

**Bestellsoftware  
ASSA ABLOY Matrix II**

**ASSA ABLOY**

Installationsanleitung

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## Introduction

Learn how to install ASSA ABLOY Matrix II here. Keep your company and user data ready.

After installation, Matrix is generally ready for use, but still has a limited range of functions. Therefore, after the first start, a activation request is automatically sent, which, after checking your sender data, effects a release of further functions such as order tracking.

Before you install Matrix it is recommended to weigh briefly how to set up matrix. (see [Considerations for set up](#)).

## System requirements

For installation you need:

- A current Windows operating system with 64-bit structure
- .net Framework 4.8
- storage space
  - approx. 350 MB for application
  - min. 350 MB for the database
- a USB-A port for a card reader

Special requirements for the CPU or memory do not exist; a contemporary computer is sufficient.



## Considerations for set up

Matrix consists of the application and the database. As a result, matrix can be set up in various situations and depending on the scope of application.

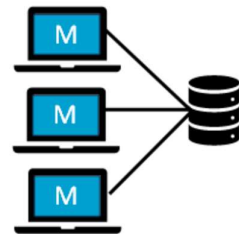
### Single installation

If Matrix is to be installed on only one computer, application and database can be installed together on the desired computer. This is the simplest set up.



### Multiple User

Once several people are working with Matrix, it makes sense to install the database on a server to which all users have access. As a result, all the same data, lock charts and orders are visible to each user. The administrative effort is reduced.



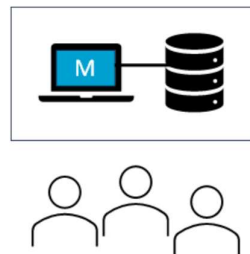
### Multiple databases

In principle, each client can connect to different databases, e.g. if matrix is to be used offline (e.g. for recording cylinder lengths on the construction site) or a further database is to be used as an archive database.

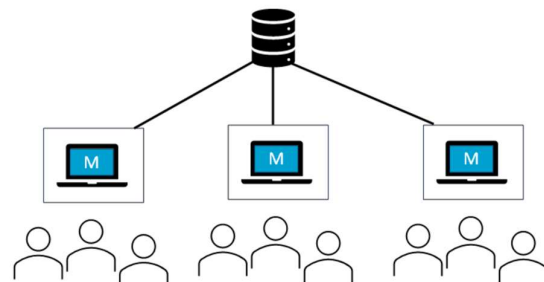


### Virtual environments and terminal server

The possibilities described above can be set up analogously in virtual environments and terminal servers. If only one terminal server is installed, the database can be set up on the same machine as the application.

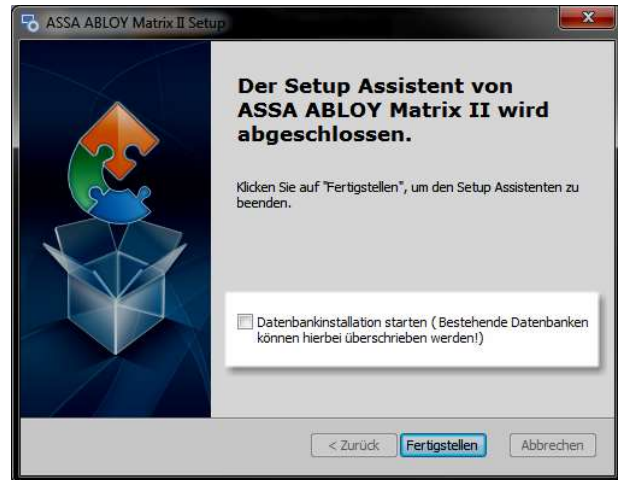


If several terminal servers exist, the database should be separated.



## First installation / Single installation

1. After you have downloaded the current installation package at [www.assaabloy.de/matrix](http://www.assaabloy.de/matrix), right click on the file in ZIP format and select 'Extract all'. Then open the folder created thereby and double-click the 'ASSA\_ABLOY\_Matrix\_II\_Setup' file to start the installation.
2. Follow the installation routine. In the last step, note the option to create the database. For operation, Matrix needs a database running on an MS SQL server.
  - a. If it is the first installation, please activate the checkbox.
  - b. If you already have a matrix database in the network or if you want to install the database on an existing MS SQL Server, leave the option unchecked.



*Attention: If a database already exists, it can be overwritten.*

3. Once you have selected the installation for creating the database, the wizard will guide you through the routine. Please note the following:
  - a. You usually do not need the "expert mode" for the first installation.
  - b. Remember your login name.
  - c. A password is optional and only recommended if you share the computer or the Windows account with others or if you are an administrator and want to restrict user rights.
4. Once the database is installed, Matrix is ready to use. Now start Matrix with the login name you just assigned.

## Network Installation / Multiple Users

If several people or workstations are to be equipped with Matrix, we recommend installing the database on a shared server. In this way, everyone has access to orders, lock charts, saved security cards, etc. Proceed as follows:

### 1. *Server installation*

Install Matrix including the database on the server. To do this, proceed as described under First installation / Single installation.

### 2. *Create users*

Select Tools/Users to create users and provide them with the appropriate rights. Please note the following:

- a. The "Administrator" check box means, among special privileges, that this user receives all new rights after activation.
- b. The "user management" enables this user to edit all users and to change their login data.
- c. If possible, there are at least two users with user administration rights, so that this role is also covered in the event of absence. These users can also reset passwords.

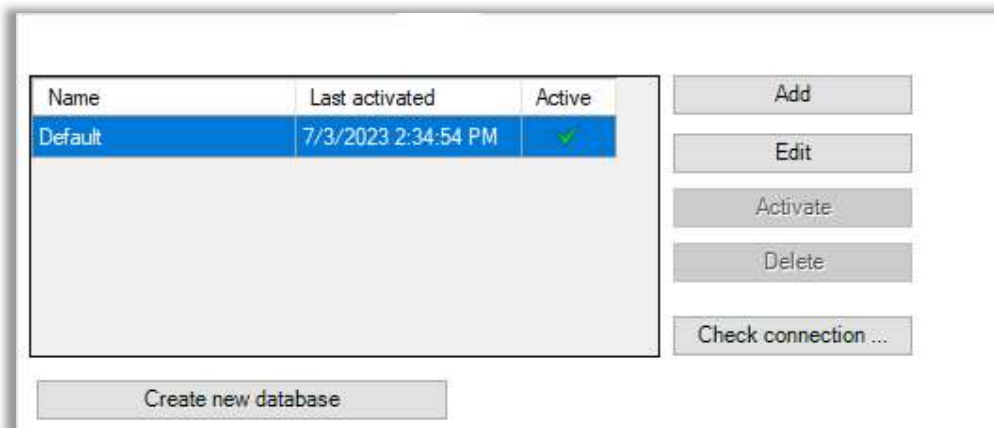
### 3. *Client installation*

Install Matrix without a database on the client.

### 4. *Connect to the database*

Now connect the client to the database on the server.

- a. Start Matrix.
  - i. If you start Matrix for the first time, an error message appears that a connection to the database could not be established.
  - ii. If you are already actively working with Matrix, the program will open. Then click on Tools/Options on the "Data" tab.
- b. In the following window you can *add* or *edit* a database connection.



- c. Now select expert mode and click on “...” next to the text box. The following window opens in which you can set up the connection.



Select the server instance with the matrix database at the first bullet point. Skip the second one and select the Matrix database at the third.

If this does not work as described here, please take a look at the error handling at the end of this document: [Server instance not visible](#) or [Database not visible](#)

- d. Confirm all entries with OK and enter a name for new connections.
5. *Finish*  
In the login screen, the user should now be able to connect to the database with their login name.

## New computer / server migration

This describes how to migrate the Matrix database to a new machine.

### Preparation

1. Create a backup of the user data (without security cards) from the existing database (File/Export/Export database).
2. Install Matrix including the database on the new server (see [Single installation](#)).
3. Import the backup into the new database (File/Import/Import database)
4. Set up an additional database connection on the clients and test it (see [Connect to the databaseClient installation](#)  
Install Matrix without a database on the client.).

### Changeover

5. Create a backup again (this time including security cards).
6. Import the backup.
7. Instruct your users to use the new database
  - a. The database can be selected directly in the login screen
  - b. The new connection can be activated in the program under Extras/Options -> Data
  - c. If the connection has already been used (tested), you can alternatively select it via Extras/Options/Recently used databases.

### After changeover

8. Stop the SQL Server service or remove the database to prevent users from accidentally continuing to work on the old database.

### Conclusion

This procedure ensures that all systems are already running and have been tested on the day of the changeover. Any problems can be solved before the changeover, so that the changeover can run smoothly. In addition, the work can be continued while executing time-consuming processes (installation, configuration, data transfer) and you get a feeling for how long it takes to export the data.

The import of the data will be significantly faster the second time, since Matrix recognizes existing orders and skips them during the import.



## Merging of databases

If you are currently using Matrix locally on several client computers and would like to merge these different databases, proceed as follows.

### Preparation

1. Specify a computer that will serve as the server and on which the central database should be stored. A server is recommended for this.
2. Install Matrix including the database on the new server (see [Single installation](#)) if there is no Matrix database there yet.
3. Set up an additional database connection on the clients and test it (see [Connect to the databaseClient installation](#) Install Matrix without a database on the client.).

### Changeover

1. Create a backup (including backup cards) on the client.
2. Import the backup to the server.
3. Instruct your users to use the new database
  - a. The database can be selected directly in the login screen
  - b. The new connection can be activated in the program under Extras/Options -> Data
  - c. If the connection has already been used (tested), you can alternatively select it via Extras/Options/Recently used databases.
4. Stop the SQL Server service on the client to prevent users from accidentally continuing to work on the old database.
5. Repeat this process for each additional client.

### Conclusion

By (repeatedly) importing the backup, all user data is taken over from the client computers. The users on the new database will also be adopted.

## Error Handling

Depending on the system environment, security settings or authorizations, various disruptions can occur. If your problem is not described here or if it continues to occur despite the solution suggested here, please send us an e-mail to [berechnung.ikon@assaablooy.com](mailto:berechnung.ikon@assaablooy.com).

### Server instance not visible

**Problem:** When setting up the database connection, the server is visible, but not the instance (e.g. IKONMatrix2).

**Solution:** Enable the SQL Server Browser on the server. To do this, start the services (e.g. under Control Panel/Administrative Tools/Services). Locate and launch the SQL Server Browser. If the service is disabled, right-click the service, open properties and set the startup type.

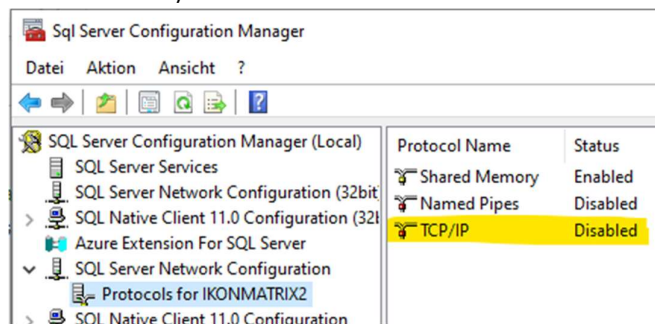
### Database not visible

**Problem:** When setting up the database connection, the server instance is visible, but not the database (z.B. IKONMatrix2).

Unfortunately, there are various causes that require different solutions. Please go through the causes one after the other, as they partly build on each other.

#### Cause 1: TCP/IP protocols are disabled

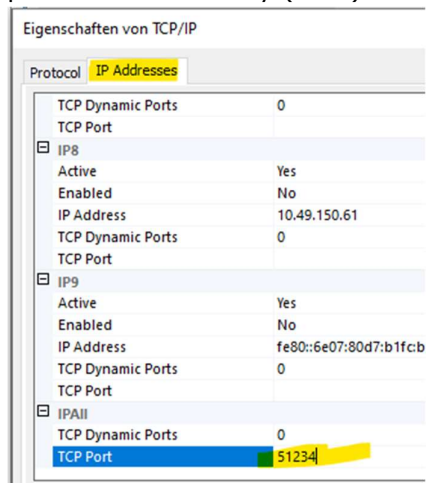
1. Check the SQL server settings on the server by starting the SQL server configuration manager there.
2. Open the SQL Server network configuration on the right and click Protocols for '[SQLServerInstance]' (e.g. IKONMatrix2).
3. Check if "TCP/IP" is enabled or enable it.



#### Cause 2: Firewall blocks access

1. A simple method to test whether the firewall is blocking access is to temporarily switch off the firewall:  
Disable the firewall on the server and on the client. If the connection is still not possible, first check the next cause before reactivating the firewall as follows.
2. First activate the firewall on the client. As a rule, the connection should still work and no adjustments should be necessary on the client. Then enable the firewall on the server.

3. Now enable the ports for the matrix database manually: Switch to the server configuration manager on the server (see 2). Under Protocols, right-click TCP/IP. Open the properties and switch to the IP addresses tab. There you will find the dynamic TCP port as the last entry (IPAll).



4. Copy this and enable this TCP port in your firewall settings. Furthermore, it is sometimes necessary to release the UDP port 1434. (If you are using the built-in Windows Firewall, here are the instructions: <https://learn.microsoft.com/en-us/windows/security/operating-system-security/network-security/windows-firewall/create-an-inbound-port-rule>)

### **Cause 3: The Windows user of the client is not known on the server**

If the user on the client is not known on the server, access to the server or the database fails. In some cases you can log in with the SQL user integrated in Matrix. To do this, use the second option "Database on another computer" for the database connection (see Network Installation / Multiple Users) and enter its name.