

Software Installation Guide

erwin DATA INTELLIGENCE (DI)

Version 13.0

This document provides the instructions to install the new 13.0 version of the erwin Data Intelligence application on a Windows OS.



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Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way Aliso Viejo, CA 92656

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About this Guide

This document describes the installation process of the erwin Data Intelligence application on a dedicated on-premises physical or virtual server, as well as cloud based virtual machines. It provides the software installation procedure for a basic HTTP installation of erwin Data Intelligence Suite, configuration tasks, and troubleshooting information. This document also describes the technical specifications and the pre-requisites required for the successful installation of the Data Intelligence software on a supported Windows Distribution.

Software Solution Architecture

Key Components

The following diagram shows a high-level modular architecture of the application.



Web Application Architecture

Users Display Results Display Results Pront End	Backend	Users +	Collect Data	Request End User Navigation HTML, CSS, Image Front End	
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The erwin DI Suite application supports both single server (application and database on the same server) and distributed (application and database on the different servers) architectures.





Highly Recommended for Production
 Deployments

Technology Stack and Components

The erwin DI Suite application follows multi-tier architecture consisting of Presentation, Application, Data Access, and Resource layers. The following is a high-level diagram depicting these layers.





System Specifications and Software Requirements

Important Note: Please note that the following specifications are for the erwin Data Intelligence application only and do not include the specifications for the erwin Data Quality module (DQLabs). We recommend that the erwin Data Quality (DQLabs) be installed on a separate server. For the erwin Data Quality (DQLabs) specifications, please refer to this <u>document</u>.

For Production Deployments

Application Tier – Minimum Compute & Software Requirements		
Single / Multi		
Windows Server / Linux Server		
64 Bit		
4 Cores / 8 vCPUs / 64 GiB RAM recommended (32 GiB RAM Minimum)		
100 -200 GB		
Eclipse Temurin Adoptium JDK version 17.0.7 certified for erwin DI v13		
Apache Tomcat version 9.0.73, 9.0.74, or 9.0.75 certified for erwin DI v13		
MS Edge (v86.0+), Google Chrome (v86.0+), Firefox (v82.0+)		

• ¹ RAM GiB required is based on the number of concurrent users that will use the application.

For optimal performance, we recommend about a minimum of 0.5 GB space per login user on the application server.

• If you have 30 users logging in concurrently, the application will need to have a minimum of 15 GB (30*0.5=15) free RAM space allocated to it. This is not the RAM of the server machine. It is the physical RAM allocated to the application server (tomcat JVM) itself.

Database Tier – Minimum Compute & Software Requirements		
MS SQL Server: 2016, 2017, 2019, 2022		
Oracle Database: 18c, 19c		
64 Bit		
4 Cores / 8 vCPUs / 64 GiB RAM recommended (32 GiB RAM Minimum)		
200 GB storage recommended as minimum starting size.		
Oracle Table Space 100 GB recommended as minimum starting size.		

• erwin DI requires a dedicated database/schema, NOT a dedicated server instance.

• The storage/tablespace allocated initially will need to increase over time based on product usage and data growth.

• Azure Cloud databases supported: Azure SQL Managed Instance, Azure SQL Database (PaaS) or SQL Server in a VM. AWS Cloud databases supported: AWS RDS SQL or AWS RDS Oracle.

Operating Systems Supported		
Microsoft Windows	Windows Server 2016 and above	
Linux Distributions	Linux Versions (Linux Kernel version 4.18 and above)	
Amazon Linux	2023	
Red Hat Enterprise Linux	v8, v9	
SUSE Enterprise / openSUSE	15 sp4 / Leap 15.4	
Ubuntu Server	20.04 LTS, 22.04 LTS	

• Server class operating system is recommended for production deployments.

• Choice of operating system should be based on customer's skill set and ability to support, manage, maintain the server.



Sugge	sted Cloud Instance Sizing		
Azure	VM Series	Amazo	on EC2 Instance Types
Intol	(8vCPU/64 GiB) Standard_E8s_v5, Standard_E8ds_v5	Intol	(8vCPU/64 GiB) r6i.2xlarge, r6id.2xlarge r5.2xlarge, r5d.2xlarge
inter	(8vCPU/32 GiB) Standard_D8s_v5, Standard_D8ds_v5	inter	(8vCPU/32 GiB) m6i.2xlarge, m6id.2xlarge, m5.2xlarge, m5d.2xlarge
	(8vCPU/64 GiB) Standard_E8as_v5, Standard_E8ads_v5		(8vCPU/64 GiB) r5a.2xlarge, r5ad.2xlarge, r6a.2xlarge
AIVID	(8vCPU/32 GiB) Standard_D8as_v5, Standard_D8ads_v5	AIVID	(8vCPU/32 GiB) m6a.2xlarge, m5a.2xlarge, m5ad.2xlarge
Azure E-series memory optimized VM types recommended		AWS r-f	amily memory optimized instance types recommended.
Azure Application Gateway or third-party Layer 7 load balancer required for		Applicat	ion Load Balancer or third-party Layer 7 load balancer required for
multi-node deployments. Suggested sizes are a starting point only, you may		multi-ne	ode deployments.
need to upsize instances based on concurrent usage and performance			
needs			

Note: We highly recommend that you stay compliant with the above-mentioned system requirements for the best experience. In case you need to use a software (database version, browser etc.) that is not listed in the above system requirements, we recommend that you reach out to your erwin support or professional services contact so we can provide a recommendation on the compatibility.

For Proof of Concepts

Application Tier – Minimum Compute & Software Requirements		
Node Options	Single / Multi	
Operating System	Windows Server / Linux Server	
Processor	64 Bit	
CPU Cores / vCPUs / RAM ¹	2 Cores / 4 vCPUs / 32 GiB RAM recommended (16 GiB RAM Minimum)	
Local Storage	100 -200 GB	
Java JDK	Eclipse Temurin Adoptium JDK version 17.0.7 certified for erwin DI v13	
Java Servlet Container / Web Server	Apache Tomcat version 9.0.73, 9.0.74, or 9.0.75 certified for erwin DI v13	
Web Browsers	MS Edge (v86.0+), Google Chrome (v86.0+), Firefox (v82.0+)	

• ¹ RAM GiB required is based on the number of concurrent users that will use the application.

For optimal performance, we recommend about a minimum of 0.5 GB space per login user on the application server.

• If you have 30 users logging in concurrently, the application will need to have a minimum of 15 GB (30*0.5=15) free RAM space allocated to it. This is not the RAM of the server machine. It is the physical RAM allocated to the application server (tomcat JVM) itself.

Database Tier – Minimum Compute & Software Requirements			
Database Server	MS SQL Server: 2016, 2017, 2019, 2022		
	Oracle Database: 18c, 19c		
Processor	64 Bit		
CPU Cores / vCPUs / RAM	2 Cores / 4 vCPUs / 32 GiB RAM recommended (16 GiB RAM Minimum)		
Database Storage	100 GB storage is recommended as minimum starting size.		
	Oracle Table Space 75 GB recommended as minimum starting size.		

• erwin DIS Suite requires a dedicated database/schema, NOT a dedicated server instance.

• The storage/tablespace allocated initially will need to increase over time based on product usage and data growth.

• Azure Cloud databases supported: Azure SQL Managed Instance, Azure SQL Database (PaaS) or SQL Server in a VM. AWS Cloud databases supported: AWS RDS SQL or AWS RDS Oracle.

 Operating Systems Supported

 Microsoft Windows
 Windows Server 2016 and above

 Linux Distributions
 Linux Versions (Linux Kernel version 4.18 and above)

 Amazon Linux
 2023

 Red Hat Enterprise Linux
 v8, v9

 SUSE Enterprise / openSUSE
 15 sp4 / Leap 15.4

 Ubuntu Server
 20.04 LTS, 22.04 LTS

• Server class operating system is recommended for production deployments.

• Choice of operating system should be based on customer's skill set and ability to support, manage, maintain the server.



Suggested Cloud Instance Sizing			
Azure VM Series Amazon EC2 Instance Types		on EC2 Instance Types	
Intol	(4vCPU/32 GiB) Standard_E8s_v5, Standard_E8ds_v5	Intol	(4vCPU/32 GiB) r6i.2xlarge, r6id.2xlarge r5.2xlarge, r5d.2xlarge
mei	(4vCPU/16 GiB) Standard_D8s_v5, Standard_D8ds_v5	inter	(4vCPU/16 GiB) m6i.2xlarge, m6id.2xlarge, m5.2xlarge, m5d.2xlarge
	(4vCPU/32 GiB) Standard_E8as_v5, Standard_E8ads_v5		(4vCPU/32 GiB) r5a.2xlarge, r5ad.2xlarge, r6a.2xlarge
AIVID	(4vCPU/16 GiB) Standard_D8as_v5, Standard_D8ads_v5	AIVID	(4vCPU/16 GiB) m6a.2xlarge, m5a.2xlarge, m5ad.2xlarge
Azure E-series memory optimized VM types recommended. AWS r-family memory optimized instance types recommended.		amily memory optimized instance types recommended.	
Azure Application Gateway or third-party Layer 7 load balancer required for Application Load Balancer or third-party Layer 7 load balancer required for		tion Load Balancer or third-party Layer 7 load balancer required for	
multi-node deployments.		multi-n	ode deployments.
	Suggested cloud instance sizes are a starting point only. Upsizing may be required based on concurrent usage and performance needs.		

Pre-requisites to install Erwin DI Suite

Eclipse Temurin Adoptium Java JRE and Tomcat webserver are standard prerequisites to install and deploy the erwin Data Intelligence application .

The erwin Data Intelligence 13.0 software is certified to run on the following versions of Tomcat and Java.

Tomcat Webserver	Tomcat 9.0.73/74/75/76
Java	Eclipse Temurin Adoptium 17.0.x

* Important Note: The erwin Data Intelligence v13.0 has been officially certified on Tomcat 9.0.73 and Java 17.0.x. We recommend that you install tomcat 9.0.73/74/75/76 versions to avoid any compatibility issues. If you are on the older Tomcat 8.5x version, it is mandatory that you upgrade to Tomcat 9.0. 73/74/75/76 for security compliance and to avoid any unexpected compatibility issues.

Additional Note: We recommend that you use the certified versions of Tomcat and Java for best experience. In case you need to use a point version that is above or below the certified versions, the product might still work as expected on the non-conformant point versions, but we recommend that you reach out to your erwin support or professional services contact so we can provide a recommendation on the compatibility.

Memory Allocation to Web Server

Allocate memory as high as possible to the tomcat web server based on the RAM size of the server.

E.g. If the server has a 32 GB RAM, the web server needs to be allocated a minimum of 50% of the RAM to begin with i.e. 16 GB minimum. The higher the memory allocation, the better for the functioning of the application.

An example of the recommended Memory allocation to Tomcat would look as follows:

Physical RAM on Server	Allocation to Tomcat
16 GB	8 – 12 GB
32 GB	16 – 28 GB
64 GB	48 - 54 GB



End-user Machine/Laptop Specifications

	End User Machine/Laptop Configuration
Processor	i3 and above
Minimum RAM	8 GB
Minimum Free Space available	1 – 2 GB
The CPU should have minimum	a 1 – 2 GB RAM free space while accessing the envin Data Intelligence application via a web

 The CPU should have minimum 1 – 2 GB RAM free space while accessing the erwin Data Intelligence application via a web browser.

• e.g., If you have a 4GB laptop and any application is occupying 100%CPU space, then the erwin Data Intelligence web pages will not load until some physical memory is freed up.

Installing the erwin the Data Intelligence software

Install DI Suite software in 5 easy steps.

Step 1: Install Java (Eclipse Temurin Adoptium 17.0.x)

Step 2: Install Apache Tomcat v9.0.73/74/75/76.

Step 3: Deploy the erwinDISuite.war file on Tomcat.

Step 4: Create the database schema for the application and configure the *database.properties* file to connect to the backend Database repository

NOTE** Create the backend repository in SQL SERVER or ORACLE databases and provide these connectivity parameters in the *database.properties* file in the tomcat

Step 5: Access the erwin DI Suite Login screen.

Step 1: Install Java

Download and Java (Eclipse Temurin Adoptium 17.0.x) and finish the installation process.

Link to download Eclipse Temurin Adoptium 17.0.x - https://adoptium.net/temurin/releases/



Step 2: Installing Tomcat & creating the database schema for the erwin Data Intelligence application.

1. Download the Tomcat 9.0.73.exe version using this link - <u>https://archive.apache.org/dist/tomcat/tomcat-</u> 9/v9.0.73/bin/

	Name	Last modified	<u>Size</u>	Description
۵	Parent Directory		_	
ò	<u>Parent Directory</u>			
	embed/	2023-03-03 08:14	-	
	<u>apache-tomcat-9.0.73-deployer.tar.gz</u>	2023-02-27 15:44	2.7M	
	<u>apache-tomcat-9.0.73-deployer.tar.gz.asc</u>	2023-02-27 15:44	833	
Ē	<pre>apache-tomcat-9.0.73-deployer.tar.gz.sha512</pre>	2023-02-27 15:44	166	
	<pre>apache-tomcat-9.0.73-deployer.zip</pre>	2023-02-27 15:44	2.7M	
	<pre>apache-tomcat-9.0.73-deployer.zip.asc</pre>	2023-02-27 15:44	833	
	<pre>apache-tomcat-9.0.73-deployer.zip.sha512</pre>	2023-02-27 15:44	163	
1	<pre>apache-tomcat-9.0.73-fulldocs.tar.gz</pre>	2023-02-27 15:44	8.2M	
	<pre>apache-tomcat-9.0.73-fulldocs.tar.gz.asc</pre>	2023-02-27 15:44	833	
Ē	<pre>apache-tomcat-9.0.73-fulldocs.tar.gz.sha512</pre>	2023-02-27 15:44	166	
<u></u>	<pre>apache-tomcat-9.0.73-windows-x64.zip</pre>	2023-02-27 15:44	12M	
	<pre>apache-tomcat-9.0.73-windows-x64.zip.asc</pre>	2023-02-27 15:44	833	
Ē	<pre>apache-tomcat-9.0.73-windows-x64.zip.sha512</pre>	2023-02-27 15:44	166	
1	<pre>apache-tomcat-9.0.73-windows-x86.zip</pre>	2023-02-27 15:44	12M	
E	<pre>apache-tomcat-9.0.73-windows-x86.zip.asc</pre>	2023-02-27 15:44	833	
	apache-tomcat-9.0.73-windows-x86.zip.sha512	2023-02-27 15:44	166	
	apache-tomcat-9.0.73.exe	2023-02-27 15:44	12M	
	apache-tomcat-9.0.73.exe.asc	2023-02-27 15:44	833	
	apache-tomcat-9.0.73.exe.sha512	2023-02-27 15:44	154	
	<u>apache-tomcat-9.0.73.tar.gz</u>	2023-02-27 15:44	11M	
	<u>apache-tomcat-9.0.73.tar.gz.asc</u>	2023-02-27 15:44	833	
	<u>apache-tomcat-9.0.73.tar.gz.sha512</u>	2023-02-27 15:44	157	
	<pre>apache-tomcat-9.0.73.zip</pre>	2023-02-27 15:44	12M	
	<pre>apache-tomcat-9.0.73.zip.asc</pre>	2023-02-27 15:44	833	
	<pre>apache-tomcat-9.0.73.zip.sha512</pre>	2023-02-27 15:44	154	

Index of /dist/tomcat/tomcat-9/v9.0.73/bin

Note: follow the same process for Tomcat 9.0.74/75/76 versions as well.

- 2. To Start Installation, double click on the downloaded apache-tomcat v9.0.73.exe file. You will see the welcome screen. Click on the Next button to continue the installation process.
- 3. Choose the port number on which you want to run the tomcat server. Tomcat uses 8080 as its default port (you can provide any other port number if 8080 is already being used)
- 4. Enter Admin User ID and password for Tomcat (default: admin/admin)
- 5. On the Java Virtual Machine selection window, select the path to the JRE/Java 17 folder

*Note***: If there is more than one version of JRE installed, Ensure Tomcat is being mapped to the JDK/ JRE 17 version previously installed.





After successful installation, a shortcut icon to start the tomcat server appears in the icon tray of the task bar as shown below. Double clicking the icon, displays the window of Apache Manager for Tomcat. It might show the "Startup type" as manual (if you change default installation Location)



Configuring Tomcat Memory settings for optimum performance

After installing tomcat, modify the tomcat memory settings as described below to achieve optimum performance.

E.g. If the server has a 16 GB RAM, the web server needs to be allocated a minimum of 50% of the RAM to begin with i.e. 8 GB minimum. The higher the memory allocation, the better for the functioning of the application.

Memory Settings:

- 1. If you are using the normal tomcat installation and Tomcat manager, then set the memory related values as shown in the Tomcat \rightarrow Java \rightarrow Java Options window
- 2. Copy the 2 lines in blue below and paste these 2 lines at the end of the existing lines in the Java Options window.



Apache Tomcat 9.0 Tomcat9 Properties × General Log On Logging Java Startup Shutdown Use default Java Virtual Machine: C:\Program Files\OpenJDK\jre-8.0.262.10-hotspot\bin\server\jvm ... Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 9.0\bin\bootstrap Java Options: -Djava.util.logging.config.file=C:\Program Files\Apache Software For 🔨 -Dlog4j2.formatMsgNoLookups=true ¥ Java 9 Options: --add-opens=java.base/java.lang=ALL-UNNAMED --add-opens=java.base/java.io=ALL-UNNAMED --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED Initial memory pool: MB Maximum memory pool: MB KB Thread stack size: OK Cancel Apply

****IMPORTANT NOTE**:** Ensure that the "Initial memory pool" & "Maximum memory pool" values are empty. If values exist in these 2 fields, delete the values i.e. set to empty and click the "Apply" button

If using an alternate Tomcat zip installation (startup.bat)

-Xms2048m

-Xmx10240m

Add the following line to the catalina.bat (Windows) or catalina.sh (Unix) file as the first line in the file.

catalina.bat

set CATALINA_OPTS=%CATALINA_OPTS% -Xms2048m -Xmx16384m

Parameters to be added to the Java 9 options section for Tomcat.

Copy the below lines as is (including the starting hyphens) and paste this block into the Tomcat \rightarrow Java 9 options as highlighted

--add-opens=java.base/java.lang=ALL-UNNAMED

--add-opens=java.base/java.io=ALL-UNNAMED

- --add-opens=java.base/java.util=ALL-UNNAMED
- --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED
- --add-opens=java.base/java.net=ALL-UNNAMED
- --add-opens=java.management/sun.management=ALL-UNNAMED
- --add-opens=java.base/java.nio=ALL-UNNAMED
- --add-opens=java.base/sun.nio.ch=ALL-UNNAMED
- --add-opens=java.base/java.lang.invoke=ALL-UNNAMED
- --add-opens=java.base/java.lang.reflect=ALL-UNNAMED
- --add-opens=java.base/java.util.regex=ALL-UNNAMED
- --add-opens=java.base/java.net=ALL-UNNAMED



Use default Java Virtual Machine: C:\Program Files\Eclipse Adoptium\jdk-17.0.6. 10-hotspot\bin\serv Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 9.0_Tomcat9_73\ Java Options: Dotatalina.home=C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home=C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home=C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home=C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home=C:\Program Files\Apache Software Foundation\Tom -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManage Disva_util.logging.manager=org.apache.juli.ClassLoaderLogManage Disva_util.logging.manager=org.apache.juli.ClassLoaderLogManage Disva_util.logging.manager=org.apache.juli.ClassLoaderLogManage -Disva_util.logging.manager=org.apache.juli.ClassLoaderLogManage -add-opens=java.base/java.log=ALL-UNNAMED -add-o	
Jose default Java Virtual Machine: C:\Program Files\Eclipse Adoptium\jdk-17.0.6.10-hotspot\bin\serv Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 9.0_Tomcat9_73\ Java Options: Ocatalina.home =C:\Program Files\Apache Software Foundation\Tom Ojava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom MB	
C:\Program Files\Eclipse Adoptium\jdk-17.0.6.10-hotspot\bin\servi Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 9.0_Tomcat9_73\ Java Options: -Dcatalina.home =C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home =C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home =C:\Program Files\Apache Software Foundation\Tom -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManage	
Java Classpath: C:\Program Files\Apache Software Foundation\Tomcat 9.0_Tomcat9_73\ Java Options: Dcatalina.home=C:\Program Files\Apache Software Foundation\Tom Djava.iot.mpdir=C:\Program Files\Apache Software Foundation\Tom Djava.iot.lassLoaderLogManage Java 9 Options:add-opens=java.base/java.io=ALL_UNNAMEDadd-opens=java.isse/java.io=ALL_UNNAMEDadd-opens=java.isse/java.io=ALL_UNNAMEDadd-opens=java.isse/java.io=ALL_UNNAMEDadd-opens=java.isse/java.isse.fava.isse.fava.isse.fauadd-opens=java.isse.fava.isse.fava.isse.fau MB Maximum memory pool: MB	
C:\Program Files\Apache Software Foundation\Tomcat 9.0_Tomcat9_73\ Java Options: -Dcatalina.home =C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tall.class.odet-CugManage -Disus.util.logging.manage=-org.apache.juli.Class.odetCugManage -Tadd-opens=java.base/java.iom=ALL-UNNAMED -add-opens=java.base/java.iom=ALL-UNNAMED -add-opens=java.base/java.otti=ALL-UNNAMED -add-opens=java.base/java.otti=ALL_UNNAMED -add-opens=java.base/java.otti=ALL_UNNAMED -add-opens=java.base/java.otti=ALL_UNNAMED MB Maximum memory pool: MB	
Java Options: Doctalina.home=C:\Program Files\Apache Software Foundation\Tom -Dcatalina.home=C:\Program Files\Apache Software Foundation\Tom -Diava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManage _Diava.util.logging.manager=org.apache.juli.ClassLoaderLogManage _Diava.util.logging.manager=org.apache.juli.ClassLoaderLogManage _Diava.util.logging.manager=org.apache.juli.ClassLoaderLogManage _Diava.util.logging.manager=org.apache.juli.ClassLoaderLogManage _Diava.util.logging.manager=org.apache.juli.ClassLoaderLogManage _Java 9 Options: add-opens=java.base/java.lang=ALL-UNNAMED -add-opens=java.base/java.uti=ALL_UNNAMED -add-opens=java.misun.mit.transport=ALL_UNNAMED -add-opens=java.base/isus.ost=ALL_UNNAMED -add-opens=java.misus.ost=ALL_UNNAMED -add-opens=java.misus.ost=ALL_UNNAMED -add-opens=java.misus.ost=ALL_UNNAMED -add-opens=java.misus.ost=ALL_UNNAMED -add-opens=java.misus.ost=ALL_UN	N
Decatalina.home =C:\Program Files\Apache Software Foundation\Tom Ocatalina.home =C:\Program Files\Apache Software Foundation\Tom Ojava.io.tmpdir=C:\Program Files\Apache Software Foundation\Tom Ojava.util.logging.manager=org.apache.juli.ClassLoaderLogManage Java 9 Options: add-opens=java.base/java.io=ALL-UNNAMED add-opens=java.base/java.id=ALL-UNNAMED add-opens=java.base/java.uti=ALL-UNNAMED add-opens	. 4
Locataina.nome =:: (+rogram riles \Apache Software Foundation\10m -Doctatina.base =:: (+rogram riles \Apache Software Foundation\10m -Djava.io.tmpdir=C: \Program Files\Apache Software Foundation\10m -Djava.util.logging.manager =org.apache.juli.ClassLoaderLogManage Disuautil.logging.comfe.file_CUProgram EleolApache Software EleolApache Software Foundation\10m -Disuautil.logging.comfe.file_CUProgram EleolApache Software Foundation\10m -add-opens=java.base/java.io=ALL-UNNAMED -add-opens=java.base/java.uti=ALL	
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Click the Apply button and Restart the Tomcat Server.

Create Dedicated Database/Schema for the application (on SQL Server or Oracle)

Create the erwin DI Database in SQL SERVER

The following steps are for a **SQL SERVER** database.

- 1. Create a new Database/Schema name for erwin DI Suite e.g. "erwinDISuite".
- 2. From the SQL folder of the installation software, run the "**erwinDISuite_SqlServer.sql**" file against the newly created SQL Server Database.
- 3. In the SQL folder, you will also see a file **erwinDISuite_SqlServer_Prerequisite.sql**. Please note that this file is not required for a new install and is only required in the case you are upgrading from an older version to the 11.1 version. In the case of upgrade, please refer to the upgrade guide.
- 4. The required database tables for the software are created in the SQL Server database.

IMPORTANT NOTE:

A **dedicated database** needs to be created in SQL Server for the software and the DDL needs to be executed against this dedicated database.

The DDL should not be executed against the MASTER schema.



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Create a dedicated DB User Account for the erwin DI database

- 1. Create a new Database login role for the erwinDISuite Database (e.g. create a new DB role as "**erwinDISuiteUser**" for the previously created database "erwinDISuite".
- 2. Ensure that you select the "SQL Server Authentication" mode for the new login role



Note**: Windows Authentication mode is also supported and the database configuration file has a section dedicated to entering the connectivity parameters that support windows authentication.

- 3. Grant the new login the following roles.
 - Public, db_owner, data_reader, data_writer



Create a Schema in Oracle Database

- 1. Create a new Database/Schema name for the DI application in the Oracle database e.g. "erwinDISuite"
- 2. Provide the following privileges to the "erwinDISuite" user/schema
 - Resource
 - Connect
 - Create a View privileges
- 3. From the SQL folder of the installation software, run the "**erwinDiSuite_Oracle.sql**" file against the newly created Oracle Schema
- 4. The required database tables for the software are created in the Oracle schema.



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IMPORTANT NOTE:

A dedicated schema name needs to be created in Oracle for the DI Suite and the DDL needs to be executed against this dedicated schema.

The DDL should not be executed against SYS or SYSTEM schemas.

Step 3: Deploying the erwin DI Suite on Tomcat

- 1. Go into the WAR folder of the installation
- 2. Copy the "erwinDISuite.war" file
- 3. Go into the webapps folder of Tomcat directory and paste the "erwinDISuite.war" file into this webapps folder
- 4. Wait a few minutes (2-3 min). You will see a newly created "erwinDlSuite" folder



- 5. Go into the erwinDISuite/WEB-INF/Database folder to configure the "database.properties" file
- 6. Provide the required parameters to connect to the SQL Server/ORACLE database
- 7. Set PasswordEncrypted=false and Restart the Tomcat server

IMPORTANT**: Restart the Tomcat server after updating the "database.properties" file



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Step 4: Configuring the "database.properties" file

Configuring the "database.properties" file for SQL Server Database

If using the SQL Server Authentication Mode

Uncomment the SQL Server section by removing the # at the beginning of each line (between SQL SERVER BEGIN and SQL SERVER END section)

Enter the following parameters

- SERVER NAME
- PORT# (default 1433)
- Database Name
- User Name
- Password
- PasswordEncrypted = false



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If using the Windows Authentication Mode

Uncomment the SQL Server Windows Authentication section by removing the # at the beginning of each line (between SQL SERVER Windows Authentication BEGIN and SQL SERVER Windows Authentication END section)

Enter the following parameters

- SERVER NAME or IP Address
- Database Name
- Domain
- User Name
- Password
- PasswordEncrypted = false

SQL Server Windows Authentication Begin #DriverName=net.sourceforge.jtds.jdbc.Driver #URL=jdbc:jtds:sqlserver://<servername/ipaddress>/<databaseName>;domain=<domainname> #UserName=uid #Password=pwd #PasswordEncrypted=false #DBType=SQLSERVER #ConnectionPartitions=1 #MinimumConnectionsPerPartition=50 #MaximumConnectionsPerPartition=150 ##ConnectionPoolType=BONECP #ConnectionPoolType=HIKARI #TestConnectionQuery=SELECT 1 ### SQL Server Windows Authentication End



Configuring the "database.properties" file for Oracle Database

Uncomment the ORACLE section by removing the # at the beginning of each line (between ORACLE BEGIN and ORACLE END section)

Enter the following parameters

- SERVER NAME
- PORT# (default 1521)
- Database Name
- User Name
- Password
- PassEncrypted = false
- Sample screenshot of Parameters is shown below.

Cognection Name erwinDISuite Username erwinDISuiteUser Password Saye Password Oracle Connection Type Basic Role default V Hostname Poct IS21 Sprvice name	<pre>### Oracle Begin DriverName=oracle.jdbc.OracleOriver URL=jdbc:oracle:thin:@//localhost:1521/xe UserName=erwinDISuiteUser Password=123 PasswordEncrypted=false DbType=ORACLESERVER ConnectionPartitions=1 MinimumConnectionsPerPartition=0 MaximumConnectionsPerPartition=40 ConnectionPoolType=BONECP ConnectionPoolType=HIKARI ## Oracle End</pre>
Oracle	erwin DI Suite Connection Params

Configuring the path for the application documents repository

This is the path that the application uses to store any documents uploaded via the application's UI.

Update the iccdocuments.properties file. This is present in the following path

Tomcat home\webapps\erwinDISuite\WEB-INF\configuration\properties folder

- DocumentsPath=Client_Path (For example: DocumentsPath=C:\MappingManager)
- ApplicationURL= Client_DI_URL (For example: ApplicationURL= http://erwintest:9191/erwinDISuite)
- ApplicationTempPath=Provide_New_Path_For_Temp_Files (this path is used to store all the temp files uploaded into the application (typically outside the tomcat directory) and can be periodically deleted by an admin)
 For example: ApplicationTempPath= C:\DISuiteTemp
- DiscoverAssetsPath=Provide_New_Path_For_syncing the Discover Assets folder this is typically the same path
 as the ApplicationTempPath variable but can be changed if needed. This path is used to sync the assets with the
 Discover Assets module and will be used going forward to support multiple instances.



Step 5: Access the erwin DI Suite Login Screen

Now it's time to test your work. If you have faithfully completed all the steps outlined in this chapter, you should now be able to access the erwin Data Intelligence Login screen from your local browser.

The URL format is: http://<ip-address/hostname>:8080/erwinDISuite

- Replace <ip-address/hostname> with your correct IP address or DNS hostname.
- Port '**8080**' is the default port used earlier when configuring Tomcat. If you changed the port used during Tomcat configuration, remember to use the correct port for your environment.
- URI path '**/erwinDISuite**' is the default application name and URI path. If you deployed the war file with a different name, use the correct /path for your environment.

If all was steps were completed accurately, and the correct URL is used your browser should display the erwin Data Intelligence Suite login screen:



How to activate the software

Once you have a valid license key, go back to the login screen, click the "**Activate Software**" link, and paste the text from the license key file in the pop-up window.

Important Note**: Once the product is successfully installed, please reach out to your <u>sales contact</u> for a valid license key.



Data Intelligence
User Name
Password
I accept & agree to the terms of the EULA
SIGN IN
Can't access your account? Activate Software

Troubleshooting Tips

1. Cannot access the login screen?

Trying to access the URL <u>http://IP_ADDRESS:Port#/erwinDISuite/</u> in your web browser and get a "404 Page Not Found" or a "black screen" error?



If you get the above error,

The application is not able to establish a connection to the backend Database (SQL SERVER or Oracle) repository.

Cause 1: Incorrect parameters in the "database.properties" file.

Solution: Check the connectivity parameters "database.properties" file in the tomcat/webapps/erwinDISuite/WEB-INF/database folder to ensure the connectivity parameters are correctly listed. <u>Click here</u> to view the Configuration options for Oracle and SQL Server databases.

Cause 2: Database port is blocked by firewall.

Solution: The port numbers being used for SQL Server or Oracle Databases need to be open and made available for access by the erwin DI Suite application. Check the port# listed in the "database.properties" file and ensure the port# being used is



open. E.g. SQL SERVER typically uses port# 1433. Ensure TCP/IP is enabled on your SQL SERVER database for the erwin Data Intelligence application to successfully establish a connection.

2. The application did not deploy properly

Cause 1: Incomplete deployment by the web server

Solution: Sometimes, incomplete deployment of the erwinDISuite.war file results in the application not being available for access. To ensure that the application is properly deployed, go into the tomcat/webapps/erwinDISuite/WEB-INF/ folder and confirm if a "web.xml" file is visible. If yes, the application is deployed correctly.

If not, execute the following steps to re-deploy the application

- 1. Stop tomcat
- 2. Go into the tomcat/webapps/ folder and delete the erwinDISuite.war and erwinDISuite folder
- 3. Go into the tomcat/work/catalina/localhost folder and delete the erwinDISuite folder
- 4. Start Tomcat
- 5. Follow steps from installation guide to deploy the erwinDISuite.war file. Click Here to view deployment instructions

If the errors persist, go into the tomcat/logs folder and zip all the log files into a compressed folder and send them to your erwin by Quest contact and we will get in touch with you to help you with the installation process.

1 - Appendix

Product Documentation and Software Downloads

Complete documentation for erwin Data Intelligence Suite can be found online at our support portal: <u>Click Here</u>

The software downloads are also available here on the support portal here: <u>Click Here</u>