erwin **Data Intelligence (DI)**

Version 15.0

Software Upgrade Guide

This document provides the instructions to upgrade the erwin DI software from your current version to the new 15.0 version.

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Determine if you are ready to upgrade to v15.0

***** VERY IMPORTANT *****

If you are using the **erwin automation framework** or **custom smart connectors** in your current version of erwin DI, please reach out to your erwin Professional Services SME, Implementation SME, or Customer Success Manager to determine the upgrade path and ensure your smart connectors work on the latest 15.0 version so you can have a smoother upgrade experience and limit the production downtime.

We recommend that **you DO NOT** upgrade directly to the latest 15.0 version without involving an erwin SME especially in cases where you have Smart Connectors configured in your environment.

License Key Readiness

- Version 15.0 works with a v13.2 and 13.0 key
- Any older version requires a new License key, and any older version key will not work on 15.0 (if you are on version 12.1, 12.0 or below).
- If you need a new license key, email license@quest.com to request a new key (specify your company name and the erwin DI product v15.0 in case you have multiple items licensed with Quest).

Please ensure that you have the compatible license key specific to v15.0 available with you before you start the upgrade process.

erwin DM compatibility for DI 15.0

erwin Data Intelligence 15.0 has been certified on the following DM versions.

DM 14.0 and ***DM 14.1***.

Please ensure that you are on a compatible version of DM prior to upgrading to DI v15.0.

erwin Data Quality (DQLabs) compatibility for DI 15.0

erwin Data Intelligence 15.0 has been certified on the following erwin Data Quality (DQLabs) version(s).

DQ 2.4.6.

Please ensure that you are on a compatible version of erwin Data Quality (DQLabs) prior to upgrading to DI v15.0.

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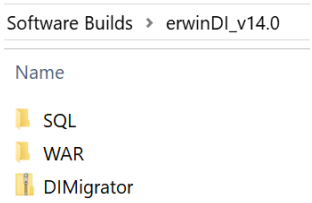
erwin DI Software v15.0 Readiness

Be sure to download the software package from the support.quest.com site. You will need to use your registered email address and password to access the zip file. If registering for the first time, you will need the license key found in the email that was sent with the erwin DI license txt file. It will be near the bottom with the instructions on how to register.

After you download the software and extract the zip, you should have the following folders. Store the zip file on your Windows DI Server under a software folder along with the updated Tomcat and Java executables as applicable. All files should be stored on the additional drive (outside of C:).



If you're running erwin DI on Linux, download the software to your local machine to get access to the file required for the database upgrade. There are steps later to download and deploy the war file on the Linux DI Server.

Prerequisites to Upgrade to the 15.0 version

Backups

Database Backups

1. **IMPORTANT** - Take a backup of the existing v13x or v12x DI Database. You can add the version number to the backup file name but keep the main database generic (without a version number attached).

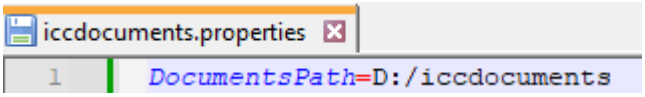
Application Configuration Backup

The following files can be copied from the existing Tomcat directory as they will be needed when deploying the new web application. You will be copying values from these files into the new versions of each file.

1. Take a backup of the **database.properties** file from the following folder
    a. **Windows:** D:\Tomcat 9.0.x\webapps\erwinDISuite\WEB-INF\database\
    b. **Linux:** /opt/erwindis/apache-tomcat-9.0.x/webapps/erwinDISuite/WEB-INF/database/

2. Take a backup of **iccdocuments.properties** file from the following folder
    a. **Windows**: D:\Tomcat 9.0.x\webapps\erwinDISuite\WEB-INF\configuration\properties\
    b. **Linux**: /opt/erwindis/apache-tomcat-9.0.x/webapps/erwinDISuite/WEB-INF/configuration/properties/

    c. Open the **iccdocuments.properties** file and go to the specified location mentioned in the **DocumentsPath** variable and take a backup of the entire physical folder



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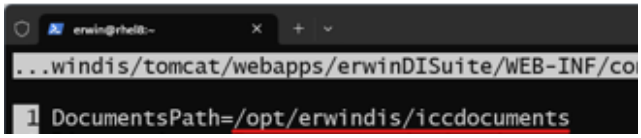

Example: Backup the entire D:/iccdocuments or /opt/erwindis/iccdocumnts folder

Java and Tomcat

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

The erwin Data Intelligence 15.0 software is certified to run on the following versions of Tomcat and Java.

Tomcat Webserver	Tomcat 10.1.x
Java	Eclipse Temurin Adoptium 17.0.x

* Important Note:

- The erwin Data Intelligence v15.0 has been officially certified on Tomcat 10.1.x. We recommend that you install tomcat 10.1.x versions to avoid any compatibility issues.
- If you are on the older Tomcat 9x or 8.5x version, it is mandatory that you upgrade to Tomcat 10.1.x 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 the best experience. In case you need to use a point version that is above or below the certified versions to meet your security guidelines, the product should 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 prior to upgrading so we can provide a recommendation on the compatibility.

- Ensure you have the erwin DI's backend SQL Server or Oracle Database User and Password credentials ready prior to conducting an upgrade as you will need to provide these credentials in the connection properties file during the upgrade process.
- In the event of installing DI 15.0 on a new server, ensure that you install Java 17.0.x first and then you install Tomcat 10.1.x prior to proceeding with the other upgrade steps.

Installing Java and Tomcat for v15.0

- If you are upgrading from v13.2 to v15.0, you do not need to install or upgrade the Tomcat and Java versions as you are already on compatible versions.

- If you are upgrading from an older 13.1/13.0 or 12.1/12.0 version of erwin DI, you will currently be running an existing Tomcat 8x/9x version along with the required version of Java.

- You might want to reuse the existing tomcat port number (e.g. 8080) for the new Tomcat 10.1.x version. To do this, stop and disable your Tomcat 8x/9x service prior to installing Tomcat 10.1.x so you can use the existing port number to ensure the application URL does not change.

- For v15.0, you need to install Java 17.0.x first and then install Tomcat 10.1.x in the new tomcat directory by following the instructions provided below.

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- You can delete and uninstall the older Tomcat 8x/9x version and the older version of DI once you have successfully upgraded to v15.0 and have validated that the application is successfully installed and running.

- Go to Windows or Linux section to follow the steps to update Java and Tomcat.

- Once you have completed installing Eclipse Temurin Adoptium 17.0.x and Tomcat 10.1.x, you may proceed with upgrading the database and web application.

Windows Server

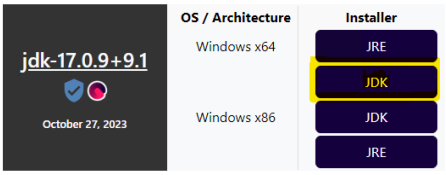
For Windows server, follow the below steps to install Java and Tomcat.

Note: You can skip this section if you have Java v17x and Tomcat 10.1.x versions installed.

Install Java

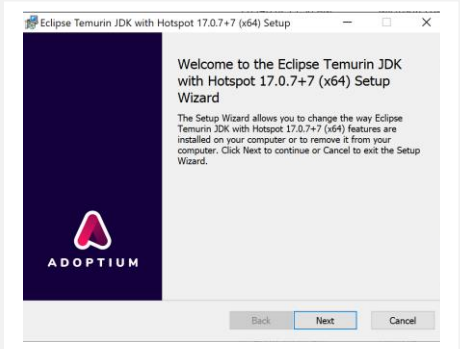
1. If you are already using Java version 17.0.x, then proceed to the Install Tomcat section.

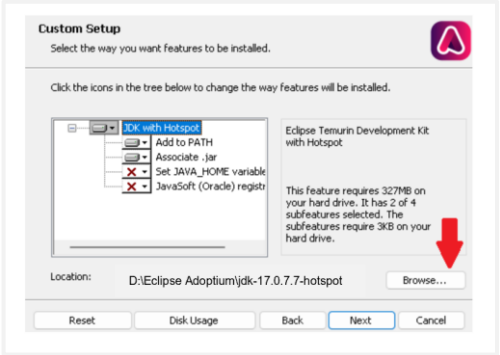
2. If you are using an earlier version of Java (not 17.0.x), then download Java (Eclipse Temurin Adoptium 17.0.x) from https://adoptium.net/temurin/releases/?version=17

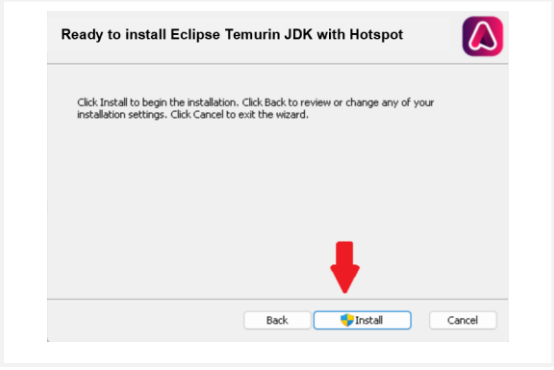


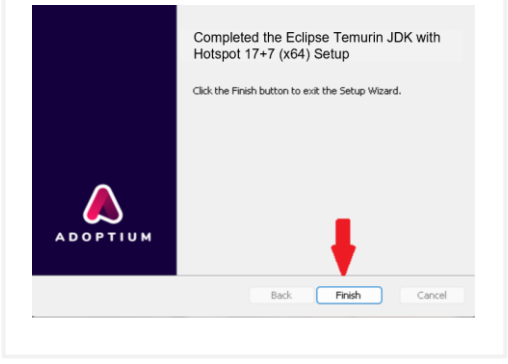
3. Once you've downloaded the Eclipse Temurin JDK installer, right-click on the .exe file, select Run As Administrator, and launch the setup wizard. You'll see a *Welcome* screen explaining the installation process. Click Next.

4. The wizard will guide you through the installation steps:
   - Ensure you are installing JDK 17 in Administrator mode (Run as Administrator) for a full and uninterrupted installation.
   - Install JDK on an alternate drive (versus C: drive) from a best practice perspective (i.e. D: or E:)









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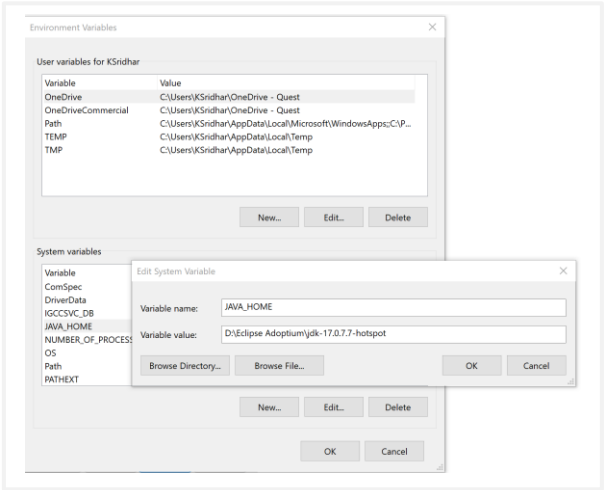
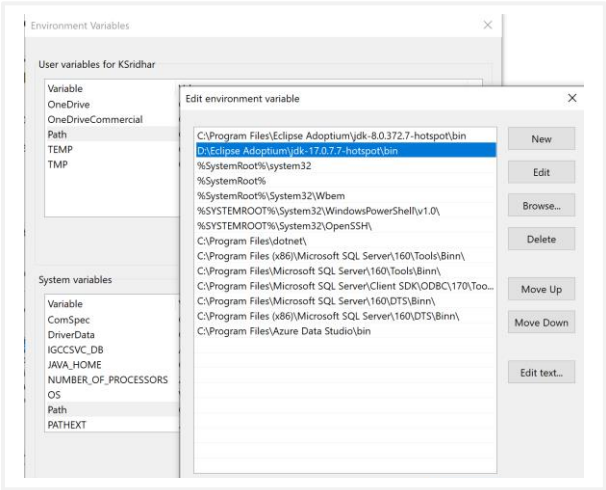
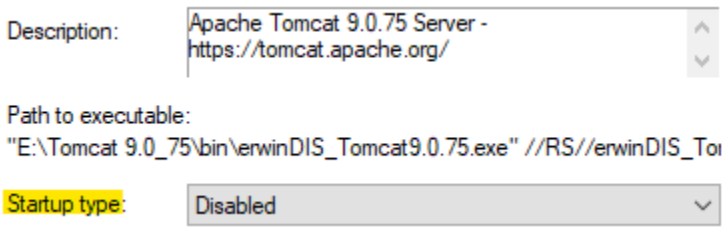
5. Set the PATH and JAVA_HOME variables as follows (Drive and java version may vary):
    - In File Explorer, right-click on This PC and select Properties.
    - On the far right, select Advanced system settings (you may need to widen the window if you don't see Related settings on the side)
    - Click on Environment Variables and under System Variables, update Path and JAVA_HOME:
        - Path example - D:\Eclipse Adoptium\jdk-17.0.7.7-hotspot\bin
        - JAVA_HOME example - D:\Eclipse Adoptium\jdk-17.0.7.7-hotspot





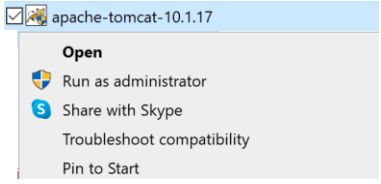
Install Tomcat

1. Make sure the existing Tomcat service has been stopped and disabled. The below setting is found by right-clicking on the service name and selecting Properties.



2. Download the Tomcat 10.1.x.exe version using this link - https://tomcat.apache.org/download-10.cgi Select the 32-bit/64-bit Windows Service Installer.

3. To Start Installation, right click on the downloaded *apache-tomcat v10.1.x.exe* file and select the 'Run as Administrator' option. You will see the welcome screen. Click on the Next button and I agree to continue with the installation process.



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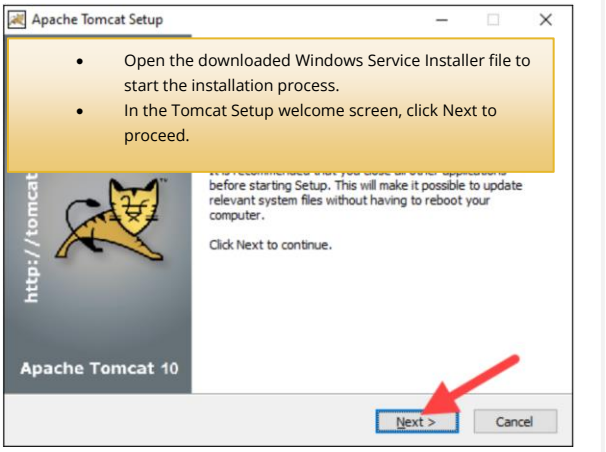
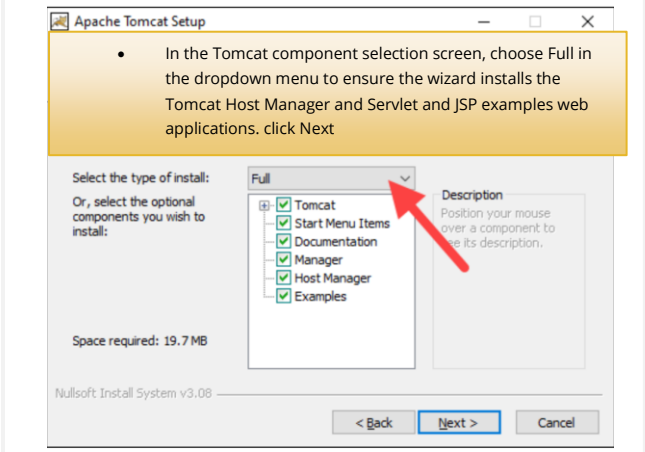
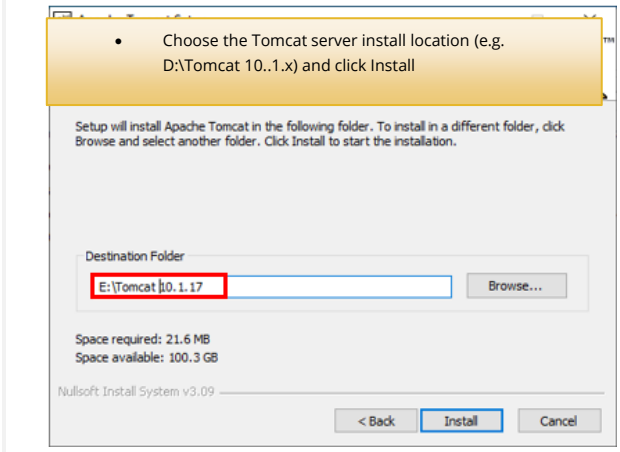
4. Select Full for the install option and click Next.

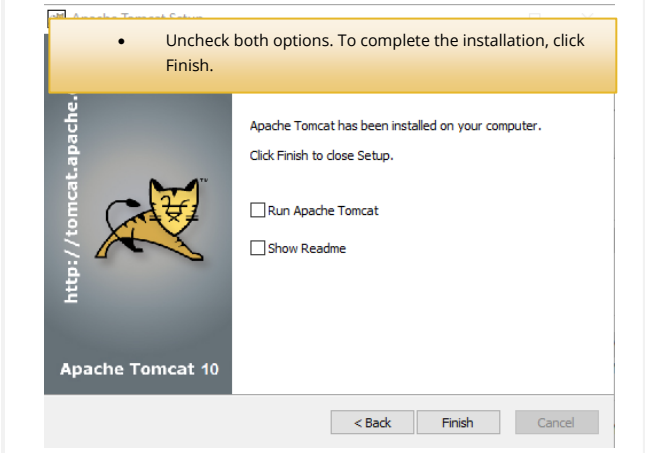
5. Choose the port number on which you want to run the tomcat server. Tomcat uses 8080 as its default port, but for best practices, use port 80 (you can provide any other port number if 8080 or 80 is already being used). Rename the Tomcat service as applicable to match the tomcat version number e.g. *Tomcat10.1.x*. Enter Admin User ID and password for Tomcat (default: admin/admin).

6. On the Java Virtual Machine selection window, select the path to the JDK/Java 17 folder. On the next screen, update the path to install tomcat e.g. D:\Tomcat<version> (i.e. D:\Tomcat 10.1.x). Then uncheck both options on the next screen before clicking Finish.









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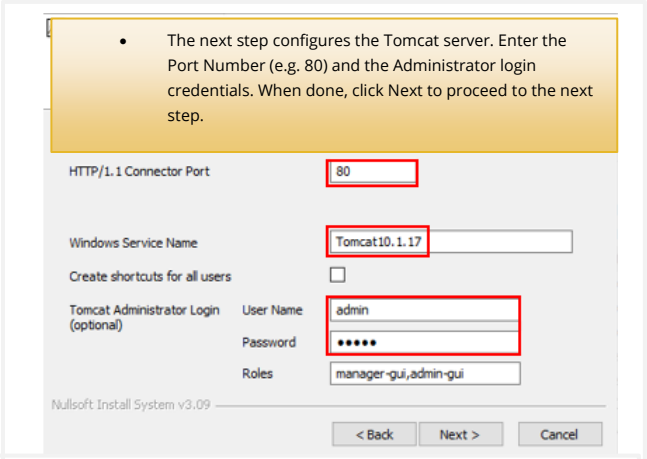
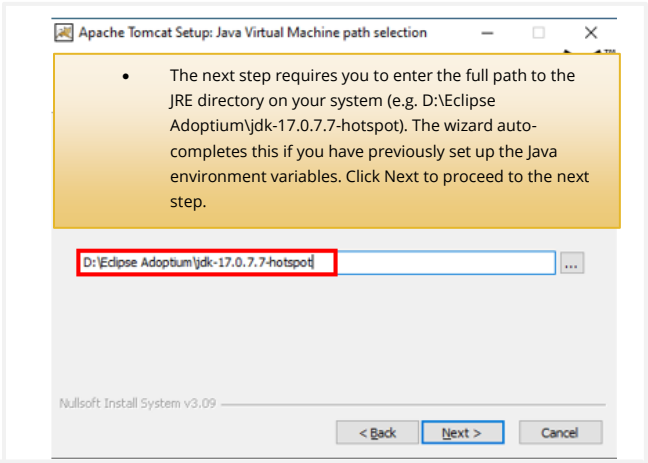
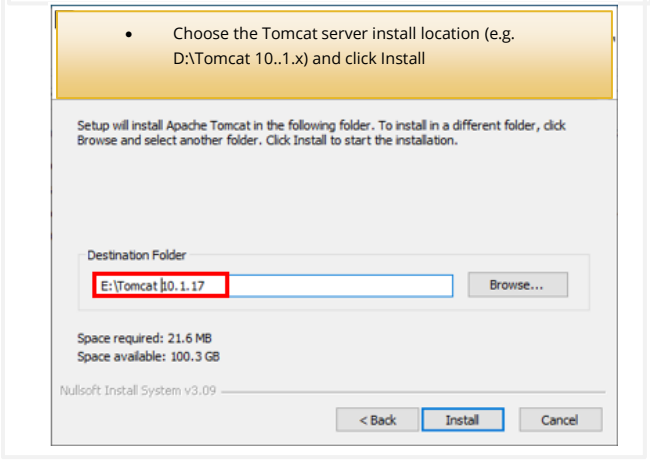
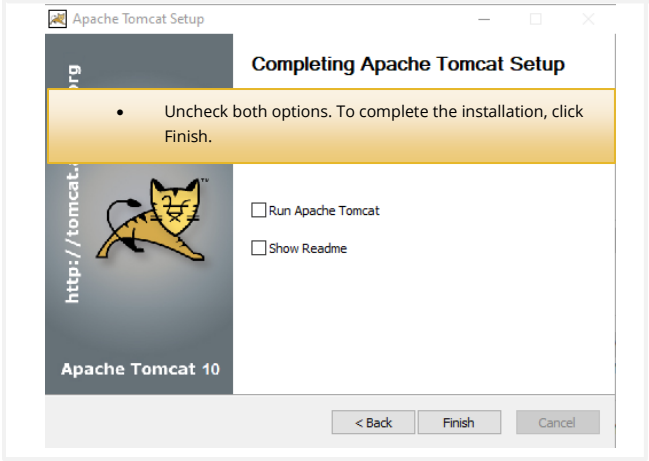
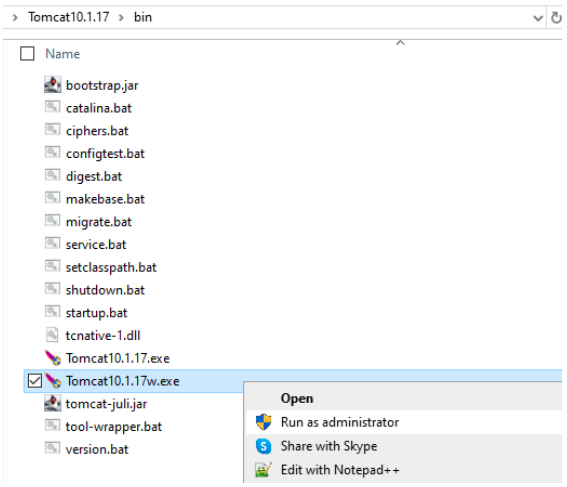








7. Go to the Tomcat directory → bin folder. Right click on the Tomcat10.1.xw file → right click → select the “Run as administrator” option. This will open the tomcat service window.



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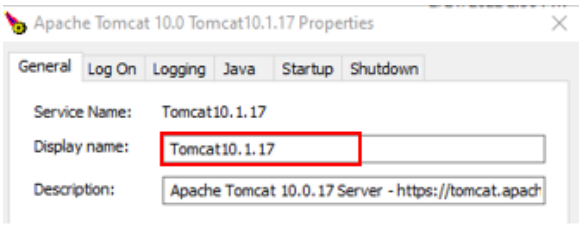
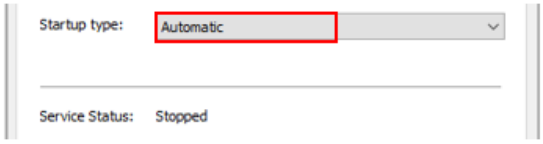
8. Go to the initial tab and update the Display Name to Tomcat10.1.x (i.e. Tomcat10.1.17).

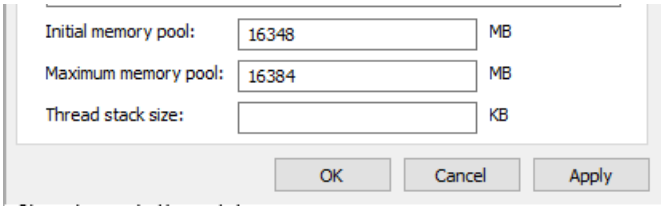


9. Make sure the Startup Type is Automatic.



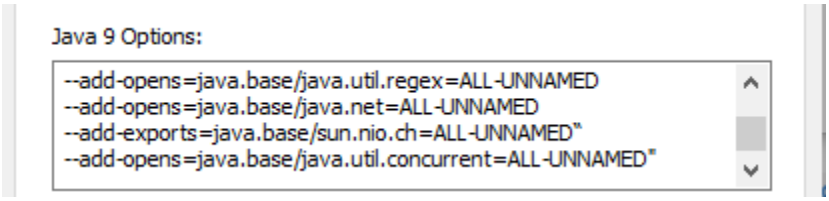
10. Switch to the Java tab and update the memory to the same settings as you used for the previous version of Tomcat. If you don't know what you used before, the recommendation is to use anywhere from half to three fourths of the existing RAM (so if your server has 32GB, then anywhere from 16 to 24GB).

Example values shown below:



11. Copy the below lines as is (including the starting hyphens) and paste this block into the Tomcat → 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
--add-exports=java.base/sun.nio.ch=ALL-UNNAMED"
--add-opens=java.base/java.util.concurrent=ALL-UNNAMED"
```



12. Click the Apply button and Start the Tomcat Server.

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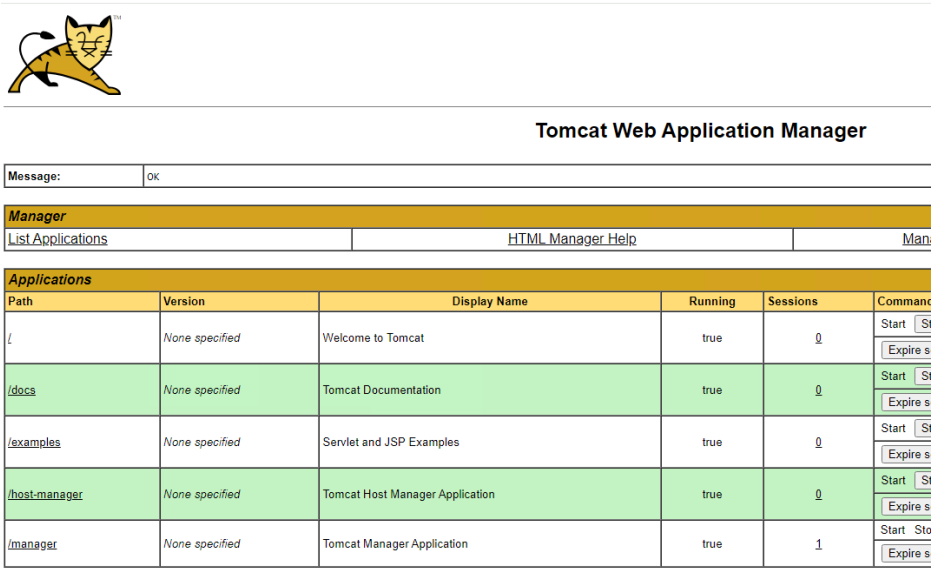
13. Ensure Tomcat is up and running by going to http://<server_name>:port (no port is required if you used 80). Click on Manager App to enter the admin/admin user id and password (if you entered different values during the setup, then enter them here). You should see the following Tomcat Manager screen if Tomcat is up and running.



Tomcat Web Application Manager

Message:	OK

Manager		
List Applications	HTML Manager Help	Man

Applications					
Path	Version	Display Name	Running	Sessions	Command
/	None specified	Welcome to Tomcat	true	0	Start St Expire s
/docs	None specified	Tomcat Documentation	true	0	Start St Expire s
/examples	None specified	Servlet and JSP Examples	true	0	Start St Expire s
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start St Expire s
/manager	None specified	Tomcat Manager Application	true	1	Start Sto Expire s

14. Proceed to the Upgrade section for instructions on the database and web application.

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Linux Server

For Linux server, follow the below steps to install Java and Tomcat

Note: You can skip this section if you have Java v17x and Tomcat 10.1.x versions installed.

Install Java

RedHat Enterprise 8 & 9

These instructions assume that you have previously installed erwinDI using the erwinDI Installation Guide for Linux.

1. If you are already using Java version 17.0.x, then proceed to the Install Tomcat section.
2. If you are using an earlier version of Java (not 17.0.x), then you will need to re-enable the Adoptium repository to download the latest version.

   ```
   sudo dnf config-manager --enable Adoptium
   ```

   Note: If you do not have this repository setup, then refer to the erwinDI Installation Guide for Linux, step 1.3.1 and complete steps 1.3.1 through 1.3.4. Return to this document and go to Install Tomcat.
3. Update the repository cache to make sure you have the latest versions

   ```
   sudo dnf upgrade --repo Adoptium
   ```
4. Install the latest version of Adoptium JDK certified for erwinDI

   ```
   sudo dnf install -y temurin-17-jdk-17.0.9.0.0.9-1
   ```
5. Disable the Adoptium repository. This will help prevent unintended updates to the JDK version. You can also verify that it has been disabled.

   ```
   sudo dnf config-manager --disable Adoptium

   dnf repolist Adoptium
   ```

Ubuntu Server and Debian

1. If you are already using Java version 17.0.x, then proceed to the Install Tomcat section.
2. If you are using an earlier version of Java (not 17.0.x), then you will need to re-enable the Adoptium repository to download the latest version.

   ```
   sudo apt-mark unhold temurin-17-jdk
   ```

   Note: If you do not have this repository setup, then refer to the erwinDI Installation Guide for Linux, step 2.3.1 and complete steps 2.3.1 through 2.3.5. Return to this document and go to Install Tomcat.

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3. Download the Eclipse Adoptium GPG Key

   Note: Be sure to copy/paste the entire text block to your shell.

```
sudo mkdir -p /etc/apt/keyrings
sudo wget -O - https://packages.adoptium.net/artifactory/api/gpg/key/public | sudo tee \
/etc/apt/keyrings/adoptium.asc
```

4. Add the Adoptium repository to your Linux distribution.

   Note: Be sure to copy/paste the entire text block to your shell.

```
echo "deb [signed-by=/etc/apt/keyrings/adoptium.asc] \
https://packages.adoptium.net/artifactory/deb $(awk -F= '/^VERSION_CODENAME/{print$2}' \
/etc/os-release) main" | sudo tee /etc/apt/sources.list.d/adoptium.list
```

5. Update the repository cache.

```
sudo apt update
```

6. Install the specific version of Adoptium JDK certified for erwin Data Intelligence

```
sudo apt install -y temurin-17-jdk=17.0.9.0.0+9 -V
```

7. Disable the Adoptium repository. This is to prevent unintended future JDK 17 version updates.

```
sudo apt-mark hold temurin-17-jdk
```

Install Tomcat

RedHat Enterprise 8 & 9, Ubuntu Server, and Debian

These instructions assume that you have previously installed erwinDI using the erwinDI Installation Guide for Linux.

1. Stop the current Tomcat service.

```
sudo systemctl stop erwindis.service
```

2. Download the Apache Tomcat tar to /opt/erwindis/Downloads directory.

   Note: the '\' indicates a multiline shell command. Be sure to copy/paste the entire text block to your shell.

```
sudo -u erwindis wget -P /opt/erwindis/Downloads \
https://archive.apache.org/dist/tomcat/tomcat-10/v10.1.17/bin/apache-tomcat-10.1.17.tar.gz
```

3. Unpack the tar to erwindis home directory.

```
sudo -u erwindis tar -xvf /opt/erwindis/Downloads/apache-tomcat-10.1.17.tar.gz \
-C /opt/erwindis && sudo rm /opt/erwindis/Downloads/apache-tomcat-10.1.17.tar.gz
```

4. Update the symbolic link for the apache-tomcat-10.1.17 path.

```
sudo -u erwindis ln -sfn /opt/erwindis/apache-tomcat-10.1.17 /opt/erwindis/tomcat
```

5. Update the erwindis.service file. Use your preferred editor and compare your current settings to the file below (you can also copy and paste into your editor). Once you have completed the updates, save the changes and exit the editor.

```
sudo vi /etc/systemd/system/erwindis.service
```

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```
[Unit]
Description=Tomcat 10.1.17 servlet container
Wants=network.target
After=syslog.target network.target

[Service]
Type=forking
Restart=always
RestartSec=5
TimeoutStartSec=500
TimeoutStopSec=0

User=erwindis
Group=erwindis

# Allow tomcat to bind to ports below 1024 without running it as root
# Port 443 is a privileged port on Linux OS
# Uncomment the next line to allow 443 instead of 8443 for ssl connector
#AmbientCapabilities=CAP_NET_BIND_SERVICE

# Set JAVA_HOME path for Adoptium temurin-17-jdk
Environment="JAVA_HOME=/usr/lib/jvm/temurin-17-jdk/"

# Setting the java.security.egd system property to use/dev/urandom configures
# the Tomcat JVM to use /dev/urandom as the source of entropy for the SecureRandom
# class to avoid potential delays during startup.
Environment="JAVA_OPTS=-Djava.security.egd=file:///dev/urandom"

Environment="CATALINA_BASE=/opt/erwindis/tomcat"
Environment="CATALINA_HOME=/opt/erwindis/tomcat"
Environment="CATALINA_PID=/opt/erwindis/tomcat/temp/tomcat.pid"
Environment="CATALINA_OPTS=-Xms24G -Xmx24G -server -XX:+UseParallelGC"

# erwinDIS v13.0, 13.2 and 15.0 require additional Java parameter options to be set
Environment="JAVA_OPTS=-Djava.security.egd=file:///dev/urandom --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" --add-exports java.base/sun.nio.ch=ALL-UNNAMED"  --add-
opens=java.base/java.util.concurrent=ALL-UNNAMED"

ExecStart=/opt/erwindis/tomcat/bin/startup.sh
ExecStop=/opt/erwindis/tomcat/bin/shutdown.sh

[Install]
WantedBy=multi-user.target
```

6. Reload systemd daemons.

```
sudo systemctl daemon-reload
```

7. Start the tomcat server using the erwindis.service unit file.

```
sudo systemctl start erwindis.service
```

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8. Verify tomcat is running using the erwindis.service unit file. If you see an Active status, then the process is running. If it is inactive, then check the catalina.log file for details (under the tomcat directory/log folder).

```
sudo systemctl status erwindis.service
```

9. Proceed to the next section to review the steps required before deploying the new web application.

Upgrading to erwin Data Intelligence v15.0 from v13.2.x, v13.1.x, v13.0.x or v12.1.x versions

Upgrade Steps for Database

1. From the newly downloaded **15.0 software build → SQL** folder

   For SQL Server database
   - Execute the **erwinDISuite_SqlServer.sql** script against the existing DI SQL Server database.
   - Important - Please wait for the script to be completed fully before proceeding with the next step.

   For Oracle database
   - Execute the **erwinDISuite_Oracle.sql** script against the existing DI Oracle database.
   - Important - Please wait for the script to be completed fully before proceeding with the next step.

Upgrade Steps for the erwin DI application on the Tomcat Server

Windows Server

1. From the newly Downloaded **15.0 software build → WAR** folder, copy the **erwinDISuite.war** file and paste into the *tomcat 10.1.x/webapps* folder.

2. You will now see an expanded **erwinDISuite** folder in the *tomcat 10.1.x/webapps/* directory. Please wait for a few minutes for the folder to explode completely.

3. Update the **Database Properties** file (the **database.properties** file is present in the *Tomcat home\webapps\erwinDISuite\WEB-INF\database folder*) using the backup copy made earlier. See below for the sections that need to be updated based on your database type as well as updating the PasswordEncrypted variable to false.

   Note: Do not replace the 15.0 database properties file with the older 13.2/13.1/13.0/12.x file. Please update the connection parameters separately in the new 15.0 file as this new version has new properties that have been added and missing properties will cause an issue with the normal functioning of the application.

If using SQL Server

a. If using SQL Server authentication, then update the first section. If using SQL Server Windows Authentication, then comment out the first section and uncomment the third section for Windows Authentication.

b. Update the parameters highlighted in yellow below with the actual values at your end.

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```
DriverName=com.microsoft.sqlserver.jdbc.SQLServerDriver
URL=jdbc:sqlserver://localhost:1433;databaseName=ClientDBName; encrypt=true;trustServerCertificate=true
UserName=ClientUserID
Password=Client_Unencrypted_Password
PasswordEncrypted=false
```

c. Set PasswordEncrypted=false
d. Save changes to the **database.properties** file

If using Oracle

a. Comment out the first SQL Server section (add # to each line that doesn't have it) and remove the # signs from below Oracle Begin to above Oracle End.

b. Update the parameters highlighted in yellow below with the actual values at your end.

```
DriverName=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@//IP_ADDRESS:1521/ClientDBName
UserName=ClientUserID
Password= Client_Unencrypted_Password
PasswordEncrypted=false
```

c. Set PasswordEncrypted=false

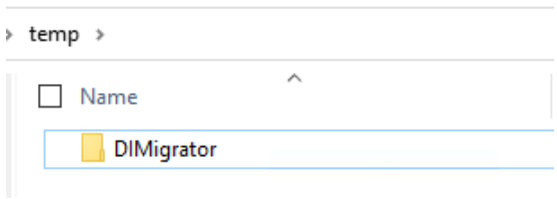
d. Save changes to the **database.properties** file

4. Update the **iccdocuments.properties** file (it is located in *Tomcat home\webapps\erwinDISuite\WEB-INF\configuration\properties* folder) using the backup copy made earlier.

   Note: Do not replace the 15.0 file with the older 13.2/13.1/13.0/12.x file. Please update the parameters separately in the new 15.0 file from the backup copy. Below are the different settings that need to be updated from the default values.

   - DocumentsPath - copy from backup file
   - ApplicationURL - copy from backup file, if https is specified here, then change to http and http port until https has been setup within Tomcat and then come back to update the file
   - ApplicationTempPath – copy from backup (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)
   - DiscoverAssetsPath – copy from backup, if this doesn't exist then use the same path as the *ApplicationTempPath* variable or you can use a different path, i.e. D:\DiscoverAssets. This path is used to sync the assets with the Discover Assets module and will be used going forward to support multiple instances.

5. From the newly downloaded **software build → DIMigrator.zip** folder, extract the **DIMigrator** folder to any temporary folder on the server - e.g. D:\Temp\DIMigrator



6. Go to the folder Tomcat 10.1.x\webapps\erwinDISuite\WEB-INF\database and copy the latest 15.0 **database.properties** file. Paste this into the **DIMigrator/DIUTIL/Config** folder (e.g. D:\Temp\DIMigrator\DIUTIL\config)

   Important: Ensure that you have entered the password in plain text format and have set the **PasswordEncrypted** field to false i.e. **PasswordEncrypted=false**

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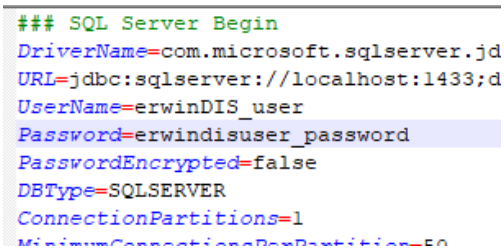
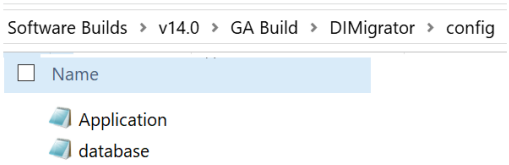
Only then will the utility be able to connect to the backend database to migrate the required data.

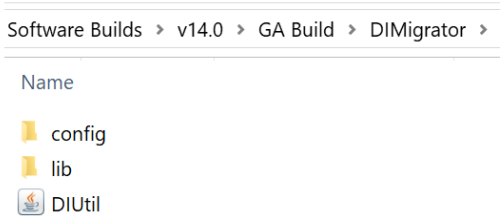


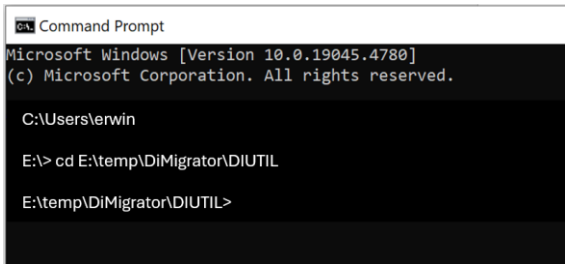
The above sample screenshot is for SQL Server. Follow the same process for Oracle as well.

7. Go to the folder Tomcat 10.1.x\webapps\erwinDISuite\WEB-INF\ configuration\properties and copy the latest 15.0 **iccdocuments.properties** file. Paste this into the **DIMigrator/DIUTIL/Config** folder (e.g. D:\Temp\DIMigrator\DIUTIL\config)

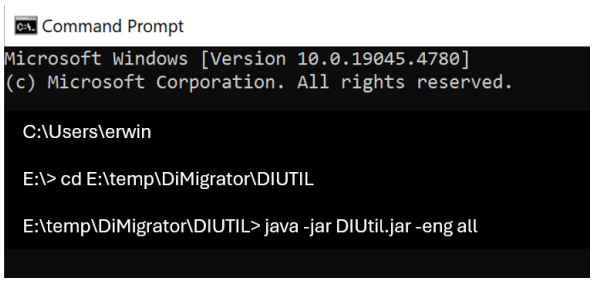


8. Open the command prompt in Administrator mode and point to the temp folder where the DIUTIL JAR folder exists e.g. D:\Temp\DIMigrator\\DIUTIL





9. Execute the command: **java -jar DIUtil.jar -eng all**



Note: The *DIMigrator* needs to be executed as part of the 15.0 upgrade process. This migrator utility migrates all existing configurations from the older 12.x versions to the latest 15.0 version, also addresses sync scenarios in the Discover Assets module during application startup.

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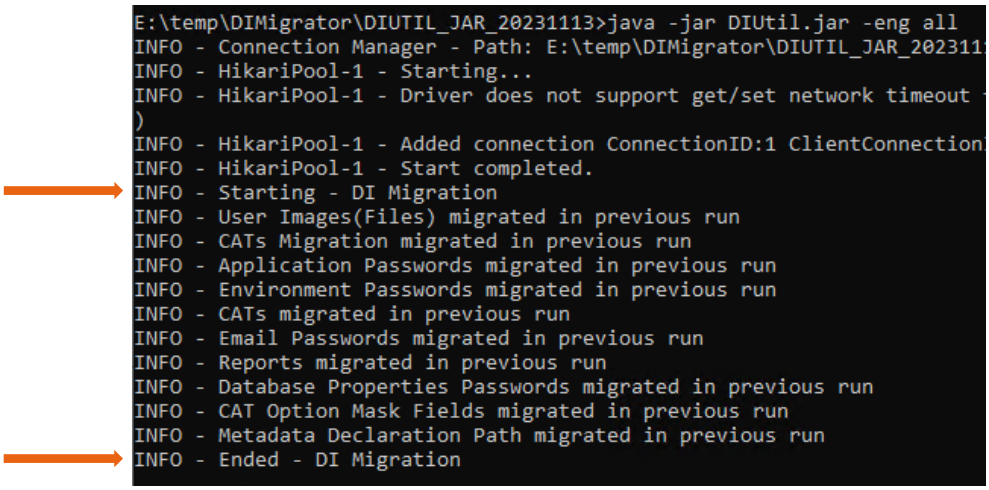
10. You should see a successful START and END block upon successful execution of the DIMigrator utility. In case you encounter any errors in this process, please reach out to the erwin support team immediately.



11. Delete the **DIMigrator** folder once the above step has completed successfully.

12. Restart the Tomcat Server.

13. Login to the application via standard administrator ID and ensure app is up and running.

Linux Server

1. Download the erwin_Data_Intelligence_v15.0 zip file.

   The following command downloads the zip file from the https://support.quest.com site. Then unzips the file and copies the erwinDISuite.war file to the /opt/erwindis/tomcat/webapps/ directory.

   Note: The "\" indicates a multiline shell command. Be sure to copy/paste the entire text block to your shell.

```
sudo -u erwindis wget -P /opt/erwindis/Downloads \
https://erwin-us.s3.amazonaws.com/Support/ADS/v15.0/erwinDI_v15.0.zip \
&& sudo -u erwindis unzip /opt/erwindis/Downloads/erwinDI_v15.0.zip \
-d /opt/erwindis/Downloads/erwinDI_v15.0 \
&& sudo -u erwindis cp /opt/erwindis/Downloads/erwinDI_v15.0/WAR/erwinDISuite.war \
/opt/erwindis/tomcat/webapps/erwinDISuite.war
```

2. Verify the erwinDISuite.war has expanded to create its project folder

```
sudo ls -l /opt/erwindis/tomcat/webapps
```

3. Stop the Tomcat service.

```
sudo systemctl stop erwindis.service
```

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4. Update the **Database Properties** file (the **database.properties** file is present in the *Tomcat home\webapps\erwinDISuite\WEB-INF\database folder*) using the backup copy made earlier. See below for the sections that need to be updated based on your database type as well as updating the PasswordEncrypted variable to false.

```
sudo nano /opt/erwindis/tomcat/webapps/erwinDISuite/WEB-INF/database/database.properties
```

Note: Do not replace the 15.0 database properties file with the older 13.2/13.1/13.0/12.x file. Please update the connection parameters separately in the new 15.0 file as this new version has new properties that have been added and missing properties will cause an issue with the normal functioning of the application.

If using SQL Server

e. If using SQL Server authentication, then update the first section. If using SQL Server Windows Authentication, then comment out the first section and uncomment the third section for Windows Authentication.

f. Update the parameters highlighted in yellow below with the actual values at your end.

```
DriverName=com.microsoft.sqlserver.jdbc.SQLServerDriver
URL=jdbc:sqlserver://localhost:1433;databaseName=ClientDBName; encrypt=true;trustServerCertificate=true
UserName=ClientUserID
Password=Client_Unencrypted_Password
PasswordEncrypted=false
```

g. Set PasswordEncrypted=false

h. Save changes to the **database.properties** file

If using Oracle

e. Comment out the first SQL Server section (add # to each line that doesn't have it) and remove the # signs from below Oracle Begin to above Oracle End.

f. Update the parameters highlighted in yellow below with the actual values at your end.

```
DriverName=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@//IP_ADDRESS:1521/ClientDBName
UserName=ClientUserID
Password= Client_Unencrypted_Password
PasswordEncrypted=false
```

g. Set PasswordEncrypted=false

h. Save changes to the **database.properties** file

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5. Update the **iccdocuments.properties** file (it is located in *Tomcat home\webapps\erwinDISuite\WEB-INF\configuration\properties* folder) using the backup copy made earlier.

```
sudo nano -l /opt/erwindis/tomcat/webapps/erwinDISuite/WEB-INF/configuration/properties/iccdocuments.properties
```

Note: Do not replace the 13.2 file with the older 13.2/13.1/13.0/12.x file. Please update the parameters separately in the new 15.0 file from the backup copy. Below are the different settings that need to be updated from the default values.

- DocumentsPath - copy from backup file
- ApplicationURL - copy from backup file, if https is specified here, then change to http and http port until https has been setup within Tomcat and then come back to update the file
- ApplicationTempPath – copy from backup (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)
- DiscoverAssetsPath – copy from backup, if this doesn't exist then use the same path as the *ApplicationTempPath* variable or you can use a different path, i.e. opt/erwindis/discover_assets. This path is used to sync the assets with the Discover Assets module and will be used going forward to support multiple instances.

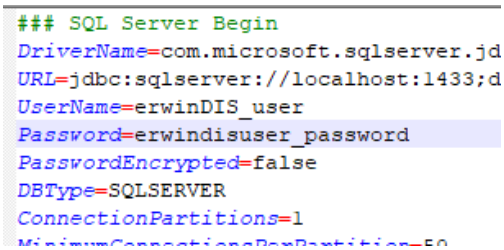
6. Extract the DIMigrator.zip file from erwinDIS_v15.0 folder.

```
sudo -u erwindis unzip /opt/erwindis/Downloads/erwinDI_v15.0/DIMigrator.zip \
-d /opt/erwindis/Downloads/erwinDIS_v15.0/DIMigrator
```

7. Copy the latest 15.0 database.properties and iccdocuments.properties files to the DIMigrator/DIUTIL/Config folder

****Important**:** Ensure that you have entered the password in plain text format and have set the **PasswordEncrypted** field to false i.e. **PasswordEncrypted=false**

Only then will the utility be able to connect to the backend database to migrate the required data.



The above sample screenshot is for SQL Server. Follow the same process for Oracle as well.

```
sudo -u erwindis cp /opt/erwindis/tomcat/webapps/erwinDISuite/WEB-INF/database/database.properties \
/opt/erwindis/Downloads/erwinDI_v15.0/DIMgrator/DIUTIL/config \
&& sudo -u erwindis cp /opt/erwindis/tomcat/webapps/erwinDISuite/WEB-
INF/configuration/properties/iccdocuments.properties \
/opt/erwindis/Downloads/erwinDI_v15.0/DIMgrator/DIUTIL/config
```

8. Change to the DIUTIL directory and execute the jar file

```
cd /opt/erwindis/Downloads/erwinDI_v15.0/DIMgrator/DIUTIL
sudo java -jar DIUTILS.jar -eng all
```

Note: The *DIMigrator* needs to be executed as part of the 15.0 upgrade process. This migrator utility migrates all existing configurations from the older 12.x versions to the latest 15.0 version, also addresses sync scenarios in the Discover Assets module during application startup.

9. You should see a successful START and END block upon successful execution of the DIMigrator utility. In case you encounter any errors in this process, please reach out to the erwin support team immediately.

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10. Delete the DIMigrator folder once the above step has completed successfully.

```
cd /opt/erwindis/Downloads/erwinDI_v15.0
sudo rm -rf DIMigrator
```

11. Restart the Tomcat Server.

```
sudo systemctl start erwindis.service
```

12. Login to the application via standard administrator ID and ensure app is up and running.

Updating LDAP/SSO

1. Now, proceed to configure LDAP and/or SSO and https for this new version.

    - The LDAP settings can be copied from the database.properties backup file. The settings are near the bottom of the file. Be sure to also update the section that contains the valid authentication methods (right before the LDAP section). Update the authentication from =DB to =DB,LDAP

    - For SSO the process has changed as it has been changed to using spring. These settings are also found within the database.propeties file at the very bottom of the file. The entity id, algorithm, and role separator remain the same, but the new setup requires a crt and key file.

    - Https settings can be reused from the previous version of Tomcat to use the 443 port (so you don't need to specify the port in the URL). The updates are made in the server.xml file found under Tomcat 10.1.x\conf. Make a backup of the file before updating. Here is an example of the updated syntax to use with Tomcat 10.1.x

      ```
      <Connector port="443" protocol="org.apache.coyote.http11.Http11NioProtocol"
                 maxThreads="150" SSLEnabled="true">
      <UpgradeProtocol className="org.apache.coyote.http2.Http2Protocol" />
      <SSLHostConfig>
      <Certificate certificateKeystoreFile="D:\Tomcat10.1.17\conf\erwinDGkeystore.jks"
                        certificateKeystorePassword="goerwin@1"
                         type="RSA" />
      </SSLHostConfig>
      </Connector>

      Linux:
      <Certificate certificateKeystoreFile="/opt/erwindis/tomcat/conf/erwinDGkeystore.jks"
      ```

Upgrading to the erwin DI Suite 15.0 version from version 11x or older versions

If you are on a version older than v11x, reach out to your erwin by Quest SME (Sales, Support or Professional Services) to determine the best upgrade options available.

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