erwin DT 9
Installation Guide

1 Contents

2 Software Requirements

Supported Operating Systems:
- Windows 10
- Windows 8/8.1 – 64 bit
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2008 R2 - 64 bit

The following system components must be installed on the erwin DT server before starting the installation wizard procedure:

- Microsoft .Net Framework 4.5.1

The following components are also required to run erwin DT:
- A 64bit JDK 8
  - A version of AdoptOpenJDK 8 x64 (HotSpot) is provided if no compatible 64bit JDKs are detected on the users machine
- Microsoft Visual C++ Redistributable
  - Visual C++ 2017 Redistributable is provided by the installer, if 2015 or 2017 is not already installed

If erwin DT is used against a CW Desktop Modeling Suite (aka Corporate Modeler Suite) connection, 2016.x or 2018.x versions of the Suite must be installed on the server.

3 Hardware Requirements

	Minimum	Recommended
RAM	8GB	16GB
CPU	Intel i7 Quad-Core 2Ghz or later	Intel i7 Quad-Core 2Ghz or later
Disk Space*	20GB	20GB

* Disk Space usage may be optimized periodically running *Reset Logs/File* feature and cleaning Windows TEMP directory

Running multiple concurrent jobs, particularly when managing import/export operations with huge amounts of data (several thousands) can lead to large memory/CPU resources requests.

It is recommended to run these operations on high-performance machines in order to provide results in a reasonable timeframe and avoid out of memory issues.
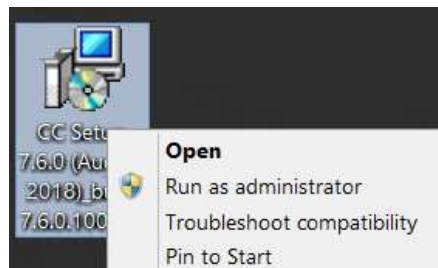
4 Pre-Installation

If you wish to use an H2 DB on a remote server please refer to APPENDIX A - Installing H2 DB on a remote server before installing erwin DT.
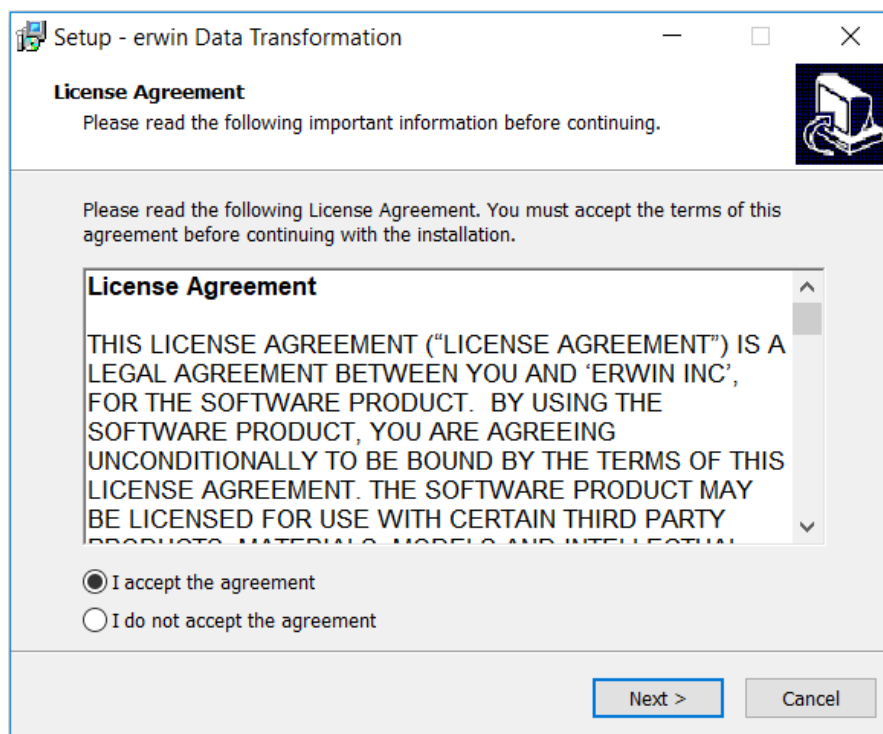
Please ensure antivirus applications are disabled during the installation.
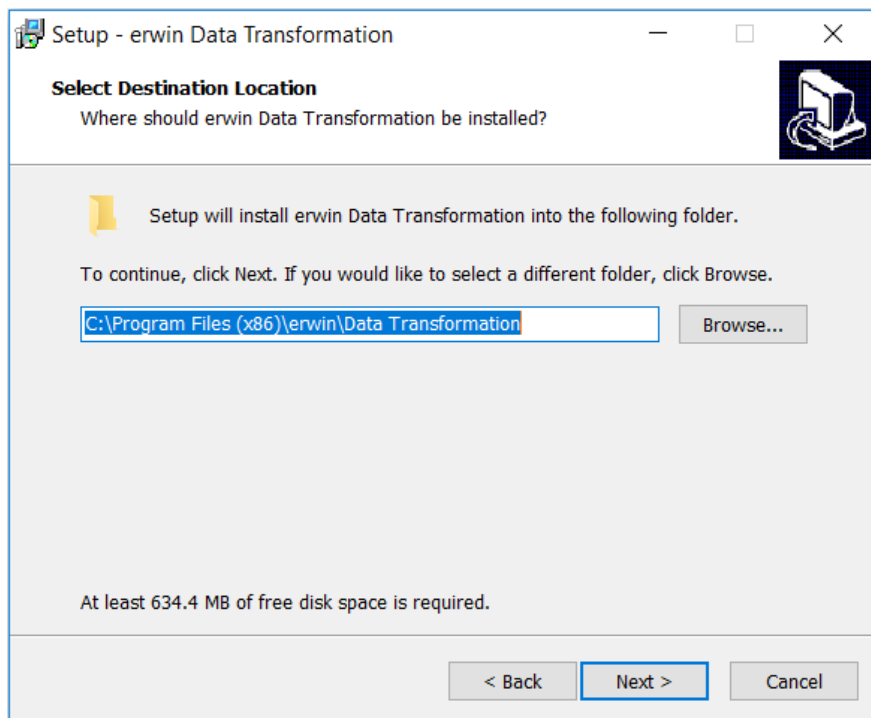
5 Installation Guide

Select the erwin DT Setup file and execute it. Please, note that this has to be **run as Administrator**:
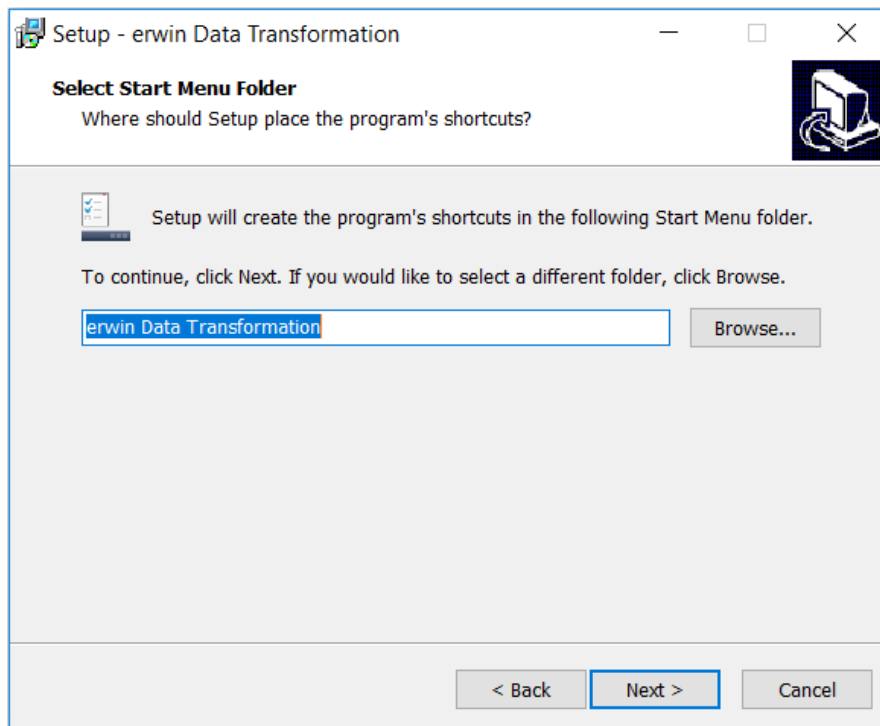

Accept the agreement and press **Next:**
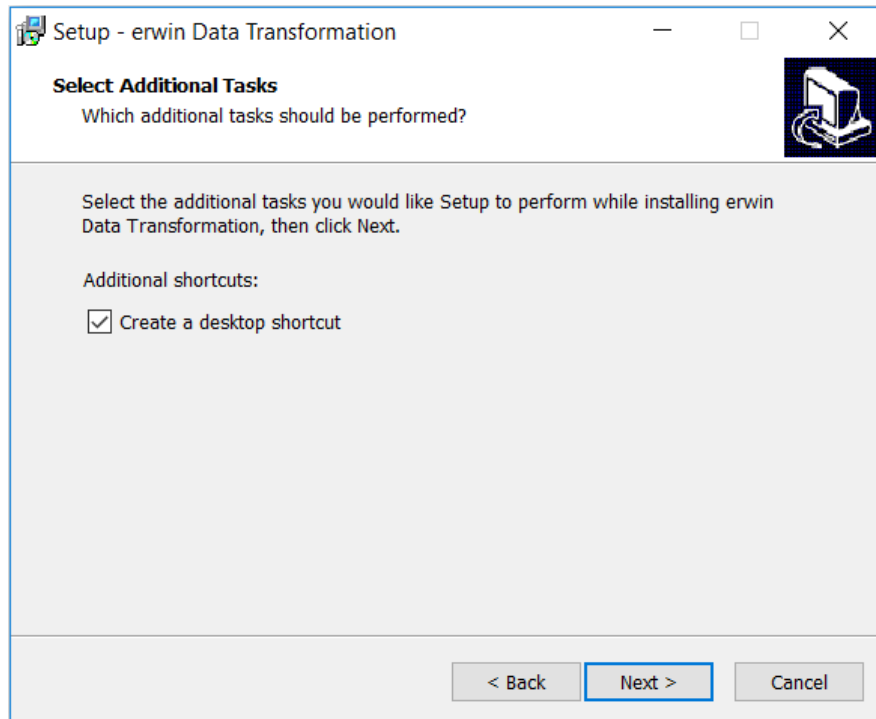
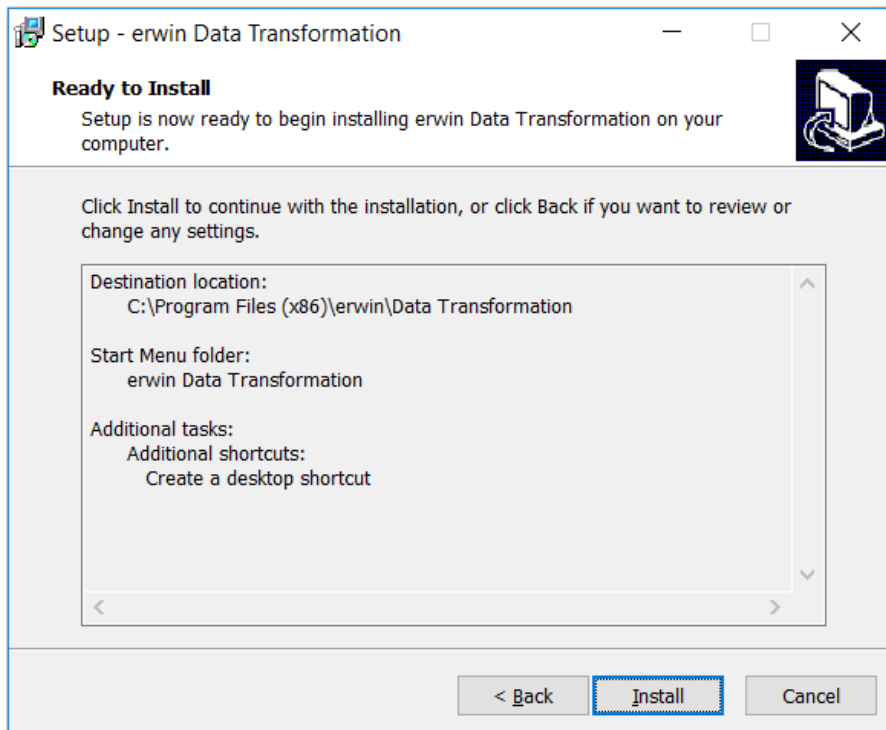Choose the folder to install the application to and press **Next:**

Then, insert a name for the start menu folder and press **Next:**

The installer will provide the option to create a shortcut on the desktop:

Press Install:

The installation will check if software requirements are satisfied (in particular, regarding JDK and .NET framework). If not, the user is advised on how to download and install the missing software.

6 Configuration

Following installation, erwin DT needs to be configured before it can be used.

6.1 General

The general tab allows the user to select the language, JDK version, account for service creation, and the location of the data folder.

6.1.1 Language

Select the **language** of the installation of erwin DT from:
- English
- French
- Italian
- Spanish
- German
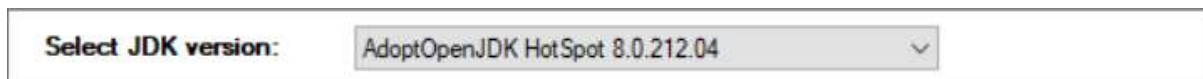
Select Language:	English	∨

6.1.2 JDK Version

Select the **JDK version** to run erwin DT; 64bit JDK is required.
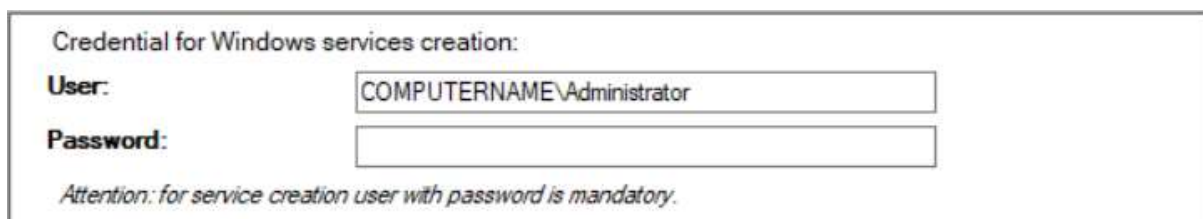
Select JDK version:	AdoptOpenJDK HotSpot 8.0.212.04	∨

6.1.3 Windows Service Creation

Provide a username and password for creating and running the erwin DT windows services. The user account needs to be in the 'Administrators' group and have 'Logon as a service' rights.

This is needed to provide the correct access rights on files and folders managed by the tool for the user executing the erwin DT Windows services.

Please be sure that this user has a valid and not empty password.

Credential for Windows services creation:

User:	COMPUTERNAME\Administrator
Password:	

Attention: for service creation user with password is mandatory.

These credentials are used to create and run the following Windows services:
- erwin DT Event Manager
- erwin DT Listener Manager
- erwin DT Quartz Scheduler

Note that an additional service is also created (erwin DT H2DB Windows Service) but is run as the Local System account.

If Windows Services cannot start, with a user having the "Log On As A service" grant and a valid password, it could be related to a security issue on the erwin DT installation path folders. Also ensure the Windows user starting the services has full control of the erwin DT installation path folders and subfolders. Finally restart the machine and services.

6.1.4 Data Folder

Users may also change the default **Data Folder** path. Please, before moving an existing data folder, backup your erwin DT database: <DataFolder>/data/H2/CC.h2.db

On the first installation, users can migrate an old data folder if migrating from CC 6.0.1 or below with the button **Migrate Data Folder**. Select a valid DT data folder and choose "Yes, migrate" will copy all DT data to the new installation folder
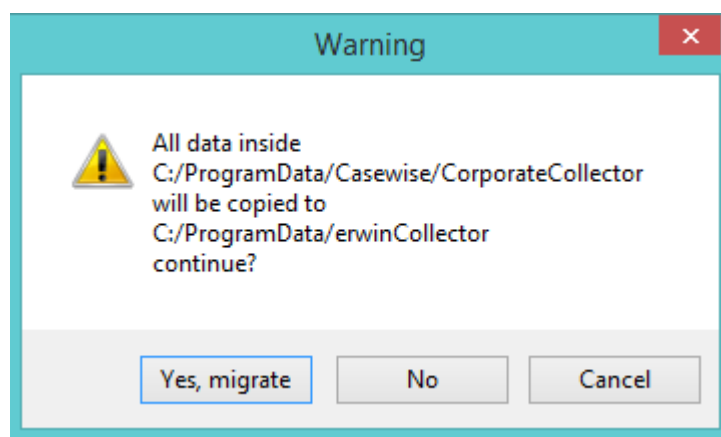
6.2 Database

The database tab allows the users to choose between a local H2 database or a remote H2 database to be used by erwin DT.
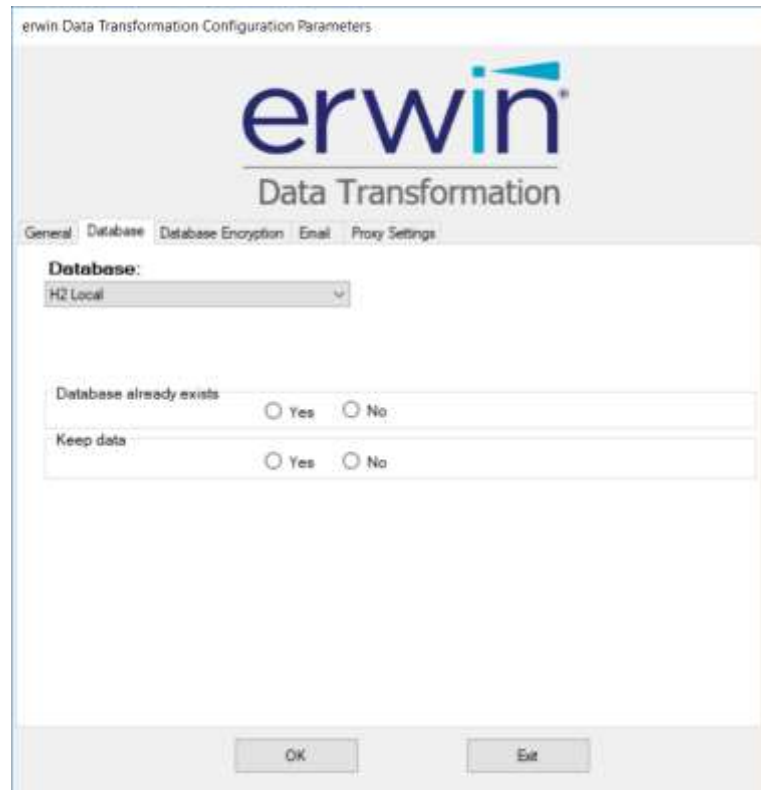
If installing with a *local database*, you'll be allowed to choose between two options:

- Database does not already exist (for a new installation)
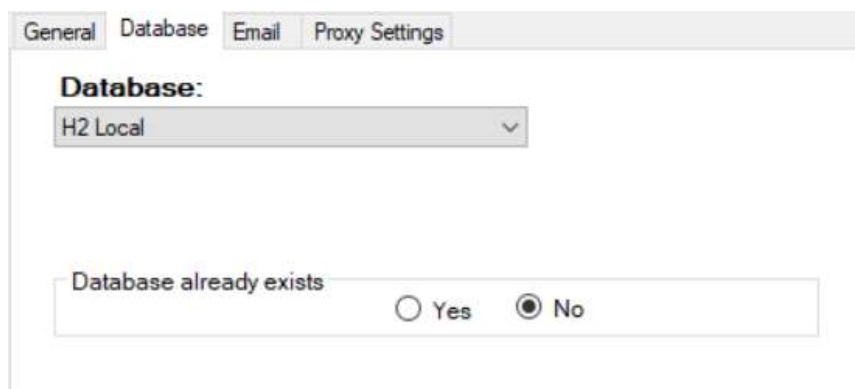
- Database already exists (for an upgrade from a previous version or when reconfiguring). In this case you can chose between maintain existing data or not.

See [Appendix A](#) for H2 remote installation.

6.3 Database Encryption

For local H2 databases, the H2 database file can optionally be encrypted. By default, no file encryption is used. Futher information on H2 database file encryption can be found at https://www.h2database.com/html/main.html

Supported stores for the encryption key include the erwinDataTransformation properties file, or the Microsoft Azure Key Vault.

6.3.1 Key Stores

6.3.1.1 Properties File

When using the Properties File, the only value required is the file encyption key to be used. This key will be stored encypted in the erwinDataTransformation.properties file in the erwin DT install directory.

Key Vault:	Properties File ▾
Key:	

6.3.1.2 Azure Key Value

When using the Azure Key Vault, the user must provide the url of the Key Vault to be used, the name of the key to be used, and the credentials of a client that has access to the required key. Note that the credentials will be stored encrypted in the erwinDataTransformation.properties file in the erwin DT install directory.

Key Vault:	Azure Key Vault ▾
Url:	
Key Name:	
Client ID:	
Client Key:	

6.3.2 Encrypting Database File

To encrypt a previously unencrypted database file, select the key store and provide the required credentials.

| Database File Encrypted: | ● Yes | ○ No |
| Change Encryption Key: | ○ Yes | ● No |

Key Vault

| Key Vault: | Properties File ⌄ |
| Key: | •••• |

6.3.3 Maintaining Database Encryption

If the database has previously been encrypted, and the required information can be resolved from the erwinDataTransformation.properties file in the erwin DT install directory, these values will be read into the erwin Data Transformation configuration. However, the user will be blocked from changing or removing the database file encryption without first re-entering the existing credentials.

If the database file has previously been encrypted but the erwin DT configuration is unaware of the previous encryption settings (e.g. if it has been encypted by a source other than erwin DT, or if the configuration settings have been deleted), then the user should enter the credentials required to read the encrypted file.

| Database File Encrypted: | ● Yes | ○ No |
| Change Encryption Key: | ○ Yes | ● No |

Key Vault

| Key Vault: | Properties File ⌄ |
| Key: | •••• |

6.3.4 Changing or Removing File Encryption

To change the encryption, select the current and new key stores, and provide the necessary credentials.

Database File Encrypted: ⦿ Yes ◯ No

Change Encryption Key: ⦿ Yes ◯ No

Key Vault		**New Key Vault**	
Key Vault:	Properties File ⌄	Key Vault:	Azure Key Vault ⌄
Key:	••••	Url:	https://your.kevault.url.net/
		Key Name:	example
		Client ID:	•••••••
		Client Key:	•••••••••••••••••••••••••

To remove the encryption, select "Remove Encryption".

Database File Encrypted: ⦿ Yes ◯ No

Change Encryption Key: ⦿ Yes ◯ No

Key Vault		**New Key Vault**	
Key Vault:	Properties File ⌄	Key Vault:	Remove Encryption ⌄
Key:	••••		

6.4 Email

The "Email" tab allows the user to provide parameters that erwin DT will use to manage domain support and error notification by email:

- **E-mail to:** insert the e-mail addresses erwin DT will send communications to in case of error (one or more e-mail addresses separated by "," or ";")
- **E-mail from:** insert an e-mail address erwin DT will use as sender in the e-mail notification
- **SMTP host:** insert the host name of the Outgoing mail server
- **SMTP username:** insert the username of a valid email server account, which erwin DT will use to send the e-mail notification
- **SMTP password:** insert the password of a valid email server account, which erwin DT will use to send the e-mail notifications
- **SMTP port:** insert the SMTP port if the port is different by the default one
- **Server authenticated:** check the Server authenticated check box if erwin DT will use an authenticated server to send the e-mail notifications

6.5 Proxy

The proxy tab enables the proxy configuration settings, in case a proxy is in place to manage the connections with the Internet; complete with proxy host and port, and userid /password if the proxy is authenticated.

| General | Database | Database Encryption | Email | Proxy Settings |

Proxy Host:

Proxy Port:

Proxy Userid:

Proxy Password:

The OK button saves the configuration.

7 Licensing

During first erwin DT log on, users will be prompted to enter an activation code. The activation code will be released by ServiceDesk. For further details on licensing, consult the erwin DT User Manual.

8 Connecting to the H2 Database

At the end of the installation process erwin DT will create, if requested, an internal database for application settings, managed by an H2 Windows service.

H2 DBMS will then host the erwin DT database. The local database can be administrated via a web interface at the URL ***http://localhost:8082/***

9 Appendix

9.1 Appendix A - Installing H2 DB on a remote server

If needed, the erwin DT H2 database can be installed on a different server than the one hosting the erwin DT application. This remote *database server* must be in a network node, which can be accessed through TCP/Jdbc protocols from the *application server*. To run DT with an H2 database installed on a separate server, execute the following instructions.

DATABASE SERVER – CREATE AND RUN THE DATABASE AS A SERVICE

1. *Identify the database server; it can be the same server erwin CW Exchange is installed on, if existing, or a completely separate one. From now the guide will refer to its network address as:*
    <DBServerIP>
2. Extract the content of the archive
    CC_H2_7.0.1.zip
    and copy the folder *H2* into a folder with absolute path:
    <remoteFolderPath>.
    This folder must be accessible by the database Windows Service (which will be created in the following step) and the Local System account, that will execute the service. This is can be ensured maintaining the same path is used for local installation, but it is not mandatory. In that case, *<remoteFolderPath>* is
    "C:\ProgramData\erwin\Data Transformation\data"
    and contains the *H2* folder.

3. Edit file *<remoteFolderPath>/H2/service/H2wrapper.conf* to check the parameters:

    • *wrapper.java.command=C:\Program Files\Java\jdk1.8.0_191\bin\java*
    update this path to an existing JDK 1.8 installation path

    • *wrapper.app.parameter.6=9092*
    the port 9092 can be changed if already in use, and is referred from now on as **<TCPport>.**

4. Execute batch files, with "*Run as Administrator*" command:
    • *<remoteFolderPath>/H2//service/1_install_service.bat*
    • *<remoteFolderPath>/H2//service/2_H2Start.bat*
    and check that the Windows Service "*erwinDataTransformationH2DB*" is created and started.

APPLICATION SERVER – INSTALL AND CONFIGURE DT TO CONNECT TO THE REMOTE DB

1. Install erwin DT, following the instructions described in the previous chapters.
2. Configure erwin DT for the use of the remote database:

   - Populate *Server IP* field with the IP of the database server *<DBServerIP>*

   - Populate *Port* field with the *<TCPport>* which the DB server is published on

     Populate *Folder Path* field with the *<remoteFolderPath>* hosting the H2 database folder