

# IBM SPSS Modeler Entity Analytics 16.0

## Installation quick start guide

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### Overview

#### EA client

If running in local mode only EA client is required.

When installing EA 16 you have the option to install a packaged DB2 instance; you can use this to store the EA repository that is running locally on Modeler Client.

- If you intend to work in distributed mode with EA Server you do not need to install the packaged DB2 from the EA client installer.
- If you will be running in local mode, and you already have DB2 10.5 installed on the Modeler client machine that you will use to store the EA repository, you should **not** install the packaged DB2.

**NOTE:** DB2 10.5 is not supported on Windows XP or Vista – if you have Modeler client installed on either of these platforms you cannot run EA in local mode. You must run in distributed mode with EA Server.

#### EA Server

Installation is required on the Modeler server tier if you want to run EA in distributed mode connected to Modeler Server. The EA Server 16 installer also provides the option to install a packaged DB2 10.5 on the server to store the EA repository.

- If you already have a DB2 10.5 installed on the Modeler\EA server machine that you will use to store the EA repository you should **not** install the packaged DB2.

#### EA Repository

You can use either the DB2 10.5 that is shipped with Modeler EA 16 to store an EA 16 repository, or you can choose to use an existing DB2 10.5 installation that exists in your organisation.

The DB2 install must be on the same machine that has the Modeler\EA execution engine installed on it (that is, if you are running Modeler in local mode this is the Modeler\EA client machine; if you are running Modeler in distributed mode this is the Modeler\EA Server machine).

# Installation\Repository Creation

## EA Client

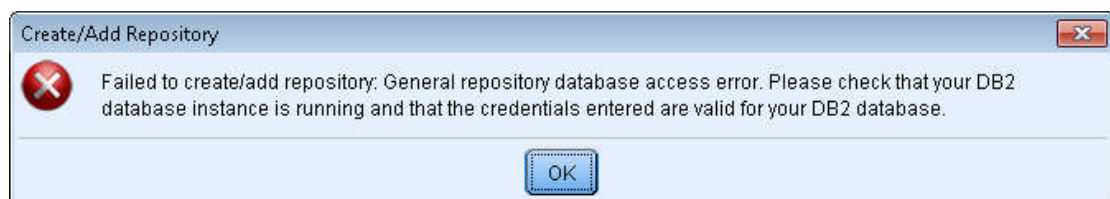
1. On Windows systems with UAC you must run the installer by right-clicking and selecting “Run as Administrator”.
2. If you choose to install DB2 (see the Overview on page 1 for when you might want to do this) you are prompted for a username and password – this is the DB2 instance owner. The installer will create the user if it does not already exist on the system.

**WARNING!** Do **NOT** specify a username that begins with “ibm” because this is invalid for DB2 and will cause the installation to fail.

- a. The EA installer status bar will not show any progress for **at least 5 minutes** whilst DB2 is being installed. Do **not** manually cancel the EA installer at this time. During this time you will see *db2* and *msiexec* related processes running on the system if your Windows Task Manager is configured to show processes from all users.
  - b. Log out and log back in to the system as the installing user. **NOTE:** if you are not logged into the OS as the DB2 instance owner you specified in 2. above then, before proceeding, you must add the logged in user to the DB2ADMNS group on the OS before logging out and logging back in again.
  - c. Check the DB2 installation by running “DB2 First Steps” from the “IBM DB2 SPSSEA (default)” entry in the Programs menu, and clicking “Create sample database”. This displays a GUI that enables you to create a sample database. If it doesn’t, or produces an error, verify the steps in a. above.
3. Create an EA repository in the DB2 instance:

**Note:** On Windows systems with UAC you must start Modeler by selecting “Run as Administrator”.

- a. The user you are logged into Windows as must have full permissions on the: C:\ProgramData\IBM\SPSS\Modeler\16\EA\g2\_config.xml file, and be a member of the DB2ADMNS group on the client.
- b. Edit the EA export node and, from the “Entity Repository” drop-down, select “<Browse>”
- c. In the Entity Repositories dialog box, from the “Repository Name” drop-down, select “create\as new repository”.
- d. In step 1. of the *Create\add repository* wizard specify a User Name and Password that must be used by **all** EA users to access the EA repository. This user must be an existing user on the operating system that is a member of the DB2ADMNS group. If they are not, repository creation will fail with the following error:



It does not have to be the DB2 instance owner.

**WARNING!** Do **NOT** specify a login that contains an exclamation mark character ( ! ) in either the username or password as this will also cause repository creation to fail.

- e. In step 2. Of the *Create\add repository* wizard specify a repository name and press OK. If the error: “Error on operating config XML file” is displayed verify step a. above and retry.

## EA Server

### Windows

On Windows Server systems it is possible that, when requested to install DB2, the EA Server installer will hang rather than silently install DB2.

Note that a normal silent DB2 installation can take at least 5 minutes with no obvious signs of progress from the EA installer (as detailed in 2.b. in the following “Installing on Windows Server” section). However, if you see no progress for 30 minutes or more, and a dialog box with the text “Windows Installer Coordinator” persistently appears, cancel the EA installer and enable the “Turn off Windows Installer RDS Compatibility” policy as explained below.

To disable Windows Installer RDS Compatibility:

1. Log on to the system as a user with Administrative Privileges.
2. Open the Windows Control Panel and search for “Group Policy”.
3. Open the Group Policy editor by clicking on the “Local Group Policy Editor” link in the search results.
4. In the Group Policy Editor go to:  
Computer Configuration->Administrative Templates->Windows Components->Remote Desktop Services->Remote Desktop Session Host->Application Compatibility
5. In the right pane, right-click on “Turn off Windows Installer RDS Compatibility” and, from the drop down menu, select Edit.
6. Select the “Enable” radio button and click OK.
7. After making these changes re-run the EA Server installer as documented in the following section.

### Installing on Windows Server

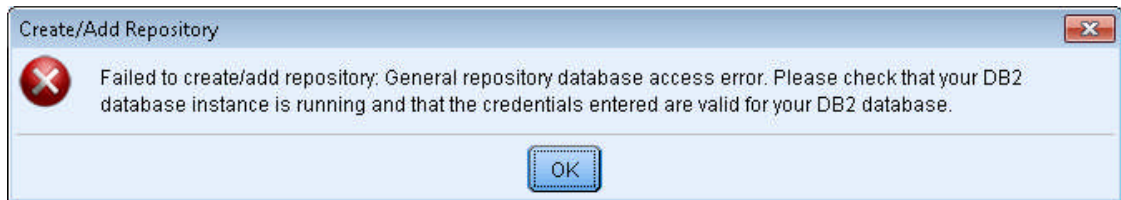
1. Install EA Server as documented in the “IBM SPSS Modeler Entity Analytics (server side)” section of the “IBM SPSS Modeler Entity Analytics Installation” guide.

Note that on Windows systems with UAC you must run the installer by right-clicking and selecting “Run as Administrator”.

2. If you choose to install DB2 (see the Overview on page 1 for when you might want to do this) you are prompted for a username and password – this is the DB2 instance owner. The installer will create the user if it does not already exist on the system.

**WARNING!** Do **NOT** specify a username that begins with “ibm” because this is invalid for DB2 and will cause the installation to fail.

- a. The EA installer status bar will not show any progress for **at least** 5 minutes whilst DB2 is being installed. Do **not** manually cancel the EA installer at this time. During this time you will see *db2* and *msiexec* related processes running on the system if your Windows Task Manager is configured to show processes from all users.
  - b. Log out and log back in to the system as the installing user. **NOTE:** if you are not logged into the OS as the DB2 instance owner you specified in 2. above then, before proceeding, you must add the logged in user to the DB2ADMNS group on the OS before logging out and logging back in again
  - c. Check the DB2 installation by running “DB2 First Steps” from the “IBM DB2 SPSSEA (default)” entry in the programs menu, and clicking “create sample database”. This displays a GUI that enables you to create a sample database. If it doesn’t, or produces an error, verify the steps in a. above.
3. Connect to the Modeler Server from a Modeler EA Client and create the EA repository.
- a. The user you are connected to Modeler Server as must have full permissions on the C:\ProgramData\IBM\SPSS\Modeler\16\EA\g2\_config.xml file on the Modeler Server machine and be a member of the DB2ADMNS group on the server.
  - b. Edit the EA export node and, from the “Entity Repository” drop-down, select “<Browse>”.
  - c. In the Entity Repositories dialog box, from the “Repository Name” drop down, select “Create\as new repository”.
  - d. In step 1. of the *Create\add repository* wizard specify a User Name and Password that must be used by **all** EA users to access the EA repository. This user must be an existing user on the operating system that is a member of the DB2ADMNS group. If they are not, repository creation will fail with the following error:



It does not have to be the DB2 instance owner.

This login must be provided to all EA users for them to use when they connect to the EA repository from within Modeler.

**WARNING!** Do **NOT** specify a login that contains an exclamation mark character ( ! ) in either the username or password as this will also cause repository creation to fail.

- e. In step 2. Of the *Create\add repository* wizard specify a repository name and press OK. If the error: “Error on operating config XML file” is displayed verify step a. above and retry.

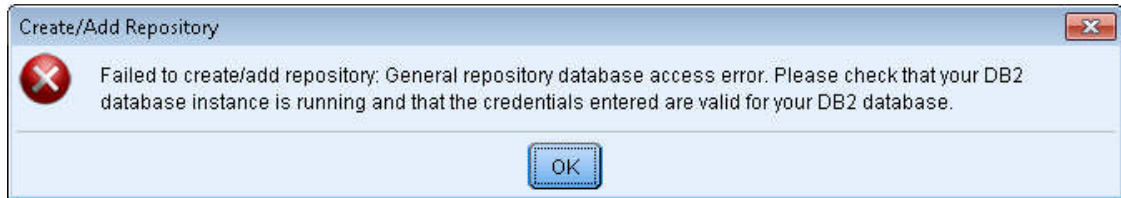
## Linux\UNIX

1. Install EA Server:
  - a. Logon to the console as root
  - b. Unzip the EA Server distribution
  - c. cd to the Disk1/InstData/VM directory where you will find the installer binary (called install.bin) and also the response (.rsp) file that the DB2 install will use.
  - d. Add execute permissions to install.bin and execute the installer (for example: ./install.bin), following the prompts provided.
2. If you choose to install DB2 (see the Overview on page 1 for when you might want to do this) you are **not** prompted for a username and password as on Windows. Instead, default credentials for the DB2 instance owner are provided in the DB2 response file. You can edit the DB2 response file to override the defaults (refer to: <http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/index.jsp?topic=%2Fcom.ibm.db2.luw.qb.server.doc%2Fdoc%2Fc0007502.html> for further information). The installer will create the user if it does not already exist on the system.

**WARNING!** Do **NOT** specify a username that begins with “ibm” because this is invalid for DB2 and will cause the installation to fail.

- a. If the credentials you specify are not the same as those you are logged into the OS as then you must add the logged in user to the db2iadm1 group on a UNIX/Linux server. You **must** then logout and login to the system again for the changes to take effect before proceeding.
  - b. Check the DB2 installation by ensuring that the DB2 instance is running after installation has completed and you have logged back in as the DB2 instance owner user. Next, attempt to create a database from the terminal window, for example: “db2 create database TEST”. This should succeed with the message: “DB20000I The CREATE DATABASE command completed successfully”.
3. Connect to the Modeler Server from a Modeler EA Client as the DB2 instance owner and create the EA repository.
    - a. The user you are connected to Modeler Server as must have full permissions on the g2\_config.xml file in the Modeler Server ./ext/bin/pasw.entityanalytics/EA/ directory on the Modeler Server machine, and be a member of the db2iadm1 group on the server.
    - b. Edit the EA export node and, from the “Entity Repository” drop-down, select “<Browse>”.
    - c. In the Entity Repositories dialog box, from the “Repository Name” drop-down, select “Create\as new repository”.

- d. In step 1. of the *Create\add repository* wizard specify a User Name and Password that must be used by **all** EA users to access the EA repository. This user must be an existing user on the operating system that is a member of the db2iadm1 group. If they are not, repository creation will fail with the following error:



It does not have to be the DB2 instance owner.

This login must be provided to all EA users for them to use when they connect to the EA repository from within Modeler.

**WARNING!** Do **NOT** specify a login that contains an exclamation mark character ( ! ) in either the username or password as this will also cause repository creation to fail.

- e. In step 2. Of the *Create\add repository* wizard specify a repository name and press OK. If the error: "Error on operating config XML file" is displayed verify step a. above and retry.

## User permissions required for non-administrative EA tasks (reading from and writing to an existing repository)

- When running EA in local mode the current OS user must be in either the DB2USERS or DB2ADMNS OS group and the user specified in the EA connection must be a member of the DB2ADMNS group on the OS.
- Running EA in remote server mode:
  - a. The user specified in the EA connection must be a member of the DB2ADMNS OS group (or db2iadm1 on Linux\UNIX). If the user logged into Modeler Server is a different user from the one used in the EA connection the Modeler Server user must be in either the DB2USERS or DB2ADMNS OS group on a Windows server, or the db2iadm1 group if using a Linux\UNIX server.
  - b. The user logged into Modeler Server on Linux\UNIX must have full permissions on the `./ext/bin/pasw.entityanalytics/EA/repositories/YOUR_REP_NAME/g2.ini` file. If you are connected to Modeler Server as a different user that was connected to create the repository you will not have these permissions. Without these permissions you will be able to connect to an existing EA repository but won't be able to read rows from the repository, or write to the repository. To change the permissions "chmod 755 g2.ini" from the above directory
- All EA users must use the same login to the EA repository.

## User permissions required for administrative EA tasks (creating or destroying a repository)

If you are running Modeler Client in standalone mode on Windows 7, to create or delete a repository you need to start Modeler Client using the "Run as Administrator" option. For more information, see: <http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/index.jsp?topic=%2Fcom.ibm.db2.luw.admin.sec.doc%2Fdoc%2Fc0051954.html>

### Windows

The user who logs into IBM SPSS Modeler Server (or is logged into the OS if running EA in client mode) needs to be added as a member of the DB2ADMNS group in order to carry out repository administration.

For Windows 7, when running EA Client in local mode, you must start Modeler by selecting "Run as Administrator".

As a one-off event, if you have just added a user to the DB2ADMNS group, you must log out and log back in to your account, or reboot, before these changes take effect. The reason the logout is needed is because the additional rights given by the DB2ADMNS group are applied on login. Note that this does not apply to Modeler Server because the user session is created on login to Modeler Server

## **UNIX**

The user logged into IBM SPSS Modeler Server must be either the root user or the DB2 instance owner and added as a member of the db2iadm1 group; for example: *usermod -G db2iadm1 user*.

### **DB2 password**

On Windows, if you change the password of the DB2 instance owner account, and then restart your machine, DB2 may not start. In this case you must update your DB2 instance to reflect the change.