

erwin Data Transformation

Installation Guide

© 2022 Quest Software Inc.

ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (https://www.quest.com) for regional and international office information.

Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at https://www.quest.com/legal.

Trademarks

Quest, the Quest logo, and Join the Innovation are trademarks and registered trademarks of Quest Software Inc. For a complete list of Quest marks, visit https://www.quest.com/legal/trademark-information.aspx. All other trademarks and registered trademarks are property of their respective owners.

Legend



CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.



IMPORTANT, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

erwin Data Transformation - Installation Guide

Updated - October 2022

Version - 9.2.3

Table of Contents

Table of Contents	3
System Requirements	4
Software Requirements	4
Hardware Requirements	5
Pre-Installation	6
Installation	7
Configuration	10
General	10
Language	11
JDK Version	11
Windows Service Creation	11
Data Folder	12
Database	13
Key Stores	16
Encrypting Database File	17
Maintaining Database Encryption	18
Changing or Removing File Encryption	19
Email	20
Proxy	21
Licensing	22
Connecting to the H2 Database	23
Appendix	24
Appendix A - Installing H2 DB on a remote server	24
About Us	26

System Requirements

Software Requirements

Supported Operating Systems:

- Windows 10
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016

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.

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.

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.

Installation

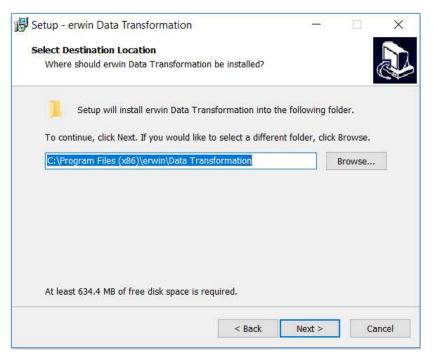
Select the erwin DT Setup file and execute it. Please, note that this has to be run as Administrator:



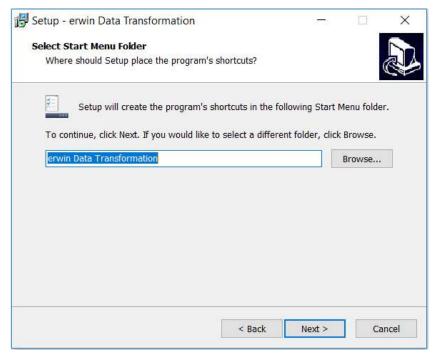
Accept the agreement and press Next:



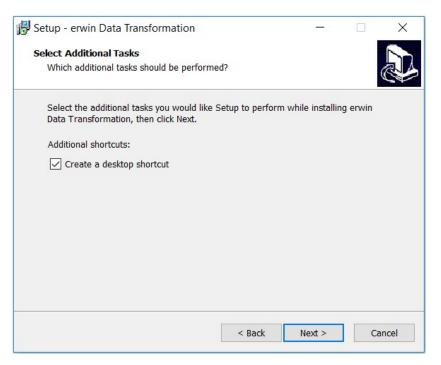
Choose the folder to install the application to and press Next:



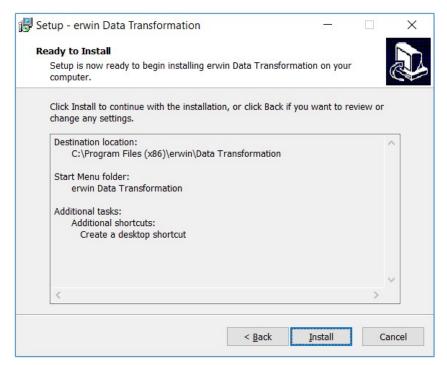
Then, insert a name for the start menu folder and press Next:



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.

Configuration

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

General

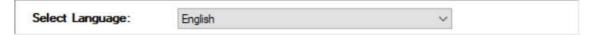
The general tab allows the user to select the language, JDK version, account for service creation, and the location of the data folder.



Language

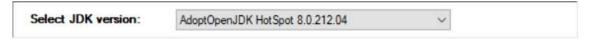
Select the language of the installation of erwin DT from:

- English
- French
- Italian
- Spanish
- German



JDK Version

Select the **JDK version** to run erwin DT; 64bit JDK is required.

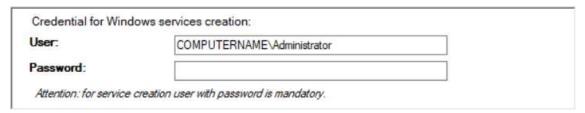


Windows Service Creation

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.



These credentials are used to create and run the following Windows services:

- erwin DT Event Manager
- erwin DT Listener Manager
- erwin DT Quartz Scheduler

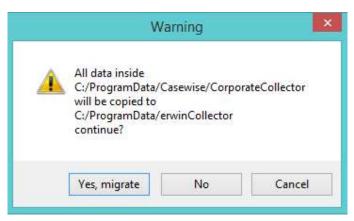
Note that an additional service is also created (erwin DT H2DB Windows Service) but is run as the Local System account.

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.

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



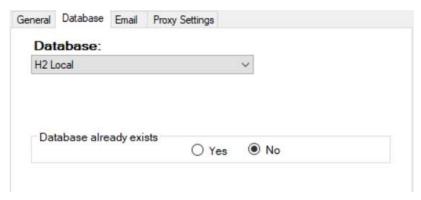
Database

The database tab allows the users to choose between a local H2 database or a remote H2 database to be used by erwin DT.

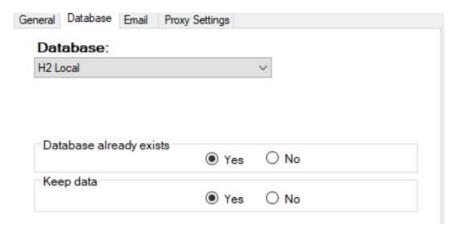


If installing with a *local database*, you'll be allowed to choose between two options:

• 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.

1. 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

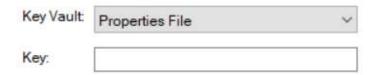


Supported stores for the encryption key include the erwinDataTransformation properties file, or the Microsoft Azure Key Vault.

Key Stores

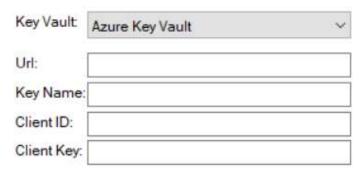
Properties File

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.



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 encypted in the erwinDataTransformation.properties file in the erwin DT install directory.



Encrypting Database File

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



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	O No	
Change E	ncryption Key:	○ Yes	No	
		Key Vaul	lt	
Key Vault	Properties File			~
Key:	••••			

Changing or Removing File Encryption

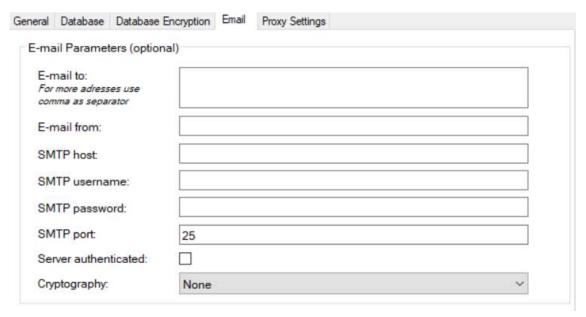
To change the encryption, select the current and new key stores, and provide the necessary credentials.

Database	File Encrypted:	Yes	○ No			
Change E	ncryption Key:	Yes	○ No			
		Key Vaul	t		New Key Vau	lt
Key Vault	Properties File		~	Key Vault:	Azure Key Vault	~
Key:	••••			Url:	https://your.kevault.url.net/	
				Key Name	example	
				Client ID:	•••••	
				Client Key:	•••••	•
	the encryption, s	elect "Remo	ove Encryption	".		
Database	The Encrypted.	© les	0 140			
Change E	ncryption Key:	Yes	○ No			
		Key Vaul	lt		New Key Vau	lt
Key Vault	Properties File		~	Key Vault:	Remove Encryption	~
Key:	••••					

Email

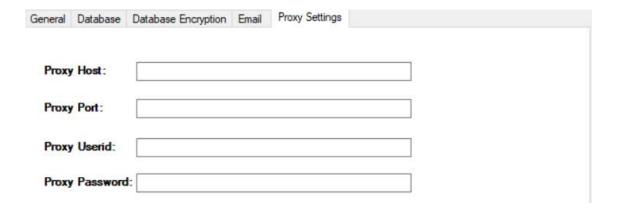
The "Email" tab allows the user to provide parameters that erwin DT will use to manage domain support and error notification by email:

- **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



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.



The OK button saves the configuration.

Licensing

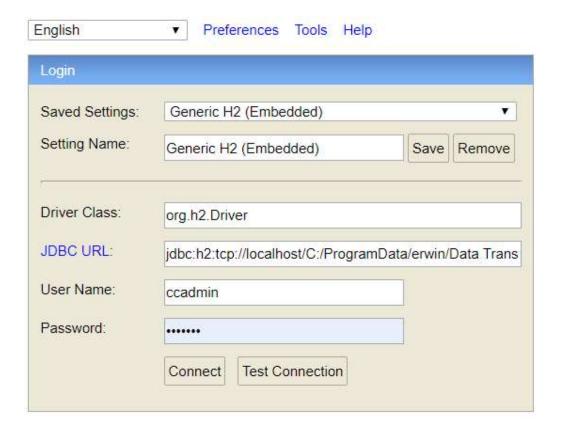
During first erwin DT log on, users will be prompted to enter an activation code. The activation code will be released by ServiceDesk. For further details on licensing, consult the erwin DT User Manual.

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/*

The default JDBC URL for the H2 database when installed locally is jdbc:h2:tcp://localhost/C:/ProgramData/erwin/Data Transformation/data/H2/CC



Appendix

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:\text{YProgramData\text{Yerwin\text{YData Transformation\text{Ydata}"}}

and contains the H2 folder.

- 3. Edit file <remoteFolderPath>/H2/service/H2wrapper.conf to check the parameters:
 - wrapper.java.command=C:\(\fomale^{C}\) Frogram Files\(\fomale^{J}\) Java\(\fomale^{J}\) Jok 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

About Us

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit www.quest.com.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at https://support.quest.com.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product.