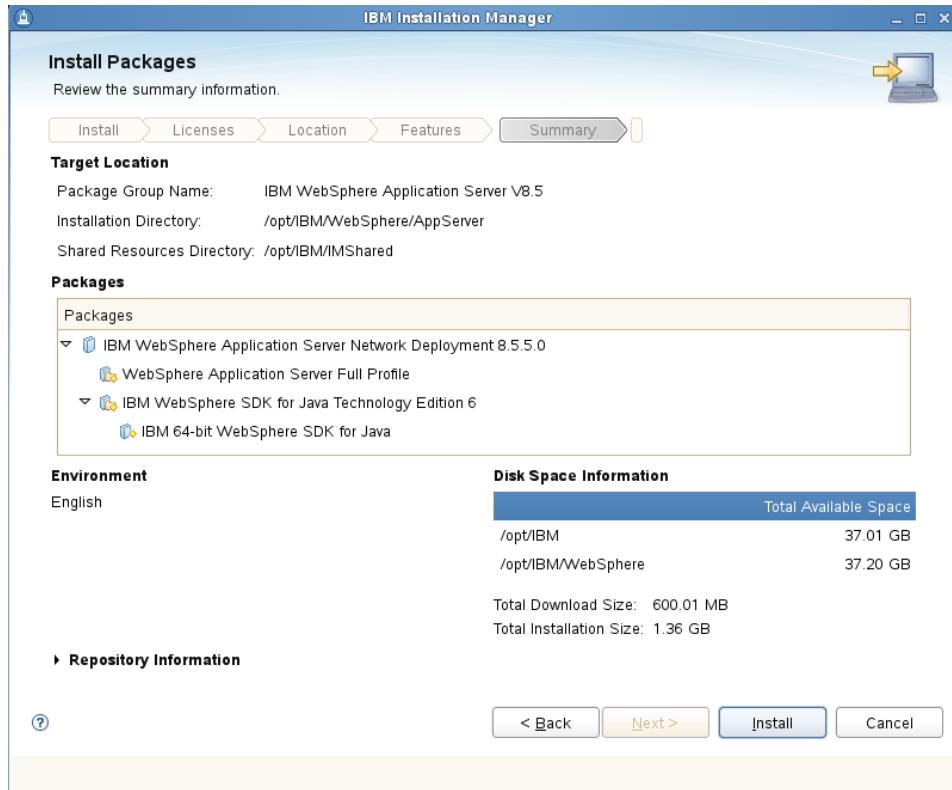
#### 24. Click Next



#### 25. Verify "WebSphere Application Server Full Profile" is selected. The other features under "WebSphere Application Server Full Profile" is optional.

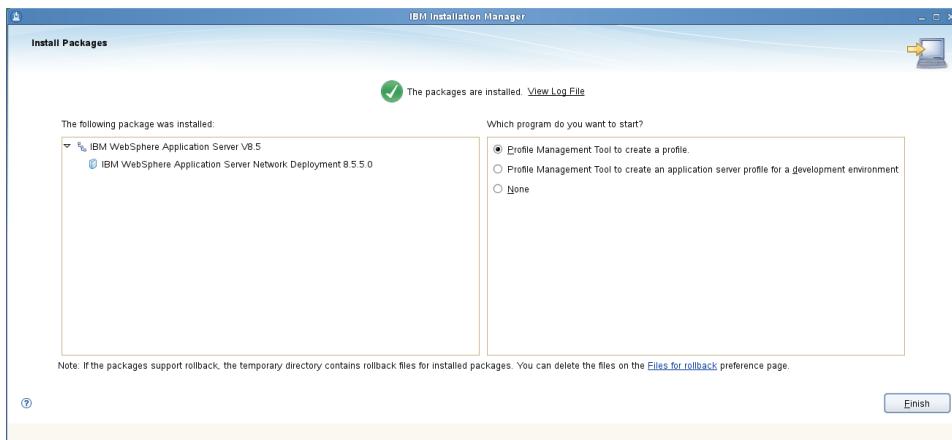
26. Verify the SDK for your specific platform bit installation is selected. In the example, “IBM 64-bit WebSphere SDK for Java” was selected.
- On a 32-bit, select “IBM 32-bit WebSphere SDK for Java
  - On a 64-bit, select “IBM 64-bit WebSphere SDK for Java

27. Click Next

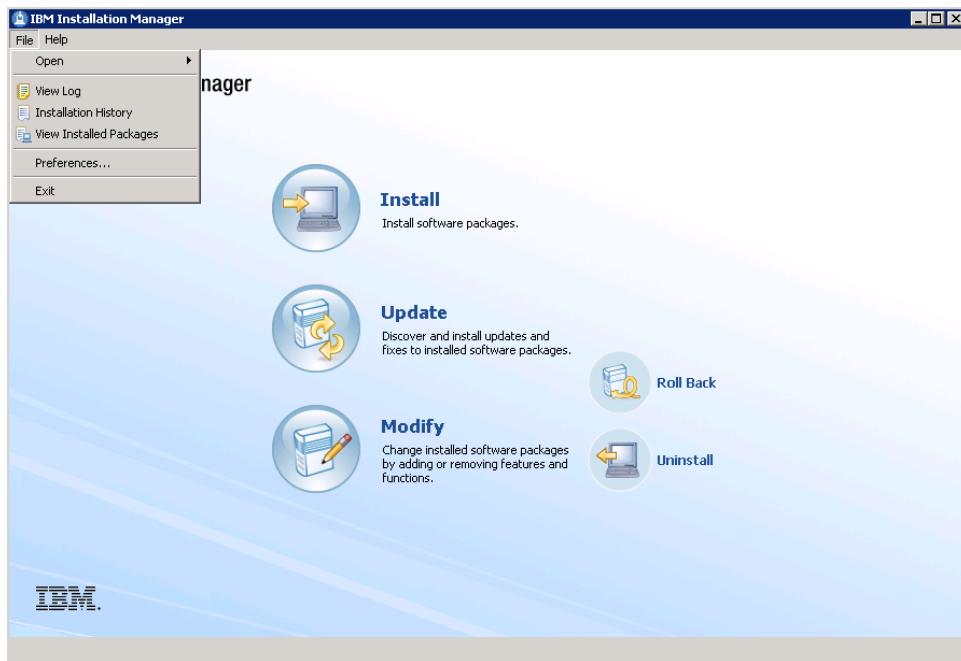


28. Review the summary information

29. Click Install



30. Verify there is a green check circle.
31. Select “None” if you want to create a profile at another time, other wise select “Profile Management Tool to create a profile”.
32. Click Finish



33. Click File
34. Click Exit

### 7.1.2 Command Line

1. Login to the IBM Forms Experience Builder file system as an administrator/root
2. Run the following command to install WebSphere Application Server

```
<IIM_HOME>/eclipse/tools/imcl install com.ibm.websphere.ND.v85 - 
repositories <MWASND>/repository.config -installationDirectory 
<WAS_HOME> -sharedResourcesDirectory <IMSHARED> -acceptLicense
```

#### Example: WINDOWS

```
E:\IBM\InstallationManager\eclipse\tools\imcl install 
com.ibm.websphere.ND.v85 -repositories F:\temp\MWASND\repository.config 
-installationDirectory E:\IBM\WebSphere\AppServer - 
sharedResourcesDirectory E:\IBM\IMShared -acceptLicense
```

#### Example: LINUX

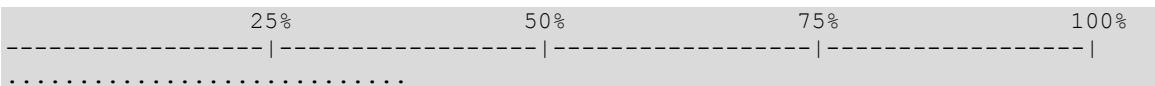
```
/opt/IBM/InstallationManager/eclipse/tools/imcl install 
com.ibm.websphere.ND.v85 -repositories
```

```
/opt/tmp/MWASND/repository.config -installationDirectory  
/opt/IBM/WebSphere/AppServer -sharedResourcesDirectory  
/opt/IBM/IMShared -acceptLicense
```

#### Example: AIX

```
/usr/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.ND.v85 -repositories  
/usr/tmp/MWASND/repository.config -installationDirectory  
/usr/IBM/WebSphere/AppServer -sharedResourcesDirectory  
/usr/IBM/IMShared -acceptLicense
```

NOTE: Add -sP to the end of the command to display the progress of the installation.



### 3. Validate the Installation results

```
Installed com.ibm.websphere.ND.v85_8.5.5000.201305014_1044 to the  
<WAS_HOME> directory.
```

#### Example: WINDOWS

```
Installed com.ibm.websphere.ND. v85_8.5.5000.201305014_1044 to the  
E:\IBM\WebSphere\AppServer directory.
```

#### Example: LINUX

```
Installed com.ibm.websphere.ND. v85_8.5.5000.201305014_1044 to the  
/opt/IBM/WebSphere/AppServer directory.
```

#### Example: AIX

```
Installed com.ibm.websphere.ND. v85_8.5.5000.201305014_1044 to the  
/usr/IBM/WebSphere/AppServer directory.
```

## 7.2 Deployment Manager – Create Profile

Only one method needs to be followed to create the Deployment Manager profile. Either user the Graphical User Interface or the Command line to create the profile.

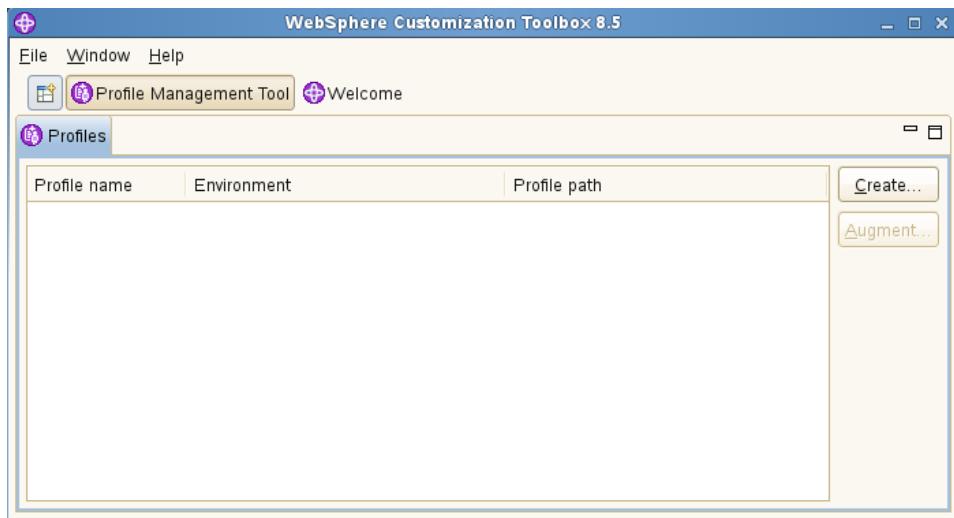
### 7.2.1 GUI

1. Start the Profile Manager Tool from the following options
  - o Select “Profile Management Tool to create a profile” after the installation of WebSphere Application Server when using a GUI
  - o Run **pmt** from the file system
    - WIN      <WAS\_HOME>\bin\ProfileManagement\pmt.bat
    - UNIX     <WAS\_HOME>/bin/ProfileManagement/pmt.sh

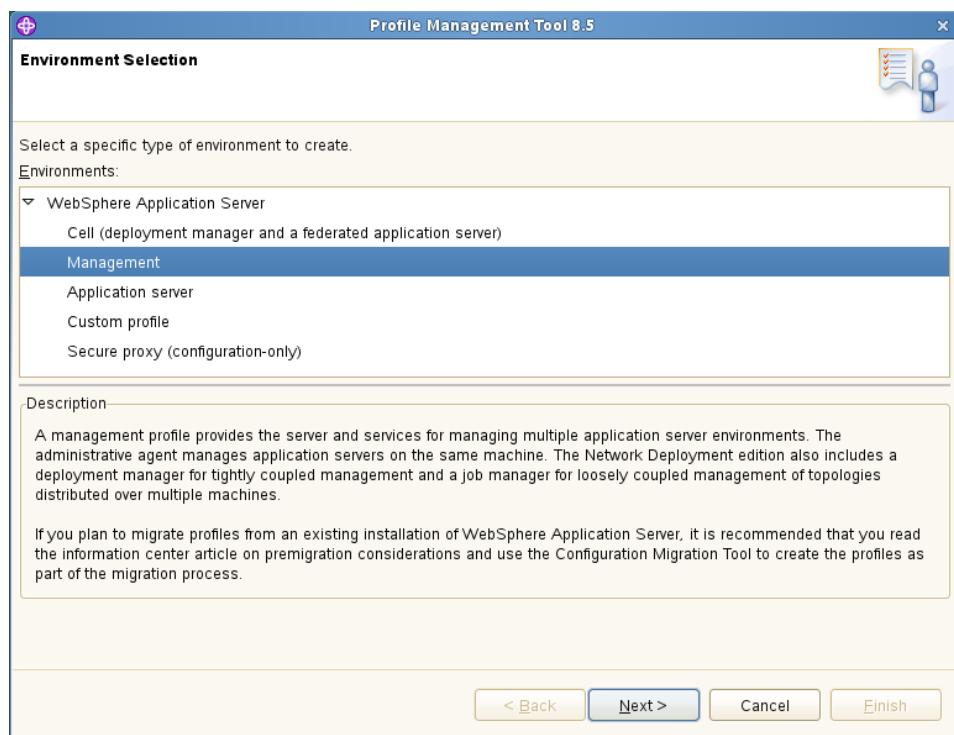
#### Example:

```
WIN      E:\IBM\WebSphere\AppServer\bin\ProfileManagement\pmt.bat
```

```
LINUX /opt/IBM/WebSphere/AppServer/bin/ProfileManagement/pmt.sh  
AIX /usr/IBM/WebSphere/AppServer/bin/ProfileManagement/pmt.sh
```

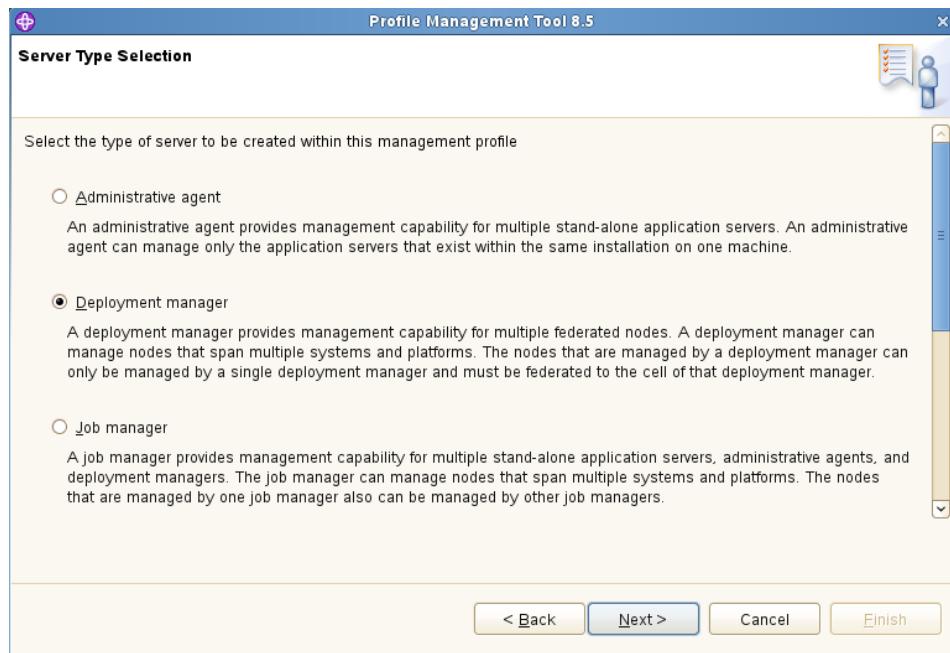


## 2. Click Create

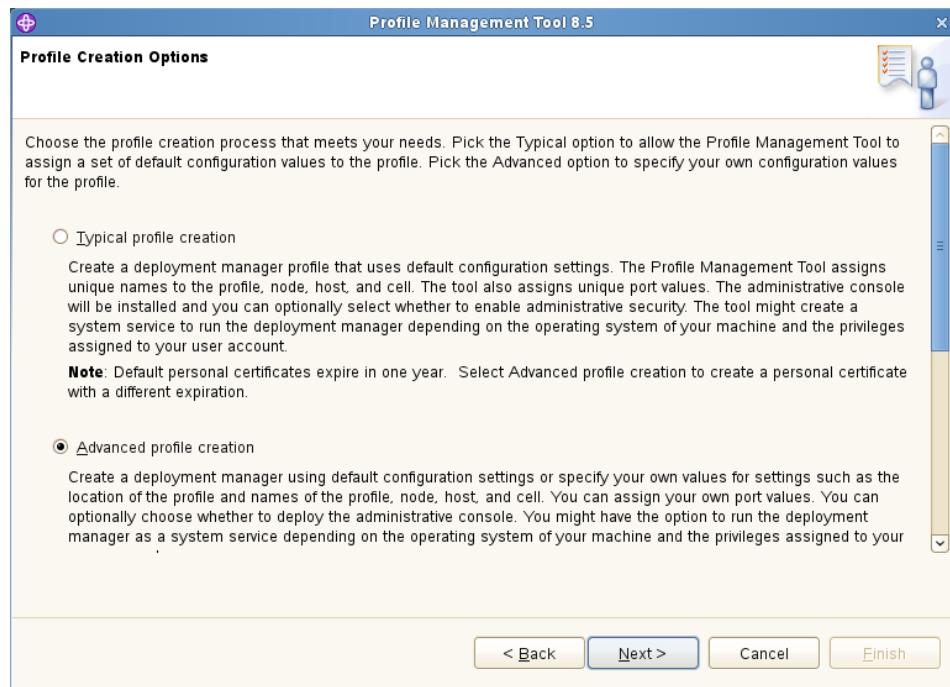


## 3. Select Management

## 4. Click Next

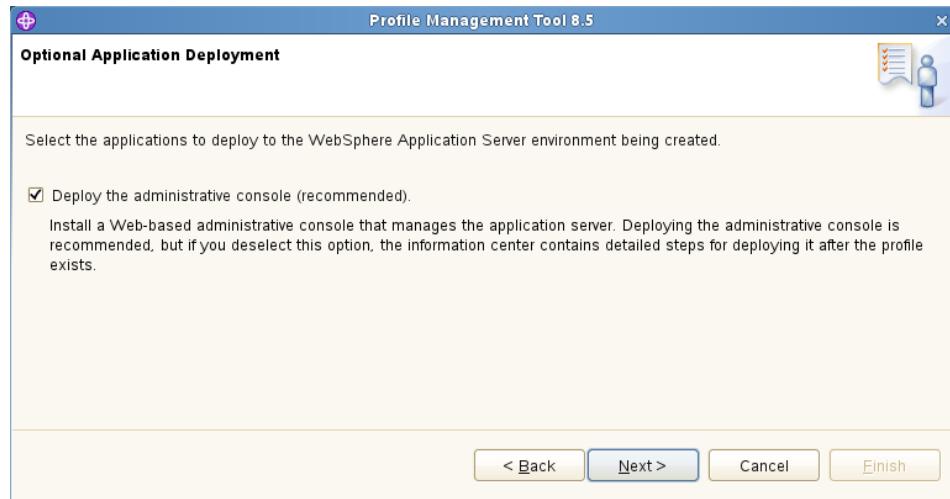


5. Select “Deployment manager”
6. Click Next



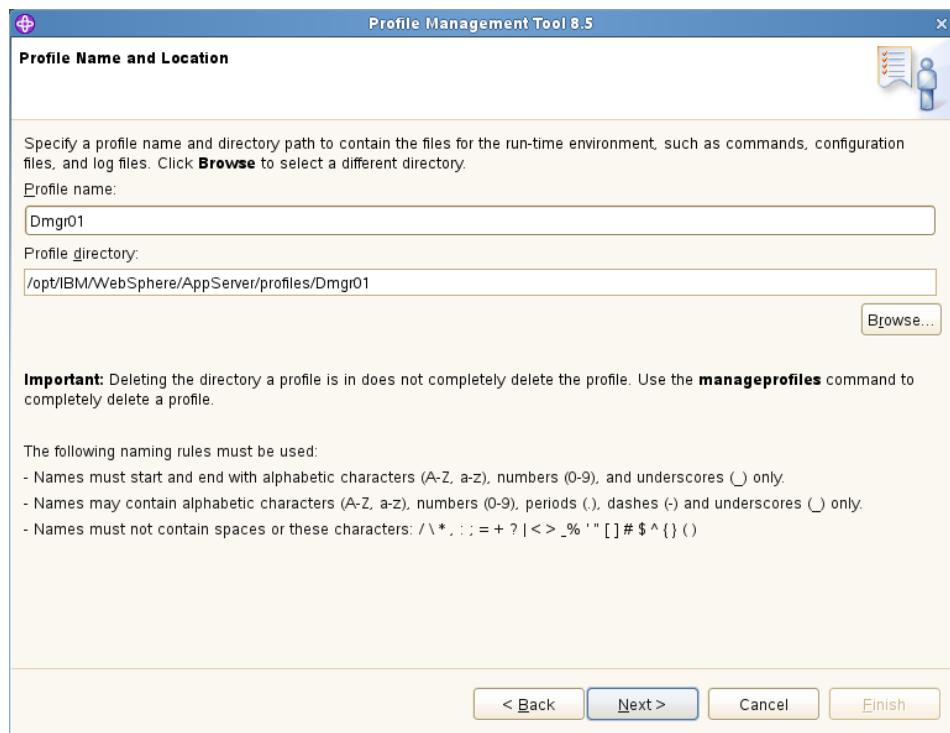
7. Select the profile creation option. By default, “Typical profile creation” is selected and can be used depending on the requirements. In the example, “Advanced profile creation” is selected to show the different available options during profile creation

8. Click Next



9. Verify “Deploy the administrative console” is checked.

10. Click Next



11. Fill in the following information

Profile name = \_\_\_\_\_

Profile directory = \_\_\_\_\_

### Example: WINDOWS

```
Profile name = Dmgr01  
Profile directory = E:\IBM\WebSphere\AppServer\profiles\DMgr01
```

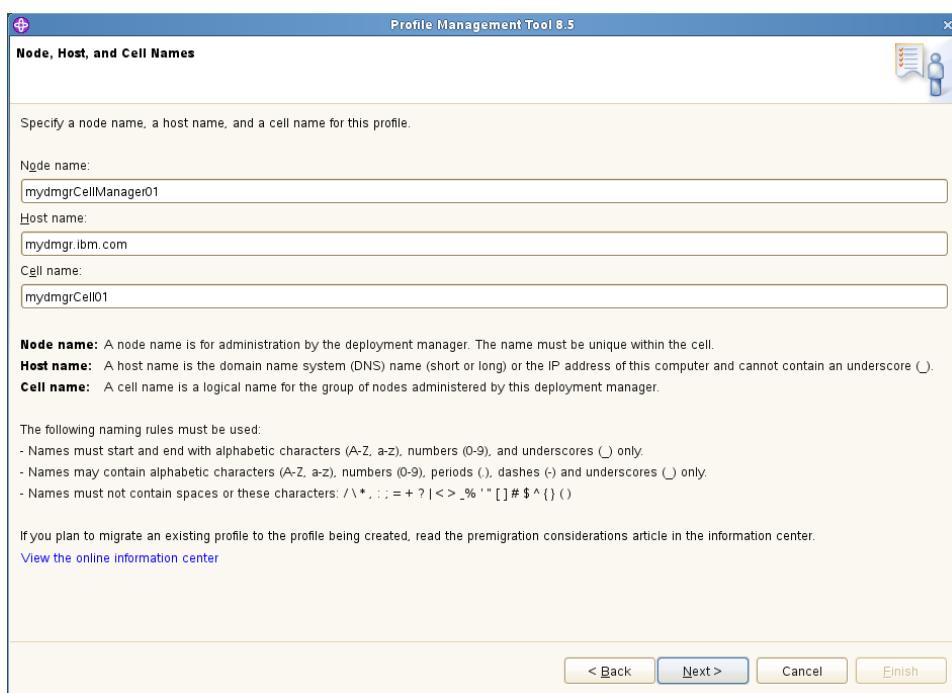
### Example: LINUX

```
Profile name = Dmgr01  
Profile directory = /opt/IBM/WebSphere/AppServer/profiles/Dmgr01
```

### Example: AIX

```
Profile name = Dmgr01  
Profile directory = /usr/IBM/WebSphere/AppServer/profiles/Dmgr01
```

## 12. Click Next



## 13. Verify/Enter the following information.

Node name = \_\_\_\_\_

Host name = \_\_\_\_\_

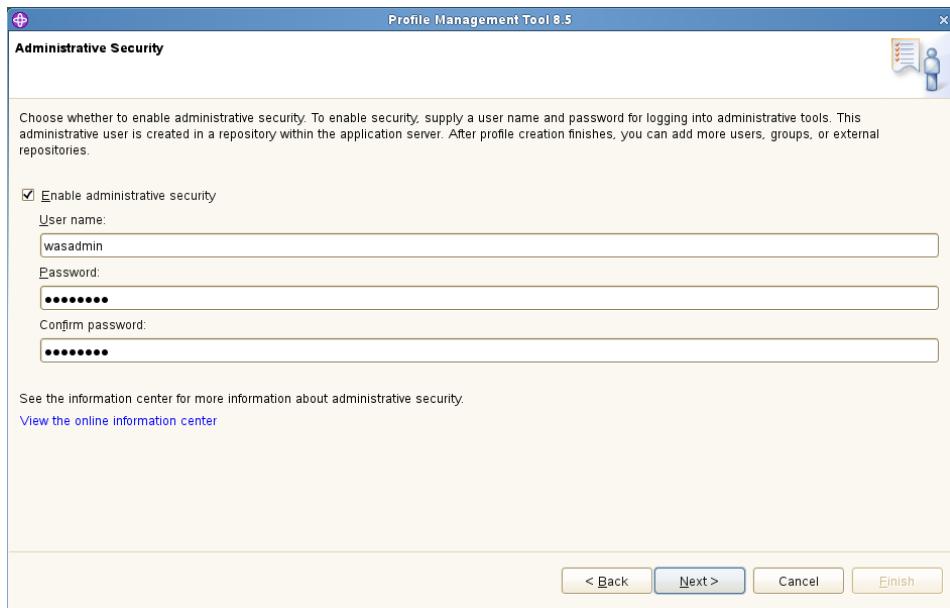
Cell name = \_\_\_\_\_

### Example:

```
Node name = mydmgrCellManager01  
Host name = mydmgr.ibm.com  
Cell name = mydmgrCell01
```

Note: By default, the Node name and Cell name consist of the hostname at the beginning of the value such as in the example. These variables can be set to anything. It is suggested to make them as short as possible.

14. Click Next



15. IBM Forms Experience Builder requires the the WebSphere Application Server to be secured. Security does not have to be set during the profile creation. It can be secured to an external user repository after the profile is created. In the example, “Enable admistrative security” is enabled by default and a file base user repository will be created and configured to the WebSphere Application Server profile.

16. If “Enable administrative security” was checked, enter a User name used for the WebSphere Application administrator user. If a LDAP user repository will be configured to the WebSphere Application Server in the future, make sure the User name entered does not match a user ID in the ldap.

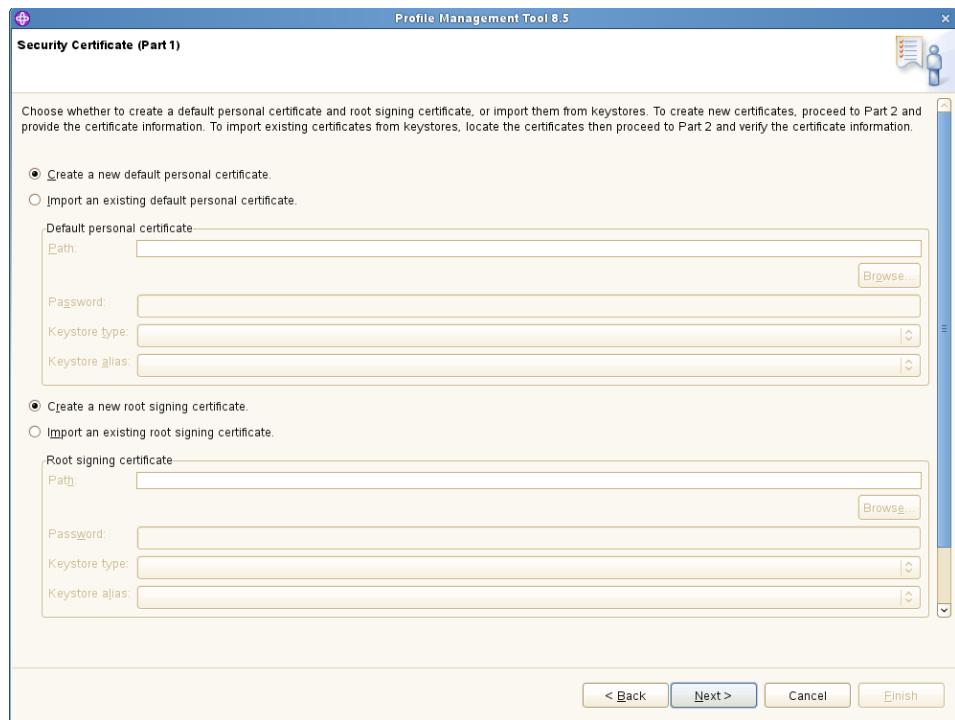
User name: \_\_\_\_\_

Example: **wasadmin**

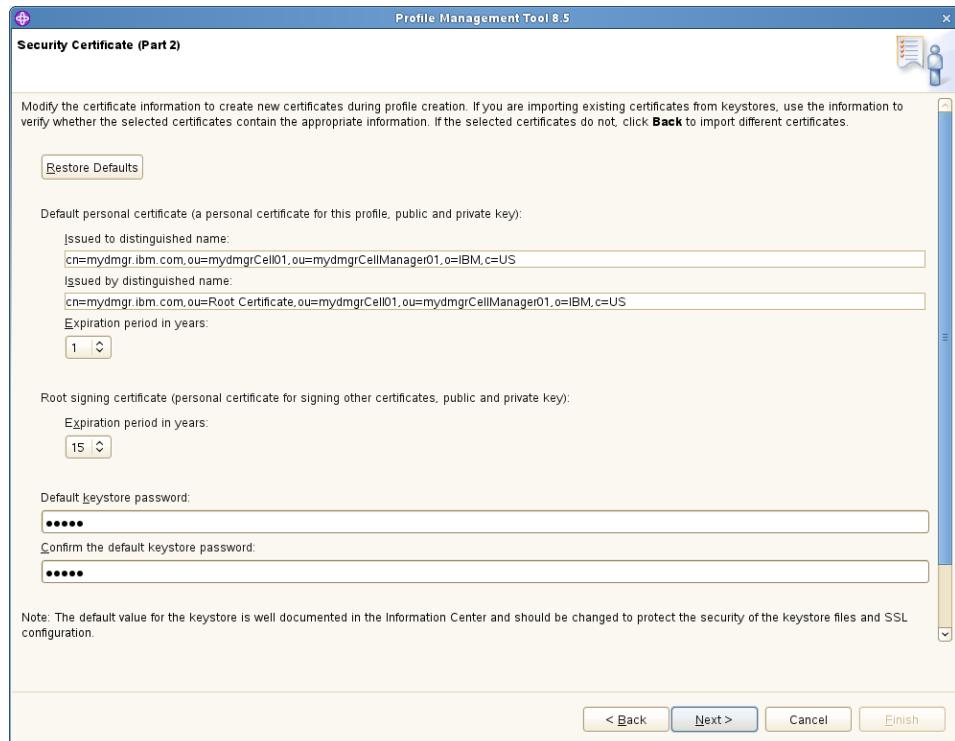
17. If “Enable administrative security” was checked, enter the password for the User name in the “Password” and “Confirm password” field.

Password: \_\_\_\_\_

18. Click Next

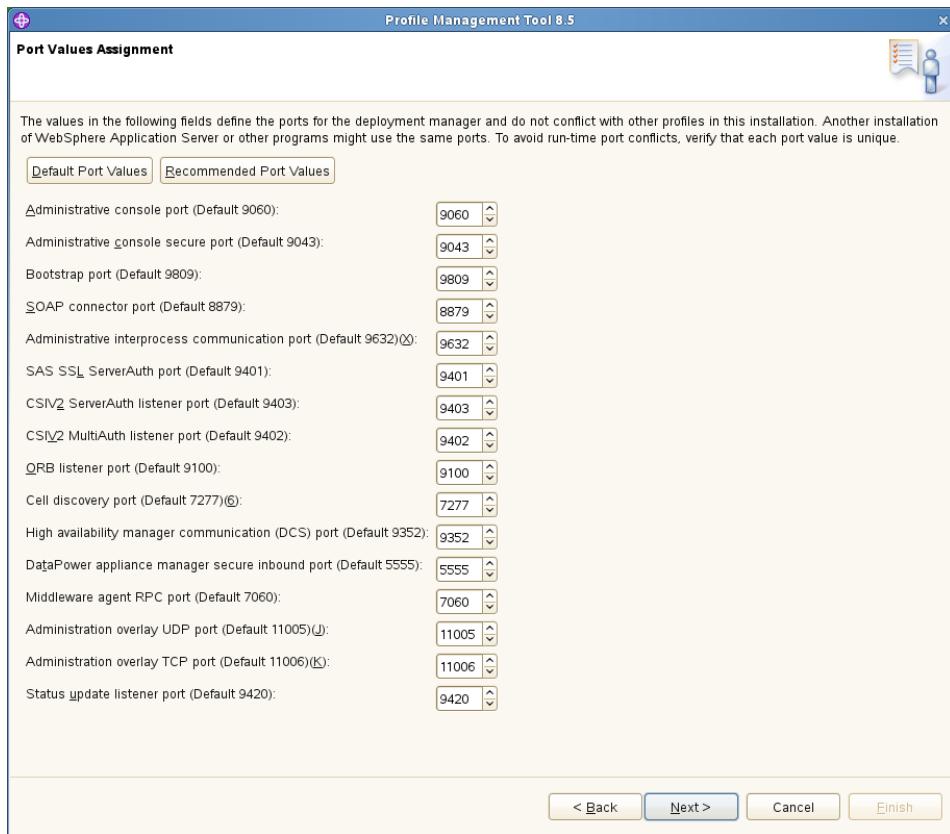


19. Signing certificates can be imported for the profile if this is a requirement. Otherwise, Click Next



20. The certificate information can be updated at this time if required.

21. The Default personal certificate, “Expiration period in years” can be updated at this time.
22. The Root signing certificate, “Expiration period in years” can be updated at this time.
23. Click Next



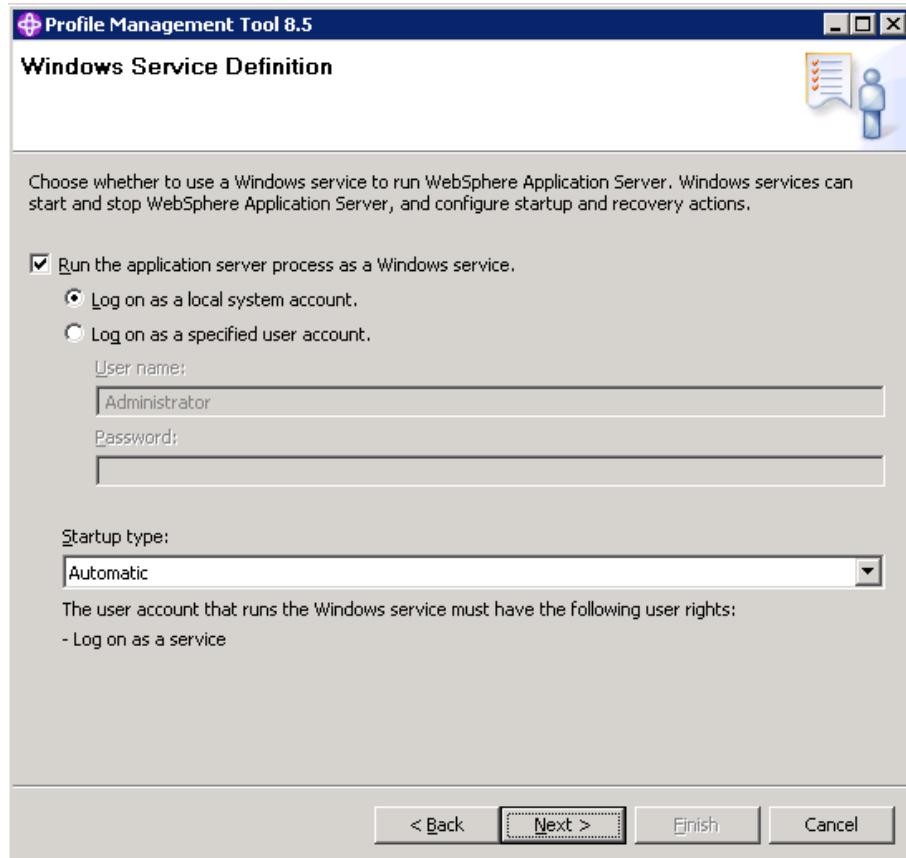
24. If there are any requirements for ports, the ports can be updated at this time.
25. Click Next



26. If installing on Linux, by default the “Run the application server process as a Linux service” is unchecked. The options must be unchecked if it meets the following...

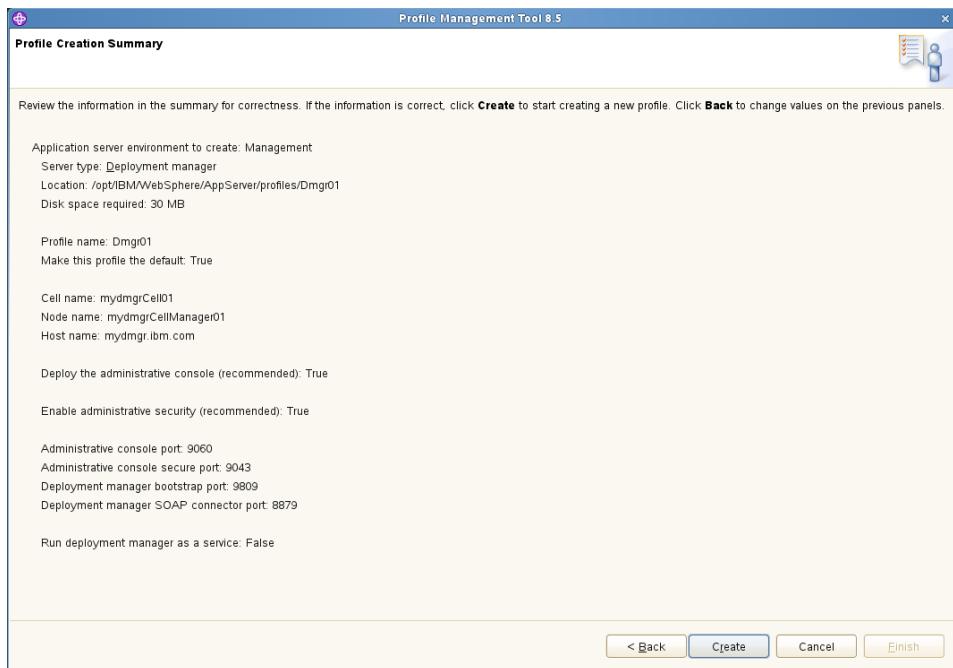
- If security is not enabled on the profile.
- If the WebSphere Application Server administrator user or password will be changed.

27. Click Next

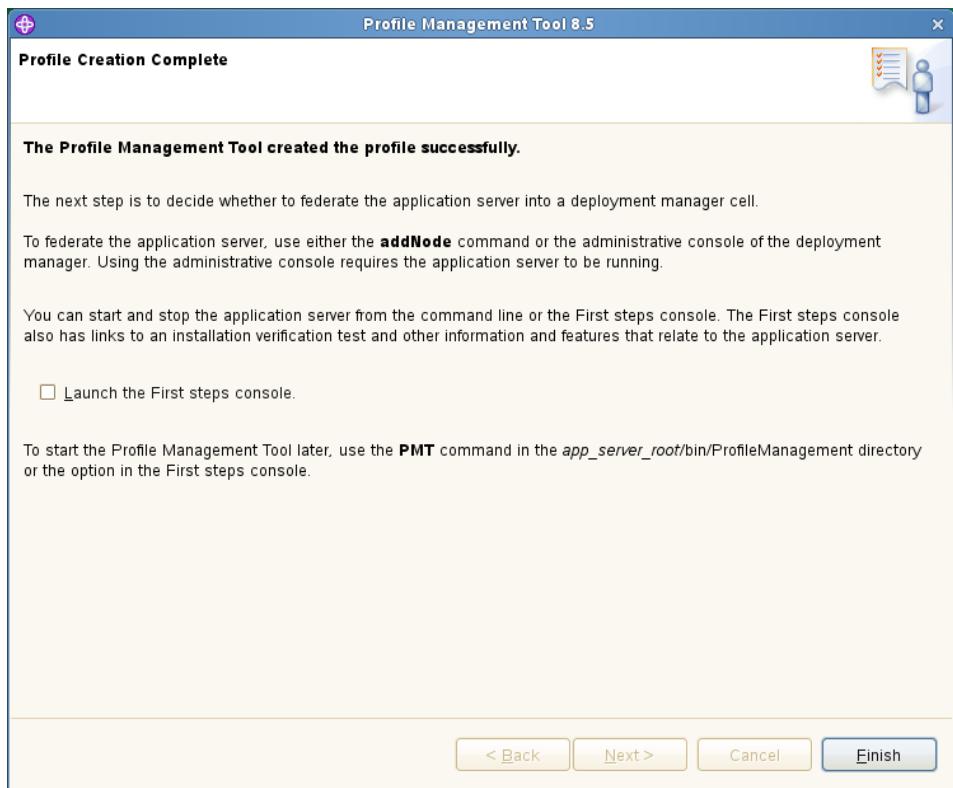


28. If installing on Windows, by default the “Run the application server process as a Windows service” is checked. Leaving it checked will start the WebSphere Application Server server after a restart of the operating system. Uncheck “Run the application server process as a Window servcice” if any of the following is met.
- If security is not enabled on the profile.
  - If the WebSphere Application Server administrator user or password will be changed.

29. Click Next

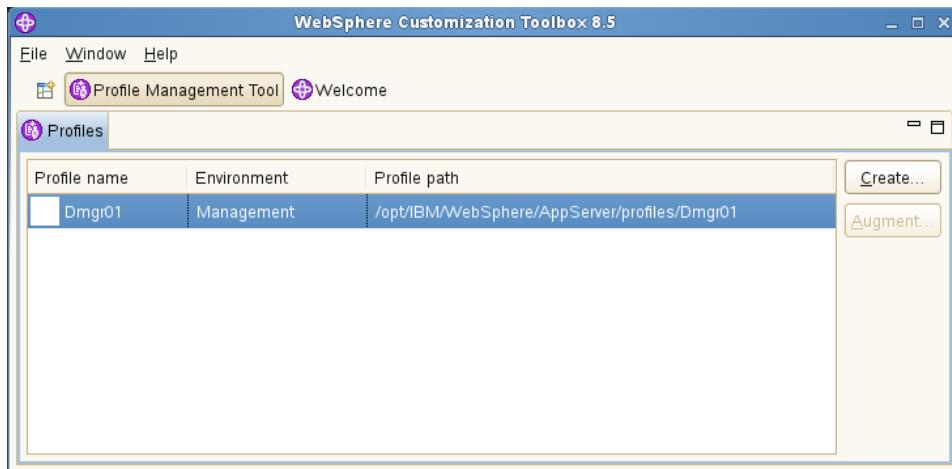


30. Review the Summary information. If anything is incorrect, click back and fix the problem.
31. If everything is correct, click Create



32. By default, “Launch the First steps console” were checked. In the example, uncheck “Launch the First steps console” was done because it was not required for the completion of the profile.

33. Click Finish



## 7.2.2 Command Line

1. Login to the Deployment Manager server
2. Run the following command to create a Deployment Manager Profile

```
<WAS_HOME>/bin/manageprofiles.(bat/sh) -create -templatePath  
<WAS_HOME>/profileTemplates/management -profileName <PROFILE_NAME> -  
profilePath <PROFILE_PATH> -hostName <DMGR_HOSTNAME> -cellName  
<DMGR_CELLNAME> -nodeName <DMGR_NODENAME>
```

NOTE: Options to enable security

```
-enableAdminSecurity true  
-adminUserName <WASADMIN>  
-adminPassword <WASPWD>
```

IBM Forms Experience Builder requires the WebSphere Application Server to be secured. Security does not have to be set during the profile creation but will be required before installation of IBM Forms Experience Builder. It can be secured to an external user repository after the profile is created. In the example below, enabling security will be set during profile creation.

Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\bin\manageprofiles.bat -create -templatePath  
E:\IBM\WebSphere\AppServer\profileTemplates\management -profileName  
Dmgr01 -profilePath E:\IBM\WebSphere\AppServer\profiles\DMgr01 -  
hostName mydmgr.ibm.com -cellName mydmgrCell01 -nodeName  
mydmgrCellManager01 -enableAdminSecurity true -adminUserName wasadmin -  
adminPassword XXXX
```

#### Example: LINUX

```
/opt/IBM/WebSphere/AppServer/bin/manageprofiles.sh -create -  
templatePath /opt/IBM/WebSphere/AppServer/profileTemplates/management -  
profileName Dmgr01 -profilePath  
/opt/IBM/WebSphere/AppServer/profiles/Dmgr01 -hostName mydmgr.ibm.com -  
cellName mydmgrCell01 -nodeName mydmgrCellManager01 -  
enableAdminSecurity true -adminUserName wasadmin -adminPassword XXXX
```

#### Example: AIX

```
/usr/IBM/WebSphere/AppServer/bin/manageprofiles.sh -create -  
templatePath /usr/IBM/WebSphere/AppServer/profileTemplates/management -  
profileName Dmgr01 -profilePath  
/usr/IBM/WebSphere/AppServer/profiles/Dmgr01 -hostName mydmgr.ibm.com -  
cellName mydmgrCell01 -nodeName mydmgrCellManager01 -  
enableAdminSecurity true -adminUserName wasadmin -adminPassword XXXX
```

### 3. Verify the results

```
INSTCONFSUCCESS: Success: Profile <PROFILE_NAME> now exists. Please  
consult <PROFILE_PATH>/logs/AboutThisProfile.txt for more information  
about this profile.
```

#### Example: WINDOWS

```
INSTCONFSUCCESS: Success: Profile Dmgr01 now exists. Please consult  
E:\IBM\WebSphere\AppServer\profiles\DMGR01\logs\AboutThisProfile.txt  
for more information about this profile.
```

#### Example: LINUX

```
INSTCONFSUCCESS: Success: Profile Dmgr01 now exists. Please consult  
/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/AboutThisProfile.txt  
for more information about this profile.
```

#### Example: AIX

```
INSTCONFSUCCESS: Success: Profile Dmgr01 now exists. Please consult  
/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/logs/AboutThisProfile.txt  
for more information about this profile.
```

## 7.3 FEB – Create Profile

Only one method needs to be followed to create the IBM Forms Experience Builder profile. Either user the Graphical User Interface or the Command line to create the profile.

### 7.3.1 GUI

#### 1. Verify/Start the Deployment Manager

```
<DMGR_PROFILE>/bin/startManager.(bat/sh)
```

#### Example:

```

WIN      E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin\startManager.bat
LINUX    /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh
AIX      /usr/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh

```

2. Login to the IBM Forms Experience Builder file system
3. Start the Profile Manager Tool

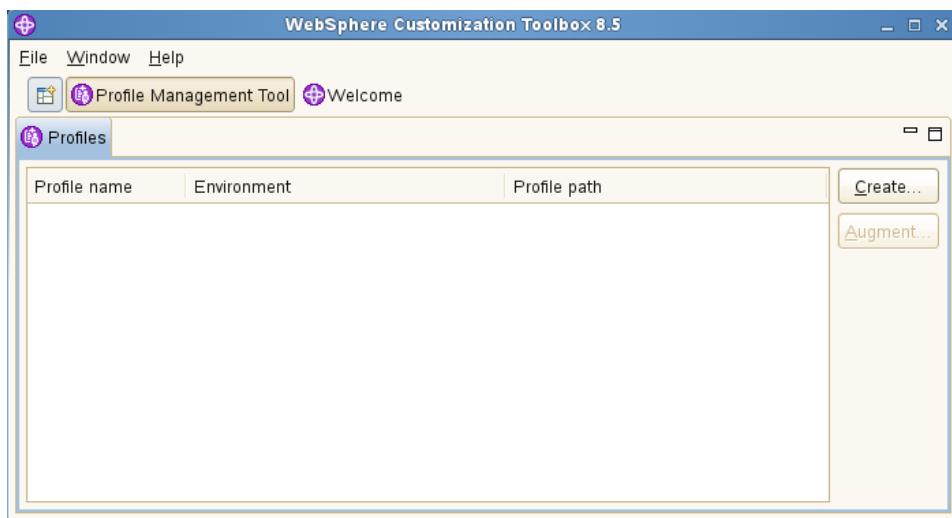
<WAS\_HOME>/bin/ProfileManagement/pmt.(bat/sh)

**Example:**

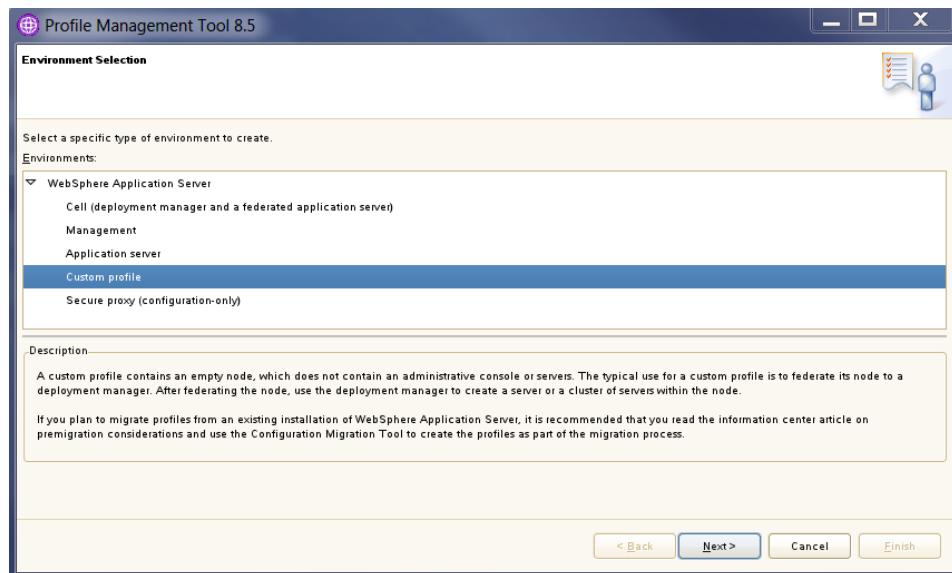
```

WIN      E:\IBM\WebSphere\AppServer\bin\ProfileManagement\pmt.bat
LINUX    /opt/IBM/WebSphere/AppServer/bin/ProfileManagement/pmt.sh
AIX      /usr/IBM/WebSphere/AppServer/bin/ProfileManagement/pmt.sh

```

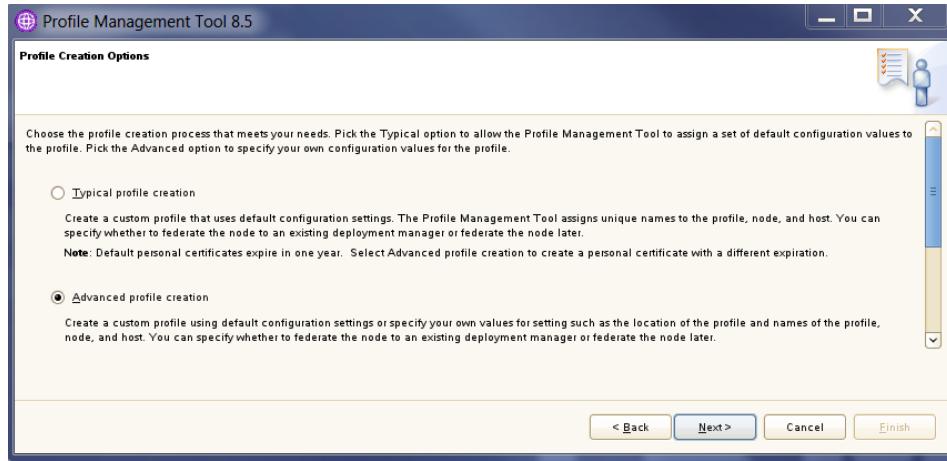


4. Click Create



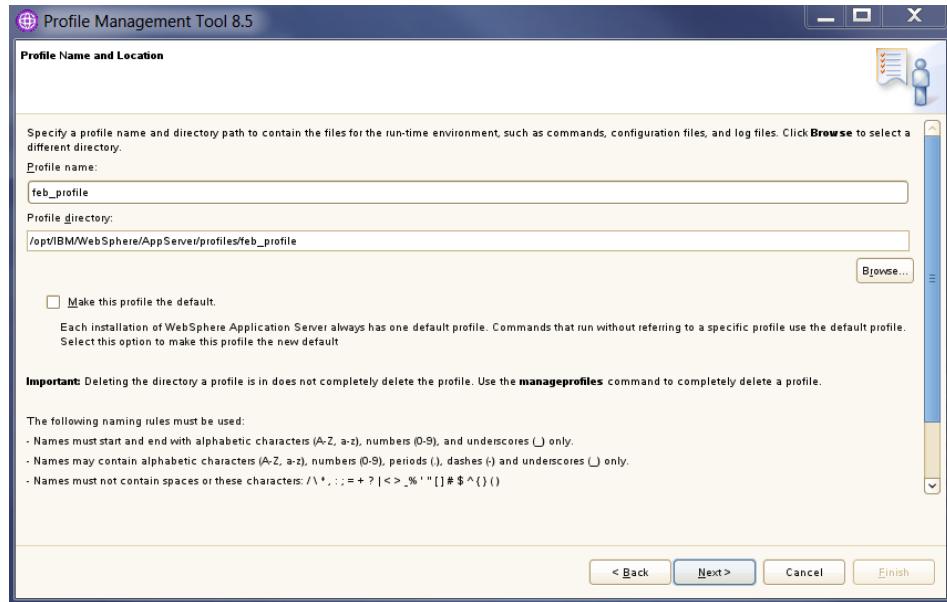
5. Select Custom profile

## 6. Click Next



7. Select the type of profile creation. When selecting the “Typical profile creation”, this will give the default settings. When selecting the “Advanced profile creation”, this will give the ability for customization. In the example, “Advanced profile creation” was chosen.

## 8. Click Next



9. Verify/Enter the Profile name.

Profile name: \_\_\_\_\_

Example: feb\_profile

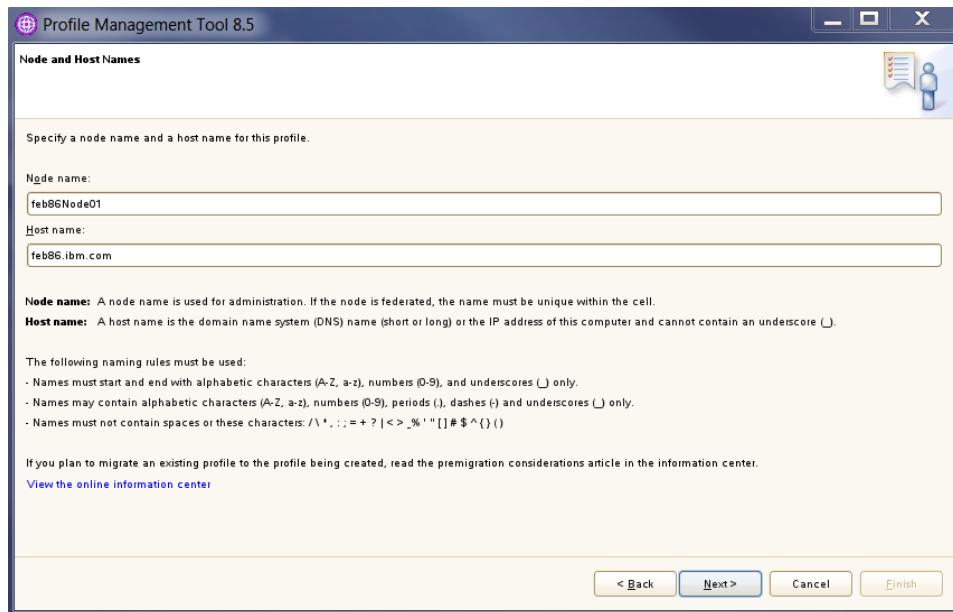
10. Verify/Enter the Profile directory. In the example, the Profile directory was updated as to match the profile name

Profile directory: \_\_\_\_\_

Example:

WIN	E:\IBM\WebSphere\AppServer\profiles\feb_profile
LINUX	/opt/IBM/WebSphere/AppServer/profiles/feb_profile
AIX	/usr/IBM/WebSphere/AppServer/profiles/feb_profile

11. Click Next



12. Enter/Verify the Node name for the environment. In the example, the nodename was left as default. The default convention is hostname+Node01. The recommendation is to have the nodename as short as possible.

Node name: \_\_\_\_\_

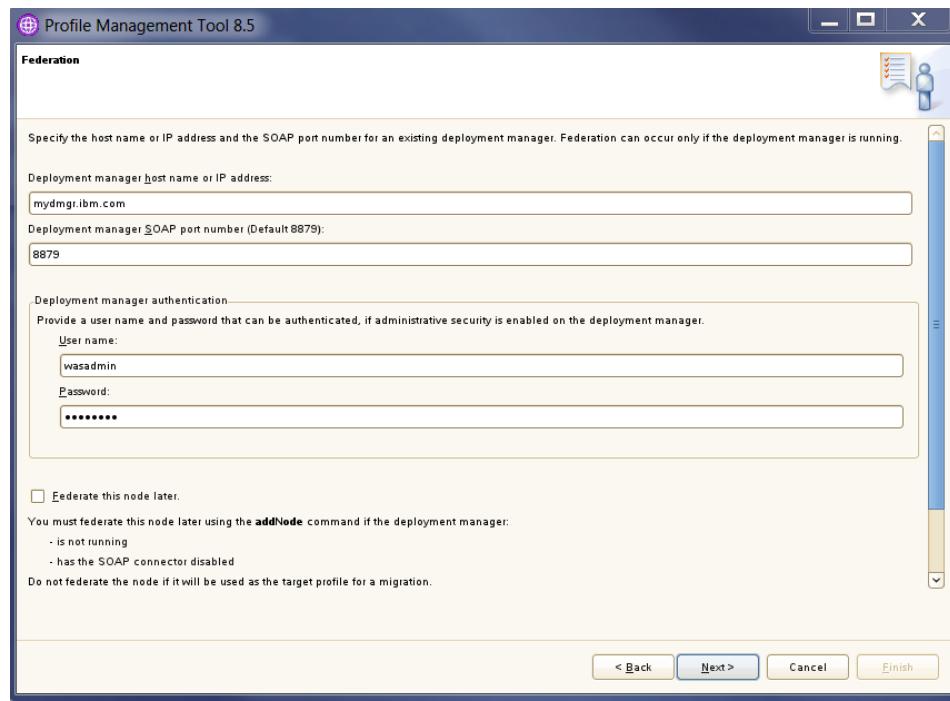
Example: feb86Node01

13. Enter/Verify the fully qualified host name for the environment.

Host name: \_\_\_\_\_

Example: feb86.ibm.com

14. Click Next



15. Fill in the following information

Deployment manager host name or IP address: \_\_\_\_\_

Deployment manager SOAP port number: \_\_\_\_\_

Deployment manager authentication

User name: \_\_\_\_\_

Password: \_\_\_\_\_

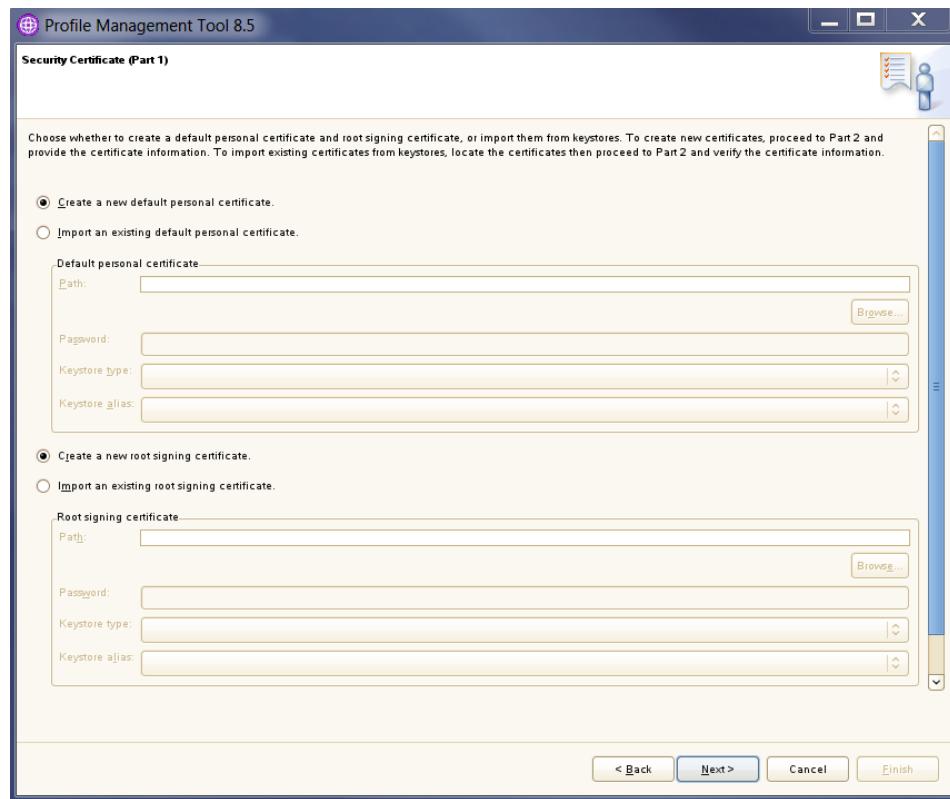
Example:

Deployment manager host name or IP address: mydmgr.ibm.com  
Deployment manager SOAP port number : 8879

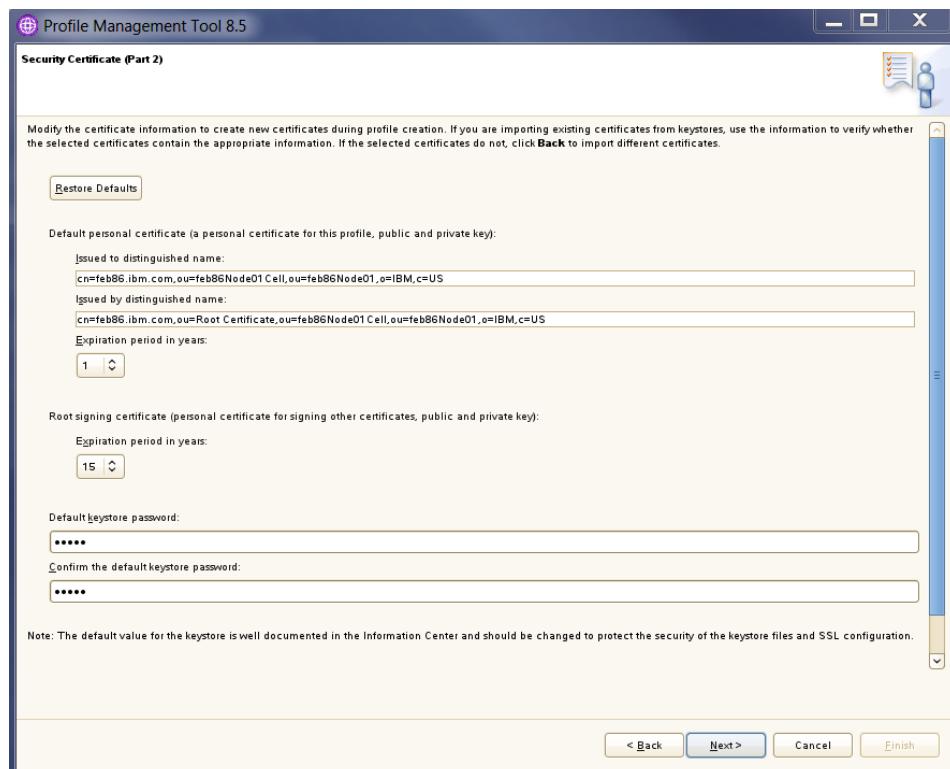
Deployment manager authentication

User name: wasadmin  
Password: XXXX

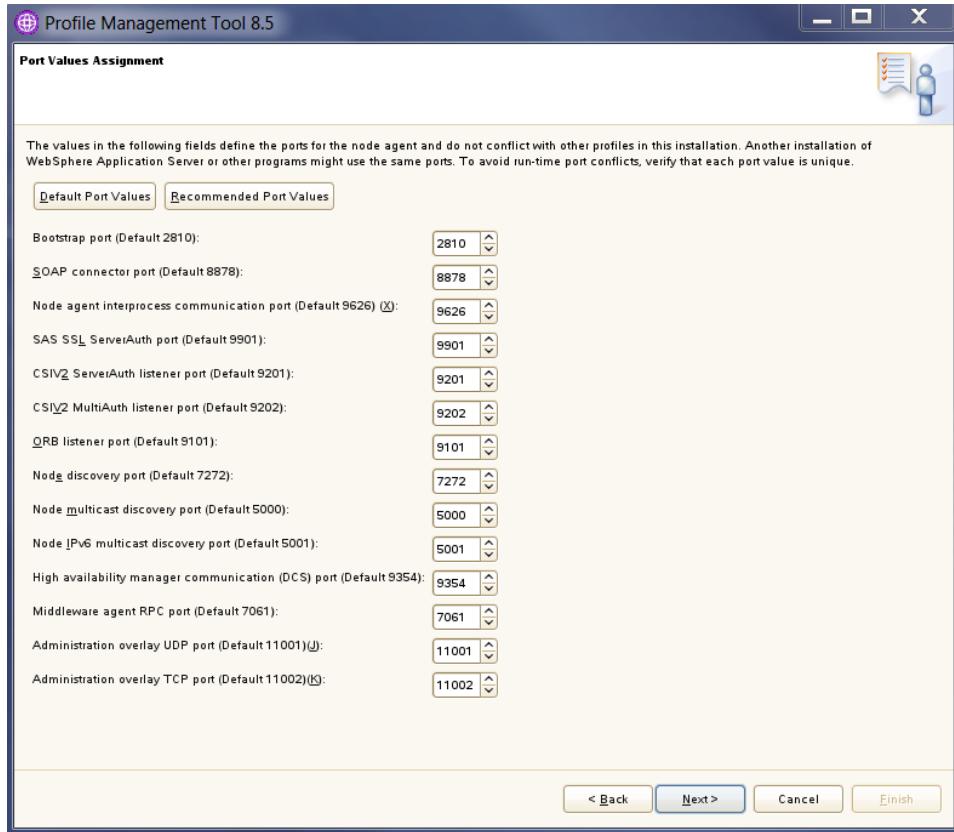
16. Click Next



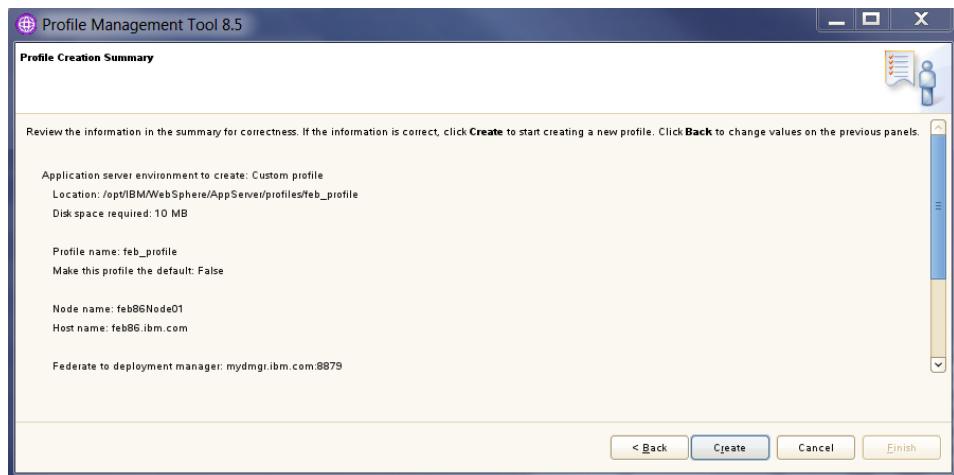
17. Signing certificates can be imported for the profile if this is a requirement. Otherwise, Click Next



18. The certificate information can be updated at this time if required.
19. Click Next

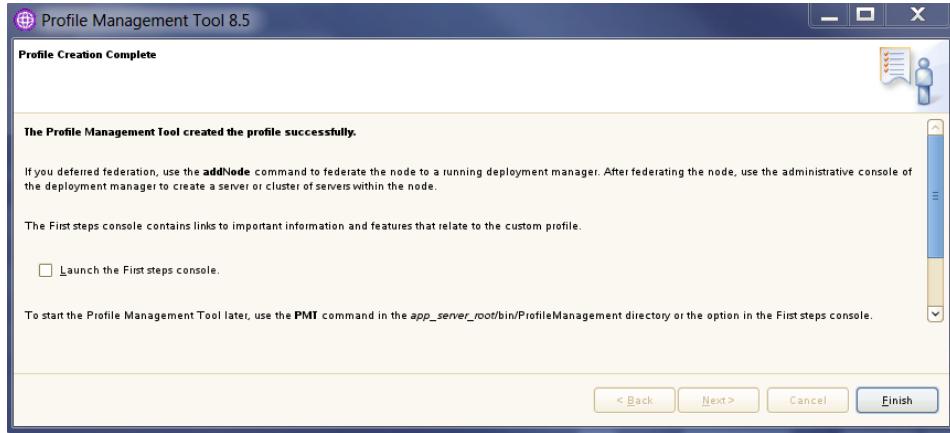


20. If there are any requirements for ports, the ports can be updated at this time.
21. Click Next



22. Review the Summary information. If anything is incorrect, click back and fix the problem.

23. If everything is correct, click Create



24. By default, “Launch the First steps console” were checked. In the example, uncheck “Launch the First steps console” was done because it was not required for the completion of the profile.

25. Click Finish

### 7.3.2 Command Line

#### 1. Verify/Start the Deployment Manager

```
<DMGR_PROFILE>/bin/startManager. (bat/sh)
```

Example:

WIN	E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin\startManager.bat
LINUX	/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh
AIX	/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh

#### 2. Login to the IBM Forms Experience Builder file system

#### 3. Run the following command to create the IBM Forms Experience Builder profile and integrated it to the Deployment Manager

```
<WAS_HOME>/bin/manageprofiles. (bat/sh) -create -templatePath  
<WAS_HOME>/profileTemplates/managed -profileName <PROFILE_NAME> -  
profilePath <PROFILE_PATH> -hostName <HOSTNAME> -nodeName <NODENAME> -  
dmgrHost <DMGR_HOSTNAME> -dmgrPort <DMGR_SOAP_PORT>
```

NOTE: If the Deployment Manager is secured add the following attribute

```
-dmgrAdminUserName <WASADMIN>  
-dmgrAdminPassword <WASPWD>
```

IBM Forms Experience Builder requires the WebSphere Application Server to be secured. Security does not have to be set during the profile creation but will be

required before installation. It can be secured to an external user repository after the profile is created. In the example below, the Deployment Manager was secured

#### Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\bin\manageprofiles.bat -create -templatePath  
E:\IBM\WebSphere\AppServer\profileTemplates\managed -profileName  
feb_profile -profilePath  
E:\IBM\WebSphere\AppServer\profiles\feb_profile -hostName feb86.ibm.com  
-nodeName feb86Node01 -dmgrHost mydmgr.ibm.com -dmgrPort 8879 -  
dmgrAdminUserName wasadmin -dmgrAdminPassword XXXX
```

#### Example: LINUX

```
/opt/IBM/WebSphere/AppServer/bin/manageprofiles.sh -create -  
templatePath /opt/IBM/WebSphere/AppServer/profileTemplates/managed -  
profileName feb_profile -profilePath  
/opt/IBM/WebSphere/AppServer/profiles/feb_profile -hostName  
feb86.ibm.com -nodeName feb86Node01 -dmgrHost mydmgr.ibm.com -dmgrPort  
8879 -dmgrAdminUserName wasadmin -dmgrAdminPassword XXXX
```

#### Example: AIX

```
/usr/IBM/WebSphere/AppServer/bin/manageprofiles.sh -create -  
templatePath /usr/IBM/WebSphere/AppServer/profileTemplates/managed -  
profileName feb_profile -profilePath  
/usr/IBM/WebSphere/AppServer/profiles/feb_profile -hostName  
feb86.ibm.com -nodeName feb86Node01 -dmgrHost mydmgr.ibm.com -dmgrPort  
8879 -dmgrAdminUserName wasadmin -dmgrAdminPassword XXXX
```

#### 4. Verify the results

```
INSTCONFSUCCESS: Success: Profile <PROFILE_NAME> now exists. Please  
consult <FEB PROFILE>/logs/AboutThisProfile.txt for more information  
about this profile.
```

#### Example: WINDOWS

```
INSTCONFSUCCESS: Success: Profile feb_profile now exists. Please  
consult  
E:\IBM\WebSphere\AppServer\profiles\feb_profile\logs\AboutThisProfile.t  
xt for more information about this profile.
```

#### Example: LINUX

```
INSTCONFSUCCESS: Success: Profile feb_profile now exists. Please  
consult  
/opt/IBM/WebSphere/AppServer/profiles/feb_profile/logs/AboutThisProfile  
.txt for more information about this profile.
```

#### Example: AIX

```
INSTCONFSUCCESS: Success: Profile AppSrv01 now exists. Please consult  
/usr/IBM/WebSphere/AppServer/profiles/feb_profile/logs/AboutThisProfile  
.txt for more information about this profile.
```

## 7.4 Create Cluster

### 1. Verify/Start the Deployment Manager

```
<DMGR_PROFILE>/bin/startManager.(bat/sh)
```

Example:

WIN	E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin\startManager.bat
LINUX	/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh
AIX	/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh

### 2. Open a browser and set the URL to the Deployment Manager URL

```
https://<DMGR_HOSTNAME>:<PORT>/ibm/console
```

Example:

```
https://mydmgr.ibm.com:9043/ibm/console
```

The screenshot shows the WebSphere application server clusters management interface. On the left, there's a navigation sidebar with various categories like Welcome, Guided Activities, Servers, Clusters, DataPower, Core Groups, Applications, Jobs, Services, Resources, Runtime Operations, Security, Operational policies, Environment, System administration, Users and Groups, Monitoring and Tuning, Troubleshooting, Service Integration, and UDDI. The main content area is titled "WebSphere application server clusters" and contains a table with one row labeled "None". At the bottom of the page, there are buttons for New..., Delete, Start, Stop, Ripplestart, and ImmediateStop.

3. Navigate to Servers > Clusters > WebSphere application server clusters
4. Click New

The screenshot shows the "Create a new cluster" wizard. The left sidebar lists steps: Step 1: Enter basic cluster information (highlighted), Step 2: Create first cluster member, Step 3: Create additional cluster members, and Step 4: Summary. The main panel is titled "Enter basic cluster information" and contains a field for "Cluster name" with "FEBCluster" entered. There are two checkboxes: one checked ("Prefer local. Specifies whether enterprise bean requests will be routed to the node on which the client resides when possible.") and one unchecked ("Configure HTTP session memory-to-memory replication"). At the bottom are "Next" and "Cancel" buttons.

5. In the "Cluster name" field, enter a Forms Cluster Name

Cluster name = \_\_\_\_\_

Example: FEBCluster

6. Click Next

The screenshot shows the 'Create a new cluster' wizard, Step 2: Create first cluster member. The 'Member name' field contains 'feb01'. The 'Select node' dropdown is set to 'feb86Node01(ND 8.5.5.0)'. The 'Weight' field is set to '2'. The 'Generate unique HTTP ports' checkbox is checked. Under 'Select basis for first cluster member', the first option 'Create the member using an application server template' is selected, with 'default' chosen from the dropdown. Navigation buttons 'Previous', 'Next', and 'Cancel' are at the bottom.

7. Fill in the following information

Member name = \_\_\_\_\_

Select node = \_\_\_\_\_

Weight = \_\_\_\_\_

Example:

```
Member name = feb01
Select node = feb86Node01
Weight = 2
```

8. Click Next

Create a new cluster

**Create a new cluster**

Step 1: Enter basic cluster information  
 Step 2: Create first cluster member  
 → **Step 3: Create additional cluster members**  
 Step 4: Summary

**Create additional cluster members**

Enter information about this new cluster member, and click Add Member to add this cluster member to the member list. A server configuration template is created from the first member, and stored as part of the cluster data. Additional cluster members are copied from this template.

\* Member name

Select node

\* Weight  (0..100)

Generate unique HTTP ports

Use the Edit function to modify the properties of a cluster member in this list. Use the Delete function to remove a cluster member from this list. You are not allowed to edit or remove the first cluster member.

Edit	Delete			
Select	Member name	Nodes	Version	Weight
	feb01	feb86Node01	ND 8.5.5.0	2
Total 1				

9. If you would like to add another server to the 2<sup>nd</sup> node you can do it now by click filling in the Member name field and clicking Add member. This can be done at another time.

10. Click Next

Create a new cluster

**Create a new cluster**

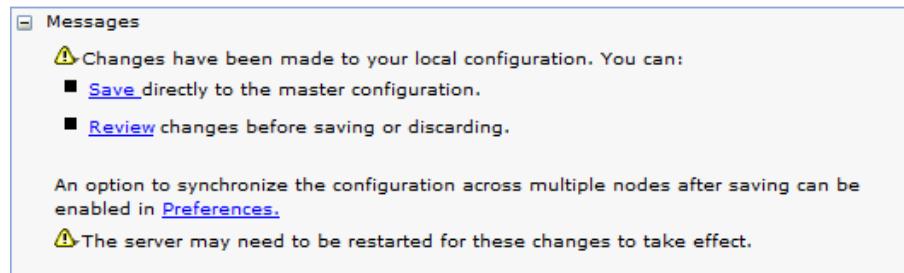
Step 1: Enter basic cluster information  
 Step 2: Create first cluster member  
 Step 3: Create additional cluster members  
 → **Step 4: Summary**

**Summary**

Summary of actions:

Options	Values
Cluster Name	FEBCluster
Core Group	DefaultCoreGroup
Node group	DefaultNodeGroup
Prefer local	true
Configure HTTP session memory-to-memory replication	false
Server name	feb01
Node	feb86Node01(ND 8.5.5.0)
Weight	2
Clone Template	default
Clone Basis	Create the member using an application server template.
Select how the server resources are promoted in the cluster.	cluster
Generate unique HTTP ports	true

## 11. Click Finish



## 12. Click Save to save to the master configuration

The screenshot shows the 'WebSphere application server clusters' management interface. The page title is 'WebSphere application server clusters'. The main content area displays the following information:

Use this page to change the configuration settings for a cluster. A server cluster consists of a group of application servers. If one of the member servers fails, requests will be routed to other members of the cluster. Learn more about this task in a [guided activity](#). A guided activity provides a list of task steps and more general information about the topic.

**Preferences**

New... Delete Start Stop Ripplestart ImmediateStop

Select Name Status

You can administer the following resources:

<input type="checkbox"/> FEBCluster	X
-------------------------------------	---

Total 1

## 8 IBM Forms Experience Builder

### 8.1 Install

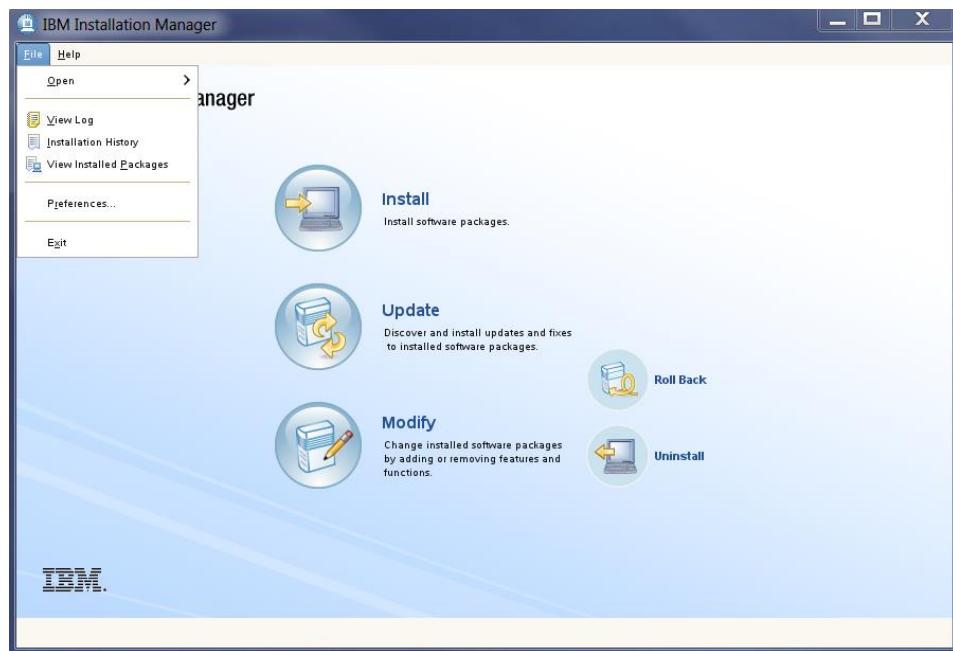
If you are using the graphical user interface to install on a UNIX environment, verify the UNIX environment is configured to display a remote graphical user interface.

1. Login to the IBM Forms Experience Builder file system as an administrator/root
2. Start the Installation Manager

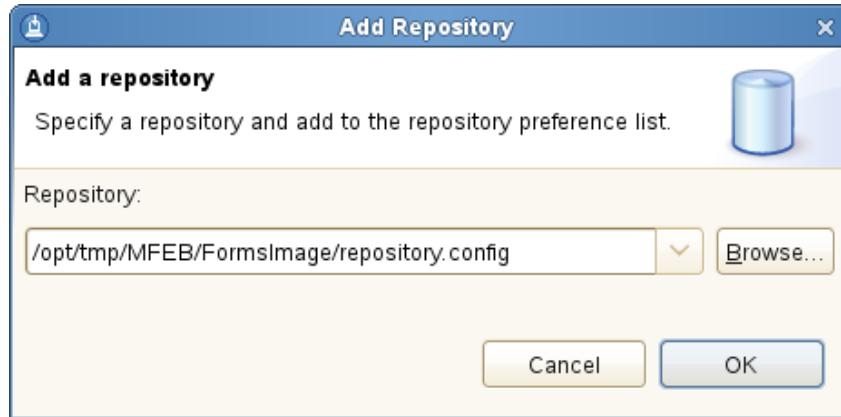
<IIM>/eclipse/IBMIM

Example:

WIN	E:\IBM\InstallationManager\eclipse\IBMIM
LINUX	/opt/IBM/InstallationManager/eclipse/IBMIM
AIX	/usr/IBM/InstallationManager/eclipse/IBMIM



3. Select File > Preferences...
4. Remove or uncheck all Repository
5. Click Add Repository...



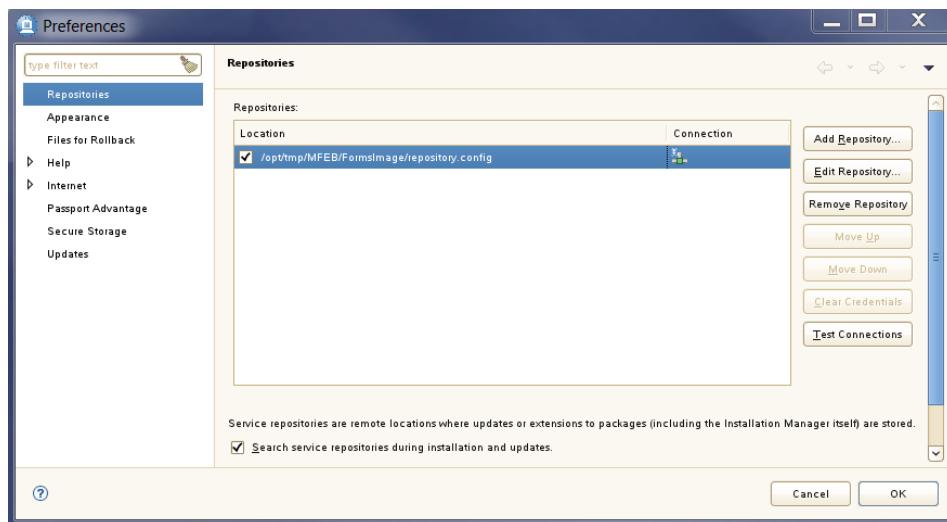
6. Enter/Browse to the repository.config of the IBM Forms Experience Builder located in the FormsImage of the media files

`<MFEB>/FormsImage/repository.config`

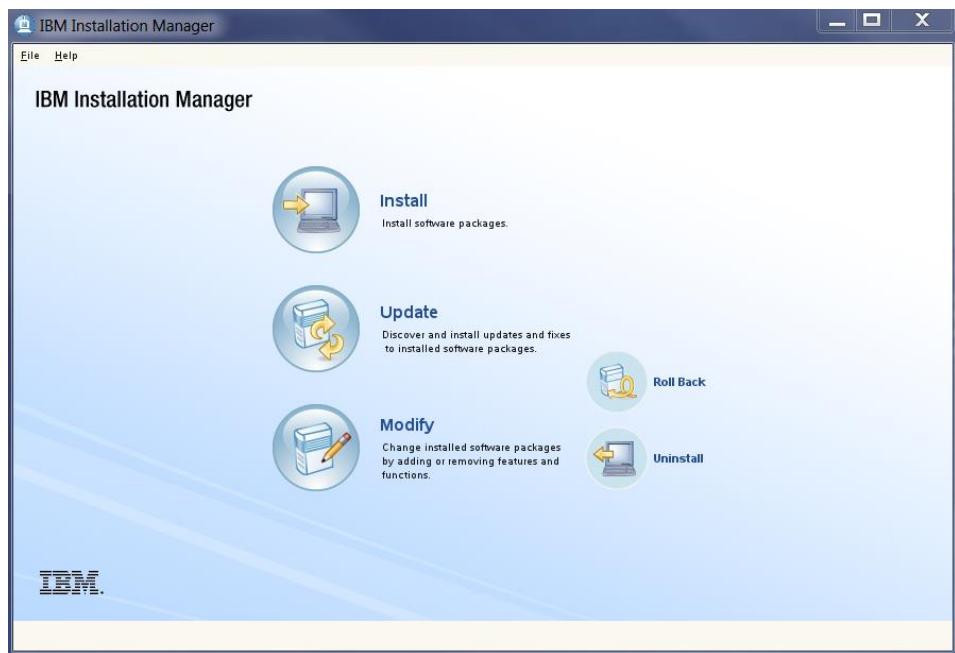
#### Example

WIN	<code>F:\MFEB\FormsImage\repository.config</code>
LINUX	<code>/opt/tmp/MFEB/FormsImage/repository.config</code>
AIX	<code>/usr/tmp/MFEB/FormsImage/repository.config</code>

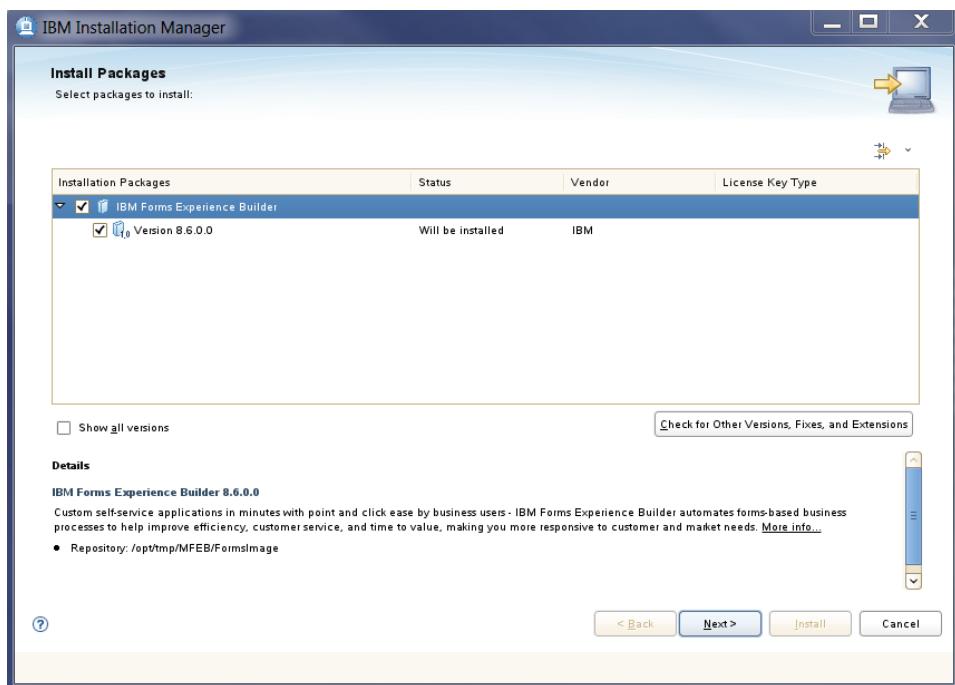
7. Click OK



8. Click OK



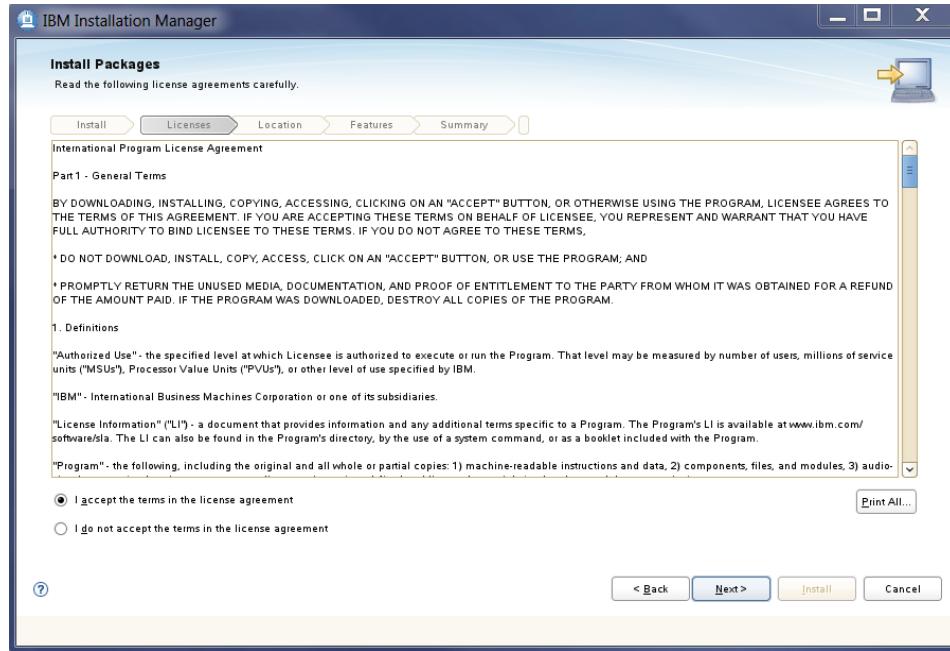
## 9. Click Install



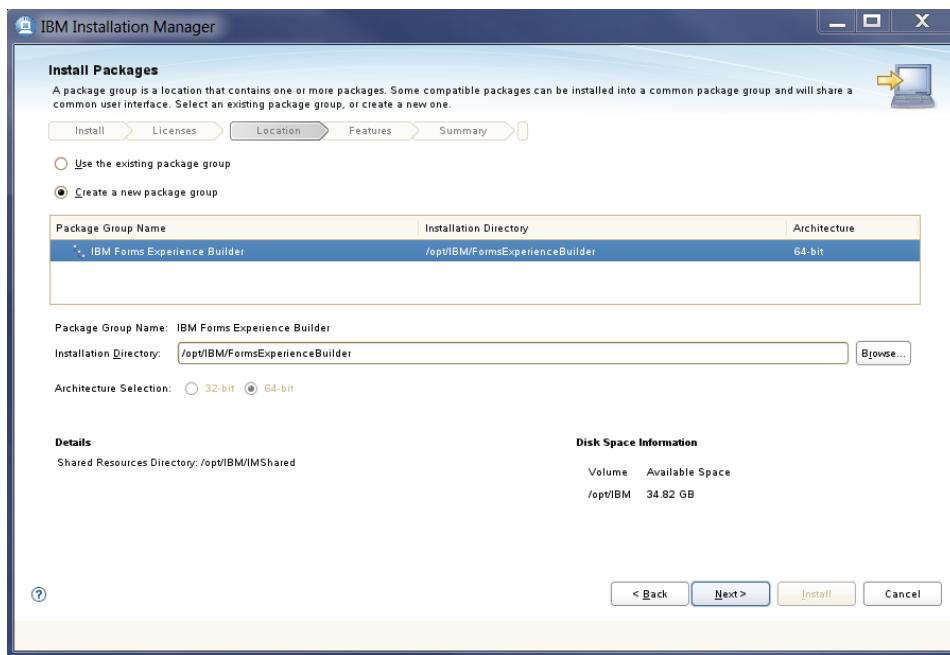
## 10. Under Installation Packages, check the following Packages

IBM Forms Experience Builder  
Version 8.6.0.0

## 11. Click Next



12. Review the “International Program License Agreement”
13. Select “I accept the terms in the license agreement”
14. Click Next



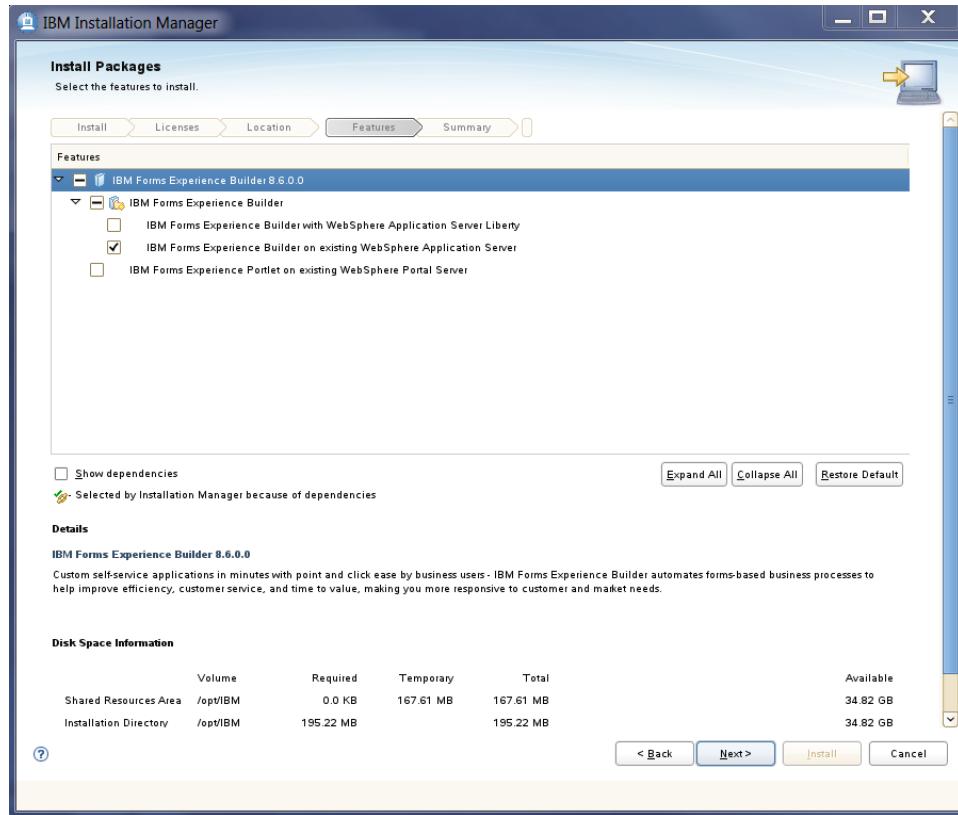
15. Under “Package Group Name”, select “IBM Forms Experience Builder”
16. Enter/Verify the installation directory for the IBM Forms Experience Builder

Installation Directory: \_\_\_\_\_

**Example:**

WIN	E:\IBM\FormsExperienceBuilder
LINUX	/opt/IBM/FormsExperienceBuilder
AIX	/usr/IBM/FormsExperienceBuilder

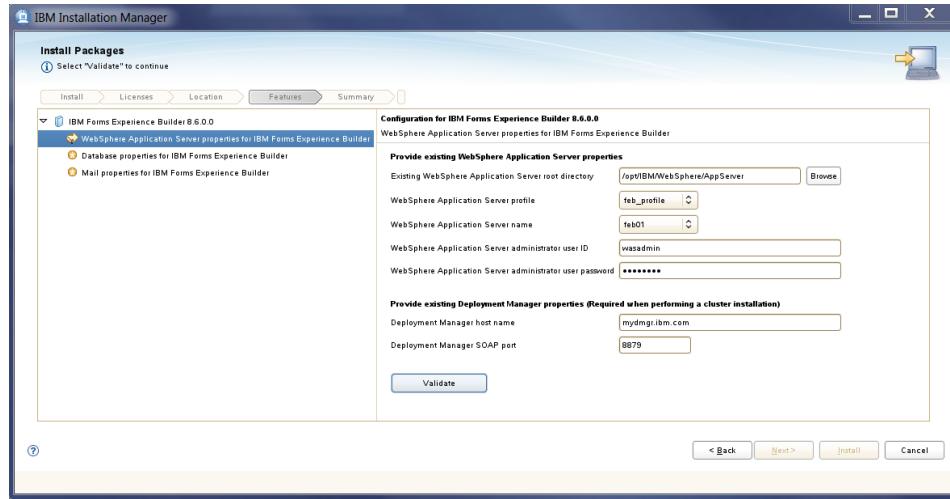
**17. Click Next**



**18. Check/Verify the following Features**

- IBM Forms Experience Builder 8.6.0.0
- IBM Forms Experience Builder
  - IBM Forms Experience Builder on existing WebSphere Application Server

**19. Click Next**



20. Verify/Browse to the WebSphere Application Server root directory

Example:

WIN	E:\IBM\WebSphere\Appserver
LINUX	/opt/IBM/WebSphere/AppServer
AIX	/usr/IBM/WebSphere/AppServer

21. Select the WebSphere Application Server profile. This was created during the profile creation

Example: feb\_profile

22. Select the WebSphere Application Server name. This was created during the profile creation

Example: feb01

23. Enter the WebSphere Application Server Administrator User ID and password

Example: wasadmin/XXXX

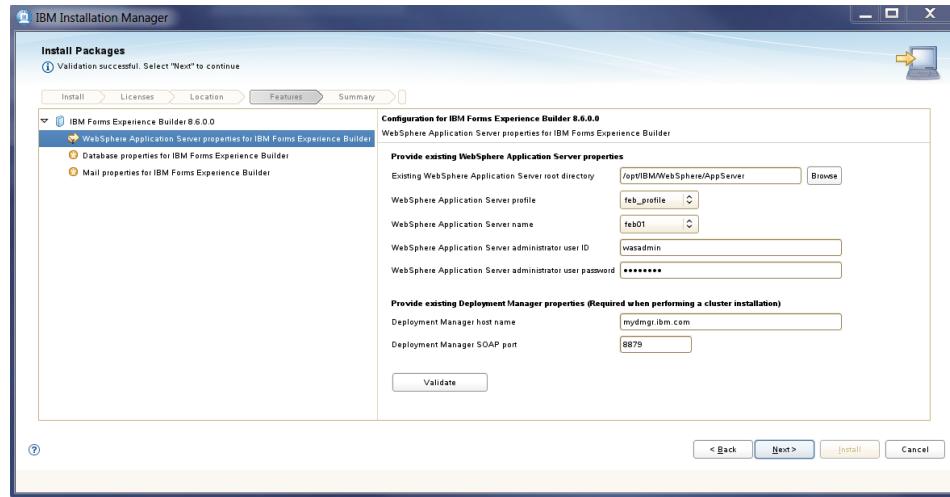
24. Verify/Enter the Deployment Manager host name

Example: mydmgr.ibm.com

25. Verify/Enter the Deployment manager SOAP port

Example: 8879

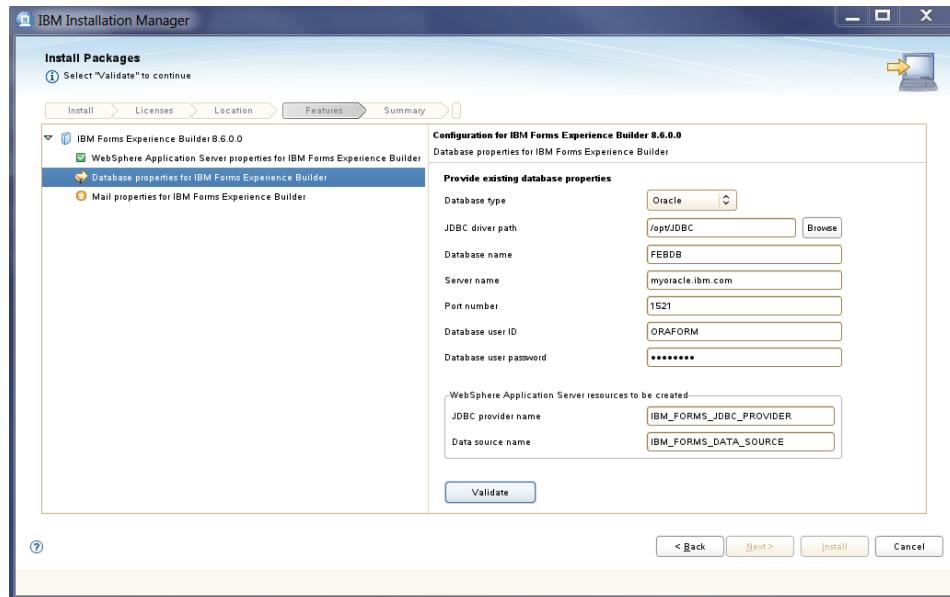
26. Click Validate



27. After the Validate is complete, the following message will appear under the "Install Packages" title

**Validation successful. Select "Next" to continue**

28. Click Next



29. Database type, select Oracle

30. JDBC driver path, Browse to the Oracle driver directory

Example:

WIN	E:\JDBC
LINUX	/opt/JDBC
AIX	/usr/JDBC

31. Database name, enter the database name

Example: FEBDB

32. Server name, enter the Oracle database server name

Example: myoracle.ibm.com

33. Port number, enter the Oracle port. By default it is 1521.

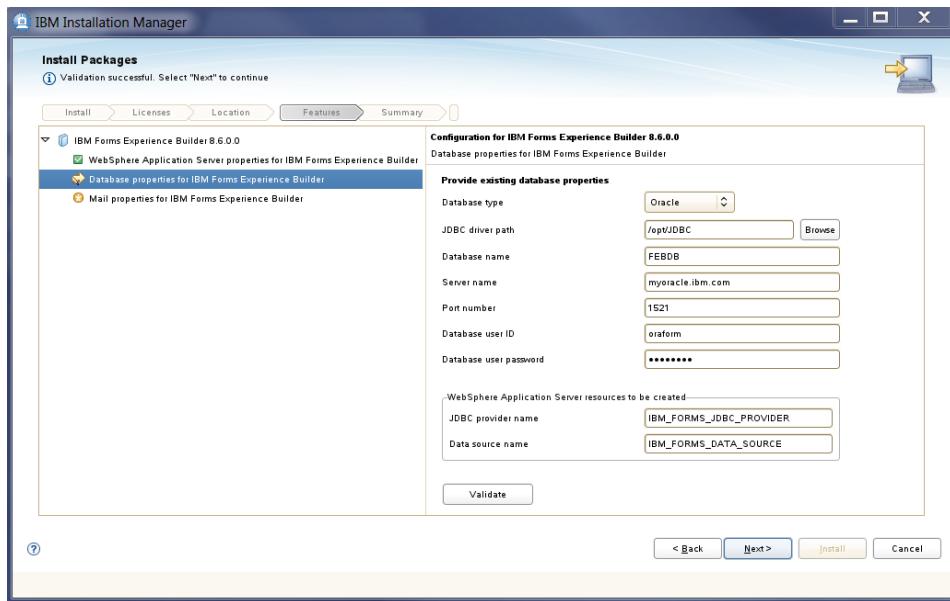
Example: 1521

34. Database user ID, enter the Oracle database user

Example: ORAFORM

35. Database user password, enter the Oracle database password

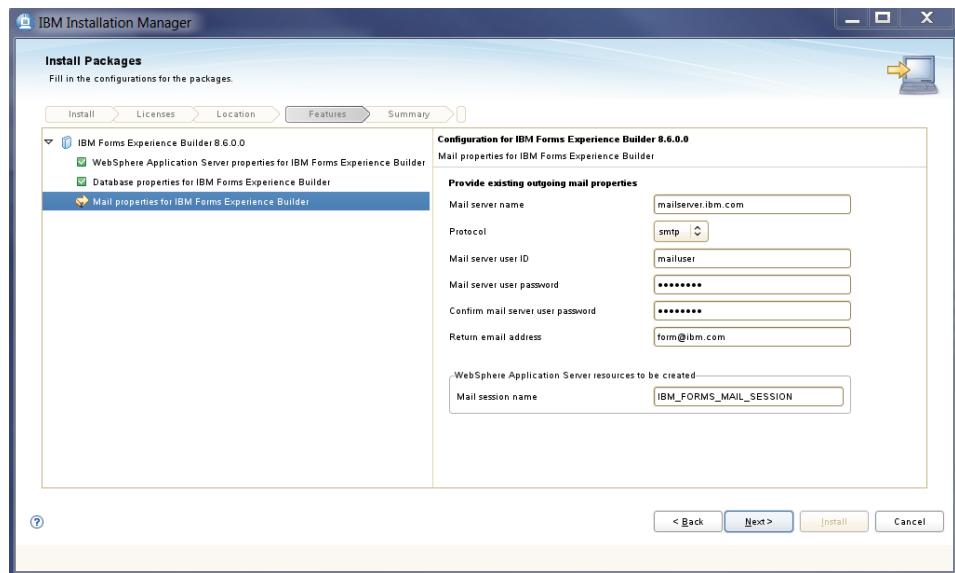
36. Click Validate



37. After the Validate is complete, the following message will appear under the Install Package title:

Validation successful. Select "Next" to continue

38. Click Next



39. Enter the Mail server hostname

Example: mailserver.ibm.com

40. Select the mail server protocol

Example: smtp

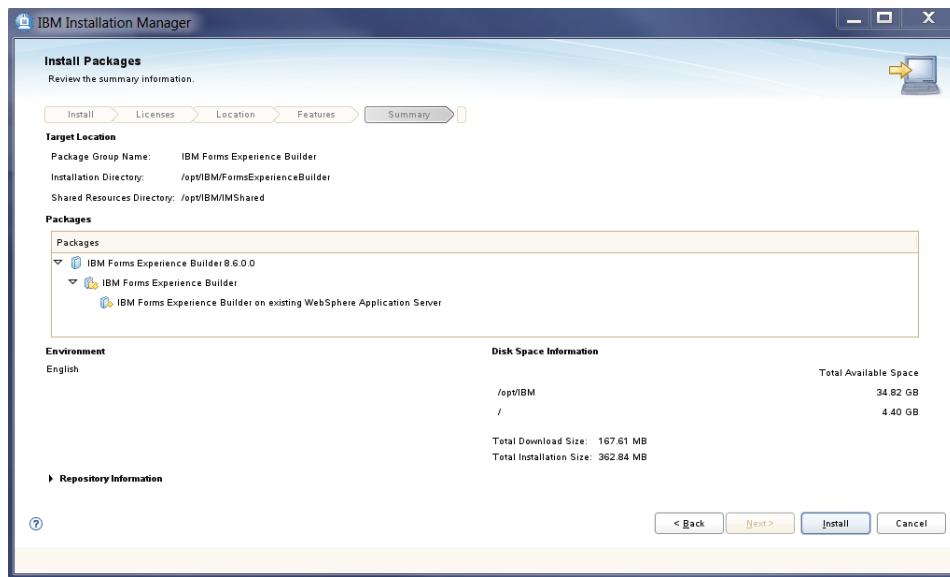
41. Enter the Mail server user ID and password

Example: mailuser/XXXX

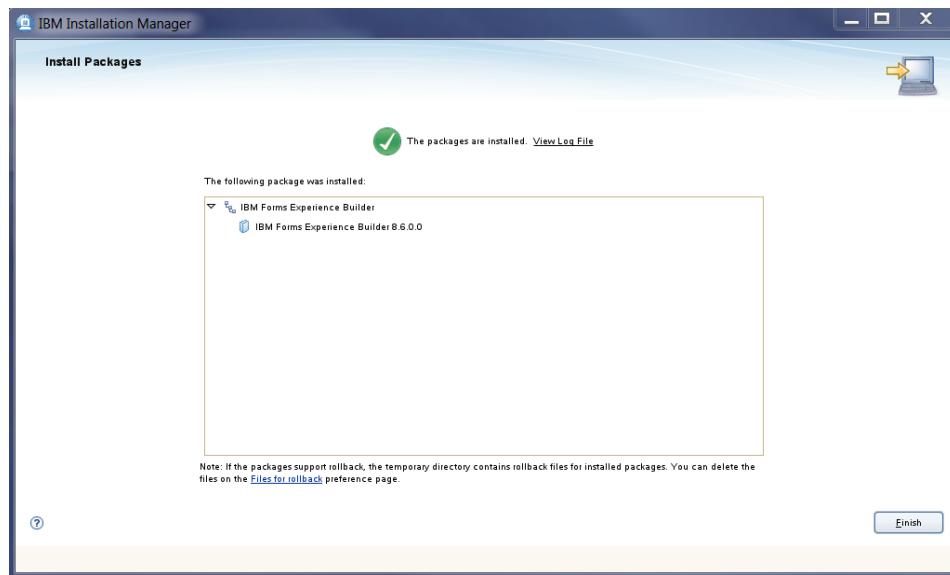
42. Enter the “Return email address”

Example: form@us.ibm.com

43. Click Next



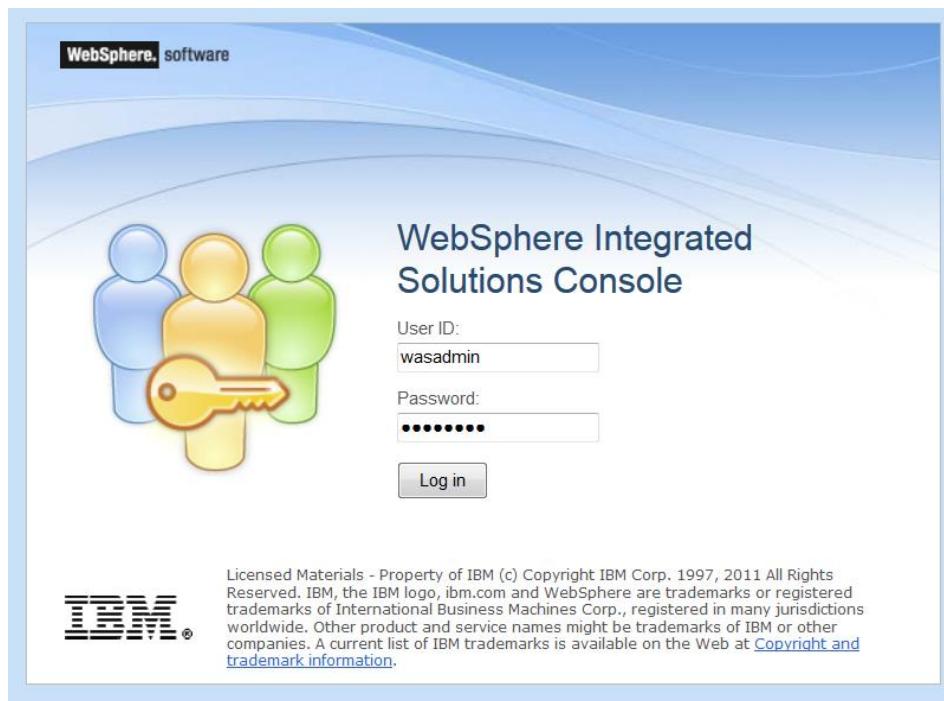
44. Click Install



45. Click Finish

## 8.2 Configuration

### 8.2.1 Forms Experience Builder AdminAlias

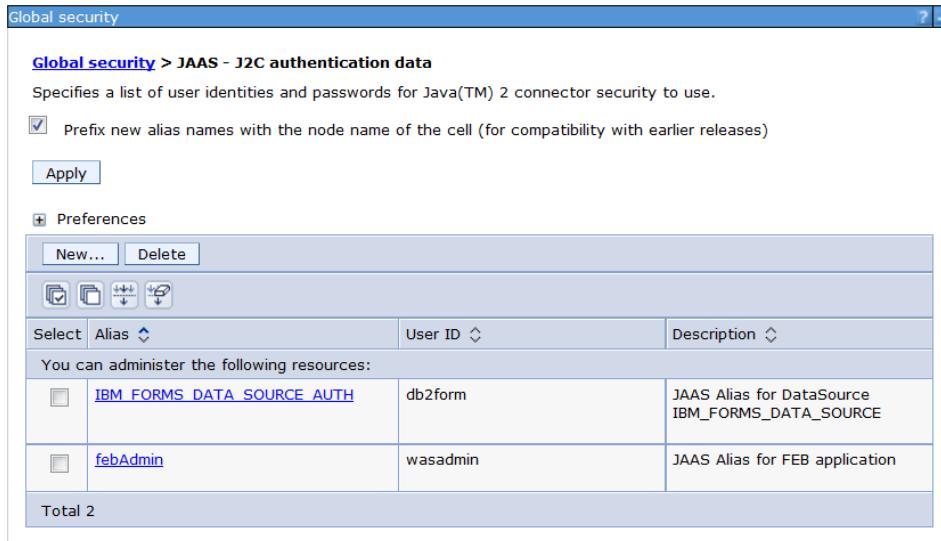


1. Open a browser and set the url to the WebSphere Application Server console  
`https://<HOSTNAME>:<PORT>/ibm/console`

**Example:**

`https://feb86.ibm.com:9043/ibm/console`

2. Navigate to Security > Global security
3. Under Authentication, expand “Java Authentication and Authorization Service”
4. Click J2C authentication data



- Verify the setting for the adminAlias (febAdmin) is created and set

### 8.2.2 Builder\_config.properties

[http://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/co\\_configuring\\_the\\_properties\\_file.html](http://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/co_configuring_the_properties_file.html)

- Login to the IBM Forms Experience Builder file system
- Open the Builder\_config.properties file with an editor

```
<FEB_DEFAULT>/extensions/Builder_config.properties
```

Example:

WIN	<code>C:\ibm\Forms\extensions\Builder_config.properties</code>
UNIX	<code>/opt/ibm/Forms/extensions/Builder_config.properties</code>

- Verify the Forms Experience Builder admin alias. The admin alias should match what is located in the WebSphere Application Server console

```
ibm.was.MemberManager.adminAlias = febAdmin
```

NOTE: Use the following link below to review other optional changes to the configuration file

[https://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/co\\_configuration\\_properties.html](https://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/co_configuration_properties.html)

- If the extensions directory needs to be moved to a different location, update the fsp.properties file using the following instructions in the link below. If the fsp.properties file is updated, the update will need to be done everytime IBM Forms Experience Builder application is updated

[https://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/co\\_configuring\\_the\\_properties\\_file.html](https://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/co_configuring_the_properties_file.html)

### 8.2.3 Service Catalog

1. Login to the IBM Forms Experience Builder file system
2. Create the Service Catalog directory in the Forms default location

```
<FEB_DEFAULT>/ServiceCatalog
```

Example:

WIN	C:\ibm\Forms\ServiceCatalog
UNIX	/opt/ibm/Forms/ServiceCatalog

3. Create a “1” directory located in the ServiceCatalog directory

```
<FEB_DEFAULT>/ServiceCatalog/1
```

Example:

WIN	C:\ibm\Forms\ServiceCatalog\1
UNIX	/opt/ibm/Forms/ServiceCatalog\1

## 8.3 Post Installation – Browser

[http://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/in\\_setting\\_up\\_feb\\_environment.html](http://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/in_setting_up_feb_environment.html)

1. Verify/Start the Deployment Manager

```
<DMGR_PROFILE>/bin/startManager.sh
```

Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin\startManager.bat
```

Example: LINUX

```
/opt/IBM/WebSphere/AppServer/profiles/dmgr01/bin/startManager.sh
```

Example: AIX

```
/usr/IBM/WebSphere/AppServer/profiles/fep_profile/bin/startManager.sh
```

2. Verify/Start the nodeagent

```
<FEB_PROFILE>/bin/startNode.sh
```

Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\profiles\fep_profile\bin\startNode.bat
```

Example: LINUX

```
/opt/IBM/WebSphere/AppServer/profiles/fep_profile/bin/startNode.sh
```

Example: AIX

```
/usr/IBM/WebSphere/AppServer/profiles/fep_profile/bin/startNode.sh
```

3. Verify/Start the IBM Forms Experience Builder server

```
<FEB_PROFILE>/bin/startServer.sh <FEB_SERVER>
```

Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\profiles\feb_profile\bin\  
startServer.bat feb01
```

Example: LINUX

```
/opt/IBM/WebSphere/AppServer/profiles/feb_profile/bin/  
startServer.sh feb01
```

Example: AIX

```
/usr/IBM/WebSphere/AppServer/profiles/feb_profile/bin/  
startServer.sh feb01
```

4. Open a browser and set the URL to the Forms Experience Builder URL

```
http://<HOSTNAME>:<PORT>/forms
```

Example:

```
http://feb86.ibm.com:9080/forms
```

5. If the post steps have not been ran, the following message below will occur.

Click [Setup](#) to start the post steps.

IBM Forms Experience Builder is not completely setup. Until that occurs, all normal requests are disabled.

Click on [Setup](#) to start the setup process.

## IBM Forms Experience Builder Setup

There are two phases that need to be completed in order for IBM Forms Experience Builder to be setup.

### Phase 1: Basic Environment Setup

#### Step 1: Data Source

The data source has been provided and configured.

#### Step 2: Database Tables

The database tables have not been created.  
Click on the Fix button to begin creating the tables. This may take some time.

Fix

### Phase 2: Secured Environment Setup

#### Step 1: Mail Session

The status of the mail session has not yet been determined. All Phase 1 checks must be OK or only a WARNING before it can be determined.

#### Step 2: Application Dependencies

The status of the applications has not yet been determined. All Phase 1 checks must be OK or only a WARNING before it can be determined.

## 6. Click Fix

## IBM Forms Experience Builder Setup

There are two phases that need to be completed in order for IBM Forms Experience Builder to be setup.

### Phase 1: Basic Environment Setup

#### Step 1: Data Source

The data source has been provided and configured.

#### Step 2: Database Tables

The database tables are up-to-date.

Phase 1 no longer has any errors. To proceed to phase 2, you must log in as a user that has been assigned to the AdministrativeUsers role.  
Click on the button to proceed.

Continue to Secured Setup

### Phase 2: Secured Environment Setup

#### Step 1: Mail Session

The status of the mail session has not yet been determined. All Phase 1 checks must be OK or only a WARNING before it can be determined.

#### Step 2: Application Dependencies

The status of the applications has not yet been determined. All Phase 1 checks must be OK or only a WARNING before it can be determined.

7. After the Fix task is complete, click “Continue to Secured Setup”



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Program. By using the Program you agree to these terms.

8. Login with the WebSphere Application Server Administrative user and password that was created during the creation of the profile

The image shows the setup screen for IBM Forms Experience Builder. It starts with a header "IBM Forms Experience Builder Setup" and a note that there are two phases: "Phase 1: Basic Environment Setup" and "Phase 2: Secured Environment Setup". Under Phase 1, there are two sections: "Step 1: Data Source" and "Step 2: Database Tables", each with a green checkmark indicating they are completed. Under Phase 2, there are two sections: "Step 1: Mail Session" and "Step 2: Application Dependencies", each also with a green checkmark. At the bottom is a "Continue to Manager" button.

9. Click “Continue to Manager”

The screenshot shows the IBM Forms interface with the following details:

- Header:** IBM Forms, Use, Manage, wasadmin, Log Out, Help, IBM Forms.
- Section:** Use Applications
- Search:** Search by Name (with input field and search icon), Search by Tag (with input field and search icon).
- Sort:** Sort by: Name
- Pagination:** Shows 5 | 10 | 20 | 30 items, Previous | Next
- View Options:** View as cloud | list | all
- Bottom Links:** Help, About, IBM Forms on ibm.com, Feedback.

## 8.4 Post Installation – Database

[https://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/in\\_oracle\\_creating\\_db.html](https://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/in_oracle_creating_db.html)

This step is only needed when creating an Oracle user with Limited Permission

1. Login to the Oracle Database Server
2. Login to Oracle SQLPlus using the SYS DBA role sysdba

```
sqlplus <SYS_USER>/<PASSWORD>@<FEBDB> as sysdba
```

Example:

```
sqlplus sys/XXXX@FEBDB as sysdba
```

3. Run the following commands

```
REVOKE CREATE ANY PROCEDURE FROM <FEBDB_ROLE>;
GRANT EXECUTE ON FREEDOM.EXECUTEDDL_PRO TO <FEBDB_ROLE>;
```

Example:

```
REVOKE CREATE ANY PROCEDURE FROM ORAFORM_ROLE;
GRANT EXECUTE ON FREEDOM.EXECUTEDDL_PRO TO ORAFORM_ROLE;
```

## 9 WebServer

A WebServer is not required but if a webserver is preferred the following section will help with the installation and configuration of the IBM HTTP Server, WebSphere Pluginm and WebSphere Customization Tool.

### 9.1 *Install*

1. Login to the IBM HTTP Server file system
2. Run the following command to install IBM HTTP Server

```
<IIM_HOME>/eclipse/tools/imcl install com.ibm.websphere.IHS.v85_8.5.5 -  
silent -acceptLicense -installationDirectory <IHS_HOME> -repositories  
<MWASSUPP>/repository.config -properties  
user.ihc.httpPort=<PORT_NUMBER> -sharedResourcesDirectory <IMSHARED> -  
log <LOGFILE>
```

#### Example: WINDOWS

```
E:\IBM\InstallationManager\eclipse\tools\imcl install  
com.ibm.websphere.IHS.v85 -silent -acceptLicense -installationDirectory  
E:\IBM\HTTPServer -repositories F:\MWASSUPP\repository.config -  
properties user.ihc.httpPort=80 -sharedResourcesDirectory  
E:\IBM\IMShared -log E:\IBM\IHS_Install.log
```

#### Example: LINUX

```
/opt/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.IHS.v85 -silent -acceptLicense -installationDirectory  
/opt/IBM/HTTPServer -repositories /opt/tmp/MWASSUPP/repository.config -  
properties user.ihc.httpPort=80 -sharedResourcesDirectory  
/opt/IBM/IMShared -log /opt/IBM/IHS_Install.log
```

#### Example: AIX

```
/usr/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.IHS.v85 -silent -acceptLicense -installationDirectory  
/usr/IBM/HTTPServer -repositories /usr/tmp/MWASSUPP/repository.config -  
properties user.ihc.httpPort=80 -sharedResourcesDirectory  
/usr/IBM/IMShared -log /usr/IBM/IHS_Install.log
```

3. Verify the installed message

```
Installed com.ibm.websphere.IHS.v85_8.5.5000.20130514_1044 to the  
/opt/IBM/HTTPServer directory.
```

#### Example: WINDOWS

```
Installed com.ibm.websphere.IHS.v85_8.5.5000.20130514_1044 to the  
E:\IBM\HTTPServer directory.
```

#### Example: LINUX

```
Installed com.ibm.websphere.IHS.v85_8.5.5000.20130514_1044 to the  
/opt/IBM/HTTPServer directory.
```

**Example: AIX**

```
Installed com.ibm.websphere.IHS.v85_8.5.5000.20130514_1044 to the  
/usr/IBM/HTTPServer directory.
```

**4. Run the following command to install WebSphere Plugin**

```
<IIM_HOME>/eclipse/tools/imcl install com.ibm.websphere.PLG.v85 -silent  
-acceptLicense -installationDirectory <PLG_HOME> -repositories  
<MWASSUPP>/repository.config -sharedResourcesDirectory <IMSHARED> -log  
<LOGFILE>
```

**Example: WINDOWS**

```
E:\IBM\InstallationManager\eclipse\tools\imcl install  
com.ibm.websphere.PLG.v85 -silent -acceptLicense -installationDirectory  
E:\IBM\WebSphere\Plugins -repositories F:\MWASSUPP\repository.config -  
sharedResourcesDirectory E:\IBM\IMShared -log E:\IBM\PLG_install.log
```

**Example: LINUX**

```
/opt/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.PLG.v85 -silent -acceptLicense -installationDirectory  
/opt/IBM/WebSphere/Plugins -repositories  
/opt/tmp/MWASSUPP/repository.config -sharedResourcesDirectory  
/opt/IBM/IMShared -log /opt/IBM/PLG_install.log
```

**Example: AIX**

```
/usr/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.PLG.v85 -silent -acceptLicense -installationDirectory  
/usr/IBM/WebSphere/Plugins -repositories  
/usr/tmp/MWASSUPP/repository.config -sharedResourcesDirectory  
/usr/IBM/IMShared -log /opt/usr/PLG_install.log
```

**5. Verify the installed message**

```
Installed com.ibm.websphere.PLG.v85_8.5.5000.20130514_1044 to the  
<PLUGINS_HOME> directory
```

**Example: WINDOWS**

```
Installed com.ibm.websphere.PLG.v85_8.5.5000.20130514_1044 to the  
E:\IBM\WebSphere\Plugins directory
```

**Example: LINUX**

```
Installed com.ibm.websphere.PLG.v85_8.5.5000.20130514_1044 to the  
/opt/IBM/WebSphere/Plugins directory
```

**Example: AIX**

```
Installed com.ibm.websphere.PLG.v85_8.5.5000.20130514_1044 to the  
/usr/IBM/WebSphere/Plugins directory
```

**6. Run the following command to install WebSphere Customization Tool**

```
<IIM_HOME>/eclipse/tools/imcl install com.ibm.websphere.WCT.v85 -silent  
-acceptLicense -installationDirectory <WCT_HOME> -repositories  
<MWASSUPP>/repository.config -sharedResourcesDirectory <IMSHARED> -log  
<LOGFILE>
```

#### Example: WINDOWS

```
E:\IBM\InstallationManager\eclipse\tools\imcl.bat install  
com.ibm.websphere.WCT.v85 -silent -acceptLicense -installationDirectory  
E:\IBM\WebSphere\Tools -repositories E:\tmp\MWASSUPP\repository.config  
-sharedResourcesDirectory E:\IBM\IMShared -log E:\IBM\WCT_install.log
```

#### Example: LINUX

```
/opt/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.WCT.v85 -silent -acceptLicense -installationDirectory  
/opt/IBM/WebSphere/Tools -repositories  
/opt/tmp/MWASSUPP/repository.config -sharedResourcesDirectory  
/opt/IBM/IMShared -log /opt/IBM/WCT_install.log
```

#### Example: AIX

```
/usr/IBM/InstallationManager/eclipse/tools/imcl install  
com.ibm.websphere.WCT.v85 -silent -acceptLicense -installationDirectory  
/usr/IBM/WebSphere/Tools -repositories  
/usr/tmp/MWASSUPP/repository.config -sharedResourcesDirectory  
/usr/IBM/IMShared -log /usr/IBM/WCT_install.log
```

#### 7. Verify the installed message

```
Installed com.ibm.websphere.WCT.v85_8.5.5000.20130514_1044 to the  
<WCT_HOME> directory
```

#### Example: WINDOWS

```
Installed com.ibm.websphere.WCT.v85_8.5.5000.20130514_1044 to the  
E:\IBM\WebSphere\Tools directory.
```

#### Example: LINUX

```
Installed com.ibm.websphere.WCT.v85_8.5.5000.20130514_1044 to the  
/opt/IBM/WebSphere/Tools directory.
```

#### Example: AIX

```
Installed com.ibm.websphere.WCT.v85_8.5.5000.20130514_1044 to the  
/usr/IBM/WebSphere/Tools directory.
```

## 9.2 Plugin Script

[https://www.ibm.com/support/knowledgecenter/SSEQTP\\_8.5.5/com.ibm.websphere.nd.doc/ae/tins\\_pctcl\\_using.html](https://www.ibm.com/support/knowledgecenter/SSEQTP_8.5.5/com.ibm.websphere.nd.doc/ae/tins_pctcl_using.html)

### 9.2.1 Windows

1. Login to the web server file system
2. Create a response file for the plugin definition (webserver.rsp)

WIN F:\tmp\webserver.rsp

3. Open the responsfile (webserver.rsp) with an editor
4. Add the following information

```
configType=remote
enableAdminServerSupport=true
enableUserAndPass=true
enableWinService=true
ihsAdminPassword=<IHS_ADMINPWD>
ihsAdminPort=8008
ihsAdminUserID=<IHS_ADMINID>
ihsWindowsPassword=<IHS_WINPWD>
ihsWindowsStartupType=auto
ihsWindowsUserID=<IHS_WINID>
mapWebServerToApplications=true
wasMachineHostname=<DMGR_HOSTNAME>
webServerConfigFile1=<IHS_HOME>\conf\httpd.conf
webServerDefinition=<WEB_DEF>
webServerHostName=<WEBSERVER_HOSTNAME>
webServerInstallArch=<BIT_VERSION>
webServerOS=windows
webServerPortNumber=80
webServerSelected=ihs
```

#### Example: WINDOW

```
configType=remote
enableAdminServerSupport=true
enableUserAndPass=true
enableWinService=true
ihsAdminPassword=XXXX
ihsAdminPort=8008
ihsAdminUserID=IHSADMIN
ihsWindowsPassword=XXXX
ihsWindowsStartupType=auto
ihsWindowsUserID=Administrator
mapWebServerToApplications=true
wasMachineHostname=mydmgr.ibm.com
webServerConfigFile1=E:\IBM\HTTPServer\conf\httpd.conf
webServerDefinition=webserver1
webServerHostName=myihs.ibm.com
webServerInstallArch=64
webServerOS=windows
webServerPortNumber=80
webServerSelected=ihs
```

5. Run the following command to create the Plugin Script

```
<WCT_HOME>\wct855\WCT\wctcmd.sh -tool pct -defLocPathname <PLUGIN_HOME>
-defLocName <PLUGIN_NAME> -createDefinition -response <RESPONSEFILE>
```

```
E:\IBM\WebSphere\Tools\WCT\wctcmd.bat -tool pct -defLocPathname  
E:\IBM\WebSphere\Plugins -defLocName webplugin -createDefinition -  
response F:\tmp\webserver.rsp
```

## 6. Verify the response

```
Importing definition location...  
  
Definition location successfully imported  
  
Launching tool pct ...  
  
Tool execution completed successfully.
```

## 7. Copy the plugin script to the bin directory of the WebSphere Application Server home on the IBM Forms Experience Builder file system

```
Before: <PLUGIN_HOME>\bin\configure<WEB_DEF>.bat  
After:  <DMGR_PROFILE>\bin\configure<WEB_DEF>.bat
```

### Example:

```
Before:  
E:\IBM\WebSphere\Plugins\bin\configurewebserver1.bat  
  
After:  
E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin\configurewebserver1.bat
```

## 8. Login to the Deployment Manager file system

## 9. Start the Deployment Manager java process

```
<DMGR_PROFILE>\bin\startManager.bat
```

### Example:

```
E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin\startManager.bat
```

## 10. Change to the bin directory of the Deployment Manager profile

### Example:

```
E:\IBM\WebSphere\AppServer\profiles\dmgr01\bin
```

## 11. Run the following command to execute the script

```
configurewebserver1.bat -user <WASADMIN> -password <WASPWD>
```

## 12. Verify the results

```
Target mapping is updated for the application Forms Experience Builder.  
  
Start saving the configuration.  
  
Configuration save is complete.
```

## 9.2.2 UNIX

1. Login to the web server file system
2. Create a response file for the plugin definition (webserver.rsp)

```
LINUX  /opt/tmp/webserver.rsp  
AIX    /usr/tmp/webserver.rsp
```

3. Open the responsfile (webserver.rsp) with an editor
4. Add the following information

```
configType=remote  
enableAdminServerSupport=true  
enableUserAndPass=true  
enableWinService=false  
ihsAdminCreateUserAndGroup=true  
ihsAdminPassword=<IHS_ADMINPWD>  
ihsAdminPort=8008  
ihsAdminUnixUserGroup=<IHS_GROUP>  
ihsAdminUnixUserID=<IHS_ADMINID>  
mapWebServerToApplications=true  
wasMachineHostname=<DMGR_HOSTNAME>  
webServerConfigFile1=<IHS_HOME>/conf/httpd.conf  
webServerDefinition=<WEB_DEF>  
webServerHostName=<WEBSERVER_HOSTNAME>  
webServerOS=<OS>  
webServerPortNumber=80  
webServerSelected=ihs
```

### Example: LINUX

```
configType=remote  
enableAdminServerSupport=true  
enableUserAndPass=true  
enableWinService=false  
ihsAdminCreateUserAndGroup=true  
ihsAdminPassword=XXXX  
ihsAdminPort=8008  
ihsAdminUnixUserGroup=ihsgroup  
ihsAdminUnixUserID=ihsadmin  
mapWebServerToApplications=true  
wasMachineHostname=mydmgr.ibm.com  
webServerConfigFile1=/opt/IBM/HTTPServer/conf/httpd.conf  
webServerDefinition=webserver1  
webServerHostName=myihs.ibm.com  
webServerOS=Linux  
webServerPortNumber=80  
webServerSelected=ihs
```

### Example: AIX

```
configType=remote  
enableAdminServerSupport=true  
enableUserAndPass=true  
enableWinService=false  
ihsAdminCreateUserAndGroup=true
```

```
ihsAdminPassword=XXXX
ihsAdminPort=8008
ihsAdminUnixUserGroup=ihsgrp
ihsAdminUnixUserID=ihsadmin
mapWebServerToApplications=true
wasMachineHostname=mydmgr.ibm.com
webServerConfigFile1=/usr/IBM/HTTPServer/conf/httpd.conf
webServerDefinition=webserver1
webServerHostName=myihs.ibm.com
webServerOS=Aix
webServerPortNumber=80
webServerSelected=ihs
```

## 5. Run the following command to create the Plugin Script

```
<WCT_HOME>\wct855\WCT\wctcmd.sh -tool pct -defLocPathname <PLUGIN_HOME>
-defLocName <PLUGIN_NAME> -createDefinition -response <RESPONSEFILE>
```

### Example: LINUX

```
/opt/IBM/WebSphere/Tools/WCT/wctcmd.sh -tool pct -defLocPathname
/opt/IBM/WebSphere/Plugins -defLocName webplugin -createDefinition -
response /opt/tmp/webserver.rsp
```

### Example: AIX

```
/usr/IBM/WebSphere/Tools/WCT/wctcmd.sh -tool pct -defLocPathname
/usr/IBM/WebSphere/Plugins -defLocName webplugin -createDefinition -
response /usr/tmp/webserver.rsp
```

## 6. Verify the response

```
Importing definition location...
Definition location successfully imported
Launching tool pct ...
Tool execution completed successfully.
```

## 7. Copy the plugin script to the bin directory of the Deployment Manager profile

```
Before: <PLUGIN_HOME>/bin/configure<WEB_DEF>.bat
After:  <DMGR_PROFILE>/bin/configure<WEB_DEF>.bat
```

### Example: LINUX

```
Before:
/opt/IBM/WebSphere/Plugins/bin/configurewebserver1.sh

After:
/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/configurewebserver1.sh
```

### Example: AIX

```
Before:
/usr/IBM/WebSphere/Plugins/bin/configurewebserver1.sh
```

After:  
`/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/configurewebserver1.sh`

8. Login to the Deployment Manager file system
9. Verify/Start the Deployment Manager

`<DMGR_PROFILE>/bin/startManager.bat`

#### Example: LINUX

`/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh`

#### Example: AIX

`/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/bin/startManager.sh`

10. Change to the bin directory of the Deployment Manager profile

#### Example:

LINUX	<code>/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/bin</code>
AIX	<code>/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/bin</code>

11. Run the following command to execute the script

`./configurewebserver1.sh -user <WASADMIN> -password <WASPWD>`

12. Verify the results

Target mapping is updated for the application Forms Experience Builder.

Start saving the configuration.

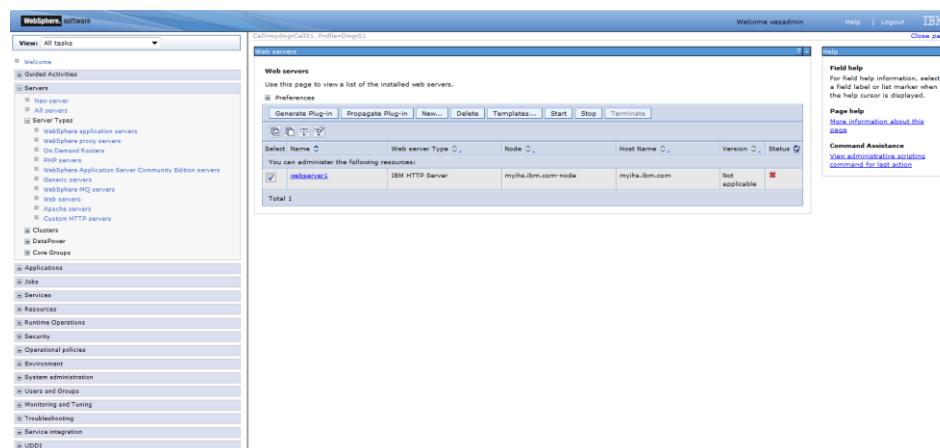
Configuration save is complete.

## 9.3 Generate/Propagate Plugin

1. Login to the Deployment Manager Console

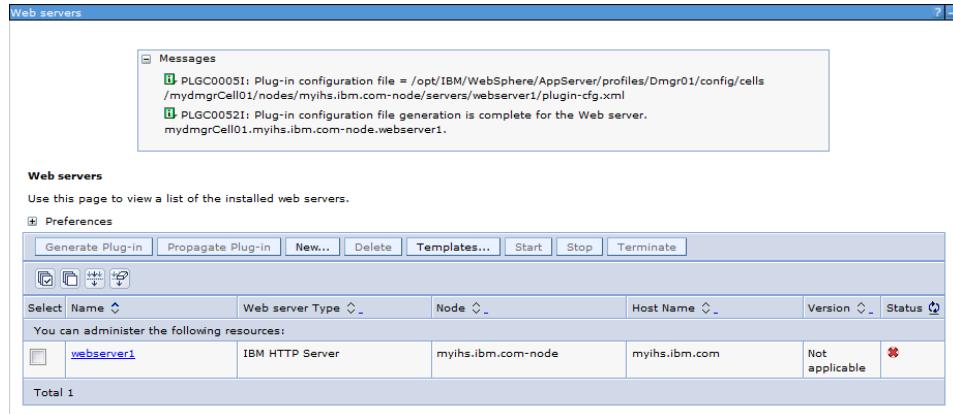
`https://<DMGR_HOSTNAME>:<DMGR_PORT>/ibm/console`

Example: `https://mydmgr.ibm.com:9043/ibm/console`



Select	Name	Web server Type	Node	Host Name	Version	Status
<input checked="" type="checkbox"/>	webserver1	IBM HTTP Server	myha.ibm.com-node	myha.ibm.com	Not applicable	*

2. Navigate to Servers > Server Types > Web servers
3. Check the box by the webserver definition (webserver1)
4. Click Generate Plug-in



5. Copy all generated files to the Web Server

```
plugin-cfg.xml
plugin-key.kdb
plugin-key.sth
```

**FROM:**  
`<DMGR_PROFILE>/config/cells/<CELL_NAME>/nodes/<WEBSERVER_NODENAME>/servers/<WEBSERVER_DEFINITION>/*`

**TO:**  
`<PLUGIN_HOME>/config/<WEBSERVER_DEFINITION>/*`

#### Example: WINDOWS

**FROM:**  
`E:\IBM\WebSphere\AppServer\profiles\dmgr01\config\cells\mydmgrCell01\nodes\myihs.ibm.com-node\servers\webserver1\*`

**TO:**  
`E:\IBM\WebSphere\Plugins\config\webserver1\*`

#### Example: LINUX

**FROM:**  
`/opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/mydmgrCell01/nodes/myihs.ibm.com-node/servers/webserver1/*`

**TO:**  
`/opt/IBM/WebSphere/Plugins/config/webserver1/*`

#### Example: AIX

**FROM:**  
`/usr/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/mydmgrCell01/nodes/myihs.ibm.com-node/servers/webserver1/*`

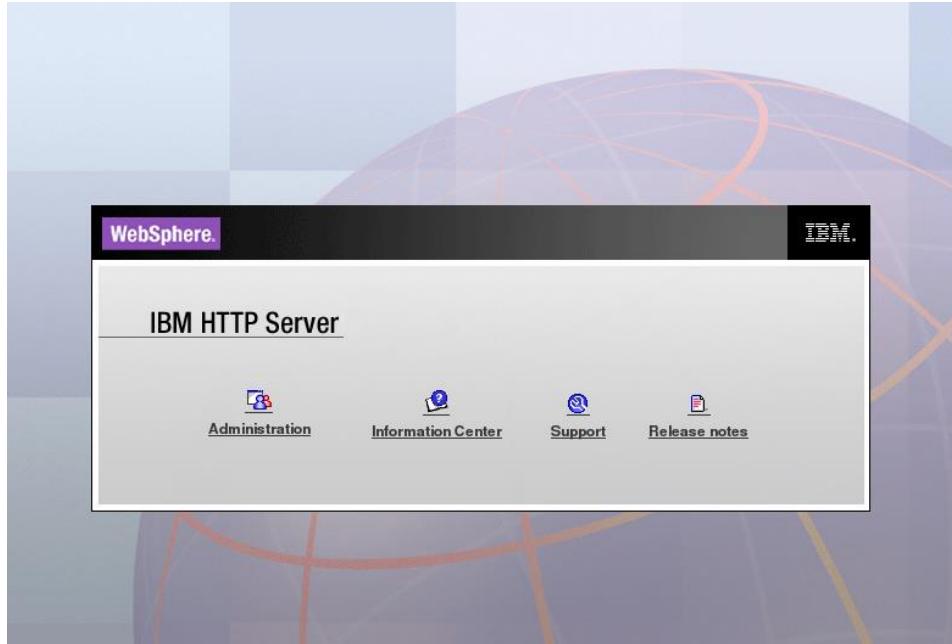
**TO:**  
`/usr/IBM/WebSphere/Plugins/config/webserver1/*`

**6. Restart/Start the WebServer**

`<IHS_HOME>/bin/apachectl start`

**Example:**

WIN	<code>E:\IBM\HTTPServer\bin\apachectl start</code>
LINUX	<code>/opt/IBM/HTTPServer/bin/apachectl start</code>
AIX	<code>/usr/IBM/HTTPServer/bin/apachectl start</code>

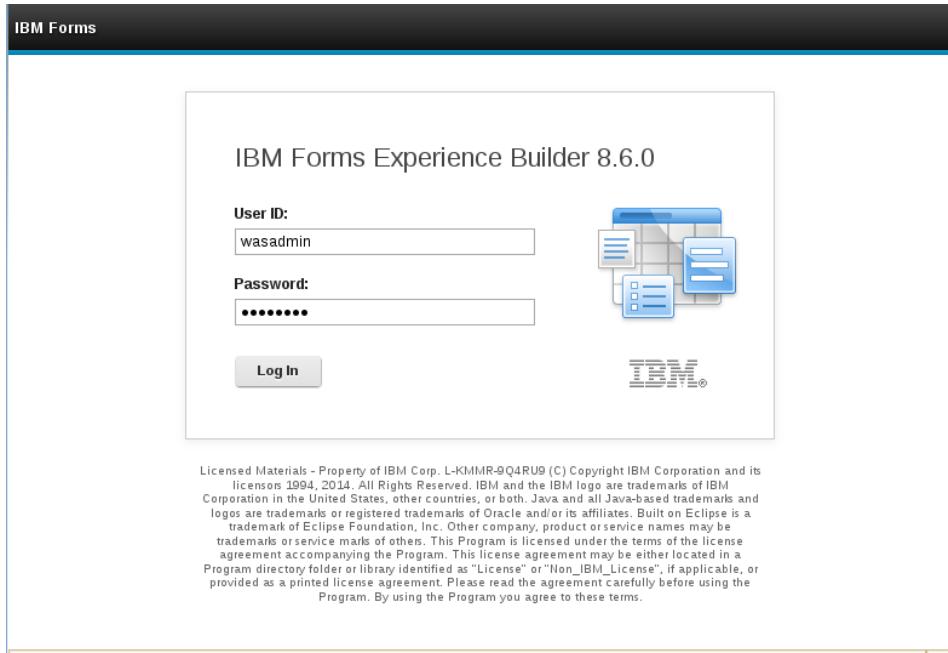


**7. Open a browser and set the url to the web server hostname**

`http://<WEBSERVER_HOSTNAME>:<PORT>`

**Example:**

`http://myihs.ibm.com`



## 8. Verify/Start the Node Agent

```
<FEB_PROFILE>/bin/startNode.(bat/sh)
```

### Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\profiles\feb_profile\bin\startNode.bat
```

### Example: LINUX

```
/opt/IBM/WebSphere/AppServer/profiles/feb_profile/bin/startNode.sh
```

### Example: AIX

```
/usr/IBM/WebSphere/AppServer/profiles/feb_profile/bin/startNode.sh
```

## 9. Restart/Start the IBM Forms Experience Builder server

```
<FEB_PROFILE>/bin/startServer.(bat/sh) <FEB_SERVER>
```

### Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\profiles\feb_profile\bin\  
startServer.bat feb01
```

### Example: LINUX

```
/opt/IBM/WebSphere/AppServer/profiles/feb_profile/bin/  
startServer.sh feb01
```

### Example: AIX

```
/usr/IBM/WebSphere/AppServer/profiles/feb_profile/bin/  
startServer.sh feb01
```

## 10. Open a browser and set the url to the web server hostname and the forms context root

```
http://<WEBSERVER_HOSTNAME>:<PORT>/forms
```

**Example:**

```
http://myihs.ibm.com:80/forms
```

## 10 Whats Next...

### 10.1 Upgrade IBM Forms Experience Builder

1. Download the latest IBM Forms Experience Builder media files from fix central.
2. Follow the following steps to upgrade the IBM Forms Experience Builder.

[http://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.4/FEB/in\\_upgrading\\_feb.html](http://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.4/FEB/in_upgrading_feb.html)

### 10.2 Enable Security

This step is only required if adding an LDAP User repository to the WebSphere Application Server is needed. IBM Forms experience Builder requires security enabled and security is required before installation of IBM Forms Experience Builder. This step will not show how to enable security but where to enable security. There are different types of user repositories and this document can not cover all of them.

1. Start the WebSphere Application Server

```
<PROFILE_HOME>/bin/startServer.(bat/sh) <APPERVER_NAME>
```

Example: WINDOWS

```
E:\IBM\WebSphere\AppServer\profiles\feb_profile\bin\startServer feb01
```

Example: LINUX

```
/opt/IBM/WebSphere/AppServer/profiles/feb_profile/bin/startServer.sh  
feb01
```

Example: AIX

```
/usr/IBM/WebSphere/AppServer/profiles/feb_profile/bin/startServer.sh  
feb01
```

NOTE: The location could be different depending on the information entered during the creation of the profile

2. Open a browser and set the URL to the WebSphere Application Server Administrative Console

```
https://<HOSTNAME>:<PORT>/ibm/console
```

Example:

```
https://feb86.ibm.com:9043/ibm/console
```

3. If required, login with the WebSphere Administrative User name and password created during the creation of the profile
4. Navigate to Security > Global security

5. Follow the WebSphere Application knowledge center to enable an external security repository

### ***10.3 Integrating with IBM WebSphere Portal***

User the following link to help integrate the IBM Forms Experience Builder with IBM WebSphere Portal

[http://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.0/FEB/in\\_portlet\\_installing\\_portlet\\_overview.html](http://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.0/FEB/in_portlet_installing_portlet_overview.html)

IBM Forms Experience Builder 8.6.4

[http://www.ibm.com/support/knowledgecenter/SS6KJL\\_8.6.4/FEB/co\\_portlet\\_configuring\\_portlet\\_overview.html](http://www.ibm.com/support/knowledgecenter/SS6KJL_8.6.4/FEB/co_portlet_configuring_portlet_overview.html)

Verify the version of WebSphere Portal is supported

<http://www-01.ibm.com/support/docview.wss?uid=swg27044505>

### ***10.4 Starter Pack***

[https://www.ibm.com/developerworks/community/wikis/home?lang=en\\_us#!/wiki/W65fd19fc117a\\_4d18\\_87e4\\_5f7b8a6727cc/page/FEB%20Starter%20Packs](https://www.ibm.com/developerworks/community/wikis/home?lang=en_us#!/wiki/W65fd19fc117a_4d18_87e4_5f7b8a6727cc/page/FEB%20Starter%20Packs)

Starter packs are partially built sample forms and instructions designed to help line of business users and IT staff quickly create and deploy data capture solutions.

- Sample forms that accelerate solution construction for specific business needs.
- Quick starting point with best in class capability.
- Easy to learn (how to) form design techniques.
- Pre-built solutions for commonly used forms.
- Customers, Business Partners and IBM Services can customize and extend samples to fit their individual needs.

# 11 Troubleshoot

## 11.1 No “Fix” button During Post Installation Step

### Problem:

#### IBM Forms Experience Builder Setup

There are two phases that need to be completed in order for IBM Forms Experience Builder to be setup.

##### Phase 1: Basic Environment Setup

###### Step 1: Data Source

 The data source has not been provided.

###### Step 2: Database Tables

 The database table status has not yet been determined due to an earlier problem.

##### Phase 2: Secured Environment Setup

###### Step 1: Mail Session

 The status of the mail session has not yet been determined. All Phase 1 checks must be OK or only a WARNING before it can be determined.

###### Step 2: Application Dependencies

 The status of the applications has not yet been determined. All Phase 1 checks must be OK or only a WARNING before it can be determined.

### Solution:

Verify the Datasource is correct by doing a Test Connect in the WebSphere Application Server Console. If it fails, fix the problem. Sometimes there is a problem finding the database driver.