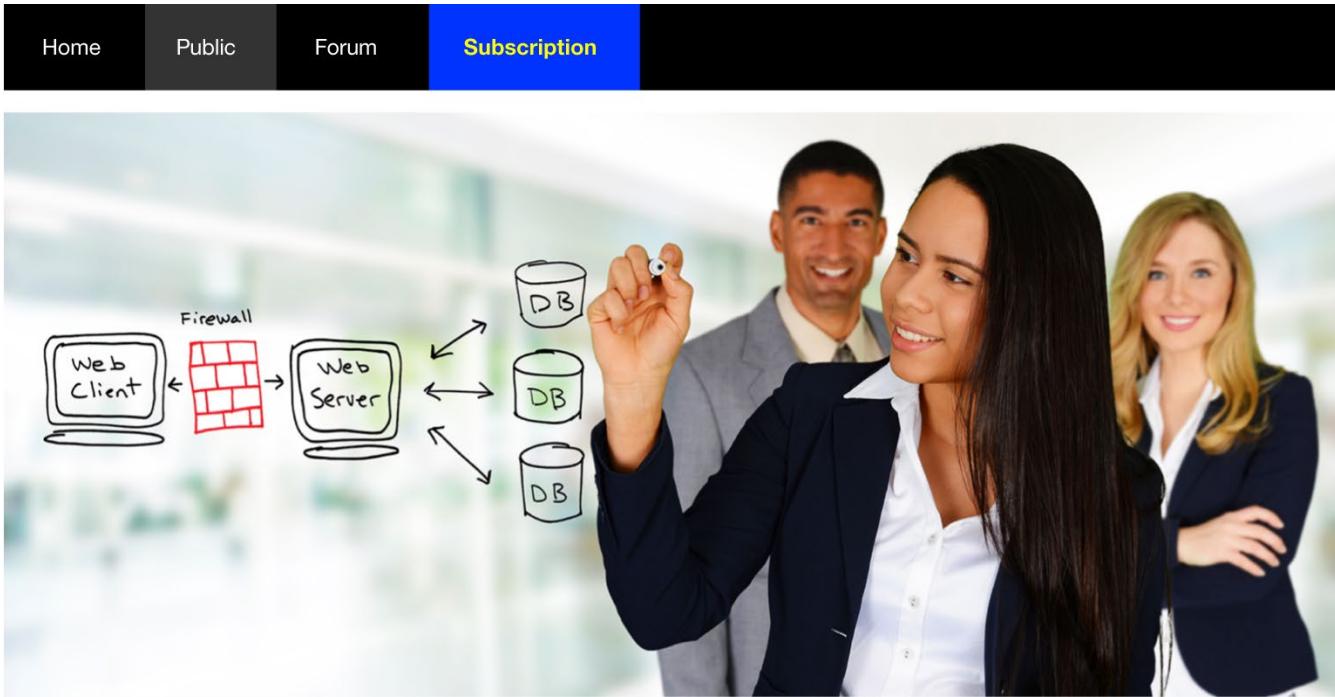


Introduction and Installation JEE



SmartDoc Technologies Courseware: www.aemforms.training

Last Updated: 7-19-2022

Introduction and Installation JEE

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Before you Begin

This course, and all of our SmartDoc courseware, is now being taught by many trainers in many locations. Therefore, we are providing this section and this information to help you get started.

Course Overview

Prerequisites: None

Approximate Instructor-Led Classroom Duration: 1 hour

This module shows how to install and configure an *AEM Forms on JEE Turnkey System* with the JBOSS application server. You cannot do these steps on a SmartDoc Server.

www.aemforms.training

The support site (www.aemforms.training) is designed to support our students during and after a training session. Here is what you will find on the support site.

- The **Known Issues** section documents bugs and issues with various versions of AEM Forms.
- The **Sandbox** section lists AEM Forms Servers you can use for the hands-on exercises.
- The **Forum** section enables you to post, review, and answer questions about AEM Forms.

Limited Courseware License

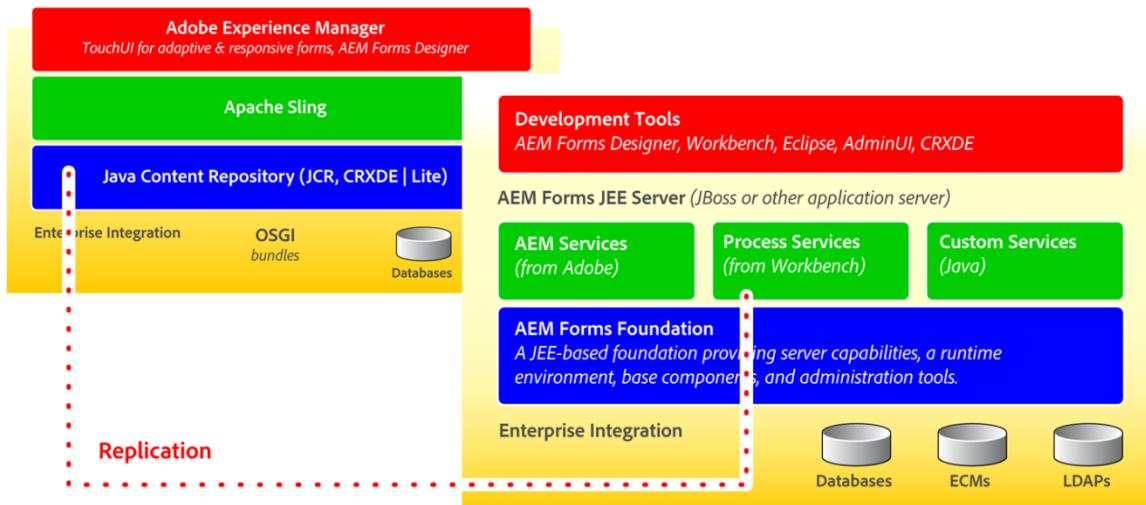
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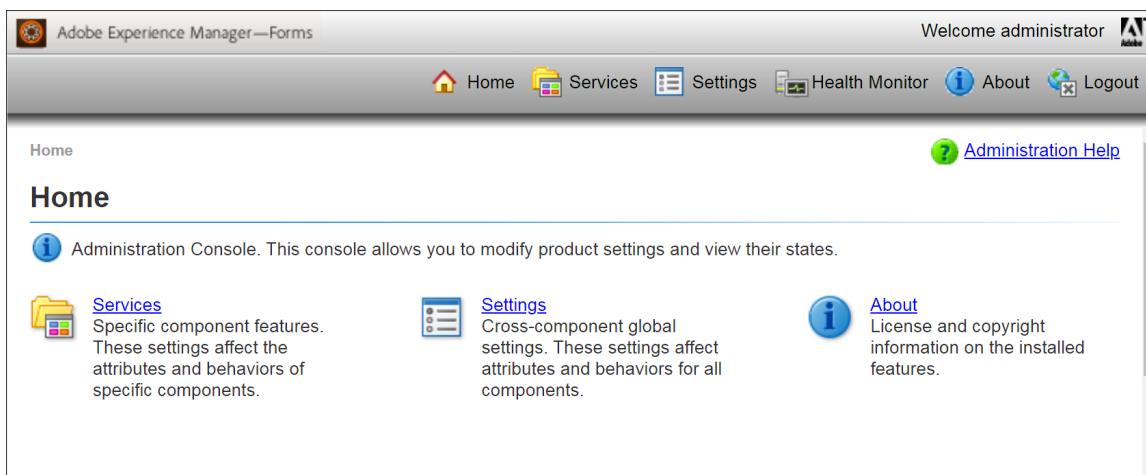
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Introduction

AEM Forms on JEE consists of both the AEM OSGi technology stack and the AEM JEE technology stack. By default, the system replicates certain assets between the two technology stacks. These assets include images, forms, documents and XML schema and data files.



The primary Administration tool for AEM Forms JEE is AdminUI.



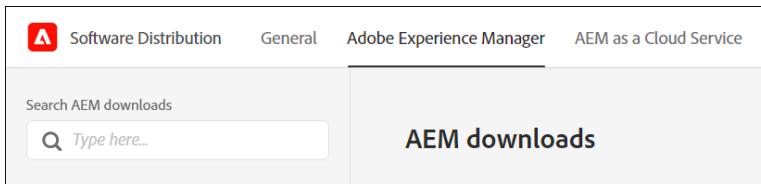
Download Software

You can download the software from Adobe's Software Distribution site by following these steps.

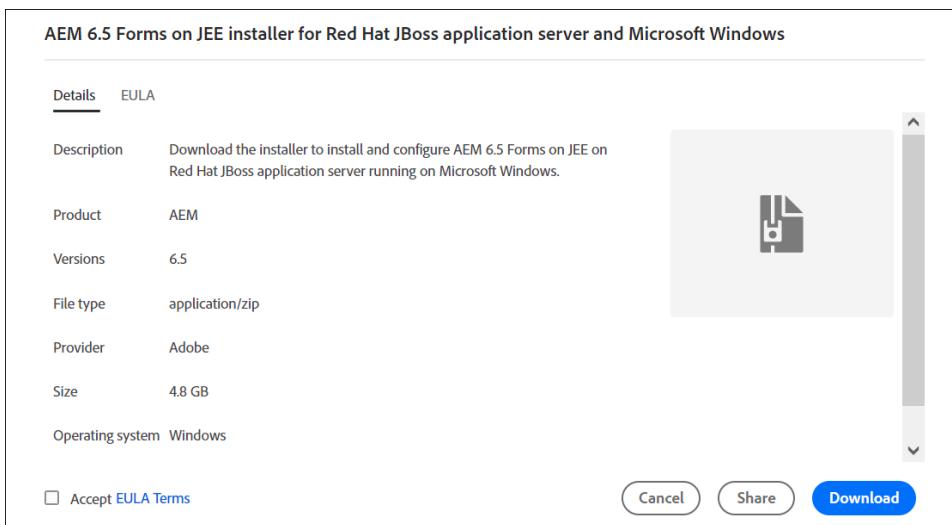
1. Login to Software Distribution.

<https://experience.adobe.com/downloads>

2. Select **Adobe Experience Manager** (see *illustration*).



3. Click the *Solution* drop-down and select **Forms**.
4. Click the *Version* drop-down and select the current version.
5. Select the *Operating system* drop-down and select your Operating system.
6. Click *AEM 6.5 Forms on JEE installer for Red Hat JBoss application server and Microsoft Windows* or whichever download you need. You will see the details screen (see *illustration*).
7. Select *Accept EULA Terms* and click **Download**.



AEM 6.5 Forms on JEE installer for Red Hat JBoss application server and Microsoft Windows

Details **EULA**

Description: Download the installer to install and configure AEM 6.5 Forms on JEE on Red Hat JBoss application server running on Microsoft Windows.

Product: AEM

Versions: 6.5

File type: application/zip

Provider: Adobe

Size: 4.8 GB

Operating system: Windows

Accept EULA Terms Cancel Share Download

8. After the download completes, unzip the file.

You should now have the following folders.

| Name | Date modified | Type |
|---------------|---------------------|-------------|
| merge_modules | 11/11/2021 12:29 PM | File folder |
| server | 11/11/2021 12:28 PM | File folder |
| third_party | 11/11/2021 12:28 PM | File folder |

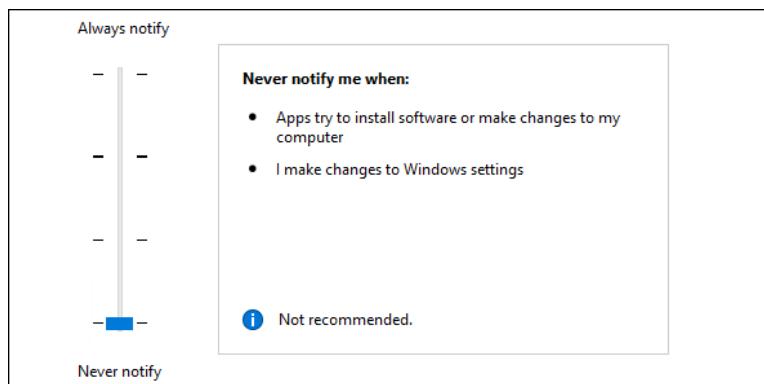
Installation

Follow these steps to install an AEM Forms JEE server on a Windows server. If you have a prior installation of *AEM Forms JEE* or *LiveCycle ES4*, you should uninstall it prior to following these installation instructions. These instructions are for a new installation of *AEM Forms JEE*.

User Control Settings

Before beginning the installation process, turn off Windows *User Account Control Settings*.

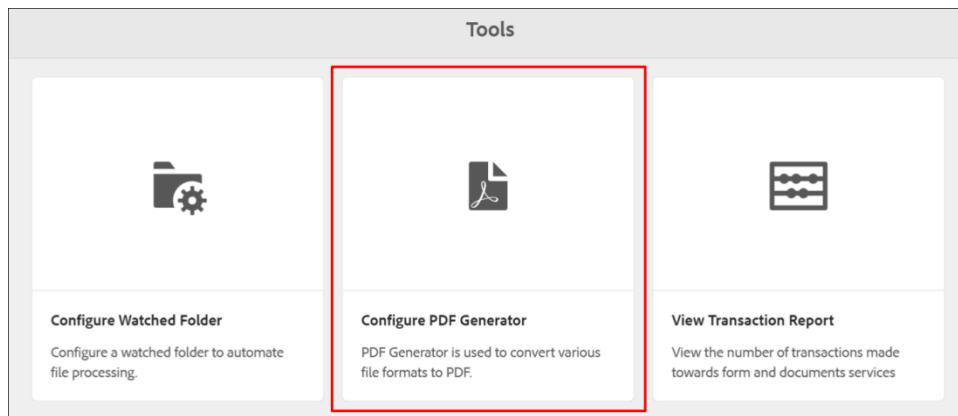
1. Open the **Windows Control Panels**.
2. Select **User Accounts** and click **Change User Account Control settings**.
3. Slide the setting all the way down to **Never notify** (see *illustration*).



4. Click **OK**.
5. Turn off **Windows Defender Firewall**.
6. **Restart** your computer if the *User Account Control settings* changed.

PDF Generator Prep

If you need to install *PDF Generator*, make sure to first review the *PDF Generator Prep* module. This module will guide you through the steps of preparing your server for *PDF Generator*.

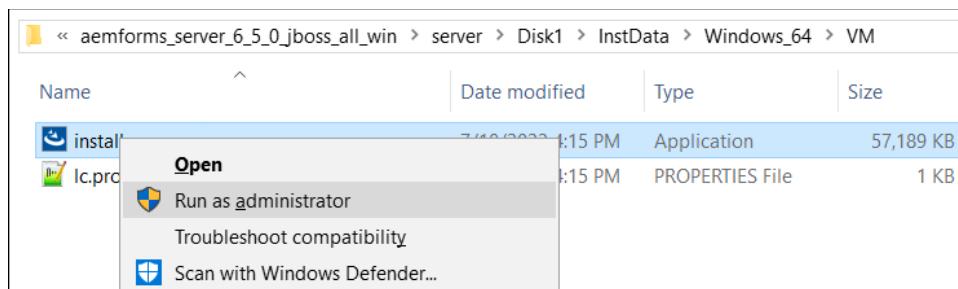


Turnkey Installation

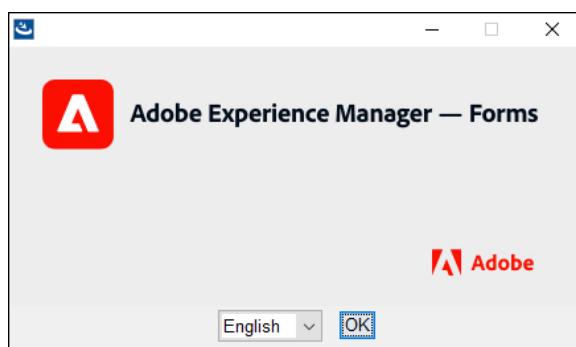
1. Expand this path in your installation files.

\server\Disk1\InstData\Windows_64\VM\install.exe

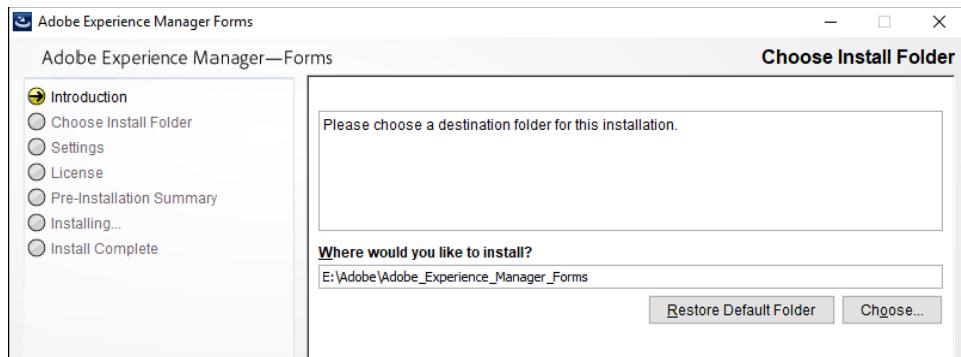
2. Right-click on **install.exe** and select **Run as administrator**.



3. When the splash screen appears, select your language, and click **OK**.



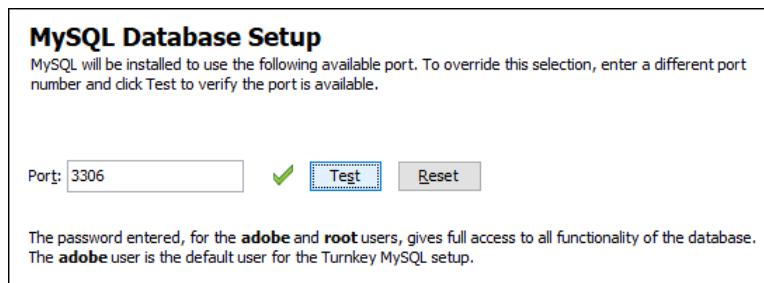
4. Click **Next** on the **Introduction** screen.
5. Specify an installation path or leave the default and click **Next**. Note: A path CANNOT contain spaces.



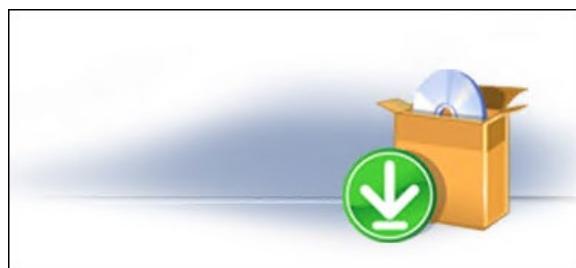
6. Select **Turnkey** and click **Next**.

Note: We always use **password** for any passwords in our training manuals.
Feel free to use your own passwords as you see fit.

7. At the *MySQL Database Setup* screen, enter **password** as the password for the adobe and root users of the MySQL database. Click **Test** to ensure that the default port is open. If the test fails, shutdown or remove any programs running on the default port or specify another port to install the MySQL database.



8. Click **Next**.
9. Accept the license agreements.
10. At the *Pre-Installation Summary* step, click **Install**. Note: this step will take about 5 minutes to execute.



11. At the *Release Notes / Readme File* step, click **Next**.
12. At the *Install Complete* step, ensure **Start Adobe Experience Manager Forms Configuration Manager** is selected and click **Done**.

Configuration Manager will be launched. Alternatively, you may start the **Configuration Manager** manually by launching the *ConfigurationManager.exe* file located here.

C:\Adobe\Adobe_Experience_Manager_Forms\configurationManager\bin



Configuration Manager

13. At the *Welcome to Adobe Experience Manager Forms* page, click **Next**.
14. At the *Update Task Selection* step ensure the checks are not selected and click **Next**.

You now have a choice between *Express Mode* and *Custom Mode*. Express Mode will use more defaults but it will still prompt you for the important configuration settings. Custom Mode shows all of the configuration dialogs.

Make your selection and proceed to the respective section of these instructions.

Turnkey Mode
Choose the mode you would like to operate in.

Express Mode
The Turnkey Installation will complete using default values.
If required, dialogs will prompt for custom information.

Custom Mode
Show all dialogs to allow complete customization.

Configuration Manager – Express Mode

To use *Configuration Manager* in Express Mode, simply select this option on the *Turnkey Mode* screen.

Turnkey Mode
Choose the mode you would like to operate in.

Express Mode
The Turnkey Installation will complete using default values.
If required, dialogs will prompt for custom information.

Custom Mode
Show all dialogs to allow complete customization.

This option will run *Configuration Manager* using the default values. If required, this option will prompt you for further information depending on the modules you are installing.

15. In the *Modules* step, select the modules you need.

JEE Capabilities

Barcoded PDF forms , version 6.5.0
 Digital Signatures , version 6.5.0
 PDF Forms , version 6.5.0
 Output , version 6.5.0
 PDF Generator , version 6.5.0
 Forms Workflow , version 6.5.0
 Reader Extensions , version 6.5.0
 Document Security , version 6.5.0
 AEM Forms connector for EMC Documentum (J2EE) , version 6.5.0
 AEM Forms connector for IBM FileNet (J2EE) , version 6.5.0
 AEM Forms connector for IBM Content Manager (J2EE) , version 6.5.0
 AEM Forms connector for Microsoft SharePoint (J2EE) , version 6.5.0

OSGi Capabilities

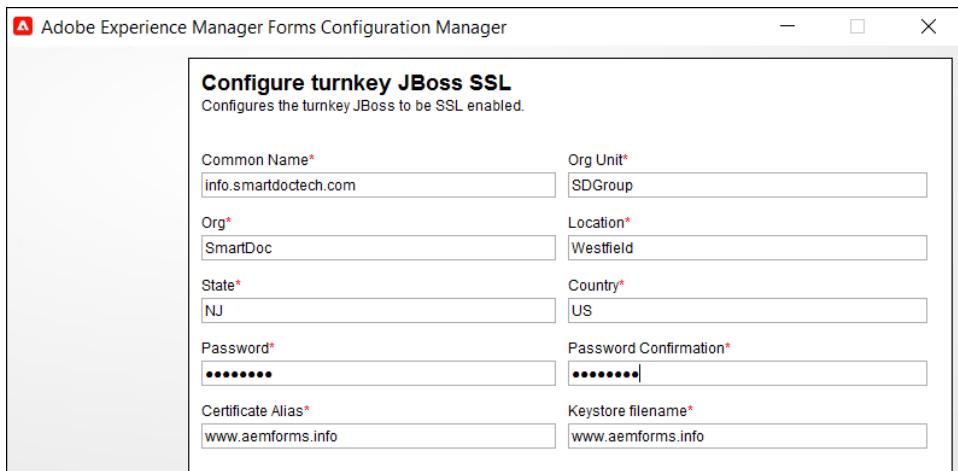
Content Repository , version 6.5.0

Note: You cannot run *Configuration Manager* on only 1 module of an existing server. If you do this, the other modules will be wiped out and your server will only include the 1 module you selected in *Configuration Manager*.

Note: if this is a production environment installation, select only the modules for which you have purchased licenses. You CANNOT uninstall modules later (without re-installing entire server); you can only install new modules.

16. Click **Next**.

17. Enter your SSL values and click **Configure JBoss SSL**. A certificate and keystore will be created. These values will be used in your certificate. The Common Name needs to be a fully qualified domain name. Localhost will not work. The common name needed to follow an `xxx.xxxxxxxxxx.xxx` format. For instance, `www.smartdoctech.com` will work as a Common Name.



18. Click **Configure JBoss SSL**.

19. Click **Next**.

The certificate and the keystore can be found in this directory.

C:\Adobe\Adobe_Experience_Manager_Forms\jboss\standalone\configuration

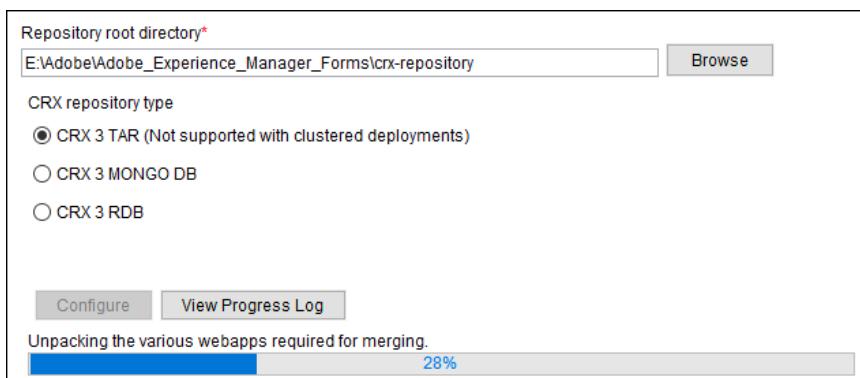
The configuration directory has these important files.

- <name>.cer
- <name>.keystore
- lc_turnkey.xml
- Rights Management End User

Note: This method creates a 3-month certificate. You can substitute a longer duration certificate after installation. See the [Long-Lived Certificates for SSL on JEE](#) for more information.

20. At the **CRX Configuration** step, select **CRX 3 TAR** and click **Configure**.

21. Click **OK** in the Warning window and then click **Configure** again. This configuration can take a while because it is creating your crx-repository. Be patient and let it run.



These actions are completed at this step.

Performing a backup of LiveCycle EAR.

Unpacking the various webapps required for merging.

Updating the home path for CRX

Unpacking the Author Quickstart.

Unpacking the Publish Quickstart.

Copy the initial content packages for deployment.

!command.ConfigureRDB!

Finished CRX packaging

22. Once the configuration has been completed, click **Next**.

23. Select **Include IVS EARs in deployment set**.

Adobe Experience Manager Forms Installation Verification Sample (IVS) EAR files

Confirm whether the IVS EARs should be added to the deployment set.

IMPORTANT: It is recommended to undeploy IVS EARs from a production environment prior to going live.

The following IVS EARs exist for your selection;

adobe-forms-ivs-jboss.ear
adobe-output-ivs-jboss.ear

Include IVS EARs in deployment set

24. Click **Next**.

25. On the Express Mode screen, click **Start**.

Note: At any point, you can click *View Progress Log* to see the actions taken during the step.

26. Once the configuration has been completed, click **Next**.

27. Enter the values for Microsoft SharePoint connection. This table provides some examples.

| Property | Example 1 | Example 2 | Example 3 |
|-------------|---|--|---|
| Host Name | localhost (not localhost:3010) | Server Name or Internal IP number if on the same network | http://www.smartdoctech.com:9090 |
| User Name | Username with SharePoint Administrator Privileges | Username with SharePoint Administrator Privileges | Username with SharePoint Administrator Privileges |
| Password | ***** | ***** | ***** |
| Domain Name | smartdoctech.local | smartdoctech | smartdoctech |
| Version | 2013 | 2013 | 2016 |

Configure Adobe Experience Manager Forms Connector for Microsoft SharePoint

| | |
|--------------|----------------------------|
| Host Name* | 133WinSrv2012 |
| User Name* | SMARTDOCTECH/administrator |
| Password* | ***** |
| Domain Name* | smartdoctech |
| Version* | 2016 |

28. Click **Configure SharePoint Connector**.
29. Click **Next**.
30. At the *Admin user credentials for native PDF conversions* step, select **Single-threaded native PDF conversions**.
31. Enter credentials for the local System Administrator.
32. Click **Add user**. You should see the *User successfully added* message.

Admin user credentials for native PDF conversions

In order to enable multithreading conversions from PDF Generator, you need to add at least three user accounts which have admin privileges on PDF Generator server machine. For Windows server 2012, you need to add at least one user account even for single threaded conversion support.

| | | |
|---|---|---|
| <input checked="" type="radio"/> Single-threaded native PDF conversions | <input type="radio"/> Multi-threaded native PDF conversions | User accounts |
| | | User name* |
| | | <input type="text"/> |
| | | Password* |
| | | <input type="text"/> |
| | | <input type="button" value="Add user"/> |

| User name | Status |
|---------------|-------------------------|
| administrator | User successfully added |

33. After the user is successfully added, click **Next**.
34. At the *PDF Generator System Readiness Test* step, click **Start**. This will run the *PDF Generator System Readiness Tool*. Note: It is best to complete the *PDF Generator Prep* manual before executing this step.
35. You will see the PDF Readiness Report (see illustration).

INFORMATION

Environment variable Acrobat_PATH is set to C:\Program Files (x86)\Adobe\Acrobat DC\Acrobat\Acrobat.exe

PDFGen.api plugin is copied successfully to Acrobat plug_ins folder (e.g. C:\Program Files (x86)\Adobe\Acrobat DC\Acrobat\plug_ins)

Printer Spooler Service is running

Installed Acrobat Version is 17.9.20044.25828.

PDFMaker DLL is registered

All the Registry entries required for Acrobat DC are properly set.

36. If there are any errors, resolve them and then click **Start** again to re-run the test.
37. When there are no errors, click the **Next** button.
38. Click **Browse** on the *Reader Extension Credential Configuration screen* and navigate to your Reader Extension.pfx file. Select the file and click **Open**.
39. Enter your Credential Password and enter **RECRED** as the User defined name.

Reader Extensions Credential Configuration

Reader Extensions requires a credential. This credential is issued by Adobe through email to the named licensee or through the Adobe developer programs.

Credential file (.pfx/.p12)*

Credential Password*

User defined name for this credential*

Type a unique name for the Rights credential.
 This is the name that is displayed in the Reader Extensions ES4 web interface.

40. Click **Configure**.
41. Click **Next**. You will see the Summary screen. Notice that *Launch Next Steps* is selected.

Summary

The following tasks have been performed:

- Configure AEM Forms EAR files
- Configure application server
- Deploy AEM Forms EAR files
- Initialize AEM Forms database
- Deploy AEM Forms components
- Configure AEM Forms components

Important: Some of the configuration changes made are applied when the server is restarted. Restart the server now.

Note: Before restarting the application server, ensure that the CRX server is up and running. A successful login to the AEM projects page at [http://\[hostname\]:\[port\]/lc](http://[hostname]:[port]/lc) can help you confirm it. If the CRX server takes longer than expected, causing the page to load slowly, then wait for some time, and try logging in later. Alternately, you can monitor the [\[AEM_forms_root\]/crx-repository/logs/error.log](#) file for the progress.

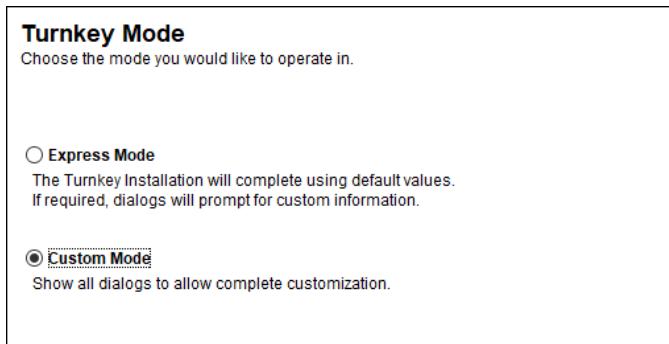
[Launch Next Steps](#)

42. Click **Finish**.

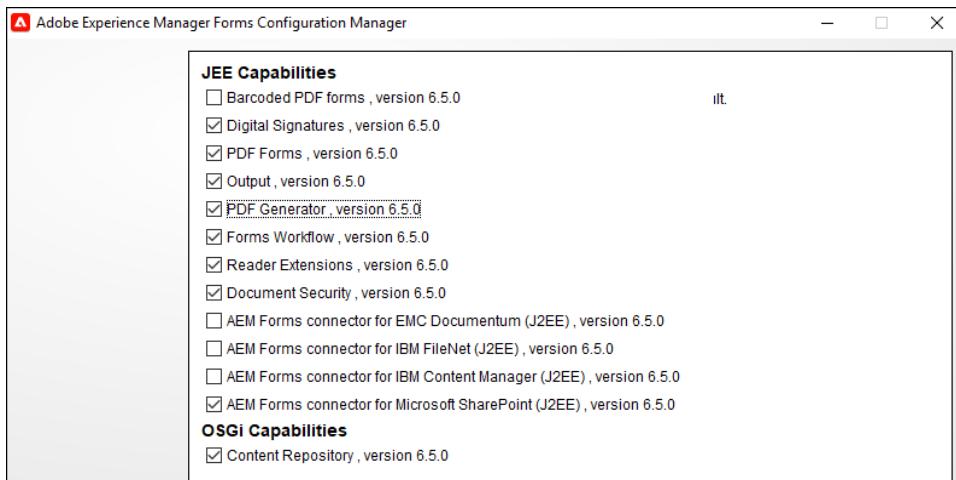
The Next Steps page is launched in a browser window. This page contains many important links.

Configuration Manager – Custom Mode

To use *Configuration Manager* in Custom Mode, simply select this option on the *Turnkey Mode* screen.



1. At the *Modules* step, select the modules you need. I usually select these modules, but your requirements may be different (see illustration).

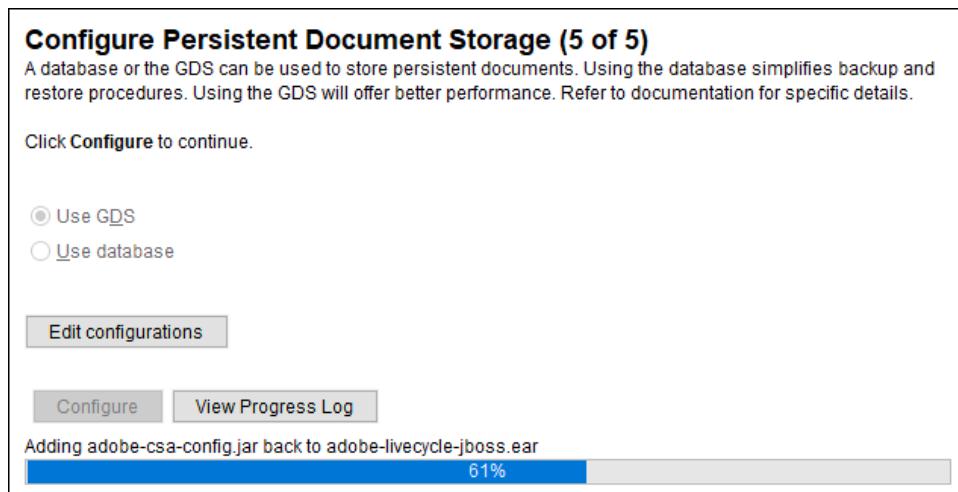


2. Click **Next**.
3. On the *Task Selection* step, leave the default options selected and also select **Configure turnkey JBoss SSL** if it is not already selected.
4. Click **Next**.
5. On the *Configure Adobe Experience Manager Forms (1 of 5)* step, click **Configure**.

Note: At any point, you can click *View Progress Log* to see the actions taken during the step. For instance, the installer is executing merge scripts during this step.

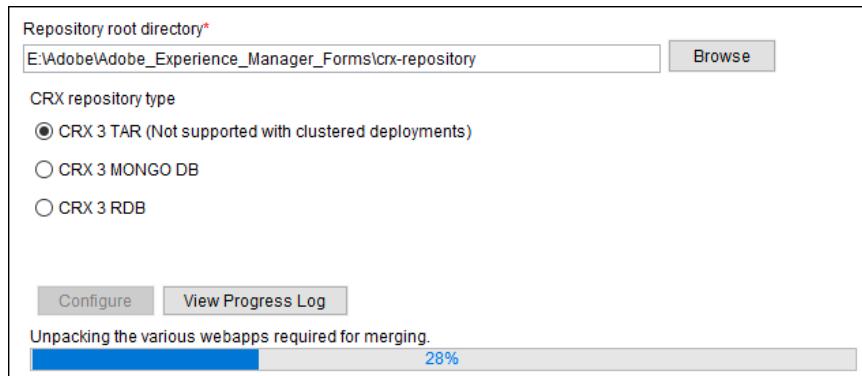
6. Click **Next**.
7. If you need to change the default font directory paths, make the changes here. Otherwise, click **Next**.
8. If you need to change the location of the temporary directory, make the change here. Otherwise, click **Next**.
9. Click **OK** on the warning message and click **Next**.

10. If you need to change the *Global document storage directory path*, make the change here. Otherwise, click **Next**.
11. Click **OK** on the warning message and click **Next**.
12. Select **GDS** and click **Configure** to configure the persistent document storage. It is best from a performance perspective to not use a database for this type of document storage although you can if you need to. See the note below for more information.



Note: The GDS is a directory used to store long-lived files that are used in long-lived process variables. These long-lived files can include PDFs, policies, and form templates. The GDS offers better performance, but you can also choose to persist this type of data to a database. Input documents for asynchronous job invocation are also stored in the GDS, and must be available to process requests. It is important that you consider the reliability of the file system that hosts the GDS and employ a redundant array of independent disks (RAID) or other technology as appropriate for your quality and level of service requirements.

13. Click **Next**.
14. At the *CRX Configuration* step, select **CRX 3 TAR** and click **Configure**.
15. Click **OK** in the Warning window and then click **Configure** again. This configuration can take a while because it is creating your crx-repository. Be patient and let it run.



Note: In general, a TAR deployment of CRX is best because it supports all the CRX features. However, you can use Mongo DB for a clustered deployment.

16. Click **Next**.

17. If you chose to configure PDF Generator, click **Configure** on the *Configure Acrobat for PDF Generator* step.
18. If you see a messages that "Acrobat Pro DC was not found to be installed on the machine" you will need to go back and first install Acrobat Pro DC.
19. Click **Next** on the *Forms Summary* step.
20. Enter your SSL values and click **Configure JBoss SSL**.

Note: A certificate and keystore will be created. These values will be used in your certificate. The Common Name needs to be a fully qualified domain name. Localhost will not work. The common name needed to follow an xxx.xxxxxxxxxx.xxx format. For instance, www.smartdocliffe.com will work as a Common Name. The certificate and the keystore can be found in this directory: Adobe_Experience_Manager_Forms\jboss\standalone\configuration. The configuration directory has these important files: <name>.cer, <name>.keystore, lc_turnkey.xml, and Rights Management End User. This method creates a 3-month certificate. You can substitute a longer duration certificate after installation. See the *Long-Lived Certificates for SSL on JEE* for more information.

Adobe Experience Manager Forms Configuration Manager

Configure turnkey JBoss SSL
Configures the turnkey JBoss to be SSL enabled.

| | |
|-----------------------|------------------------|
| Common Name* | Org Unit* |
| www.smartdocliffe.com | SDGroup |
| Org* | Location* |
| SmartDoc | Westfield |
| State* | Country* |
| NJ | USA |
| Password* | Password Confirmation* |
| ***** | ***** |
| Certificate Alias* | Keystore filename* |
| www.smartdocliffe.com | www.smartdocliffe.com |

21. Click **Configure JBoss SSL**.
22. Click **Next**.
23. Select **Include IVS EARs in deployment set**.

Adobe Experience Manager Forms Installation Verification Sample (IVS) EAR files

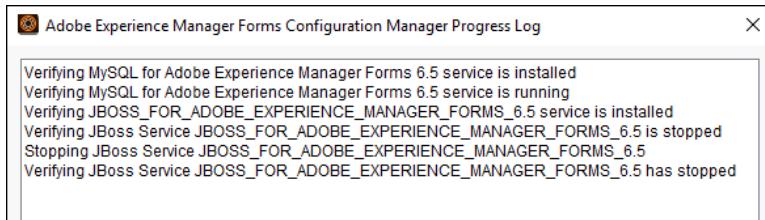
Confirm whether the IVS EARs should be added to the deployment set.

IMPORTANT: It is recommended to undeploy IVS EARs from a production environment prior to going live.

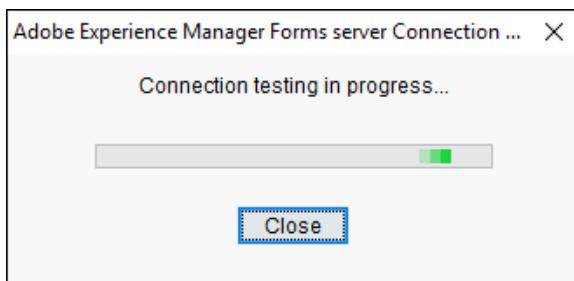
The following IVS EARs exist for your selection;
adobe-forms-ivs-jboss.ear
adobe-output-ivs-jboss.ear

Include IVS EARs in deployment set

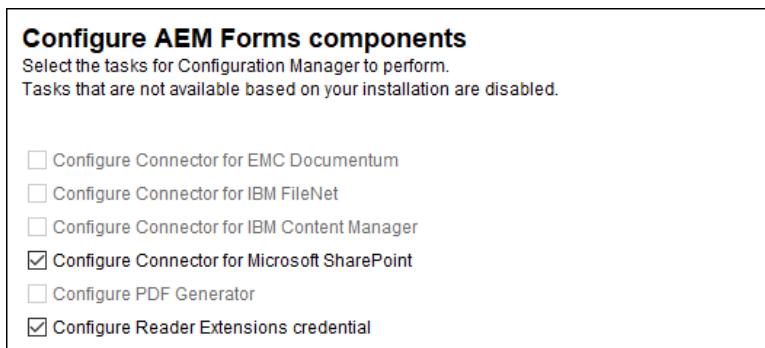
24. Click **Next**.
25. Select all of the EAR files and click **Deploy**.
26. Click **View Progress Log**. You can do this at any step to monitor the actions.



27. Click **Close** on the View Progress Log dialog.
28. Click **Next**.
29. Click **Initialize**.
30. Click **Next**.
31. Enter the password and click **Verify Server Connection**. This will test your server connection. This can take a few minutes.



32. If the test results are good, click **OK** and click **Next**.
33. Click **Deploy** to deploy components to the application server.
34. Click **Next**.
35. Click **Validate** to validate the deployment of the modules.
36. Click **Next**.
37. Select your AEM Forms components. In this example, I am configuring the *Connector for Microsoft SharePoint* and *Reader Extensions* (see illustration).



38. Click **Next**.
39. Enter the values for Microsoft SharePoint connection. This table provides some examples.

| Property | Example 1 | Example 2 | Example 3 |
|-------------|---|--|---|
| Host Name | localhost (<i>not</i> localhost:3010) | Server Name or Internal IP number if on the same network | http://www.smartdoctech.com:9090 |
| User Name | Username with SharePoint Administrator Privileges | Username with SharePoint Administrator Privileges | Username with SharePoint Administrator Privileges |
| Password | ***** | ***** | ***** |
| Domain Name | smartdoctech.local | smartdoctech | smartdoctech |
| Version | 2013 | 2013 | 2016 |

Configure Adobe Experience Manager Forms Connector for Microsoft SharePoint

| | |
|--------------|---------------------------|
| Host Name* | 133WinSrv2012 |
| User Name* | MARTDOCTECH/administrator |
| Password* | ***** |
| Domain Name* | smartdoctech |
| Version* | 2016 |

40. Click **Configure SharePoint Connector**.
41. Click **Next**.
42. Click **Browse** on the *Reader Extension Credential Configuration screen* and navigate to your Reader Extension.pfx file. Select the file and click **Open**.
43. Enter your Credential Password and enter **RECRED** as the User defined name.

Reader Extensions Credential Configuration

Reader Extensions requires a credential. This credential is issued by Adobe through email to the named licensee or through the Adobe developer programs.

| | |
|---|---|
| Credential file (.pfx/.p12)* | <input type="text" value="E:\software\AEM Forms on JEE 6.5\RE_cert\1005566.pfx"/> <input type="button" value="Browse"/> |
| Credential Password* | <input type="password" value="*****"/> |
| User defined name for this credential* | <input type="text" value="RECRED"/> |
| <small>Type a unique name for the Rights credential. This is the name that is displayed in the Reader Extensions ES4 web interface.</small> | |

44. Click **Configure**.
- If you are also running PDF Generator, follow these steps.
45. At the *PDF Generator System Readiness Test* step, click **Start**. This will run the *PDF Generator System Readiness Tool*. Note: It is best to complete the *PDF Generator Prep* manual before executing this step.
46. You will see the PDF Readiness Report (*see illustration*).

INFORMATION

Environment variable Acrobat_PATH is set to C:\Program Files (x86)\Adobe\Acrobat DC\Acrobat\Acrobat.exe

PDFGen.api plugin is copied successfully to Acrobat plug_ins folder (e.g. C:\Program Files (x86)\Adobe\Acrobat DC\Acrobat\plug_ins)

Printer Spooler Service is running

Installed Acrobat Version is 17.9.20044.25828.

PDFMaker DLL is registered

All the Registry entries required for Acrobat DC are properly set.

47. If there are any errors, resolve them and then click **Start** again to re-run the test.
48. When there are no errors, click the **Next** button.
49. Click **Next**. You will see the Summary screen. Notice that *Launch Next Steps* is selected.

Summary

The following tasks have been performed:

- Configure AEM Forms EAR files
- Configure application server
- Deploy AEM Forms EAR files
- Initialize AEM Forms database
- Deploy AEM Forms components
- Configure AEM Forms components

Important: Some of the configuration changes made are applied when the server is restarted. Restart the server now.

Note: Before restarting the application server, ensure that the CRX server is up and running. A successful login to the AEM projects page at [http://\[hostname\]:\[port\]/lc](http://[hostname]:[port]/lc) can help you confirm it. If the CRX server takes longer than expected, causing the page to load slowly, then wait for some time, and try logging in later. Alternately, you can monitor the `[AEM_forms_root]/crx-repository/logs/error.log` file for the progress.

[Launch Next Steps](#)

50. Click **Finish**.

The *Next Steps* page is launched in a browser window. This page contains many important links.

Post Installation Tasks

Execute these steps after your installation and configuration is complete.

Update License

1. Open AdminUI.

http://<servername>:8080/adminui

2. Enter the administrator username and password.
 - Username: **administrator**
 - Password: **password**
3. Click **Login**.



4. Review the **Licensing** section (see illustration).

5. If the Status is **Pending confirmation**, click the **Licensing** link.
6. Select **I accept** on the License agreement and click **Next**.
7. Select your *LicenseType*. I select **DEV**.
8. Select **Yes, license change is valid for all deployed Modules**.
9. Click **Confirm License Change**.

License Type:

- EVAL 60-day evaluation license
- DEV Perpetual development license
- NFR 2-year evaluation license
- IDEV 1-year subscription to Adobe Developer Program
- Production Perpetual license

Do you confirm that the license change is valid for all deployed Modules?

- Yes, license change is valid for all deployed Modules.
- No, license change is not valid for all deployed Modules.

10. Click **Return to Admin home**. You will see the Licensing is now updated.

Licensing

 Current license: **DEV** Last updated on: **7/5/22 12:02 PM** By: **administrator** Status: **Confirmed**
Installation date: **7/4/22** Expiry date: **Never**



Licensing

Update or confirm pending server license changes.

Service Packs and CFPs

This section includes information about installing JEE service packs and CFPs (*Cumulative Fix Packs*).

1. Open AdminUI.

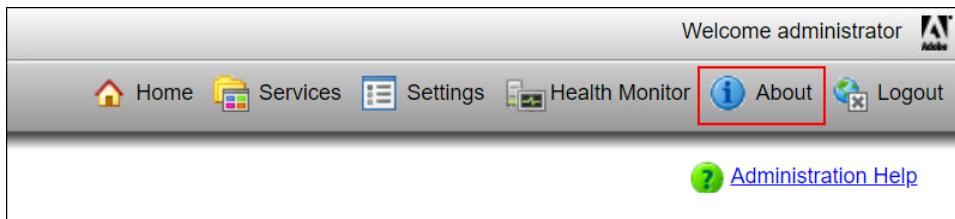
http://<servername>:8080/adminui

2. Enter the administrator username and password.

- Username: **administrator**
- Password: **password**

3. Click **Login**.

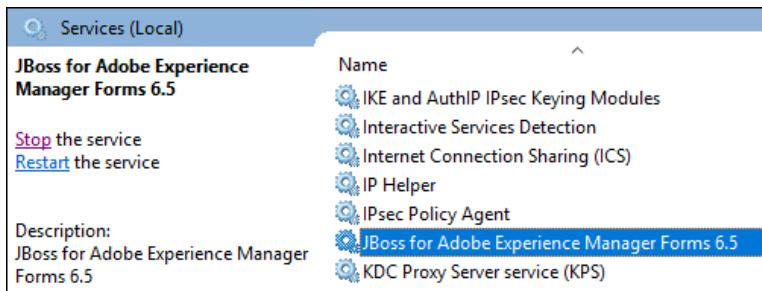
4. Select **About** (*see illustration*).



5. You can find your current version and service pack version here.
6. When there is a newer service pack available on Software Distribution, you can download it and apply it to your server so your server is running the current service pack. Follow the steps in the next section.

Prepare your System

7. Shut down your AEM Forms JEE Server. Unlike AEM Forms OSGi, and JEE service pack must be installed when the server is not running.
8. If you are using Windows, open **Server Manager** and select **Tools – Services**.
9. Select **JBoss_for_Adobe_Experience_Manager_Forms_<version>** and click **Stop the service** (*see illustration*).

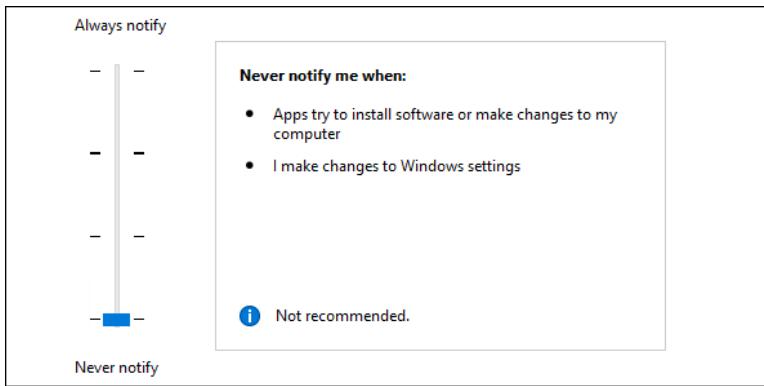


10. Wait for the service to completely stop. This can take 5 minutes or more depending on your server.

Before beginning the installation process, turn off Windows *User Account Control Settings*.

11. Open the Windows **Control Panels**.

12. Select **User Accounts** and click **Change User Account Control settings**.
13. Slide the setting all the way down to **Never notify** (see *illustration*).



14. Click **OK**.
15. Turn off **Windows Defender Firewall**.
16. **Restart** your computer if the *User Account Control settings* changed.
17. Quit all other programs before starting the installation.

Download a Service Pack

18. Open a browser and navigate to Adobe Software Distribution.
19. Click on the new service pack. You will see information about its contents. There may also be documentation links like the one you see here.
20. Select **Accept EULA Terms**.
21. Click **Download**.

AEMForms-6.5.0-0044_jboss_win

[Details](#) [EULA](#)

| | | |
|--------------|--|---|
| Description | Service pack for AEM Forms on JEE 6.5.13.0 release. It is for JBoss EAP installed on Microsoft Windows. It brings fixes for critical security vulnerabilities (CVE-2021-44228 and CVE-2021-45046) reported for Apache Log4j2 and more fixes. Before installing the service pack, see corresponding documentation . |  |
| Versions | 6.5 | |
| Package type | Service & Cumulative Fix Pack | |
| File type | application/zip | |
| Provider | Adobe | |

[Accept EULA Terms](#)

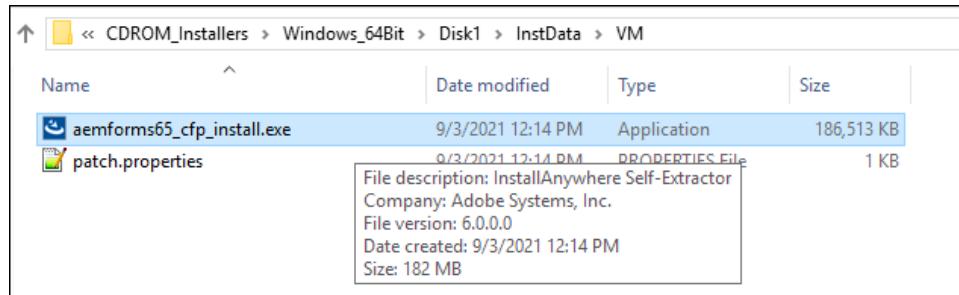
[Cancel](#) [Share](#) [Download](#)

22. Extract the archives contents.

Install a Service Pack

23. After the archives contents are extracted, locate this file.

\AEM Forms JEE 6.5.12\AEMForms-6.5.0-0044_jboss_win
SP13\CDROM_Installers\Windows_64Bit\Disk1\InstData\VM\aemforms65_cfp_install.exe



24. Double-click the **aemforms65_cfp_install.exe**. Note: the filename might be different if you have a newer version. The *InstallAnywhere* application will start.

25. Click **Next**.

26. Update the path with the location of your existing installation. The installer will default to this location.

C:\Adobe\Adobe_Experience_Manager_Forms

27. Click **Next** and the installer will provide a Patch Summary.

28. Click **Next**, scroll down, and select **I accept the terms of the License Agreement**.

29. Click **Next** and review the information in the table.

30. Click **Install** and the installation will start.



31. Click **Next** and you will see a *Processing Patch Instructions* message.

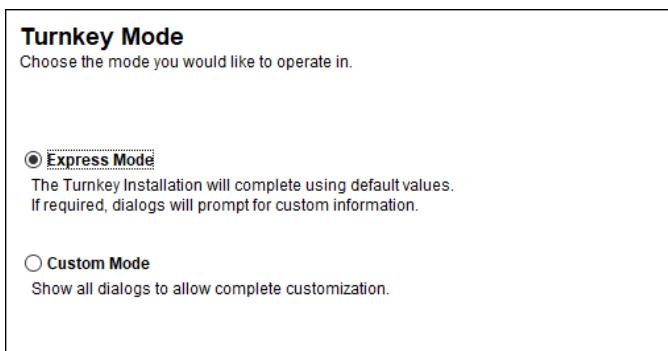


32. Click **Done** and *Configuration Manager* will start.



33. Click **Next**.

34. When you see the *Turnkey Mode* screen, select **Express Mode** and click **Next**.



35. Review the *JEE Capabilities* that will be configured and click **Next**.

36. Complete the *Configuration Manager* screens as described above in the Installation instructions.

37. When the installation is completed, review the installation log file located here.

C:\Adobe\Adobe_Experience_Manager_Forms\patch\AEMForms-6.5.0-0044\log

Make sure to review and correct any errors. Most of the log will be [INFO] and [WARN] messages.

Sat Apr 28 15:43:21 EDT 2018:[INFO]

Sat Apr 28 15:43:21 EDT 2018:[WARN]

If everything is fine, restart the server.

Back Up the MySQL Database

Follow these steps to back up the repository stored in MySQL.

1. Open CMD.

C:\Adobe\Adobe_Experience_Manager_Forms\mysql\bin

2. Enter this command.

mysqldump -u adobe -p --databases adobe>adobedump.sql

3. Enter **password** or another MySQL password.

This will create a backup of the MySQL database.

adobedump.sql

You will find this file in the bin directory.

Restore the adobedump.sql file

4. Stop the JBoss service but leave the MySQL service running.

5. Make sure the **adobedump.sql** file is in this location.

C:\Adobe\Adobe_Experience_Manager_Forms\mysql\bin

6. Open **CMD**.

7. Go to this directory.

C:\Adobe\Adobe_Experience_Manager_Forms\mysql\bin

8. Enter this command.

mysql -u adobe -p adobe < adobedump.sql

Be patient, it will take a few minutes.

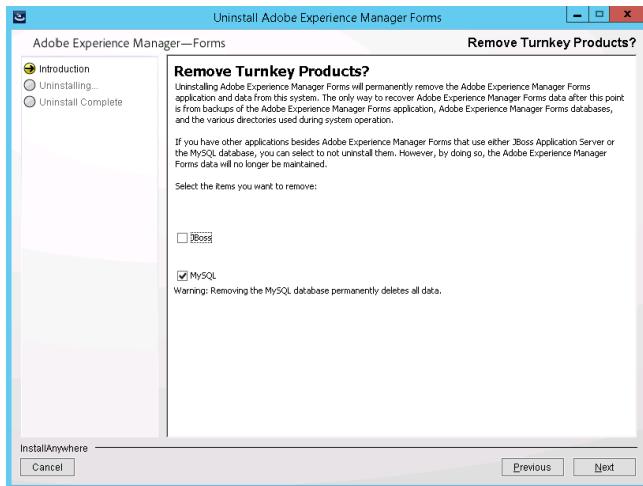
9. Stop the MySQL service.

| Name | Description | Status | Startup Type | Log On As | |
|---|---|--|-----------------|----------------|----------------|
| Google Update Service (gupdate) | Keeps your Google software up to date. If this service... | Running | Automatic (D... | Local Syste... | |
| Google Update Service (gupdatem) | Keeps your Google software up to date. If this service... | Running | Manual | Local Syste... | |
| Group Policy Client | The service is responsible for applying settings config... | Running | Automatic (T... | Local Syste... | |
| Health Key and Certificate Management | Provides X.509 certificate and key management servi... | Running | Manual | Local Syste... | |
| Human Interface Device Service | Activates and maintains the use of hot buttons on ke... | Running | Manual (Trig... | Local Syste... | |
| Hyper-V Data Exchange Service | Provides a mechanism to exchange data between the... | Running | Manual (Trig... | Local Syste... | |
| Hyper-V Guest Service Interface | Provides an interface for the Hyper-V host to interact... | Running | Manual (Trig... | Local Syste... | |
| Hyper-V Guest Shutdown Service | Provides a mechanism to shut down the operating sy... | Running | Manual (Trig... | Local Syste... | |
| Hyper-V Heartbeat Service | Monitors the state of this virtual machine by reportin... | Running | Manual (Trig... | Local Syste... | |
| Hyper-V Remote Desktop Virtualization Service | Provides a platform for communication between the ... | Running | Manual (Trig... | Local Syste... | |
| Hyper-V Time Synchronization Service | Synchronizes the system time of this virtual machine ... | Running | Manual (Trig... | Local Service | |
| Hyper-V Volume Shadow Copy Requestor | Coordinates the communications that are required t... | Running | Manual (Trig... | Local Syste... | |
| IIS Admin Service | Enables this server to administer the IIS metabase. Th... | Running | Automatic | Local Syste... | |
| IKE and AuthIP IPsec Keying Modules | The IKEEXT service hosts the Internet Key Exchange (I... | Running | Automatic (T... | Local Syste... | |
| Interactive Services Detection | Enables user notification of user input for interactive ... | Running | Manual | Local Syste... | |
| Internet Connection Sharing (ICS) | Provides network address translation, addressing, na... | Disabled | | Local Syste... | |
| Internet Explorer ETW Collector Service | ETW Collector Service for Internet Explorer. When run... | Running | Manual | Local Syste... | |
| IP Helper | Provides tunnel connectivity using IPv6 transition tec... | Running | Automatic | Local Syste... | |
| IPsec Policy Agent | IPsec for Adobe Experience Manager Forms 6.2 | Running | Manual (Trig... | Network S... | |
| JBoss for Adobe Experience Manager Forms 6.2 | KDC Proxy Server service (KPS) | Running | Automatic | Local Syste... | |
| KDC Proxy Server service (KPS) | KtmRm for Distributed Transaction Coordinator | Running | Manual (Trig... | Network S... | |
| KtmRm for Distributed Transaction Coordinator | Link-Layer Topology Discovery Mapper | Running | Manual | Local Service | |
| Link-Layer Topology Discovery Mapper | Local Session Manager | Running | Automatic | Local Syste... | |
| Local Session Manager | Microsoft iSCSI Initiator Service | Running | Manual | Local Syste... | |
| Microsoft iSCSI Initiator Service | Microsoft SharePoint Workspace Audit Service | Running | Manual | Local Service | |
| Microsoft SharePoint Workspace Audit Service | Microsoft Software Shadow Copy Provider | Running | Manual | Local Syste... | |
| Microsoft Software Shadow Copy Provider | Microsoft Storage Spaces SMP | Running | Manual | Network S... | |
| Microsoft Storage Spaces SMP | Multimedia Class Scheduler | Running | Manual | Local Syste... | |
| Multimedia Class Scheduler | MySQL for Adobe Experience Manager Forms 6.2 | MySQL Service setup during the Turnkey installatio... | Running | Automatic | Local Syste... |
| MySQL for Adobe Experience Manager Forms 6.2 | NetPipe Listener Adapter | Receives activation requests over the net.pipe protoc... | Running | Automatic | Local Service |

10. Restart the JBoss Service

Uninstall while keeping MySQL Database

If your system becomes corrupted, you can uninstall it, while keeping the MySQL database.



Be patient, it will take a while.

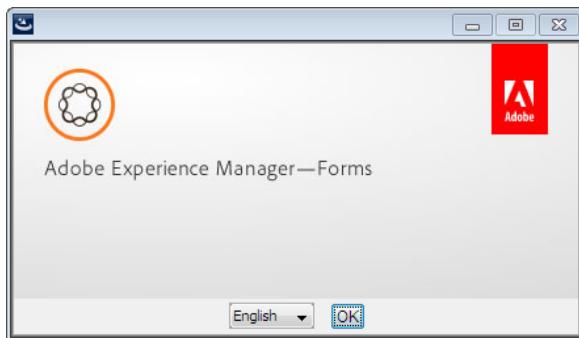
Installation

Before beginning the installation process, turn off *Windows User Account Control Settings*.

1. Go to Control Panels.
2. Locate **User Account Control Settings**.
3. Turn the settings all the way down.
4. **Restart** your computer.
5. Run the **install.exe** file located in this directory.

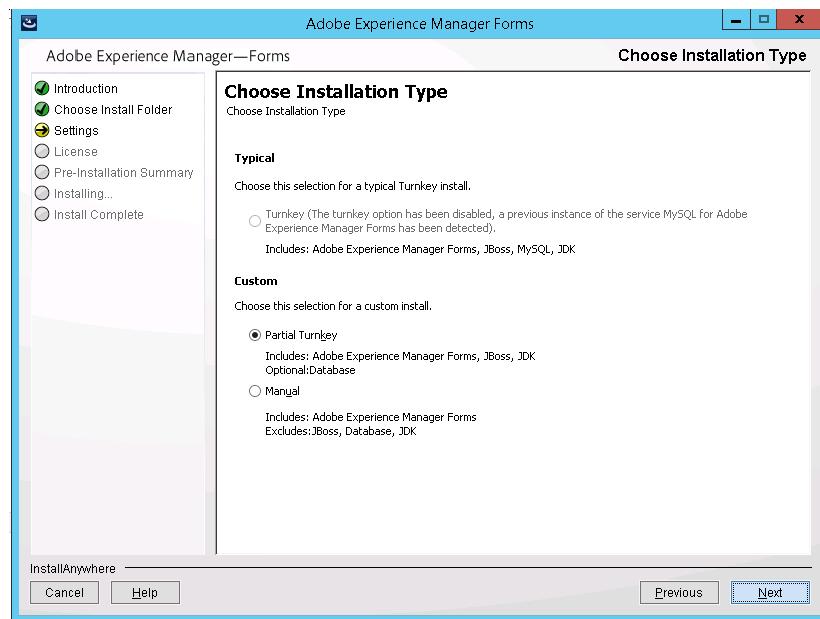
[AEM Installer Location]\server\Disk1\InstData\Windows_64\VM\install.exe

6. When the splash screen appears, select your language.

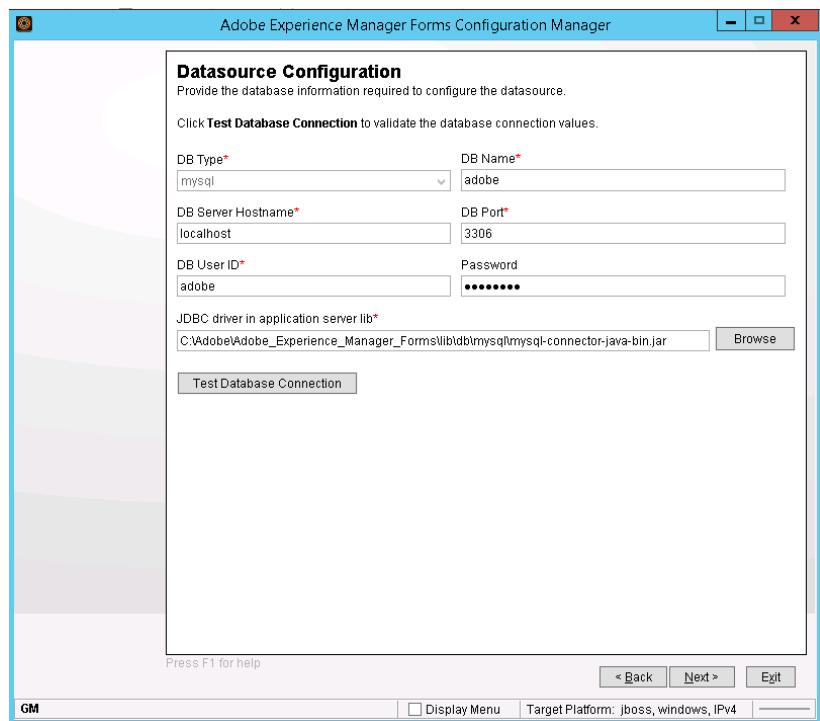


7. Click **OK**.

8. At the *Choose Installation Type* screen select **Partial Turnkey** and click **Next**.



These are the settings for the existing **mysql** database.



These are the settings for the JBOSS SSL.

Adobe Experience Manager Forms Configuration Manager

Configure turnkey JBoss SSL

Configures the turnkey JBoss to be SSL enabled.

| | |
|------------------------|------------------------|
| Common Name* | Org Unit* |
| r430b.smartdoctech.com | SDGROUP |
| Org* | Location* |
| SmartDoc | Iselin |
| State* | Country* |
| NJ | US |
| Password* | Password Confirmation* |
| •••••••• | •••••••• |
| Certificate Alias* | Keystore filename* |
| AEMformsCert | aemformses |

Skip configuration

0%

Press F1 for help

GM | Display Menu | Target Platform: jboss, windows, IPv4

Trouble-Shooting

This section shows how to trouble-shoot common errors.

Failed to merge Ears

When running *Configuration Manager*, you may see this error when trying to merge the Ear files.

Configure Adobe Experience Manager Forms (1 of 5)
Configures the Adobe Experience Manager Forms EAR files based on the selected modules.

| Module | EAR File |
|---|--|
| Adobe Experience Manager forms Foundation | adobe-core-jboss.ear |
| Adobe Experience Manager forms Foundation | adobe-core-native-jboss-x86_win32.ear |
| Digital Signatures | adobe-dss-native-jboss-x86_win64.ear |
| PDF Forms | adobe-forms-jboss.ear |
| PDF Forms | adobe-formdataintegration-jboss.ear |
| PDF Forms | adobe-guides.ear |
| PDF Forms | adobe-forms-native-jboss-x86_win32.ear |
| Output | adobe-output-jboss.ear |

Error [ALC-LCM-010-200]

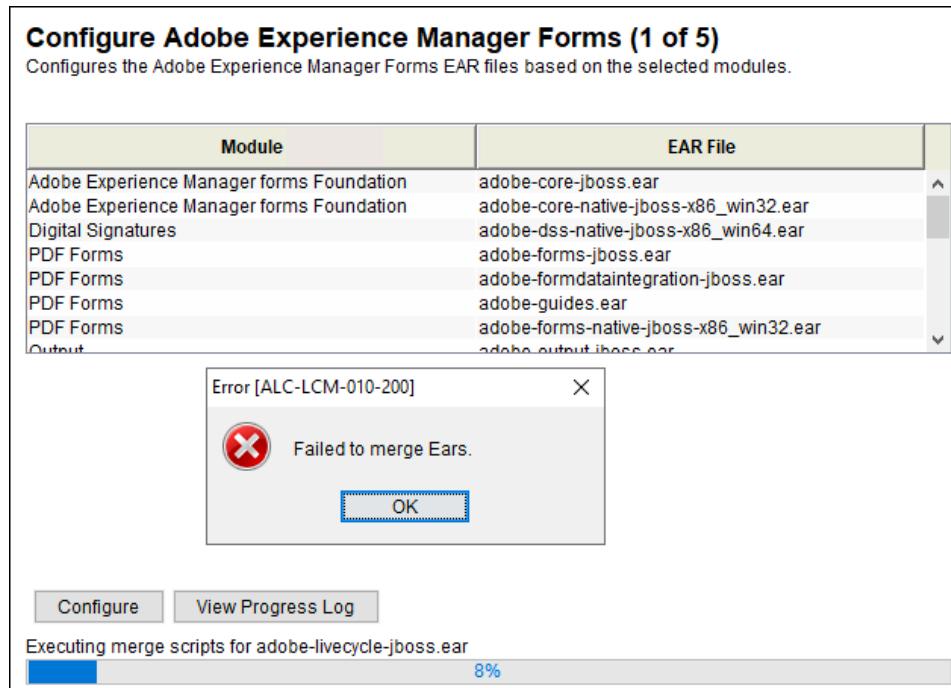
Failed to merge Ears.

OK

Configure View Progress Log

Executing merge scripts for adobe-livecycle-jboss.ear

8%



Connection Test Hangs

This may be an indication of a bigger problem, but it may just be a slow starting system. I have seen instances when the test was slow but the installation was perfectly fine.

Adobe Experience Manager Forms Configuration Manager

Adobe Experience Manager Forms information

One or more of the selected tasks require connecting to a running Adobe Experience Manager Forms server. Specify the server connection information for the target server instance. If this is a new installation a default user ID has been created (User ID: **administrator**, password:**password**). If this is an upgrade installation you should use the username and password you set previously. It is recommended that the password for this account be changed from the default when you log in to the Administration Console for first time.

Host*
localhost

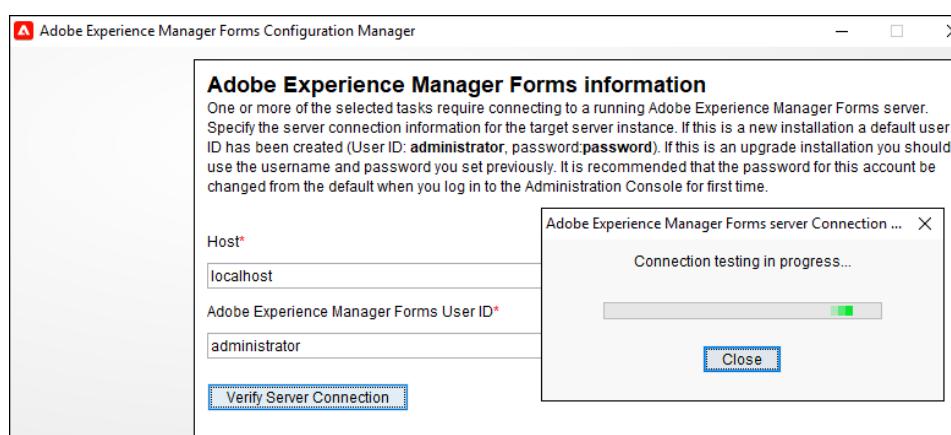
Adobe Experience Manager Forms User ID*
administrator

Verify Server Connection

Adobe Experience Manager Forms server Connection ...

Connection testing in progress...

Close

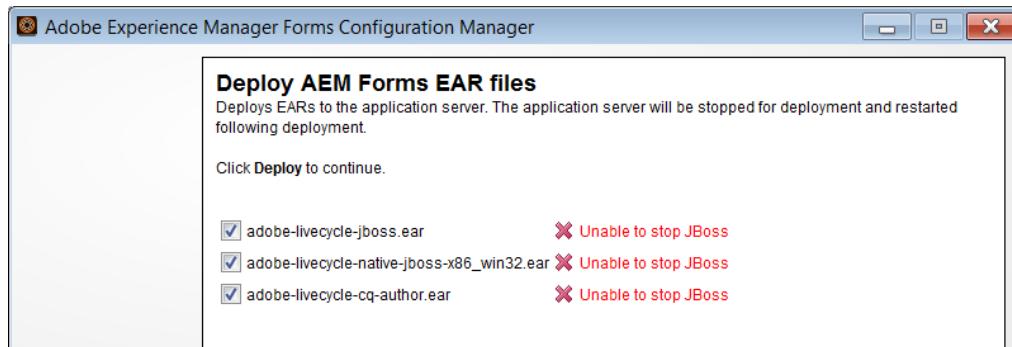


Failed on Verifying MySQL is installed

During a Turnkey install, this message comes up.



This sometimes occurs while deploying the EAR files.

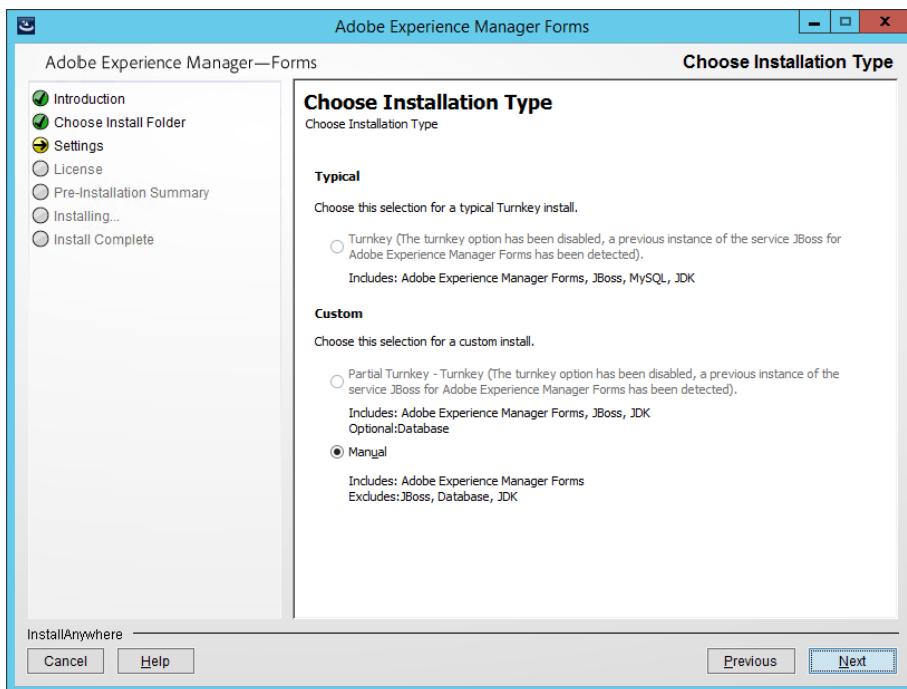


The log files confirm that the installer cannot find MySQL.

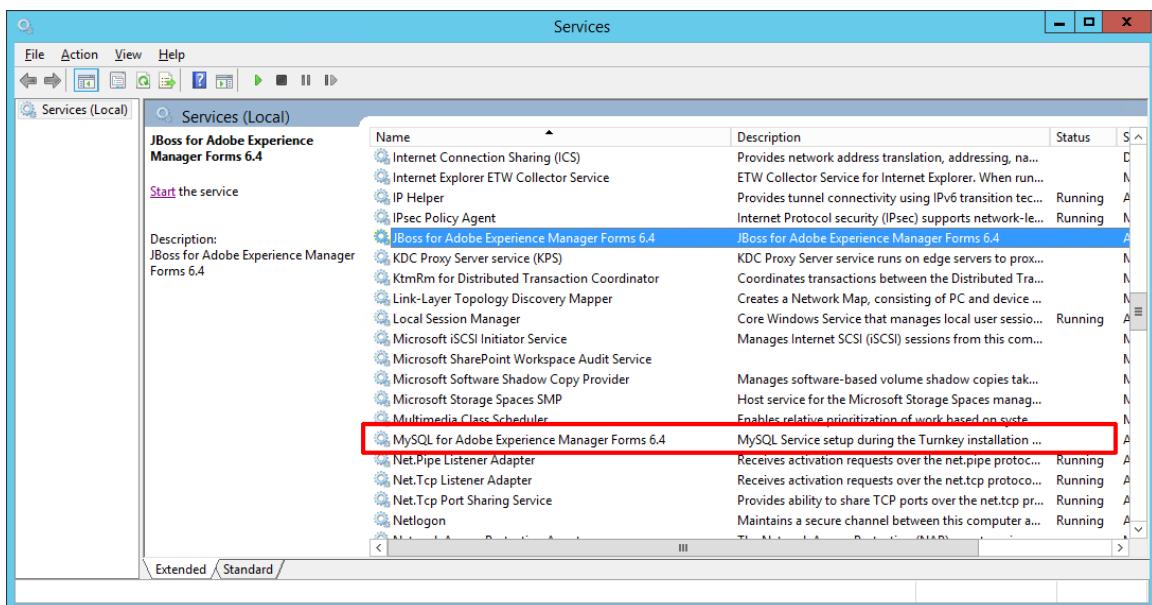
```
[2019-04-02 20:37:42,965], INFO, Thread-22, com.adobe.livecycle.lcm.feature.deployment.DeployEARsDialog, Progress: [0%, Verifying MySQL for Adobe Experience Manager Forms 6.4 service is installed]
[2019-04-02 20:37:42,965], INFO, Thread-22, com.adobe.livecycle.lcm.util.process.ProcessExecutor, Running: sc query "MySQL for Adobe Experience Manager Forms 6.4"
[2019-04-02 20:37:43,021], INFO, Thread-22, com.adobe.livecycle.lcm.util.ProcessExecutor, Return value: 1060
[2019-04-02 20:37:43,021], INFO, Thread-22, com.adobe.livecycle.lcm.util.ServiceUtils, State: -2,The specified service does not exist as an installed service
[2019-04-02 20:37:43,021], INFO, Thread-22, com.adobe.livecycle.lcm.util.ServiceUtils, Service 'MySQL for Adobe Experience Manager Forms 6.4' exists: false
[2019-04-02 20:37:43,022], SEVERE, Thread-22, com.adobe.livecycle.lcm.feature.deployment.DeployEARsTask, Task failed
com.adobe.livecycle.cdv.CDVException[ALC-LCM-999-020]: Windows turnkey service MySQL for Adobe Experience Manager Forms 6.4 does not exist.
    at com.adobe.livecycle.lcm.util.TurnkeyUtils.assertService(TurnkeyUtils.java:97)
    at com.adobe.livecycle.lcm.feature.deployment.DeployEARs.turnkeyGetDBReadyForDeployment(DeployEARs.java:232)
    at com.adobe.livecycle.lcm.feature.deployment.DeployEARs.turnkeyDeployLiveCycleEARs(DeployEARs.java:258)
    at com.adobe.livecycle.lcm.feature.deployment.DeployEARs.turnkeyDeployLFSs(DeployEARs.java:224)
    at com.adobe.livecycle.lcm.feature.deployment.DeployEARs.turnkeyDeployLFSs(DeployEARs.java:207)
    at com.adobe.livecycle.lcm.feature.deployment.DeployEARsTask$ActualTask.<init>(DeployEARsTask.java:93)
    at com.adobe.livecycle.lcm.feature.deployment.DeployEARsTask$1.construct(DeployEARsTask.java:63)
    at com.adobe.livecycle.lcm.core.tasks.SwingWorker$2.run(SwingWorker.java:114)
    at java.lang.Thread.run(Thread.java:745)
[2019-04-02 20:37:49,431], INFO, Thread-22, com.adobe.livecycle.lcm.feature.deployment.DeployEARsTask, Completing task: com.adobe.livecycle.lcm.feature.deployment.DeployEARsTask@3f251311 isDone:true
```

Turnkey Unavailable

You may see the Turnkey options grayed out.



This is due to the **JBOSS_FOR_ADOBE_EXPERIENCE_MANAGER_FORMS_6.4** and the "MySQL for Adobe Experience Manager Forms 6.4" services. They don't have to be running as shown here.



Follow these steps to remove these services.

1. Open **CMD**.
2. Enter this command.

sc delete JBOSS_FOR_ADOBE_EXPERIENCE_MANAGER_FORMS_6.5.12

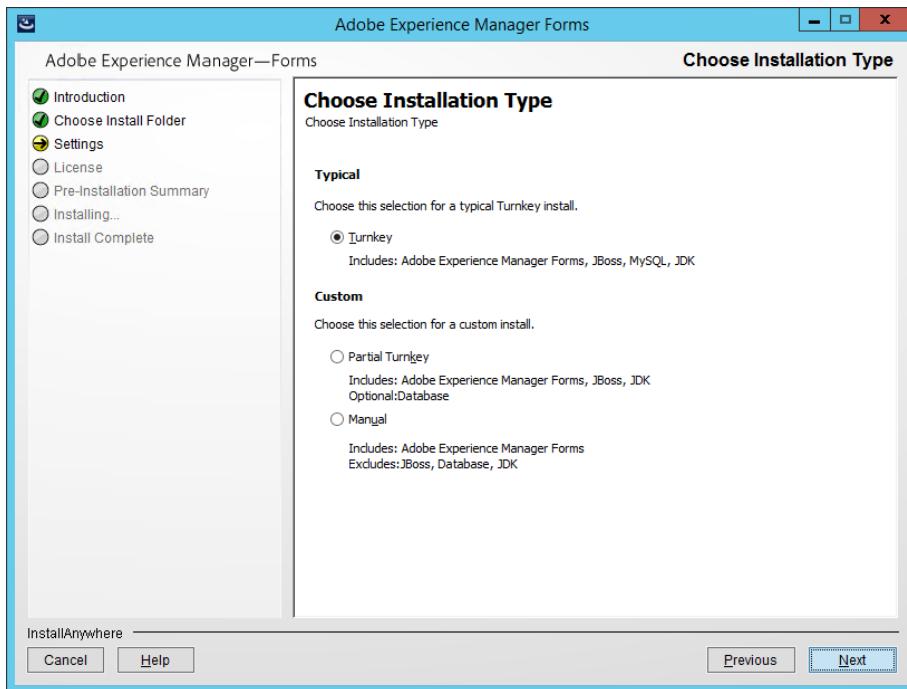
You will see this message: **[SC] DeleteService SUCCESS**.

3. Enter this command.

```
sc delete "MySQL for Adobe Experience Manager Forms 6.5.12"
```

You will see this message: **[SC] DeleteService SUCCESS**.

The Turnkey options will now be available.

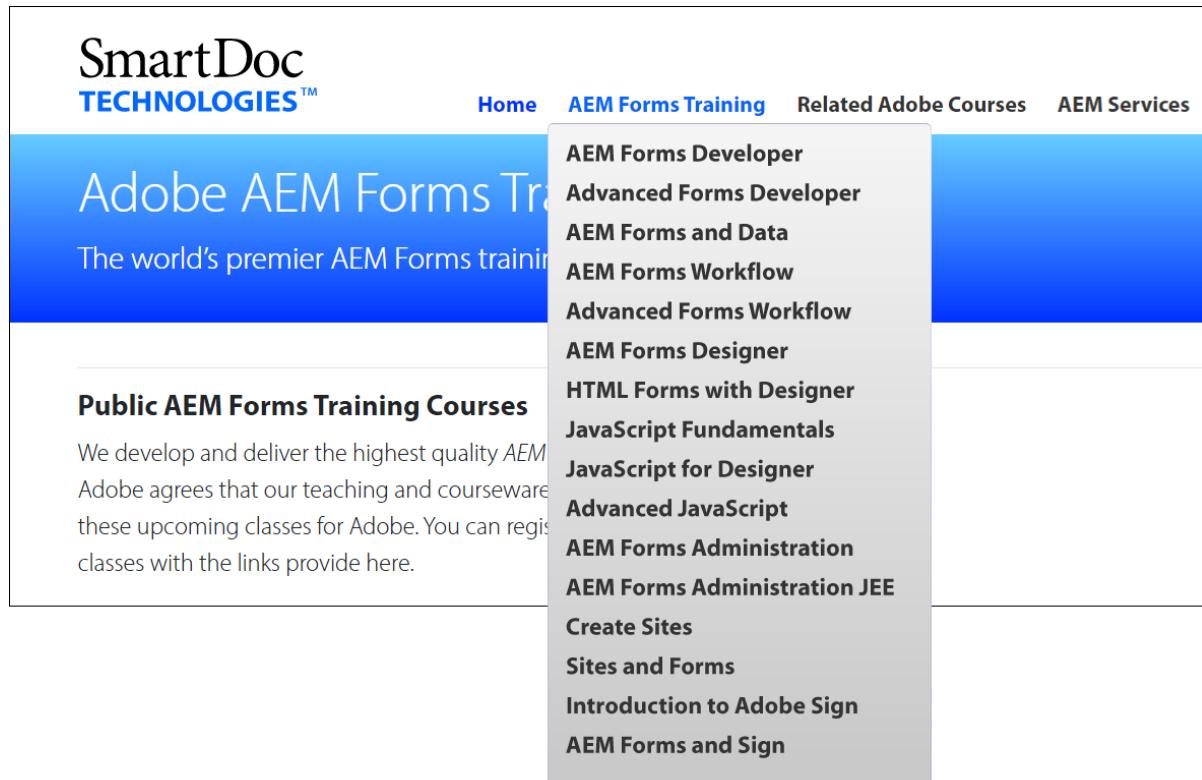


About this Courseware

SmartDoc Technologies supplied the official *Adobe-Certified AEM Forms Training* courseware to Adobe and Adobe's clients from 2016 – 2021. During that time, our SmartDoc Courseware was battle-tested by thousands of students worldwide. Our SmartDoc Technologies courseware has been peer-reviewed and certified by the *Adobe Engineering, Product, and Curriculum* teams and by thousands of students like you.

In addition to having the highest *quality* AEM Forms courseware, the SmartDoc library also has the highest *quantity* of AEM Forms courseware. You will find the perfect course for your specific AEM Forms needs in the SmartDoc library. You can always find a current listing of our Adobe AEM Forms training courses on our website.

www.smartdoctech.com



The screenshot shows the SmartDoc Technologies website. The header includes the company logo 'SmartDoc TECHNOLOGIES™' and a navigation menu with links for 'Home', 'AEM Forms Training' (which is the active page, indicated by a blue underline), 'Related Adobe Courses', and 'AEM Services'. A dropdown menu is open under 'AEM Forms Training', listing various training courses: 'AEM Forms Developer', 'Advanced Forms Developer', 'AEM Forms and Data', 'AEM Forms Workflow', 'Advanced Forms Workflow', 'AEM Forms Designer', 'HTML Forms with Designer', 'JavaScript Fundamentals', 'JavaScript for Designer', 'Advanced JavaScript', 'AEM Forms Administration', 'AEM Forms Administration JEE', 'Create Sites', 'Sites and Forms', 'Introduction to Adobe Sign', and 'AEM Forms Sign'.