



IBM ECM System Monitor Field Guides

Switch Database during Update to MSSQL or DB2

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Introduction

Overview

This guide describes in detail, how to switch the database to MSSQL or DB2 during the update process to ESM.

Disclaimer

The content of this document is based on ESM in version 5.5.5.0-003. The descriptions and guidelines in this document are for informational purposes only. Up-to-dateness, content completeness, appropriateness and validity for all possible scenarios cannot be guaranteed. All information is provided on an as-is basis. The author is not liable for any errors or omissions in this document or any losses, injuries and damages arising from its use.

If you are planning to setup or configure ESM or to adjust an existing installation, it is absolutely necessary to take into account current security whitepapers, release notes and announcements from the official IBM ECM System Monitor product documentation website.

Description

ESM supports the usage of MSSQL (2016, 2017 and 2019) and DB2 (V10.5, V11.1 and V11.5) as configuration and monitoring database since Version 5.5.5.0-003 already. To use one of these several steps have to be taken.

Note: It is only possible to switch the configuration to a different DB Type. The incident and sample data cannot be moved.

Steps to be taken

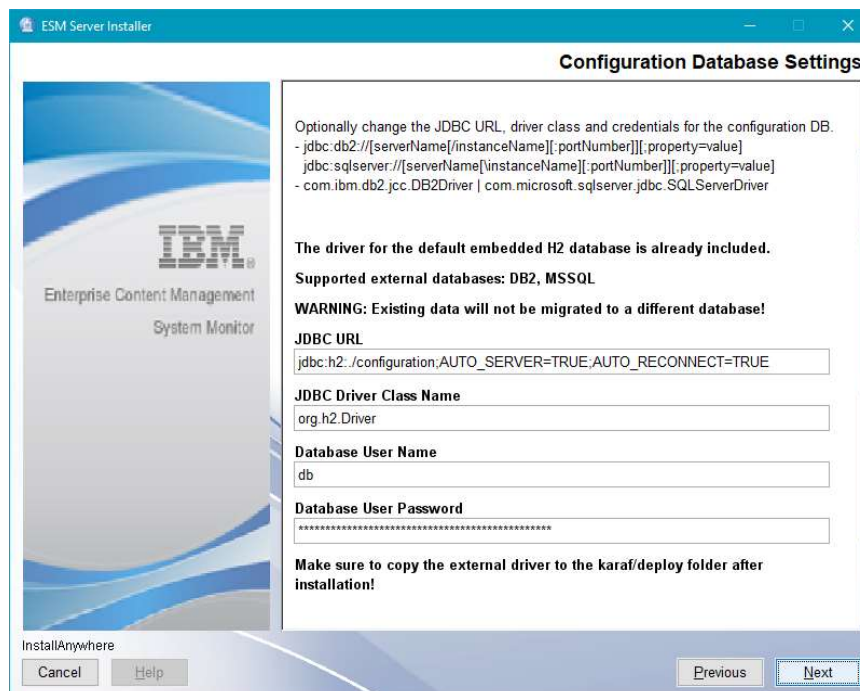
The following steps need to be performed to switch to a different database type during the update process.

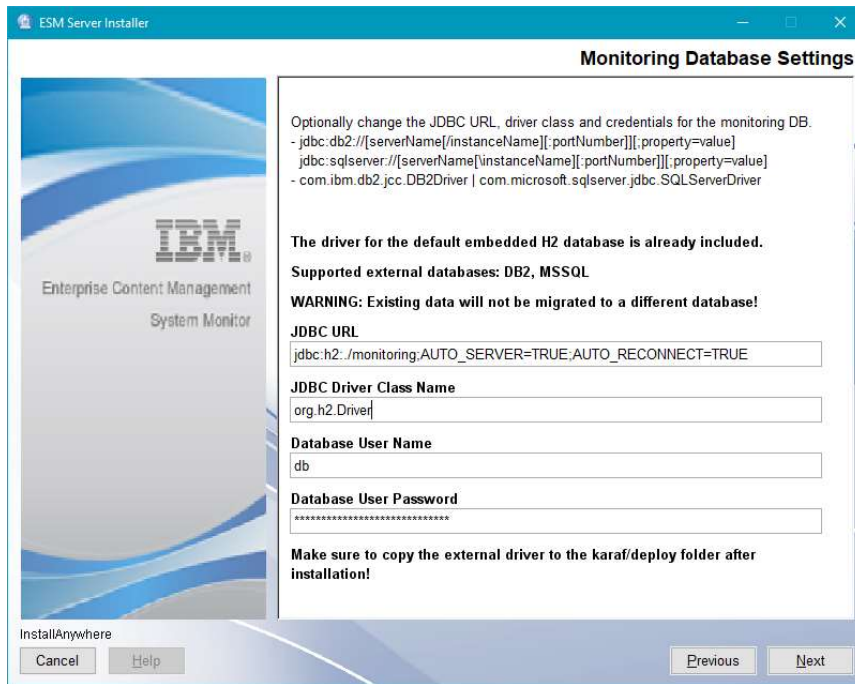
1. Prepare the new databases

Take a look into the installation guide of ESM and follow the instructions to prepare the MSSQL or DB2 databases.

2. Update to latest supported ESM version – still use the H2 Database at this point

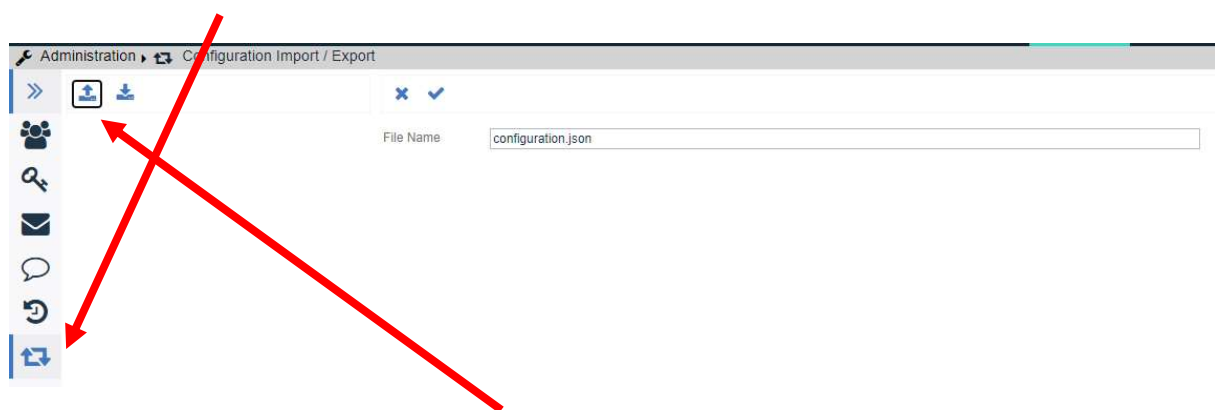
If not done yet, please update the ESM server software to latest version. Follow exactly the steps described in the readme document or in the Field Guide for upgrades. At the settings for the Configuration DB and Monitoring DB please keep the H2 settings at this time and complete the update process.





3. Export the configuration data and store it in a file

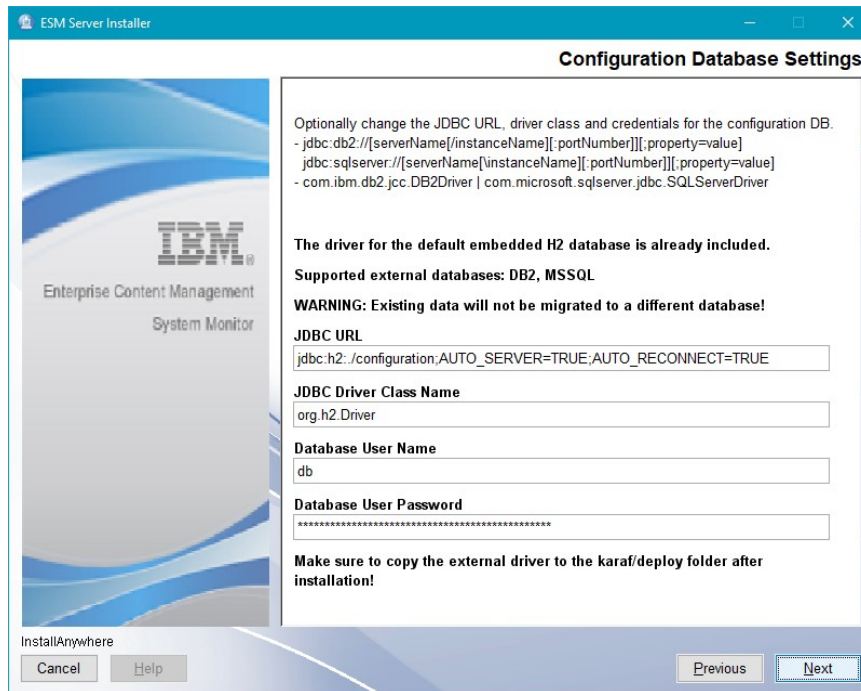
The whole configuration can be exported into a json file. For exporting the configuration switch to the administration dashboard and select the Configuration Export / Import feature from the sidebar on the left:



On the top you see two buttons. The left button is for the export. After clicking on it the export editor will open where you can specify a configuration file name. Once you click on the save button either the file is stored automatically to your preferred download directory or you are asked where the file should be stored. That depends on your browser setting.

4. Re-Install the same Version of ESM again – This time switch the DB settings

Start the installer for latest ESM version again. Again please make sure to follow the readme. This time specify the connection details for your MSSQL or DB2 databases instead at this point.



The screenshot shows the 'Configuration Database Settings' window of the ESM Server Installer. The window title is 'ESM Server Installer'. On the left, there is a logo for IBM Enterprise Content Management System Monitor. The main content area contains the following text:

Optionally change the JDBC URL, driver class and credentials for the configuration DB.
- jdbc:db2://[serverName/instanceName][:portNumber][:property=value]
- jdbc:sqlserver://[serverName[instanceName][:portNumber][:property=value]
- com.ibm.db2.jcc.DB2Driver | com.microsoft.sqlserver.jdbc.SQLServerDriver

The driver for the default embedded H2 database is already included.
Supported external databases: DB2, MSSQL
WARNING: Existing data will not be migrated to a different database!

JDBC URL
jdbc:h2:./configuration;AUTO_SERVER=TRUE;AUTO_RECONNECT=TRUE

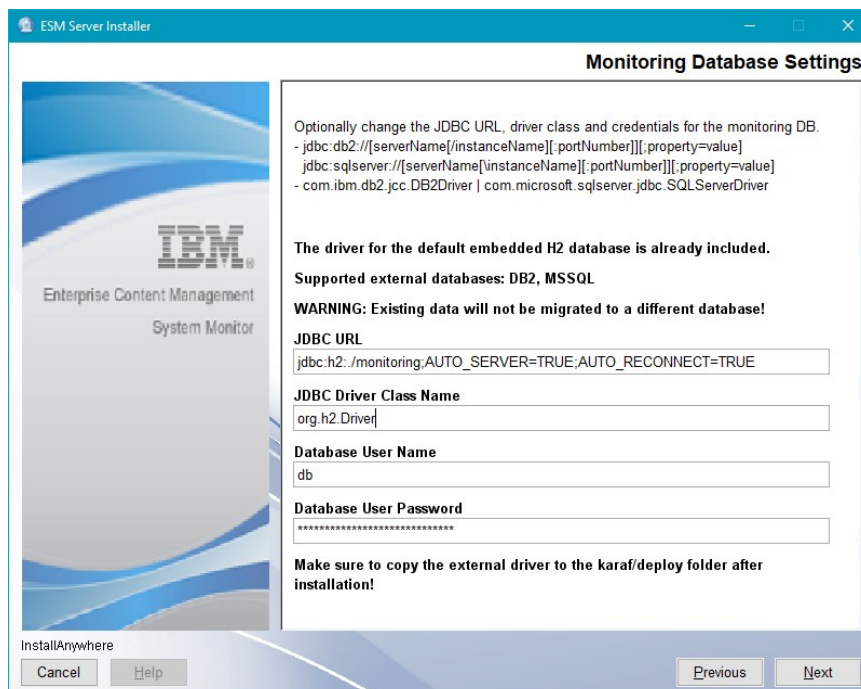
JDBC Driver Class Name
org.h2.Driver

Database User Name
db

Database User Password

Make sure to copy the external driver to the karaf/deploy folder after installation!

At the bottom, there are buttons for 'Cancel', 'Help', 'Previous', and 'Next'. The 'InstallAnywhere' logo is also visible at the bottom left.



The screenshot shows the 'Monitoring Database Settings' window of the ESM Server Installer. The window title is 'ESM Server Installer'. On the left, there is a logo for IBM Enterprise Content Management System Monitor. The main content area contains the following text:

Optionally change the JDBC URL, driver class and credentials for the monitoring DB.
- jdbc:db2://[serverName/instanceName][:portNumber][:property=value]
- jdbc:sqlserver://[serverName[instanceName][:portNumber][:property=value]
- com.ibm.db2.jcc.DB2Driver | com.microsoft.sqlserver.jdbc.SQLServerDriver

The driver for the default embedded H2 database is already included.
Supported external databases: DB2, MSSQL
WARNING: Existing data will not be migrated to a different database!

JDBC URL
jdbc:h2:./monitoring;AUTO_SERVER=TRUE;AUTO_RECONNECT=TRUE

JDBC Driver Class Name
org.h2.Driver

Database User Name
db

Database User Password

Make sure to copy the external driver to the karaf/deploy folder after installation!

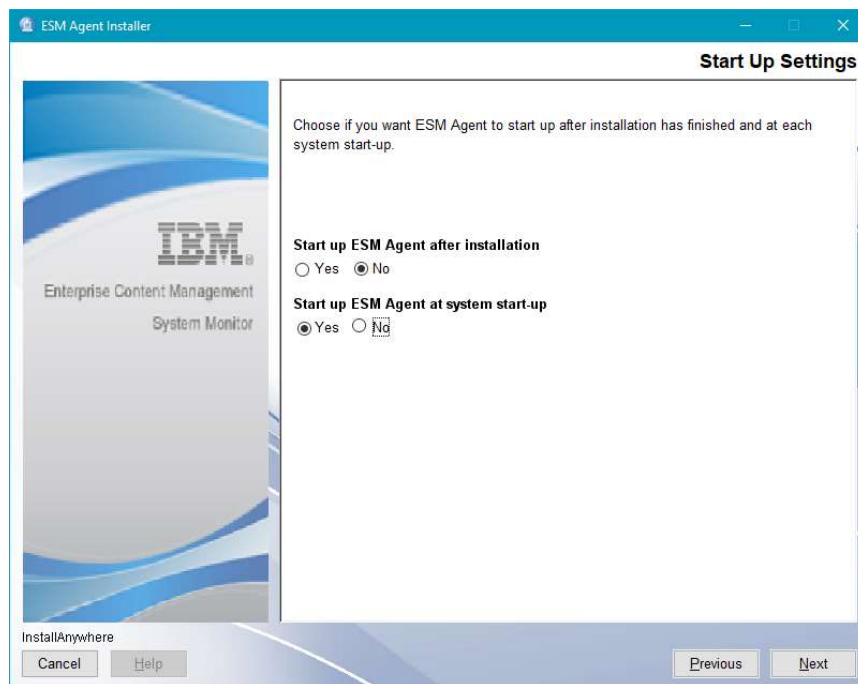
At the bottom, there are buttons for 'Cancel', 'Help', 'Previous', and 'Next'. The 'InstallAnywhere' logo is also visible at the bottom left.

Once asked, specify not to start the Software after the installation.

Background information: The Software should not be started after the installation as the next step (step 6) must be done before the software is started. This is mandatory because the databases are switched.

If you like you can also specify not to start it at the system start.

Note: In this case the service entry in Windows and the systemctl entry in Linux / Unix is not created.



Furthermore during the installation process you will be asked to copy the JDBC Driver jars to a certain location. Please follow the instructions.

5. Edit file for disabling automated basic monitoring

Note: This step is important.

Background information: Starting from ESM 5.5.5.0 there is a mechanism to automatically deploy basic probes (CPU, Memory and DiskSpace) for each newly connected agent. Since the DB was newly created, the already existing agents will behave like new agents at this time and the probes will be deployed once you start the ESM Server in the next step. The probes will continue to exist after the import process later on.

This is an unwanted behavior and can cause issues during the import process.

Edit the file “de.cenit.phoenix.server.services.agents.AgentBasicMonitoringInitializer.cfg”. The file is located in <Installation-Root>/karaf/etc of the ESM Server.

Change the content from

```
disable=false
```

to

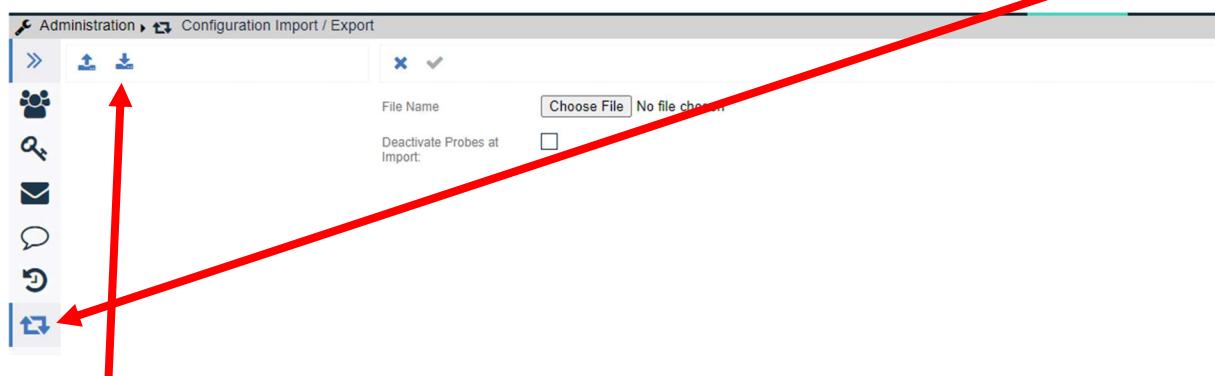
```
disable=true
```

6. Start ESM Server

Start the ESM Server Software. This can take some time, the database tables are created.

7. Import the configuration data

For importing the configuration to your new database, please switch to the administration dashboard of the ESM server and select the Configuration Export / Import on the left:



The right button is for the import. After clicking on it the import editor will open where you can select the configuration file that you want to import via the Choose File button. Also you can specify whether the probes should be deactivated or not after the import. Please have them activated (unchecked). Click on the Choose File button, the browsers file explorer opens and you can search for the correct file.

Click on the Save button at the top to start the import.

Note: The console is not showing any information until the import is completed, so please be patient and wait a moment. Information about the successful import is listed in the browser window.



The screenshot shows a web interface with a file upload section. At the top left, there are two small icons: a blue 'x' and a blue checkmark. Below them, the text 'File Name' is followed by a 'Choose File' button and the filename 'configuration.json'. Underneath, there is a checkbox labeled 'Deactivate Probes at Import' which is currently unchecked. At the bottom of the form, there is a message: 'Configuration was imported with the following notice(s): Existing Situation Group 'All Situations' replaced by 'All Situations'. Existing User 'admin' replaced by 'admin'.'

If you were using a different password than admin for the admin account this was also restored at this point.

8. End

Your ESM server is back in business now. It is using the new databases and the Monitoring and Configuration DB are migrated. You can continue to upgrade your agents with the same version.

Contact Information

If you have any questions, please contact us at ECM.SystemMonitor@cenit.com.

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