

# SOX Database Server Migration

This documentation shows how to migrate an existing SOX database to the current version.

This migration manual applies to all supported database types (currently MySQL & Oracle).


In case database migration is not possible or the new database should be created for the new version, it is always possible to export the project from an existing SOX installation and import it into a new installation. It should be noted that exported project data does neither contain historical project information, nor the user administration.

In order to perform a proper database migration please perform the following steps:

## Instructions

### 1. Stop the SOX server

For stopping the server please use the `service_stop` script from the `scripts` folder in the SOX server installation folder.

 Before you continue with step 2 make sure to create a backup of your SOX database. Migration failures might lead to unrecoverable data or data loss!

### 2. Insure GRANT's on the SOX database

E.g. on MySQL:

```
GRANT SELECT, DROP, CREATE, CREATE VIEW, INSERT, UPDATE, DELETE, ALTER, INDEX, REFERENCES ON SOX_REPO.* TO 'SOX_REPO_USER'@'localhost';
```












### 3. Install the current SOX Server Version

Download the new server from our service desk (<https://www.enco-software.com/en/support/downloads/>) and unzip it to a location where you have the necessary administrative rights. Create a new installation folder for the new version and unzip the content of the downloaded archive.

### 4. Modify the `sox2server.ini` file to start the migration

This step is very important. Open the `sox2server.ini` file with a text editor and add the following argument to the end of the `sox2server.ini` file:

```
-Denco.sox2.schema.migration.version=3.3.0.060
```

 configuration	03.04.2020 11:25	Dateiordner	
 db-driver	03.04.2020 11:22	Dateiordner	
 features	11.09.2019 17:31	Dateiordner	
 p2	11.09.2019 17:31	Dateiordner	
 plugins	11.09.2019 17:31	Dateiordner	
 scripts	03.04.2020 11:18	Dateiordner	
 workspace	03.04.2020 11:25	Dateiordner	
 artifacts.xml	11.09.2019 17:31	Serna XML File	31 KB
 eclipsec.exe	11.09.2019 17:30	Anwendung	18 KB
 sox2server.exe	12.09.2019 10:11	Anwendung	312 KB
 sox2server.ini	03.04.2020 11:24	Konfigurationseins...	1 KB



```
sox2server.ini - Editor
Datei Bearbeiten Format Ansicht Hilfe
-startup
plugins/org.eclipse.equinox.launcher_1.4.0.v20161219-1356.jar
--launcher.library
plugins/org.eclipse.equinox.launcher.win32.win32.x86_64_1.1.551.v20171108-1834
-console
-nl
-en
-vm
-vmargs
features/enco.sox2.releng.jre.win32.win32.x86_64_1.8.0.60/jre/bin
-vmargs
-Denco.sox2.schema.migration.version=3.3.0.060
-Dnet4j.config=configuration/config-mysql
-Xbootclasspath/a:db-driver/mysql-connector-java-5.1.37-bin.jar
Zeile 13, Spalte 24 100% Windows (CRLF) UTF-8
```

### 5. Adjust the Dnet4j.config in the sox2server.ini

Either chose the configuration from previous installation or check the server installation manual for details.

```
-Dnet4j.config=configuration/config-mysql
```

### 6. Add the DB connector in the sox2server.ini

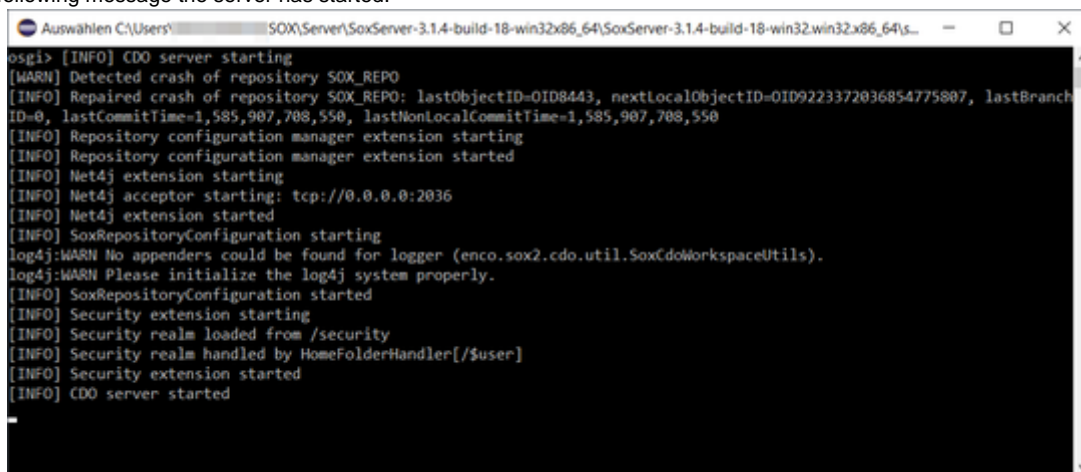
Either chose the DB connector from the previous installation or check the server installation manual for details.

```
-Xbootclasspath/a:db-driver/mysql-connector-java-5.1.37-bin.jar
```

### 7. Start the SOX server

**i** This might take a while depending on the size of the repo

If you see the following message the server has started:



```
Auswählen C:\Users\... SOX\Server\SoxServer-3.1.4-build-18-win32x86_64\SoxServer-3.1.4-build-18-win32.win32.x86_64\...
osgi> [INFO] CDO server starting
[WARN] Detected crash of repository SOX_REPO
[INFO] Repaired crash of repository SOX_REPO: lastObjectID=OID8443, nextLocalObjectID=OID9223372036854775807, lastBranch
ID=0, lastCommitTime=1,585,907,708,550, lastNonLocalCommitTime=1,585,907,708,550
[INFO] Repository configuration manager extension starting
[INFO] Repository configuration manager extension started
[INFO] Net4j extension starting
[INFO] Net4j acceptor starting: tcp://0.0.0.0:2036
[INFO] Net4j extension started
[INFO] SoxRepositoryConfiguration starting
log4j:WARN No appenders could be found for logger (enco.sox2.cdo.util.SoxCdoWorkspaceUtils).
log4j:WARN Please initialize the log4j system properly.
[INFO] SoxRepositoryConfiguration started
[INFO] Security extension starting
[INFO] Security realm loaded from /security
[INFO] Security realm handled by HomeFolderHandler[/$user]
[INFO] Security extension started
[INFO] CDO server started
```

### 8. Optional DB Connection settings

If the database is not running, when the server starts, it will check for a connection 20 times every 60 seconds. To configure the duration and interval, you can use these options:

**KEY** Specify as System property in the **sox2server.ini**. For example.:

```
-Dcdo.server.retry-connect-interval-secs=67  
-Dcdo.server.max-connect-attempts=12
```

**ENV** Specify as environment variable:

```
private static final String CDO_SERVER_RETRY_CONNECT_INTERVAL_SECS_KEY  
= "cdo.server.retry-connect-interval-secs";  
private static final String CDO_SERVER_RETRY_CONNECT_INTERVAL_SECS_ENV  
= "CDO_SERVER_RETRY_CONNECT_INTERVAL_SECS";  
  
private static final String CDO_SERVER_MAX_CONNECT_ATTEMPTS_KEY = "cdo.  
server.max-connect-attempts";  
private static final String CDO_SERVER_MAX_CONNECT_ATTEMPTS_ENV =  
"CDO_SERVER_MAX_CONNECT_ATTEMPTS";
```