

EMS Active Directory  
Installation & Configuration Guide  
V44.1  
April 2019

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## Table of Contents

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CHAPTER 1: Connect to Your Database Using Active Directory .....	1
Active Directory Process Overview .....	1
What Is an EMS User? .....	1
CHAPTER 2: Pre-Installation Requirements .....	2
CHAPTER 3: Configure Your EMS Database .....	3
CHAPTER 4: Configure EMS Desktop Client .....	4
CHAPTER 5: Connect Your EMS Web-Based Applications .....	6
CHAPTER 6: Finalize Your Database Connection .....	8
CHAPTER 7: Manage Database Connections with EMS Services .....	9
Change Databases .....	9
Create New Database Connections .....	10
CHAPTER 8: How Do I Translate EMS to Another Language? .....	12
Build Your Language Translation Spreadsheet .....	12
Example of Successful Installation .....	13

## CHAPTER 1: Connect to Your Database Using Active Directory

Most EMS customers connect their databases to EMS applications using the EMSUser account, however, some organizations prefer to tighten security even further by using their own accounts, such as those from Active Directory. This gives them greater control over the account and enables them to set their own passwords instead of relying on the built-in EMSUser account.

### Active Directory Process Overview

To connect your database to Active Directory, you will essentially be replacing the EMSUser account with an Active Directory account/group that your organization can define and control. This method enables you to use the Windows Authentication mode exclusively (instead of SQL Server and Windows Authentication mode) for your server authentication. This process involves the following stages:

- [Pre-installation Requirements](#)
- [Configure Your EMS Database](#)
- [Configure EMS Desktop Client](#)
- [Connect Your EMS Web-Based Applications](#)
- [Finalize Your Database Connection](#)
- [Manage Database Connections With EMS Services](#)
- [How Do I Translate EMS to Another Language?](#)

### What Is an EMS User?

EMS employs an application-level security model. All EMS end-user accounts are provisioned within the EMS application. Connectivity between the EMS database and all EMS components (e.g. EMS Desktop Client, VEMS, EMS Web App, EMS Mobile App, etc.) is managed with one fixed EMS SQL Server user account (EMSUser) that is created during the EMS database installation process. This security model requires that the server authentication for the Microsoft SQL Server where your EMS database resides must be set to a mixed mode (SQL Server and Windows Authentication mode).

## CHAPTER 2: Pre-Installation Requirements

The following requirements must be met before using this database connection method:

- EMS and all of its components must be installed and functional.
- An EMS-specific Active Directory security group that contains all of your EMS desktop client users is required. This group will be granted explicit permissions to your EMS and EMS\_Master databases.
- An EMS-specific Active Directory user account that is a member of the Active Directory security group outlined above is required. This account will be used to configure this database authentication option for EMS web-based products (e.g. EMS Web App, VEMS, EMS Mobile App etc.)

## CHAPTER 3: Configure Your EMS Database

1. Using Microsoft SQL Server Management Studio, [add a login for the EMS Active Directory security group](#).
2. Under the User Mapping area, map the login to your EMS database. Add the **db\_datareader** and **db\_datawriter** roles.
3. Repeat Step 2 for the EMS\_Master database.
4. Using Microsoft SQL Server Management Studio, execute the following statement against your EMS database:

```
sp_addrolemember 'EMS_Role', 'securitygroup'
```

**Note:**

Replace **securitygroup** with the name of your EMS Active Directory security group.

5. Repeat Step 4 for the EMS\_Master database.

## CHAPTER 4: Configure EMS Desktop Client

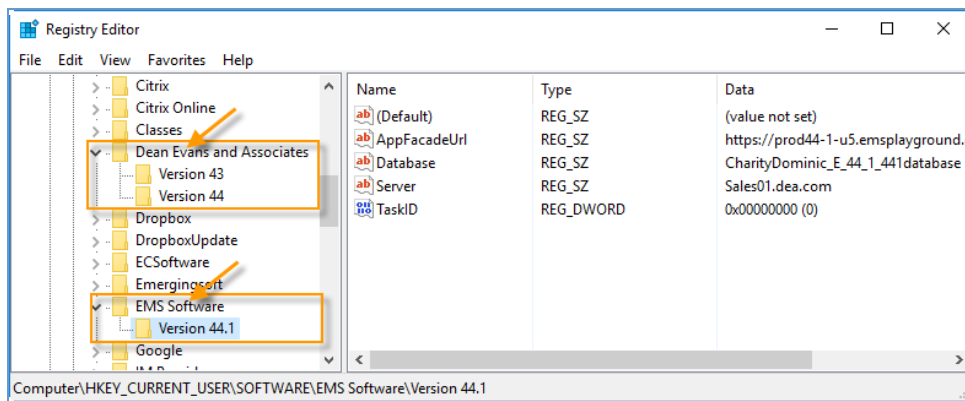
1. Go to an EMS desktop client user's PC and open the Registry Editor.



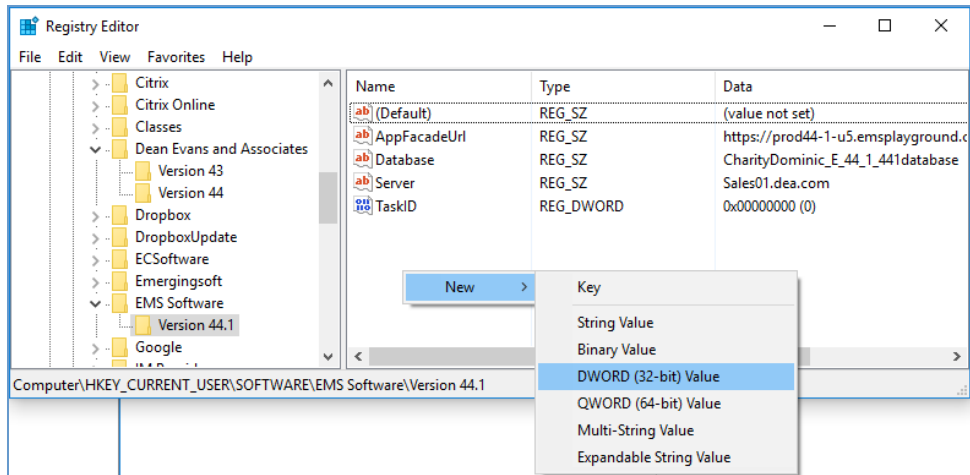
### Important!

Registry changes can cause irreversible damage if done incorrectly.

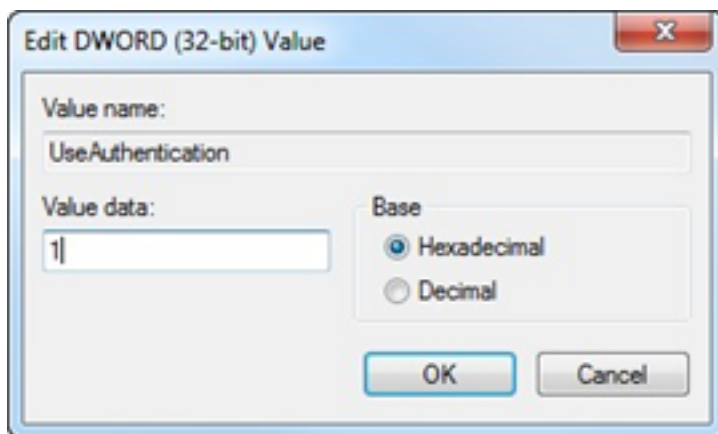
2. Locate and expand **HKEY\_CURRENT\_USER**.
3. Locate and expand **Software**.
4. Locate and expand EMS Software if you use V44.1, or **Dean Evans and Associates** if you use EMS V43 or V44.
5. Navigate to and select your EMS product folder (e.g. EMS Workplace 6.0).



6. Right-click, select **New**, and add a **DWORD (32-bit) Value**.



7. Rename the **New Value #1** entry to **UseAuthentication**.
8. Modify the **Value** data field to 1.



9. Launch your EMS Desktop Client application to verify connectivity.

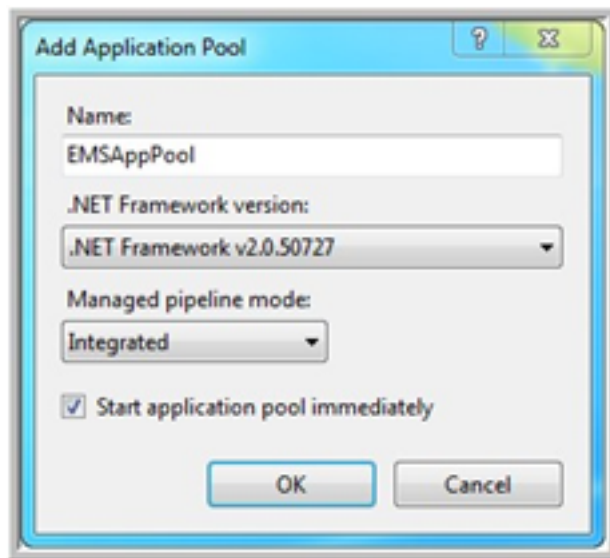


## CHAPTER 5: Connect Your EMS Web-Based Applications

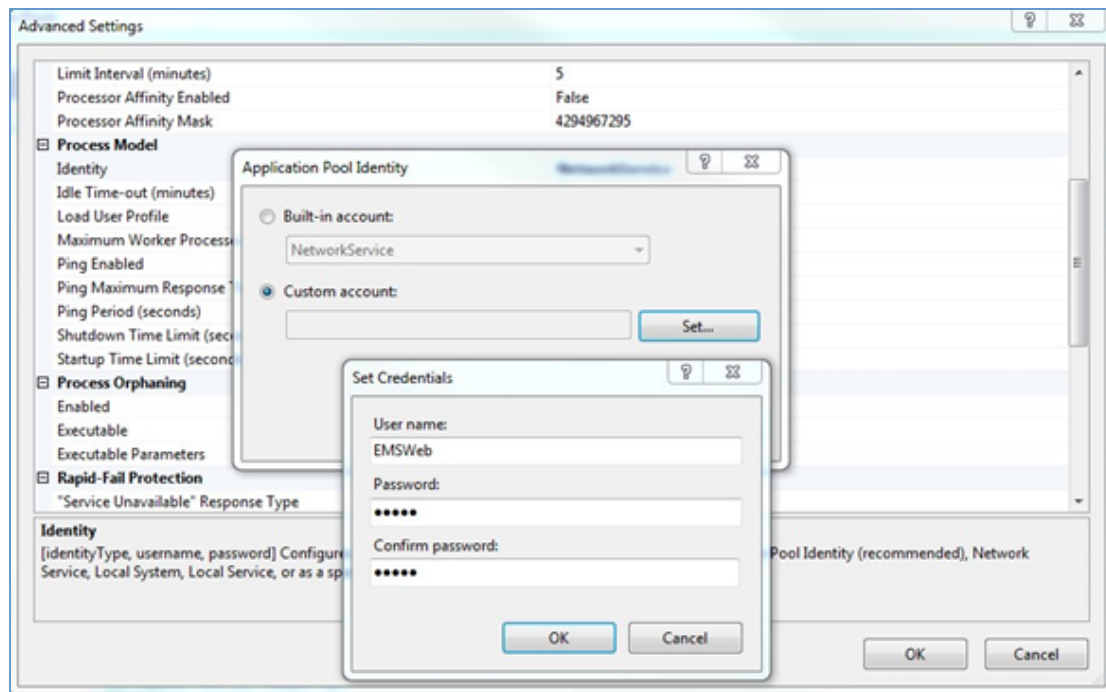
EMS Web-based applications (such as VEMS, EMS Web App, and EMS Mobile App) also need to be configured to use this database connection method.

To configure your EMS web-based applications, do the following:

1. Access Internet Information Services (IIS) Manager on your web server.
2. Create a new Application Pool that will be used by your EMS web based application(s) installed on this web server.



3. Change the **Application Pool Identity** to run under a **Custom account**. Specify the EMS-specific Active Directory user account (see [Pre-Installation Requirements](#)).



4. Change the **Application Pool** in your EMS web-based application to the pool defined above.
5. Open the **web.config** file for the EMS web-based product and make the following changes:

```
<connectionStrings>
  <add name="deaconconnection" providerName="System.Data.SqlClient" connectionString="server=MyServer;database=EMS;Trusted_Connection=yes" />
</connectionStrings>
<dataConfiguration>
  <databaseConnections>
    <add name="deaconconnection" useEmsuser="false" useDetailedLogging="true" defaultCommandTimeout="20" />
  </databaseConnections>
</dataConfiguration>
```



### Important!

#### TIP FOR EMS CLOUD CUSTOMERS

Modifications to the web.config file must be performed by EMS Cloud Operations. To request these changes, please [contact EMS Support](#).

6. Launch your EMS web-based product to verify connectivity.

## CHAPTER 6: Finalize Your Database Connection

Once you have successfully verified EMS desktop client and EMS web-based application connectivity to the EMS database, drop/disable your EMS user account and re-verify connectivity once again.

## CHAPTER 7: Manage Database Connections with EMS Services

After EMS has been installed on your desktop using the EMS Desktop Client Web Deployment, managing database connections can be done through the EMS Desktop Client using the instructions below.

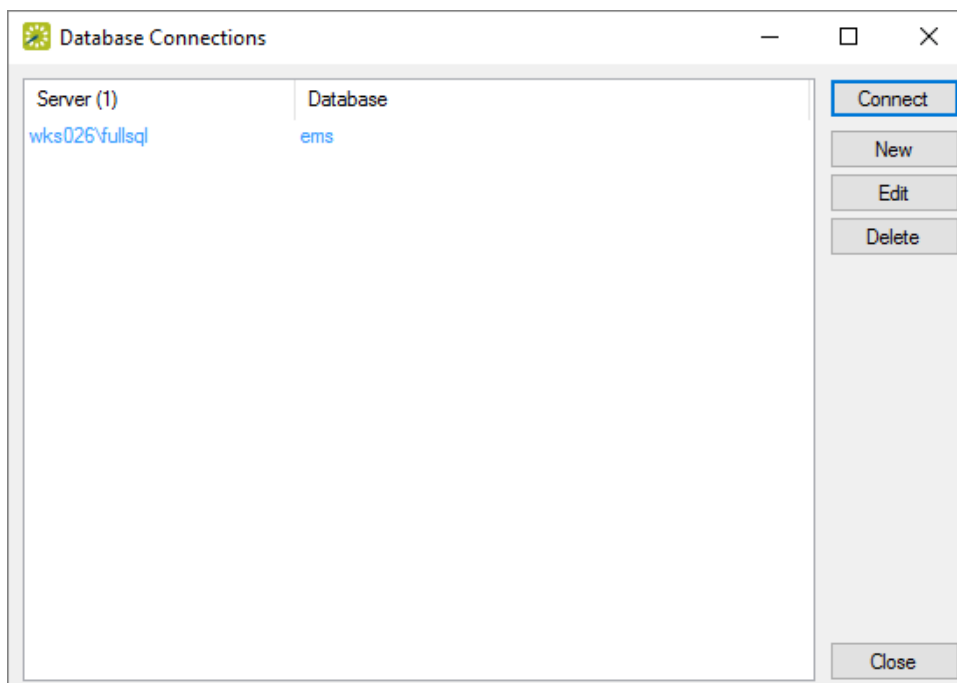
This topic provides information about the following:

- [Change Databases](#)
- [Create New Database Connections](#)

### Change Databases

To change databases while using EMS Desktop Client applications installed with Web Deployment, do the following:

1. On the EMS Menu select **File > Change Database** to open the Database Connections window.

**Note:**

Any database connection listed in blue is a system record inherited from the EMS Desktop Client Web Deployment that can not be deleted.

2. To connect to a database that is not the system database select it from the list of Database

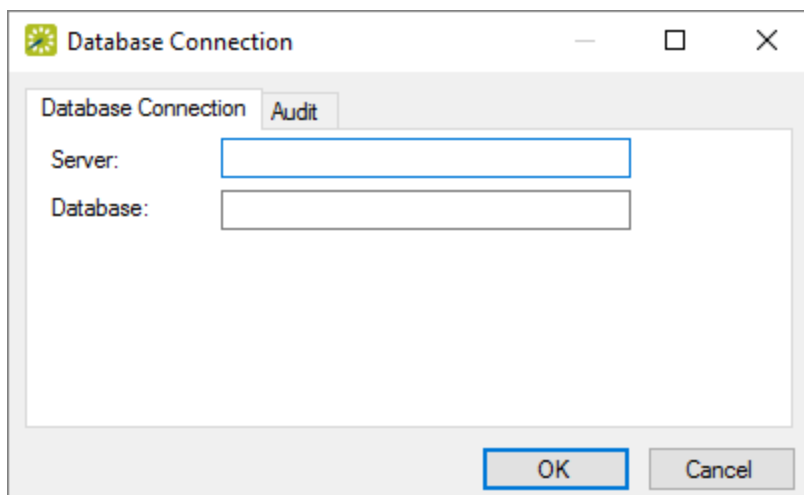
Connections and then press the **Connect** button. This will close and reopen EMS Desktop Client connected to the selected database.

**Note:**

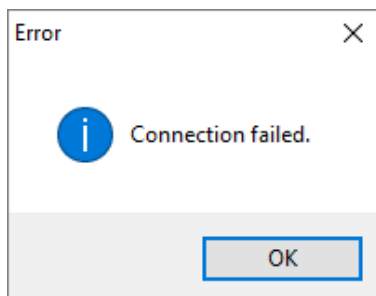
The user will need to log in again after changing databases.

## Create New Database Connections

1. To create a New connection select **New** in the Database Connections window to open the Database Connection window.



2. Type in the SQL server and EMS database name and then select **OK** to save the connection. You can delete connections later when you no longer need them.
3. For EMS to save this connection, it will first check to see if it is a valid connection. If the connection is invalid, it will not be created, and the user will receive the "Connection failed" error message.



**Note:**

If your implementation uses additional EMS Services and Components, you will need to establish (and maintain) database connections with each.

See step 7 of the following topics for each service:

- [Install EMS Check-in Notification Service](#)
- [Install or Upgrade the EMS Email Notification Service](#)
- [Install the EMS Automated Report Service](#)

## CHAPTER 8: How Do I Translate EMS to Another Language?

This topic provides information about the following:

- [Build Your Language Translation Spreadsheet](#)
- [Example Successful Installation](#)

### Build Your Language Translation Spreadsheet

1. EMS Software provides a Microsoft® Excel spreadsheet specific to EMS Web App that contains all of the application labels, page titles, system messages and error messages with their English translations.

**Note:**

Values for data items (e.g. Event Types like “Meeting”, “Training”, etc. or Room Types like “Workspace”, “Conference Room”, etc.) configured within EMS or dynamic information that is inputted by an EMS user or Virtual EMS web user (e.g. Event Name like “HR Meeting”, Comments, Special Instructions, etc.) are not translated.

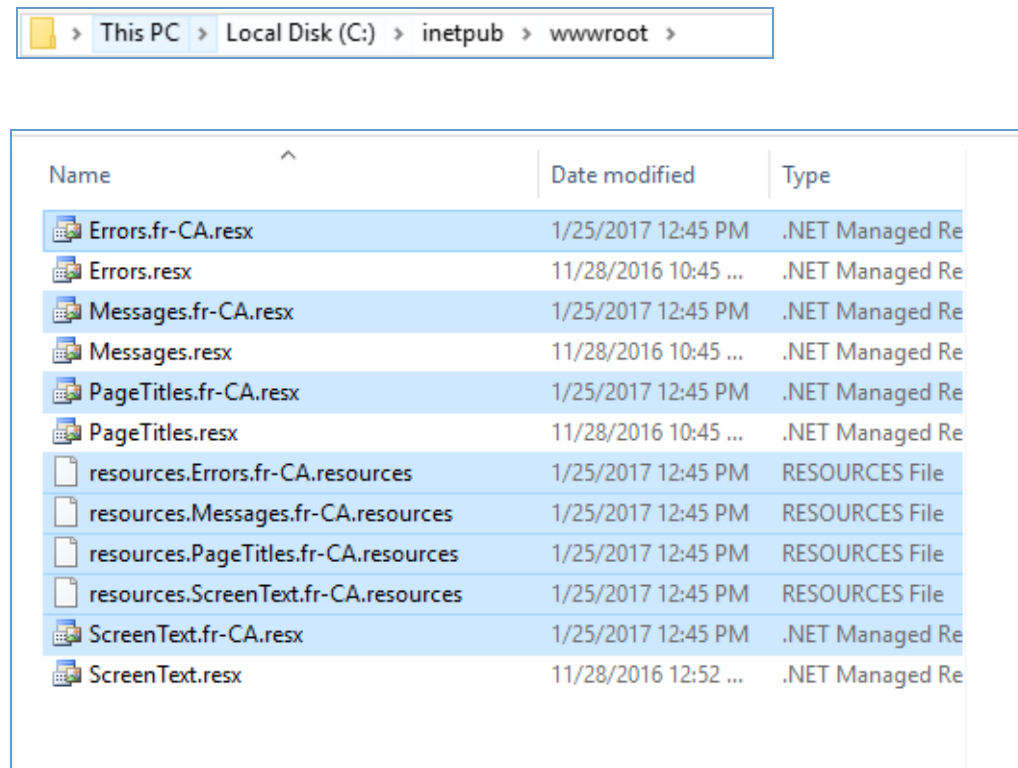
2. The customer is responsible for providing the translated values for the information in the product spreadsheet. Once the customer returns the fully translated product spreadsheet to EMS Software, EMS Software development teams compile the spreadsheet into a product-specific language folder containing a set of files. (We maintain a language folder for each language).
3. The customer saves the language files in the "App\_GlobalResources" folder within the EMS Web App physical directory on their web server (the default path is C:\inetpub\wwwroot\emswebapp\App\_GlobalResources\).

**Important!**

For the translation to affect an Everyday Applications user, two conditions should be met:

4. The language setting should be [set in Windows](#).
5. The end user's browser Language Preference is set to that specific language and set as the default.

## Example of Successful Installation





The screenshot shows the 'Système virtuel EMS – Demande de...' interface. The top navigation bar includes the EMS logo and a hamburger menu. Below the header, there's a breadcrumb trail: 'Book a Meeting w/Services' (with an info icon), '1 Chambres et participants' (highlighted), '2 Services', and '3 Détails de la réservation'. A shopping cart icon shows 'Mon panier (0)'. The main heading is 'Nouvelle réservation pour sam. 25 févr. 2017'. The interface is divided into two main sections. The left section, 'Date et heure', contains a 'Date' field with 'sam. 2017-02-25' and a 'Récurrence' button, and a 'Heure du début' / 'Heure de la fin' section with '08:00' and '10:00' respectively, each with a clock icon. Below this is a 'Créer une réservation dans ce fuseau horaire' section with a dropdown menu set to 'Central Time'. The bottom left section is 'Emplacements' with 'My Favorites' and an 'Ajouter/Retirer' button. The right section, 'Sélectionner Chambres', contains the text 'Votre Chambres sélectionné s'affichera ici.' and a 'Participants' section with a timeline for 'SC - Billie Hawkins' showing slots for 8, 9, 10, and 11. Below the timeline is a search bar 'Trouver un participant' with a magnifying glass icon. The bottom right section is 'Chambres Résultats de la recherche' with the text 'Chambres correspondant à vos critères de recherche apparaîtront ici.'

Reflected in EMS as follows (French-Canadian is the example here):

See Also: [Configure EMS Language Translation for Everyday User Applications](#)

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