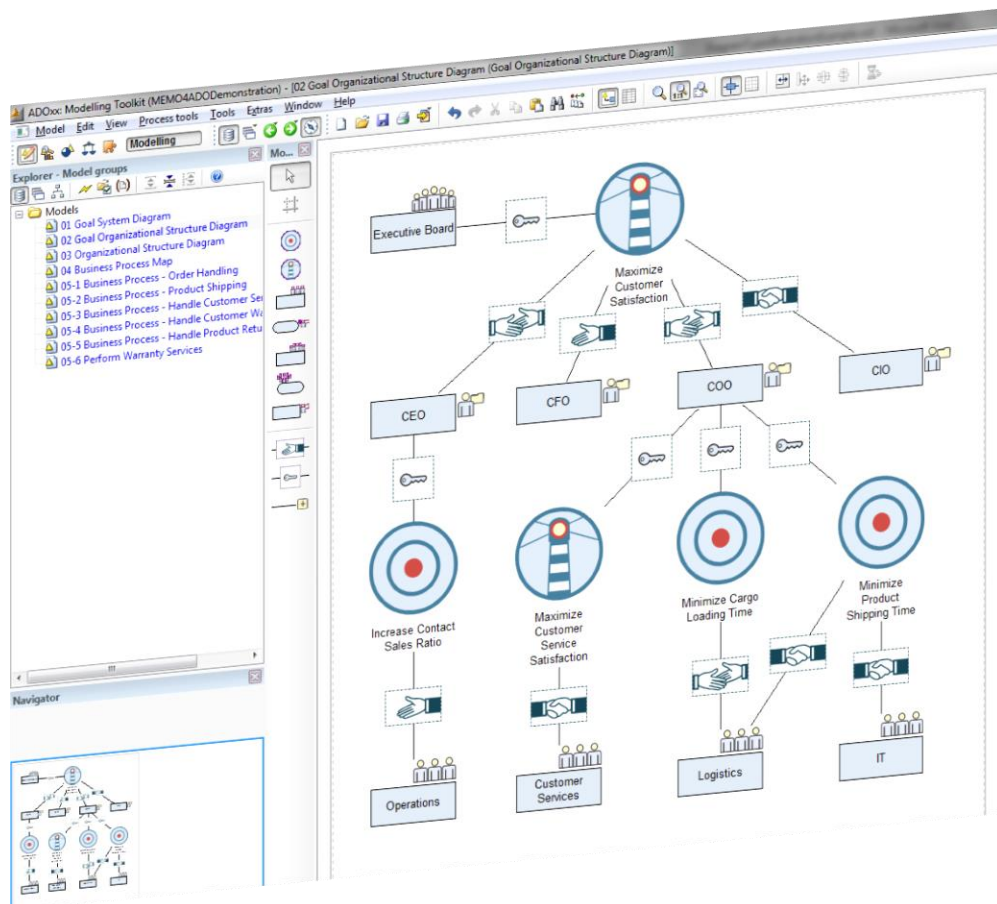


# MEMO4ADO

Version 0.91



## Installation Manual

# **MEMO4ADO**

Version 0.91

Installation Manual

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Chair of Information Systems and Enterprise Modeling  
Institute for Computer Science and Business Information Systems (ICB)  
University of Duisburg-Essen, Essen.

[www.icb.uni-due.de/um](http://www.icb.uni-due.de/um)

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# 1. OVERVIEW

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## MULTI-PERSPECTIVE ENTERPRISE MODELING

MEMO4ADO is a modeling tool to create integrated enterprise models using the enterprise modeling (EM) method *Multi-Perspective Enterprise Modeling* (MEMO) (Frank 2014; Frank 2002; Frank 1994). MEMO encompasses a set of integration modeling languages to describe a variety of aspects related to an organization's action system and information systems. Integrative links between the various MEMO modeling languages permit to interrelate model elements from organizational and information-technological areas, enabling to build a truly integrated, multi-disciplinary view of an organization.

## SCOPE AND PURPOSE OF THE TOOL

MEMO4ADO is intended offer an accessible enterprise modeling environment to grasp the notion of multi-perspective enterprise modeling. It implements a specifically edited and revised subset of MEMO and is especially tailored for enterprise modeling beginners. MEMO4ADO is based on the (meta) modeling environment ADOxx (Fill and Karagiannis 2013).

The current version of MEMO4ADO (0.91) includes three modeling languages. The modeling language MEMO GoalML enables to describe organizational *goal* systems (Köhling 2013). The language MEMO OrgML: Structures allows to model *organizational structures* (Frank 2011a). The language MEMO OrgML: Processes permits to describe *business processes* (Frank 2011b). For each modeling language, MEMO4ADO provides the ability to create diagrams of specific types (e.g., goal system diagrams using MEMO GoalML). Furthermore, all modeling languages are integrated and interrelations among diagrams can be expressed by means of references between different diagrams as well as specific integrative diagram types (explained in detail in this document). More MEMO modeling languages will be added to MEMO4ADO in the future.

## THIS DOCUMENT AND FURTHER REFERENCES














*This document* is intended as a practical installation guide for the MEMO4ADO tool. It provides guidance in installing MEMO4ADO. A discussion of the theoretical background and the development process of the modeling tool is offered in Bock and Frank (2016). In-depths explanations of the various MEMO modeling languages as well as advanced meta modeling concepts are available in several distinct publications, for which references are found in the bibliography of this document as well as on the project online home page.

## 2. INSTALLATION AND PREPARATION

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### STEP 1: UNPACK THE DISTRIBUTION ARCHIVE

MEMO4ADO is distributed in the form of a zip archive (*MEMO4ADO\_091\_ADOxx13.zip*). Please unpack the contents into any folder. Navigate to the selected folder. You will find the files and folder structure shown in Figure 1.

 dbinfo	File folder	
 MSDE	File folder	
 MSI 2.0 Engine	File folder	
 program files	File folder	
 readme	File folder	
 SQLExpress	File folder	
 tools	File folder	
 autorun.ico	Icon	5 KB
 autorun.inf	Setup Information	1 KB
 isscript.msi	Windows Installer Package	617 KB
 MEMO4ADO 0.9.msi	Windows Installer Package	50,431 KB
 readme.htm	Chrome HTML Document	1 KB
 setup_adoxx.exe	Application	2,001 KB

**Figure 1.** MEMO4ADO Distribution Archive Contents

### STEP 2: INSTALL MICROSOFT SQL SERVER

ADOxx utilizes *Microsoft SQL Server*. The simplest way to ensure your system will be able to successfully install and run MEMO4ADO is to install a new instance of SQL Server to be used by MEMO4ADO.

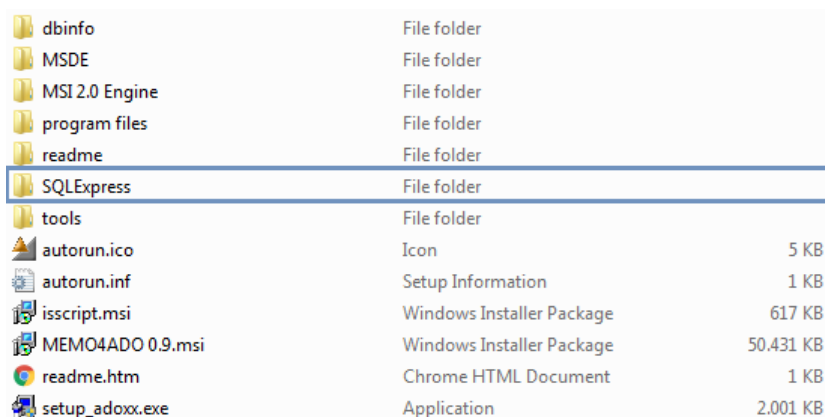
The procedure below explains how a new SQL Server instance can be setup specifically for MEMO4ADO. Please start with *Step 2-A*.

*Technical background:* Besides ADOxx and MEMO4ADO, various other applications utilize Microsoft SQL Server. It is therefore well possible that SQL Server is already installed on your system, even if you did not install it on your own. When different applications use SQL Server on one machine, accessing the default SQL Server instance or adding a new database might run into access problems (for examples, see *Step 5*).

In order to avoid problems, the procedure suggested here can be applied regardless of whether or not another SQL Server instance has already been installed on your system. In case you run into any problems during the subsequent installation of MEMO4ADO (see *Step 3*), please have a look at the troubleshooting help summarized in the section for *Step 5*.

## STEP 2-A: INITIATE THE INSTALLATION

Navigate to the folder *SQLExpress*. It can be found in the extracted MEMO4ADO distribution folder structure (see Figure 2).



dbinfo	File folder	
MSDE	File folder	
MSI 2.0 Engine	File folder	
program files	File folder	
readme	File folder	
SQLExpress	File folder	
tools	File folder	
autorun.ico	Icon	5 KB
autorun.inf	Setup Information	1 KB
isscript.msi	Windows Installer Package	617 KB
MEMO4ADO 0.9.msi	Windows Installer Package	50.431 KB
readme.htm	Chrome HTML Document	1 KB
setup_adocx.exe	Application	2.001 KB

**Figure 2.** SQLExpress Installation Folder

In the folder *SQLExpress*, please run the executable *sqlexpress.exe* (see Figure 3).



sqlexpress.exe	Application	72.778 KB
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**Figure 3.** SQL Express Installer File

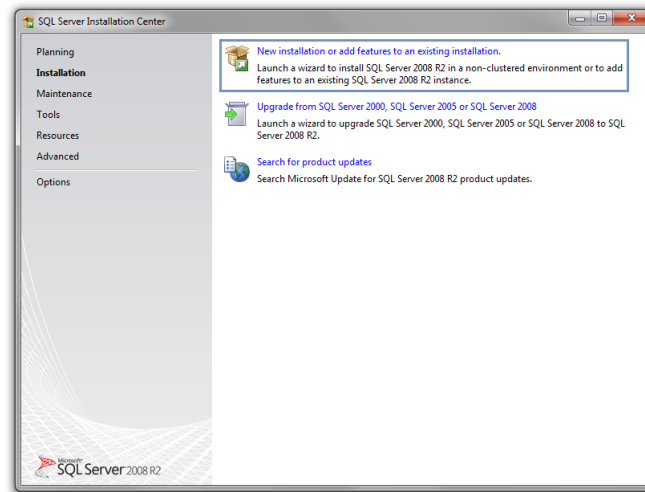
## STEP 2-B: CONFIRM BASIC INSTALLATION DETAILS

During the first part of the installation, you will need to confirm a couple of installation wizard dialog forms.

*Basic note:* Throughout the installation process, your operating system might raise various general administration or help queries. In essence, you can confirm each query such that *no special intervention* will be performed by your operating system. Examples include:

- *Users and Administration Rights:* As usual, your system might ask for a confirmation to install new software. You can confirm this question using either your standard user account or administrator credentials, depending on whether or not your account is provided with sufficient rights to install new software.
- *Compatibility and Online Help:* In case your operating system raises a message indicating the possibility of compatibility issues (e.g., when using Windows 8 or Windows 10), you may ignore the message. SQL Server can be operated successfully on these systems. Please click on *Run the program without getting help* or *Continue Anyway*, dependent on your operating system.

*Dialog 1:* Once the installer has launched, you need to select the component to be installed. Please select *New installation or add features to an existing installation* (see Figure 4).

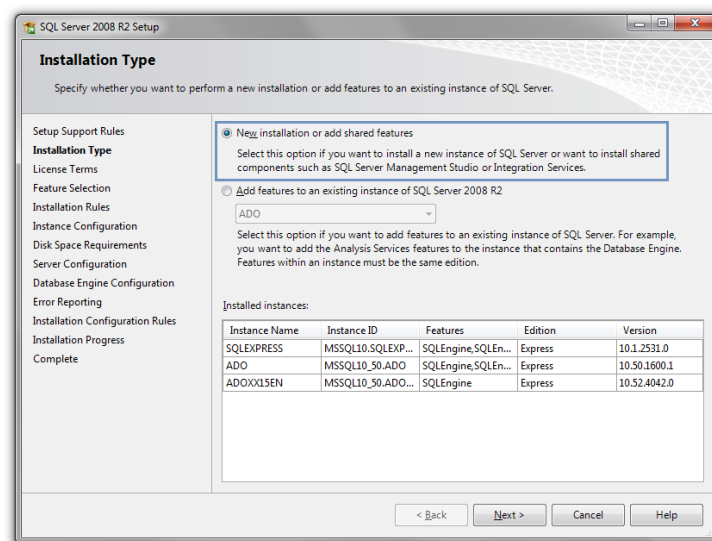


**Figure 4.** SQL Server Installation Dialog 1

*Dialog 2:* The next dialog form is **optional**. It will only appear in case SQL Server or a related distribution is already installed on your machine. In case the dialog shown in Figure 5 does not appear during your installation process, please continue with *Dialog 3* below.

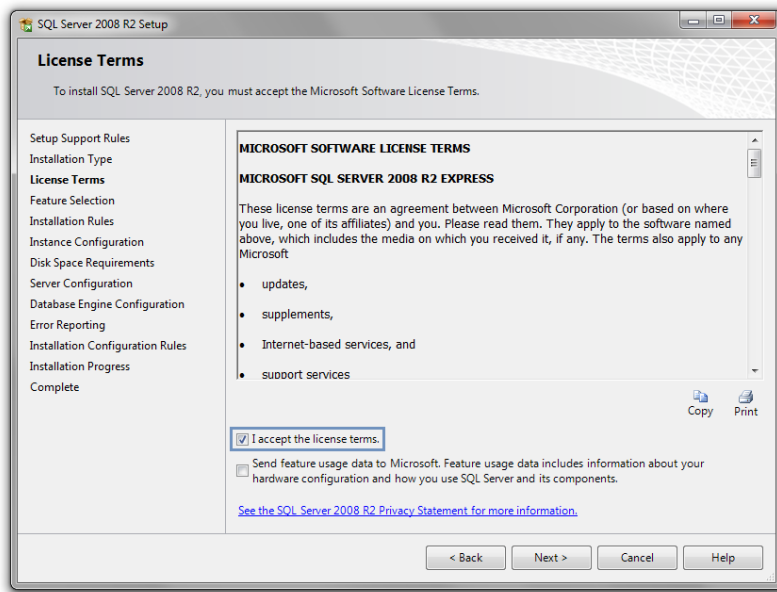
In case the dialog shown in Figure 5 does appear on your machine, please select *New installation or add shared features* at the top of the form (see the highlighted option in Figure 5).

*Technical note:* The list at the bottom of the form displays SQL Server instances already installed and running on your system (see Figure 5). Please leave them untouched at this stage.



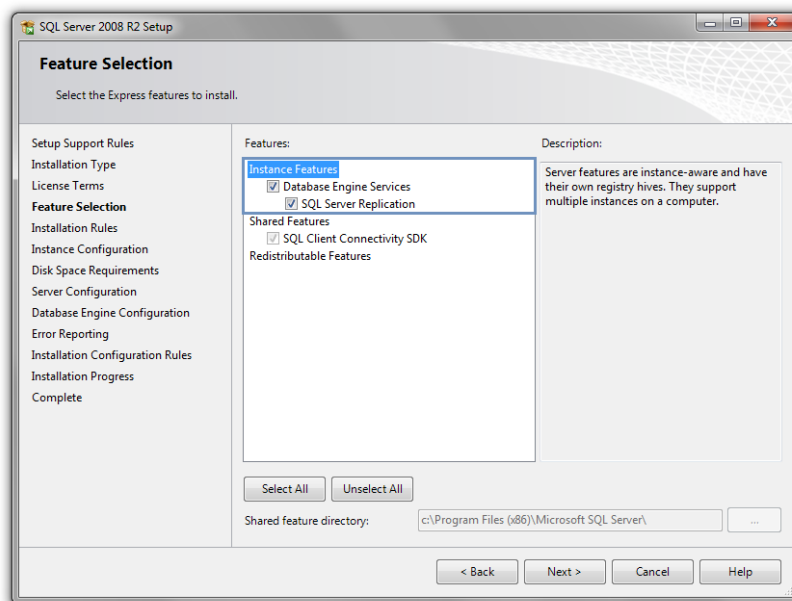
**Figure 5.** SQL Server Installation Dialog 2

*Dialog 3:* Accept the license terms and click on *Next* (see Figure 6).



**Figure 6.** SQL Server Installation Dialog 3

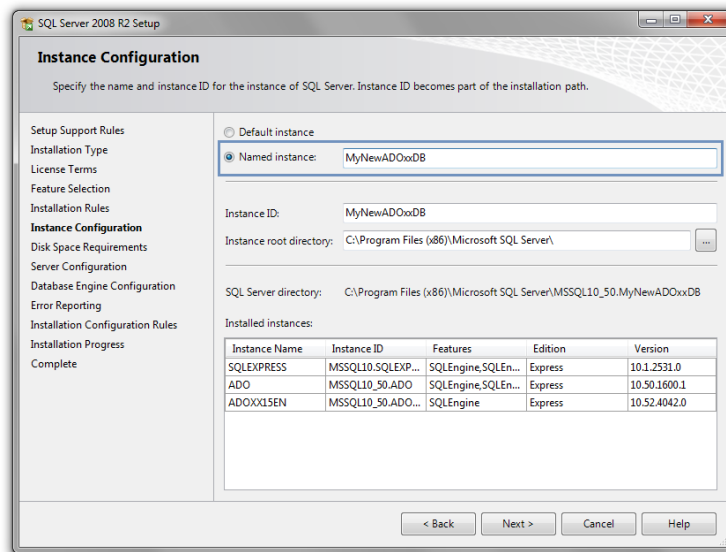
*Dialog 4:* Make sure the default selection is activated (see Figure 7) and confirm the dialog.



**Figure 7.** SQL Server Installation Dialog 4

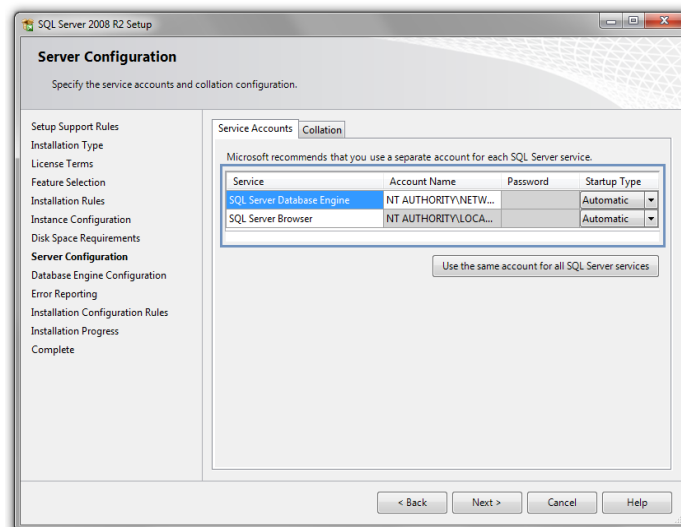


*Dialog 5:* In the next installation form, please select *Named instance* (i.e., the second option) at the top of the form. Please enter any new name for the database (e.g., *MyNewADOxxDB* or *MEMO4ADODB*). See Figure 8 for an example.



**Figure 8.** SQL Server Installation Dialog 5

*Dialog 6:* In the next step, please check that the selected configuration corresponds to the default configuration shown in Figure 9 and confirm the dialog.



**Figure 9.** SQL Server Installation Dialog 6

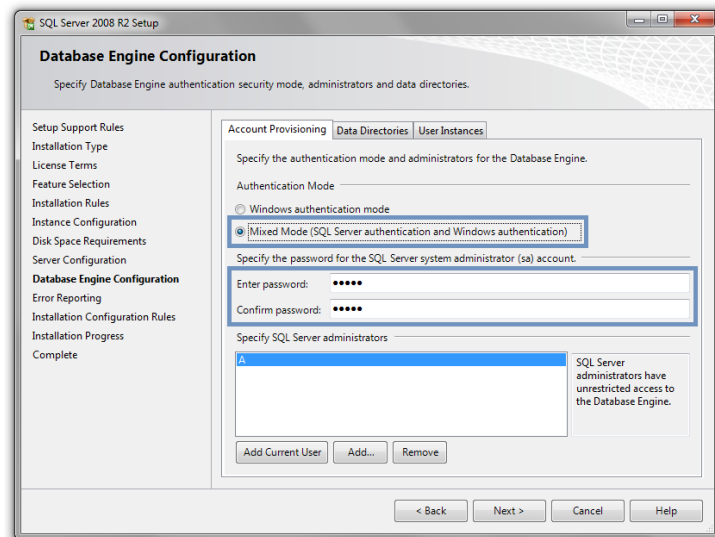
## STEP 2-C: SPECIFY NEW DATABASE ACCESS DETAILS

The next step is very **important** in order to ensure that MEMO4ADO will be able to access the newly created database.

*Dialog 7:* At the selection panel at the top of the dialog, select *Mixed Mode (!)*. Do not select the default option *Windows authentication mode*. Once the option *Mixed Mode* has been

selected, you are also asked to enter a password for the database. Please enter any password in the highlighted textbox elements (see Figure 10 for an example).

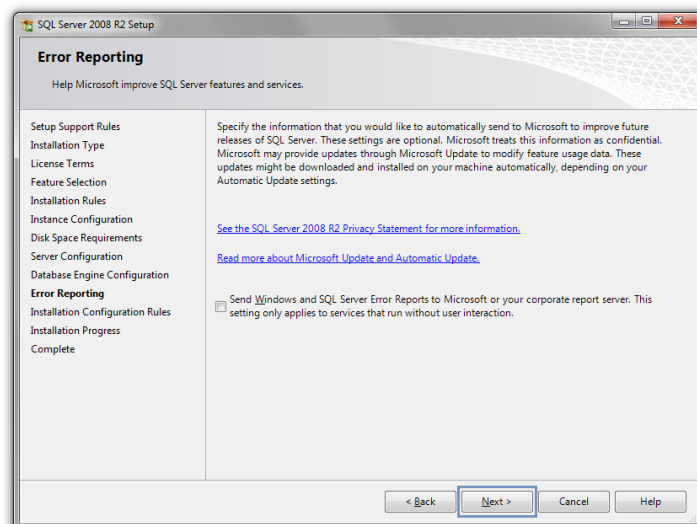
Make sure you **remember** this password as you will be asked to enter it later on when installing MEMO4Ado.



**Figure 10.** SQL Server Installation Dialog 7

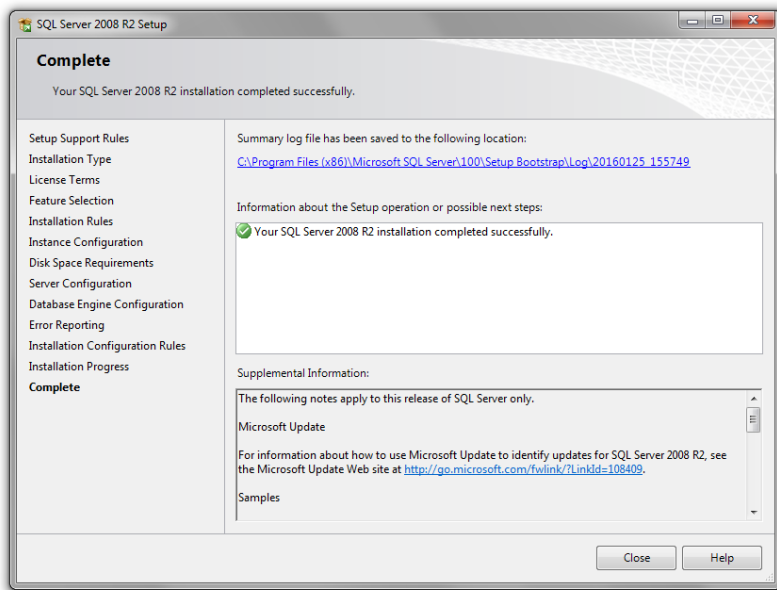
## STEP 2-D: FINALIZE THE INSTALLATION

*Dialog 8:* As a last step before the installation will be carried out, you will need to confirm another dialog. Simply click on *Next* (see Figure 11).



**Figure 11.** SQL Server Installation Dialog 8

After confirming the last dialog, the new SQL Server instance will be installed. When the installation has been completed, you should see the dialog shown in Figure 12.



**Figure 12.** SQL Server Installation Dialog 9

SQL Server is now available on your machine. You are ready to install MEMO4ADO. Please continue with *Step 3*.

## STEP 3: INSTALL MEMO4ADO

### STEP 3-A: INITIATE THE INSTALLATION

To install MEMO4ADO, navigate to the root folder of the extracted distribution archive content. Run the executable *setup\_adoxx.exe* (see Figure 13).

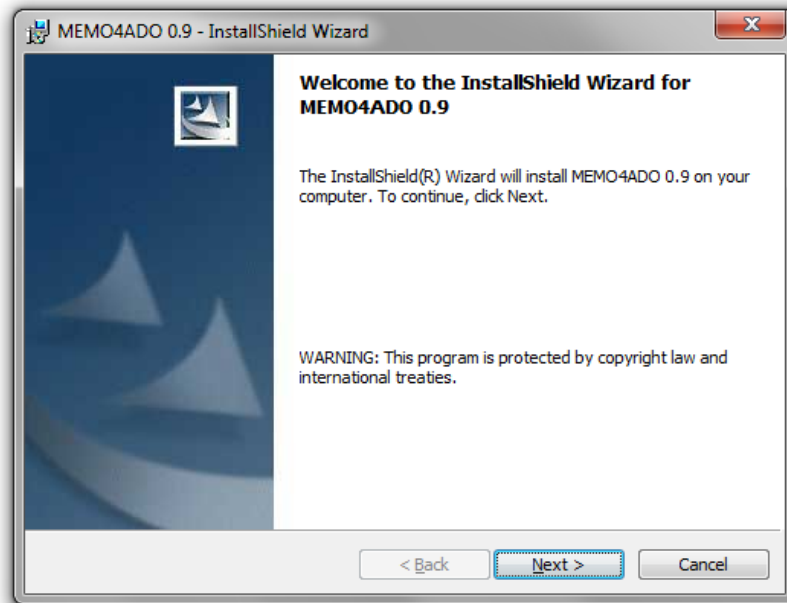
dbinfo	File folder	
MSDE	File folder	
MSI 2.0 Engine	File folder	
program files	File folder	
readme	File folder	
SQLExpress	File folder	
tools	File folder	
autorun.ico	Icon	5 KB
autorun.inf	Setup Information	1 KB
isscript.msi	Windows Installer Package	617 KB
MEMO4ADO 0.9.msi	Windows Installer Package	50.431 KB
readme.htm	Chrome HTML Document	1 KB
setup_adoxx.exe	Application	2.001 KB

**Figure 13.** MEMO4ADO Setup File

### STEP 3-B: CONFIRM BASIC INSTALLATION DETAILS

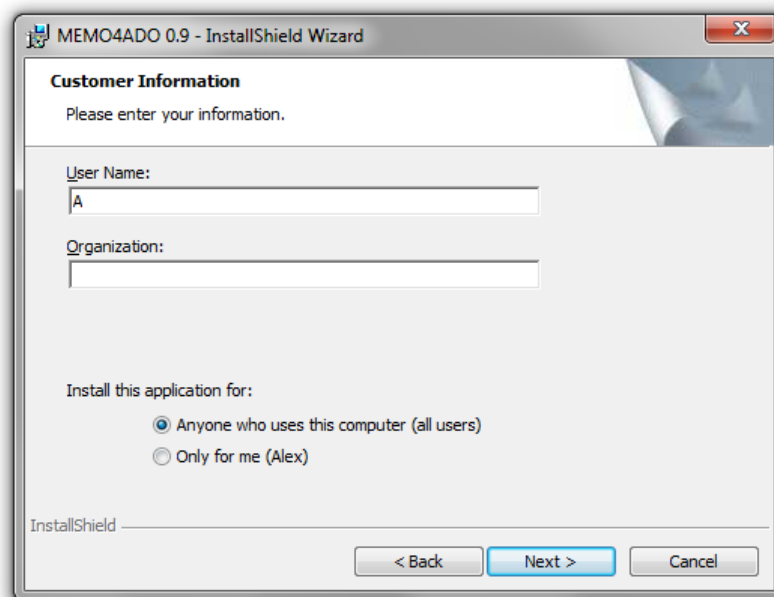
In essence, you can confirm all of the following installation wizard dialogs by accepting the default options and clicking on *Next*. The dialogs are shown below.

*Dialog 1:* Simply click on *Next* (see Figure 14).



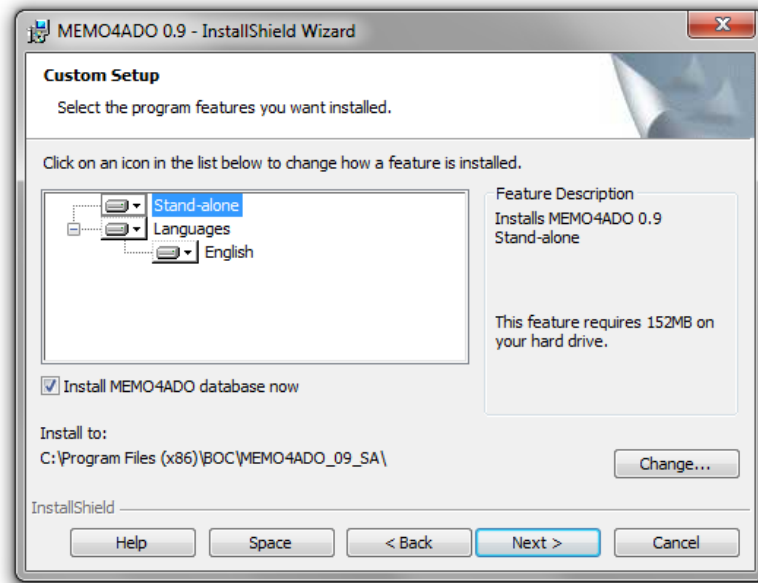
**Figure 14.** MEMO4ADO Installation Dialog 1

*Dialog 2:* Choose any name of your liking and confirm (see Figure 15).



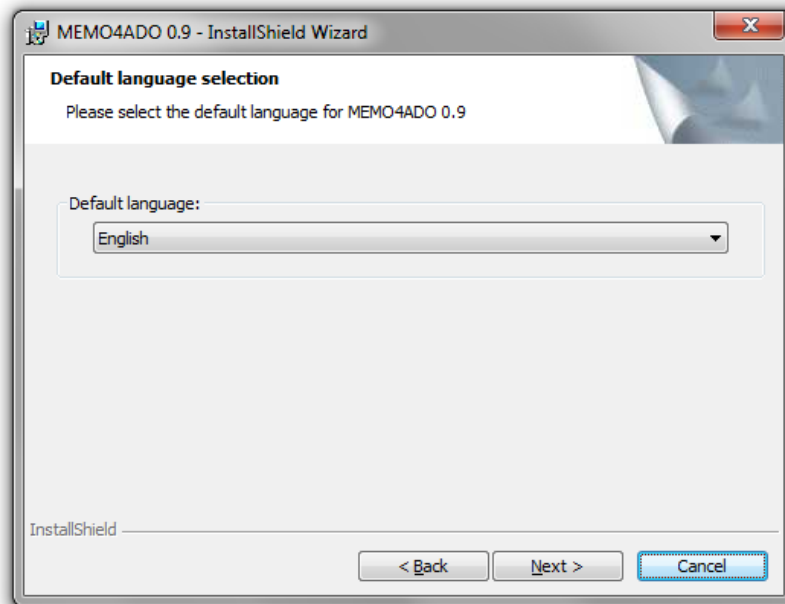
**Figure 15.** MEMO4ADO Installation Dialog 2

*Dialog 3:* You may leave the default options unchanged and confirm via *Next* (see Figure 16).



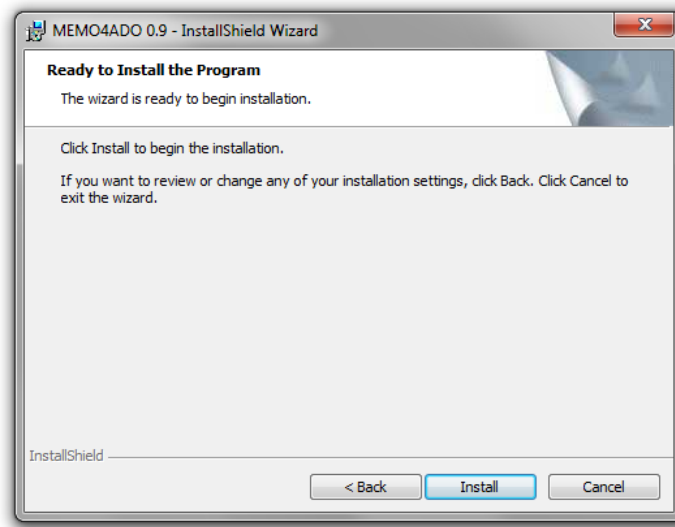
**Figure 16.** MEMO4ADO Installation Dialog 3

*Dialog 4:* In this dialog, please accept *English* as a default language and confirm (see Figure 17). MEMO4ADO is currently available in English exclusively.



**Figure 17.** MEMO4ADO Installation Dialog 4

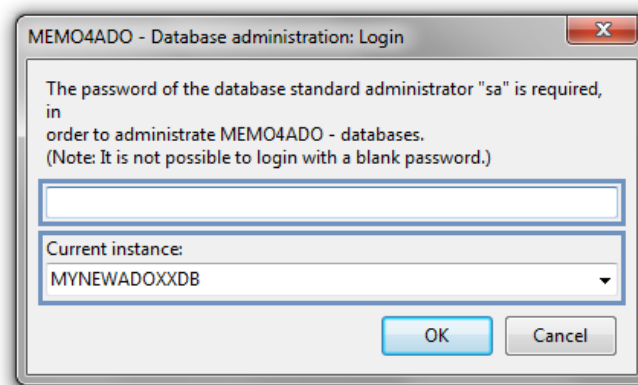
*Dialog 5:* Finally, confirm the last dialog so that the installation will start (see Figure 18).



**Figure 18.** MEMO4ADO Installation Dialog 5

### STEP 3-C: CONFIGURE THE DATABASE

The first part of the installation of MEMO4ADO may take a few moments. After a while, the installer will note that *“The MEMO4ADO 0.91 database will be created now. This may take a few minutes”*. After another short while, the installer will ask for the database administration login (see Figure 19). Here it is **important** to remember the database details specified in *Step 2-B* and *Step 2-C*.

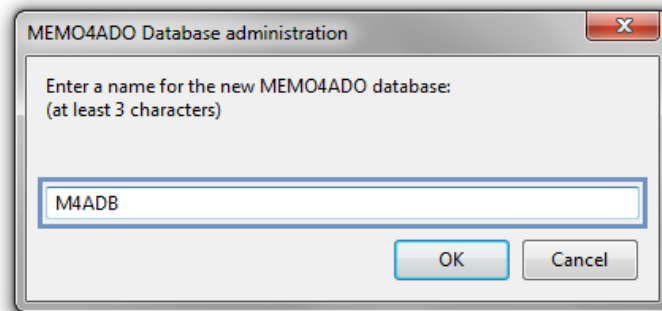


**Figure 19.** MEMO4ADO Database Administration Dialog 1

First, select the name of the database instance defined in *Step 2-B* (e.g., *MYNEWADOXXDB*; see Figure 19). Second, enter the password specified in *Step 2-C*. Once you enter the correct administration details, the database configuration should proceed.

*Technical note:* Dependent on your machine and possible previous SQL Server installations, other SQL Server instances might be displayed in the selection list as well.

Lastly, it may occur that the installer asks you for a name of a new database to be created. This dialog is **optional** and it might not appear on your system. In case it does appear, please enter any name for the a new database (see Figure 20 for an example).

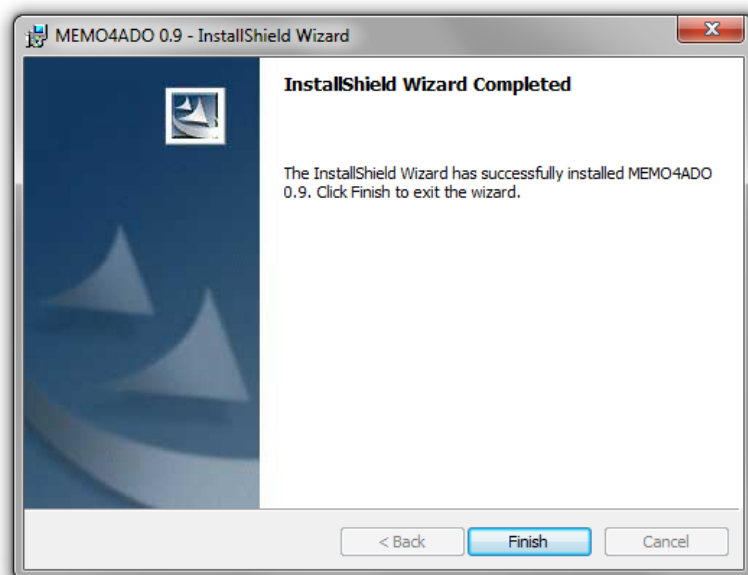


**Figure 20.** MEMO4ADO Database Administration Dialog 2

In any case, after the previous dialogs have been confirmed, the MEMO4ADO database will be created and the installation will soon be completed.

#### STEP 3-D: FINALIZE THE INSTALLATION

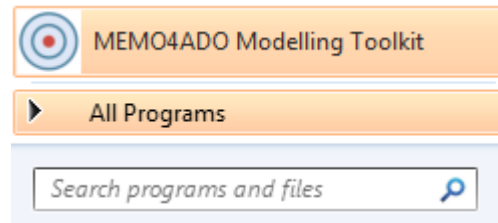
As soon as the database has been created successfully, a brief notification will be displayed. The wizard will provide you with a completion message for the installation (see Figure 21). MEMO4ADO is now installed on your system.



**Figure 21.** MEMO4ADO Installation Dialog 8

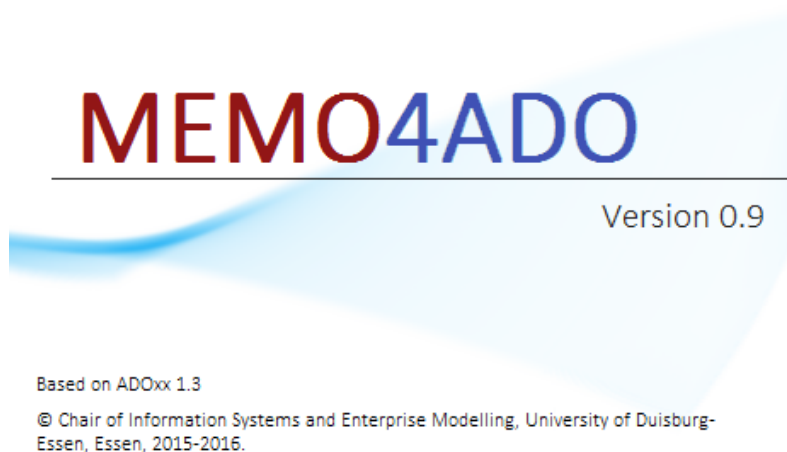
#### STEP 4: START THE TOOL

When the installation has been completed successfully, MEMO4ADO will be registered as an application on your machine. You can start the tool simply by navigating to the entry in your *Start* menu or program menu (see Figure 22 for an example).



**Figure 22.** New MEMO4ADO Start Menu Entry

When you start MEMO4ADO, a launcher screen will be displayed while the application is starting up (see Figure 23). The modeling environment will appear a few moments later. To learn about first steps in MEMO4ADO, please continue in the next section.



**Figure 23.** MEMO4ADO Launcher

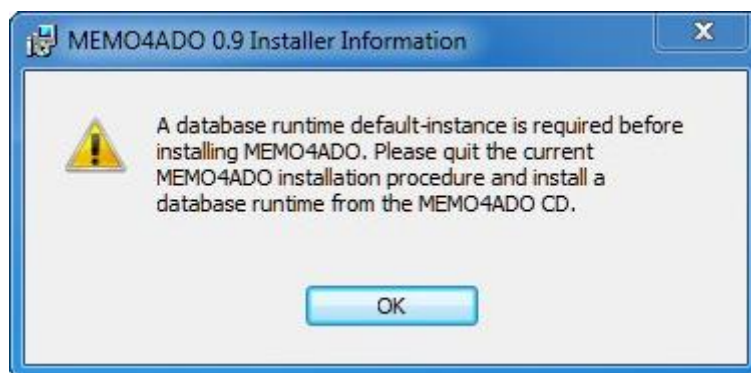
#### STEP 5 (OPTIONAL): DEALING WITH PROBLEMS AND TROUBLESHOOTING

Dependent on the configuration of your machine and the presence of previous SQL Server installations, it might happen that you encounter errors in the process of installing MEMO4ADO. The following explanations are supposed to offer guidance in dealing with the most common issues.



## PROBLEM 1: SQL SERVER OR DATABASE DEFAULT-INSTANCE NOT FOUND

It is possible that the MEMO4ADO installer raises an error message in which you are told that a *“database runtime default-instance is required”*. This error should occur only in case SQL Server has not successfully been installed on your system. If you encounter this error, please go to *Step 2* and install SQL Server according to the guidelines presented there.

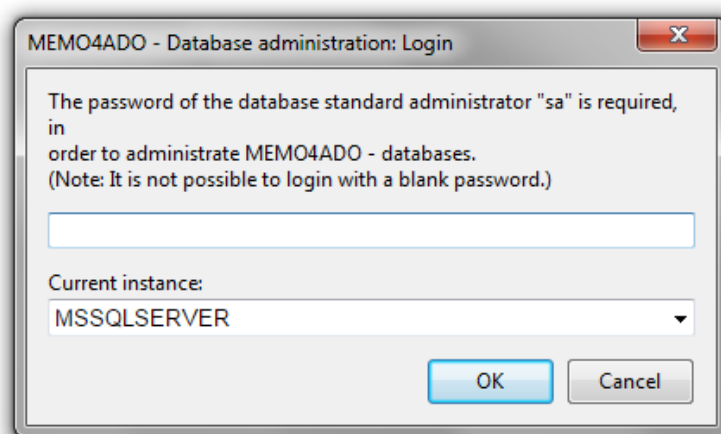


**Figure 24.** Database Required Installer Information

## PROBLEM 2: DATABASE ADMINISTRATION PASSWORD NOT AVAILABLE

During the MEMO4ADO installation process, you will always be asked to enter the password for a SQL Server instance (see *Step 3-C*). In case you have defined your password for a custom instance according to the description in *Step 2-C*, you will know this password.

However, if something went wrong during the installation, or if for any other reason only a default instance of SQL Server is installed on your machine, you might be asked to enter the password for the instance *MSSQLSERVER* (see Figure 25).



**Figure 25.** Database Administration Login Password Required

*Hint:* You may consider the following steps also in case you forgot the password for your custom SQL server instance.

In case you do not know the default password for *MSSQLSERVER* (or you forgot the password for your custom SQL Server instance), and you are also not able to select any other instance for which you know the password, then please proceed as follows:

1. **Cancel** the current installation process by clicking on *Cancel*.

*Note:* Although you now aborted the installation, the following dialogs might convey the impression that the installation has been successful. This does not apply. The application will not run successfully without an adequate database.

2. **Uninstall** MEMO4ADO. For that purpose, navigate to *Start – Control Panel – Programs and Features*. Select MEMO4ADO in the list of installed programs and click on *Uninstall*. Follow the wizard until the program has been removed completely.
3. **Re-Install** a new SQL Server instance according to the guidelines described in the section for *Step 2*.
4. **Re-Install** MEMO4ADO. Now, in *Step 3-C*, you should be able to select your newly created SQL Server instance for which you will know the password. Afterwards, continue as described in the section for *Step 3*.

### 3. REFERENCES

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