

# Encore Database Installation Guide

Encore Workforce Optimization Solution Version 9.1

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# encore

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## **Getting Started**

The purpose of this document is to provide detailed instructions for installing the Encore databases and reports.

The Encore system uses SQL Server for all data storage and uses Reporting Services for all reports. The installation assumes that one of the following versions of SQL Server is installed:

- SQL Server 2019 Standard or Enterprise edition with Reporting Services
- SQL Server 2016 Standard or Enterprise edition with Reporting Services
- SQL Server 2014 Standard or Enterprise edition with Reporting Services

#### CAUTION

Encore does not support SQL Server versions older than 2014.

If SQL Reporting Services has not been installed, refer to the Microsoft SQL documentation for steps to install Reporting Services on an existing SQL Server.

#### NOTE

To deploy the reports later in this guide, the Windows login that is used to log into the SQL Reporting Services server must be a member of the SQL Server Reporting Service's **System Administrator** role. By default, any Windows user that is a member of the local **Administrators** group qualifies.

There are two MSI files that have been provided:

- EncoreReports\_<version>.msi This MSI creates the C:\DeployReports folder and copies the files needed to install the Encore reports. The MSI does not modify SQL Reporting Services. When you run the MSI, accept all the defaults and do not change the Destination Folder.
- EncoreSQLScripts\_<version>.msi This MSI creates the C:\SQLScripts folder and copies the SQL scripts needed to create and configure the Encore databases. The MSI does not modify SQL or run SQL scripts. When you run the MSI, accept all the defaults and do not change the Destination Folder.

If the Encore databases are already installed and only an upgrade is needed, skip the installation steps and execute the steps in "Appendix D: Upgrade Encore Databases" on page 11.

## Step 1 – SQL Server/SQL Instance Requirements

The following guidelines must be used when providing a SQL server for use with Encore.

Set the name for the SQL Server instance as follows:

- If building a SQL Server for Encore's exclusive use, the instance name should be set to MSSQLSERVER.
- If providing a SQL named instance for the Encore system, choose any instance name that fits your naming conventions. When using a SQL instance, the **SQL Browser Service** should be running to allow the Encore applications to use the named instance. Be sure to provide the DVSAnalytics installation technician with the instance name so the Encore software can be configured appropriately.

Verify the required installation options are appropriately configured:

- For SQL Server 2014 refer to the "Appendix A: SQL Server 2014" Options section on page 8.
- For SQL Server 2016 refer to the "Appendix B: SQL Server 2016" Options section on page 9.
- For SQL Server 2016 refer to the "Appendix C: SQL Server 2019" Options section on page 10.

### **Step 2 – Install Encore Databases**

The steps in this section must be performed on a PC where **SQL Server Management Studio** is installed.

#### CAUTION

If you encounter any script error, contact DVS Customer Support before continuing.

- 1. There are two Encore databases: Encore and EncoreAnalytics. Usually both databases are installed on the same SQL server. All SQL Scripts are located in **C:\SQLScripts**.
  - a. Open SQL Server Management Studio and log in with the sa account.
  - b. Execute the following SQL scripts for the **Encore** database in the order shown.
    - EncoreBuildScript.sql Creates the Encore database. Do not modify this SQL script.
    - PromoteEncoreServertoSysadmin.sql Promotes EncoreServer to a Sys Admin. Do not modify this SQL script.
    - EncoreSystemDatabaseObjectsScript.sql Adds additional tables and stored procedures for Encore server components. Do not modify this SQL script.
    - EncoreUIObjectsScript.sql Adds additional tables and stored procedures for Encore UI components. Do not modify this SQL script.
- 2. The next SQL script is optional for the **Encore** database depending on the desired configuration.
  - DisallowNonADAccountCreation.sql The Encore product can use two types of users:
    - User's with local Encore only credentials A user is created within Encore and authentication is performed using Encore's store credentials. The user's password is stored in the Encore database.
    - User's with Active Directory credentials A user is created within Encore, but authentication is performed using your company's Active Directory. The user's password is not stored in the Encore database.

Typically, all accounts are created with Active Directory credentials with only one administrator user, 'Administrator', created with Encore credentials. If there are security requirements that specify accounts must use Active Directory, run this SQL script to disable the ability to create users with Encore credentials. You will need to specify at least one user to be a member of the Encore Administrators group. Once the Encore system is fully configured, the user 'Administrator' should be deleted.

- 3. Execute the following SQL scripts for the **EncoreAnalytics** database in order shown.
  - **SQLSysAdminBuildScript.sql** Creates the base EncoreAnalytics database. Do not modify this SQL script.
  - **#EncoreAnalyticsBuiltScript.sql** Adds additional tables and stored procedures to the EncoreAnalytics database. Do not modify this SQL script.
  - Set\_Site.sql Inserts or modifies the site information. Your DVS Project Manager will
    provide you with the values for @EDSFILE and @URL. The remaining values should not be
    modified. After running the script, you can verify the site values, by running the script
    Display\_Site.sql.

## Step 3 – SQL Reporting Services Configuration

The most common configuration for SQL Reporting Services is to use a Windows domain account as the execution account. This configuration provides the most flexibility and ease of maintenance, but a local Windows account may be used as well.

The other method is to use a SQL Reporting Services data source which specifies a user account in the data source definition for each report. This method is rarely used because it isn't as flexible as the first method and requires more management. If you want to use this method, ask your DVS Project Manager for the user account and password needed in the data source definition. You need this information in a later step.

If there is already an execution account defined in SQL Reporting Services, this account is used for accessing the Encore reports. Gather the account name, password, and the domain name, this information will be needed in a subsequent step.

### Step 4 – Create or Configure a Windows Account

Follow the steps below to create the Windows account to be used for browsing Encore reports. If Encore and the SQL Reporting Services are running on the same sever a local Windows account can be created on that server. Where possible, regardless of where Encore and SQL Reporting Services are installed, DVSAnalytics recommends that that domain account be created. If a SQL Reporting Services execution account is already created, review the steps below and make any adjustments to the existing account as needed. This account is used to browse the reports regardless of the Reporting Services configuration method used.

 Create the following Windows account (local or domain as appropriate): Username: EncoreReportViewer Description: Used by Encore for SQL Reporting Services Password: V!ewR3ports

#### NOTE

This is the default password used by the Encore installs, this can be set to any password, but you must inform your DVSAnalytics representative so they can update Encore's configuration.

#### Settings:

UNCHECK	(
CHECK	
CHECK	
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User must change password at next login User cannot change password Password never expires Account is disabled

- If using a domain account, on the server where SQL Reporting Services is running, open Server Manager, navigate to Local Users and Groups and then Groups, open the group Users, and add the new domain account using the format domain\EncoreReportViewer.
- 3. Give permission for the new account to log in locally to the SQL Reporting Services server. While there may be several ways to accomplish this, here is one recommended method:
  - a. On the server where SQL Reporting Services is running, run **gpedit.msc**, navigate to **Computer Configuration | Windows Settings | Security Settings | Local Policies | User Rights Assignment**.
  - b. Double-click Allow log on locally and add the group Users if not in the list.

## **Step 5 – Deploy Reports**

The deploy reports utility creates all the necessary SQL Reporting Service objects to successfully run reports. On the server where SQL Reporting Services is running, follow the steps below.

1. Right-click and edit C:\DeployReports\EncoreReportSettings.cmd. This command file contains configuration settings that should be reviewed for needed modifications.

Read the file's comments and make changes as needed.

When using the Execution Account method, three relevant setting are:

- SET REPORT SERVER
- SET REPORT\_USER
- SET REPORT\_EXECUTION

If the Data Source method is used, then this additional setting should be reviewed

- SET DS\_SQL\_USER
- 2. Run **EncoreReportSettings.cmd**. If creating the reports for the first time, the utility prompts for the password of the Windows account used to browse reports. This is the account defined in the *SET REPORT\_USER* setting above.

#### CAUTION

Before running the command file, make sure no one is running reports or has Report Manager open. If Report Manager is open and you run the command file, the command may appear successful, but reports may not have been loaded into Report Manager.

3. To verify the reports installed correctly, open the log file listed at the end of the installation. If errors occurred, contact DVS Customer Support.

The database and reports installation is now complete.

### **Appendix A: SQL Server 2014 Options**

Verify the following options are installed:

- Instance Features
  - Database Engine Services
    - SQL Server Replication
    - Full-Text and Semantic Extractions for Search
  - Reporting Services Native
- Shared Features
  - Client Tools Connectivity
  - Client Tools Backwards Compatibility
  - **o** Documentation Components
  - Management Tools Basic
    - Management Tools Complete
- SQL Server collation must be set to SQL\_Latin1\_General\_CP1\_CI\_AS
- The Authentication Mode must be set to Mixed Mode (SQL Server authentication and Windows authentication). The Encore applications and reports use SQL Server authentication to connect to the application databases.
- The TCP/IP protocol must be enabled.

You are now ready to process to "Step 2 – Install Encore Databases" on page 5.

### **Appendix B: SQL Server 2016 Options**

Verify the following options are installed:

- Instance Features
  - Database Engine Services
    - SQL Server Replication
    - Full-Text and Semantic Extractions for Search
  - Reporting Services Native
- Shared Features
  - Client Tools Connectivity
  - **o** Client Tools Backwards Compatibility
  - **o** Documentation Components
- SQL Server collation must be set to SQL\_Latin1\_General\_CP1\_CI\_AS
- The Authentication Mode must be set to Mixed Mode (SQL Server authentication and Windows authentication). The Encore applications and reports use SQL Server authentication to connect to the application databases.

The TCP/IP protocol must be enabled.

You are now ready to process to "Step 2 – Install Encore Databases" on page 5.

### **Appendix C: SQL Server 2019 Options**

Verify the following options are installed:

- Instance Features
  - Database Engine Services
    - SQL Server Replication
    - Full-Text and Semantic Extractions for Search
  - Reporting Services Native
- Shared Features
  - Client Tools Connectivity
  - **o** Client Tools Backwards Compatibility
  - **o** Documentation Components
- SQL Server collation must be set to SQL\_Latin1\_General\_CP1\_CI\_AS
- The Authentication Mode must be set to Mixed Mode (SQL Server authentication and Windows authentication). The Encore applications and reports use SQL Server authentication to connect to the application databases.

The TCP/IP protocol must be enabled.

You are now ready to process to "Step 2 – Install Encore Databases" on page 5.

## **Appendix D: Upgrade Encore Databases**

Typically, DVS Customer Service Technicians run any needed database and reports upgrades. If your security policy requires that changes made to the databases and reports only be performed by internal resources, follow the steps below. Login to the Windows server using an account that is a member of the local Administrators group.

### Step 1 – Run the Installation MSIs

Run the following MSIs that were provided by DVSAnalytics.

- EncoreReports\_<version>.msi
- EncoreSQLScripts\_<version>.msi

### Step 2 – Run Databases SQL Scripts

The steps in this section must be performed on a PC where **SQL Server Management Studio** is installed.

- 1. There are two Encore databases: **Encore** and **EncoreAnalytics**. Usually both databases are installed on the same SQL server. All SQL Scripts are in **C:\SQLScripts**.
  - a. Open SQL Server Management Studio and log in with the sa account.
  - b. Execute the following SQL scripts for the Encore database in the order shown.
    - EncoreSystemDatabaseObjectsScript.sql Adds additional tables and stored procedures for Encore server components. Do not modify this SQL script.
    - EncoreUIObjectsScript.sql Adds additional tables and stored procedures for Encore UI components. Do not modify this SQL script.
  - c. Consult with your DVS Customer Service Technician before running the following script to verify the version of Encore that you currently have installed to determine if the script should be run. If you are upgrading from an Encore version of 8.0 or lower, run this script. If your Encore version is currently 8.1 or higher, this script should not be run as the migration has already been performed.
    - 317\_MigrationScript.sql This script is used to migrate some database components to the new format when upgrading from Encore 8.0 or lower. Do not modify this SQL script. This script assumes that both the *Encore* and *EncoreAnalytics* databases are on the same server. If this is not the case, do not run the script and contact DVS customer support before continuing.
- 2. Execute the following SQL script for the EncoreAnalytics database.
  - **#EncoreAnalyticsBuiltScript.sql** Adds additional tables and stored procedures to the EncoreAnalytics database. Do not modify this SQL script.

### Step 3 – Update Reports

Proceed to the "Step 5 – Deploy Reports" section on page 7 to complete the upgrade.