PCSYS A/S

PCSYS PM5 Installation and upgrade manual

Version 5.12.1000 and later

4/7/2016

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Introduction

This manual describes installation/upgrade and uninstallation procedures for PCSYS PM5 Maintenance application. The document is valid for version 5.12.1000 and forward.

Requirements

General requirements

PCSYS PM5 Maintenance application can be installed and run on computers running Windows operating system Windows XP, Vista, Windows 7, Windows 8, Windows 8.1 and Windows 10.

PCSYS PM5 Maintenance application can be installed and run on server computers running Windows Server operating system Windows Server 2008, Windows Server 2008 R2, Windows Server 2012 and Windows Server 2012 R2.

PCSYS PM5 Maintenance can be run in virtual environment, such as Citrix or Microsoft Virtual Terminal.

PCSYS PM5 Maintenance stores its data in a dedicated SQL database and requires therefore access to Microsoft SQL Server. PM5 can be run with Microsoft SQL Server 2008 or later. PM5 can be run on the Express Edition of Microsoft SQL Server, freely available from Microsoft.

Software requirements

PM5 client requires Microsoft .NET Framework 4.0 or higher to be installed prior to its installation.

Microsoft SQL Server requirements

Microsoft SQL Server needs to be set up to run in so called Mixed Authentication mode.

SQL Server Browser service belonging to the SQL Server needs to be activated and running for all installations other than a completely local setup where both SQL Server and PM5 software are installed on same computer.

Preparatory steps before installation/upgrade of PM5 client

Prior to starting installation of PM5, ensure following:

1. IMPORTANT – if PM5 Maintenance of version prior to 5.12.1000 is present on the computer, this installation needs to be removed prior to proceeding with installation of PM5 client software.
2. IMPORTANT - if installation/upgrade will also upgrade PM5 database, it is very strongly recommended that a backup of PM5 database is made before proceeding with installation/upgrade procedure.
   Database is always updated to the version of installation package, if version installation package is higher than that of the database.
3. Before proceeding with installation, confirm that Microsoft .NET Framework 4.0 or higher is present on computers where PM5 clients are to be installed. If Microsoft .NET Framework 4.0 (or higher version) is missing, please download distribution suitable for your computer/operating system and install it prior to installation of PM5 client.
4. Ensure that necessary information about SQL Server and (if it exists already) PM5 database is available to you. Following information is needed for successful completion of installation of PM5:
   a. Name of Microsoft SQL Server where PM5 database is to be created (for completely new installations that will include creation of new PM5 database) or where pre-existing PM5 database is run (for installations that will use pre-existing PM5 database).
   b. Name of PM5 database to be used, if user intends to use an already existing PM5 database. Default name of database used by PM5 is *PM5*.
   c. If installation includes creation of a database (empty or demo) then it is required to provide name and password for an SQL Server user with administrative rights for SQL Server where the database will be created.
   d. If installation will use an already existing database, then it is required to provide name and password for SQL Server user used for communication between PM5 client and the database. SQL Server user with name *pm5_user* and password *pa$$w0rd* is used as default.

Installation of PM5 client including creation of new database

Installation of PM5 client that includes creation of database needs be performed only once, usually when the very first PM5 client is installed on one of the computers in user's computer network.

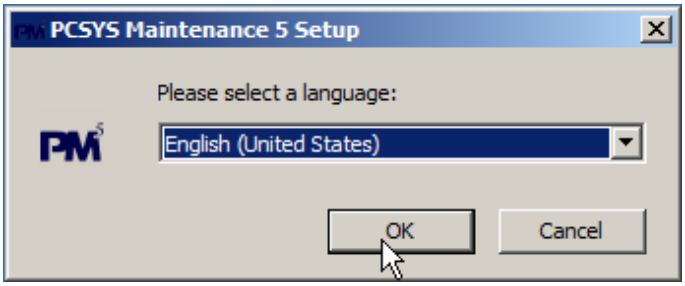
The PM5 database that is created as part of such installation comes in two variants depending on selection made by user in step 4:

- Demo – this database variant is intended for demo installations intended for evaluation, tests and educational purposes.
- Empty – this database variant is intended for installations intended for real life usage in production environment.

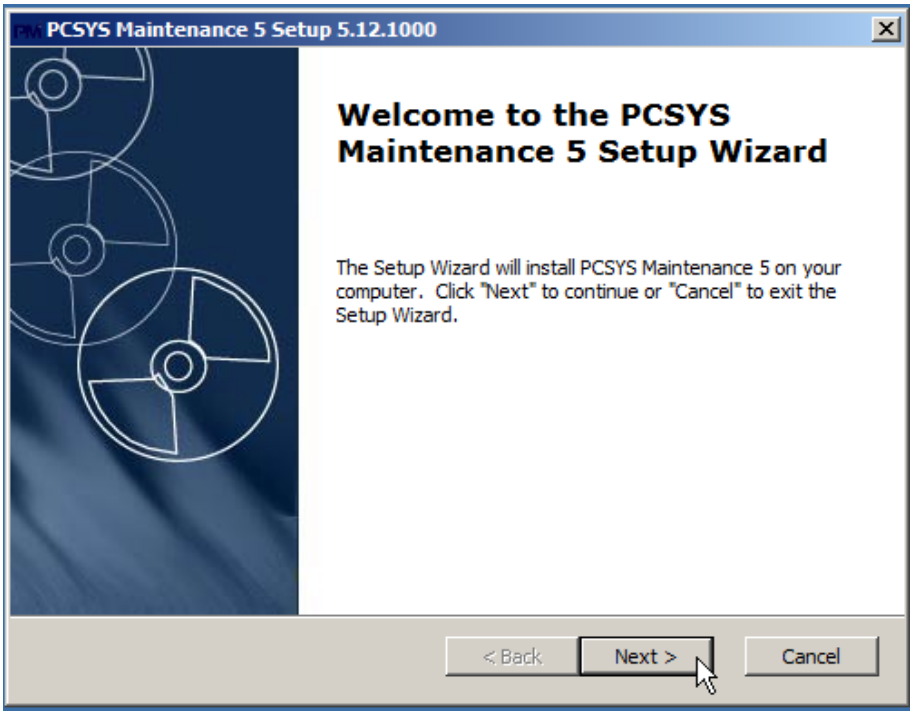
Installation procedure

1. Language selection – here user is to select the language used during the installation procedure. The two languages available for selection are English and Danish.

   Select the language and press 'OK' button to proceed.

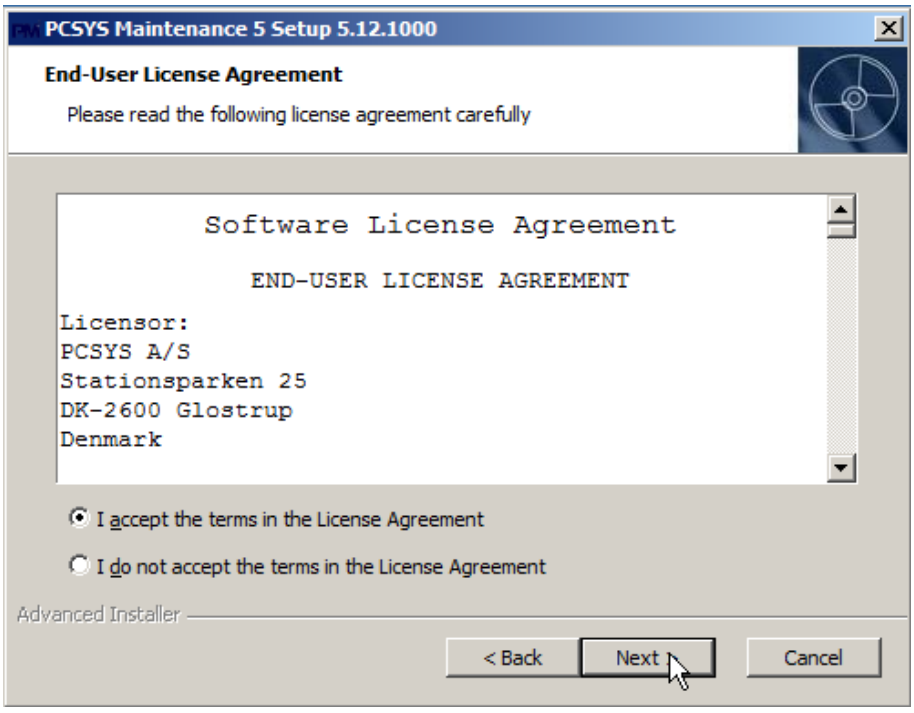


2. Start form – this form is shown for information purposes only. Press ‘Next’ to continue.



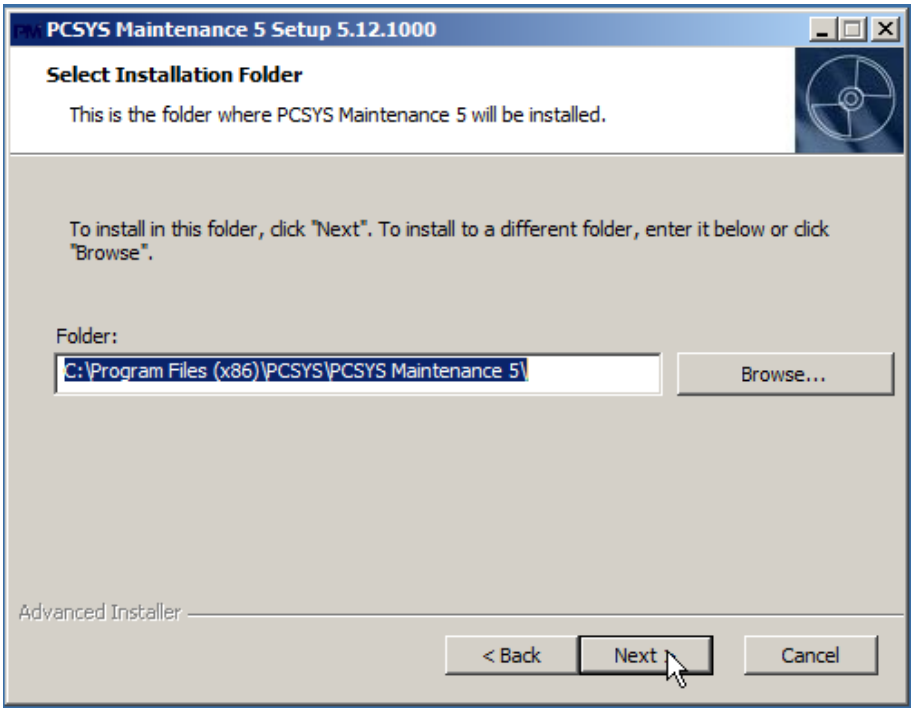
3. License agreement form – here user is presented the license agreement between PCSYS A/S and end users of PM5.

   To proceed with installation user needs to select ‘I accept the terms in the License Agreement’ and press on ‘Next’ button.



4. Installation location form – here user is to specify into which folder files belonging to PM5 Client are to be copied. A default location is predefined, but can be changed by clicking on button ‘Browse’ and selecting alternative directory. Path can also be edited manually.

   Once selection of directory is done, user is to press on button ‘Next’ to proceed with installation.

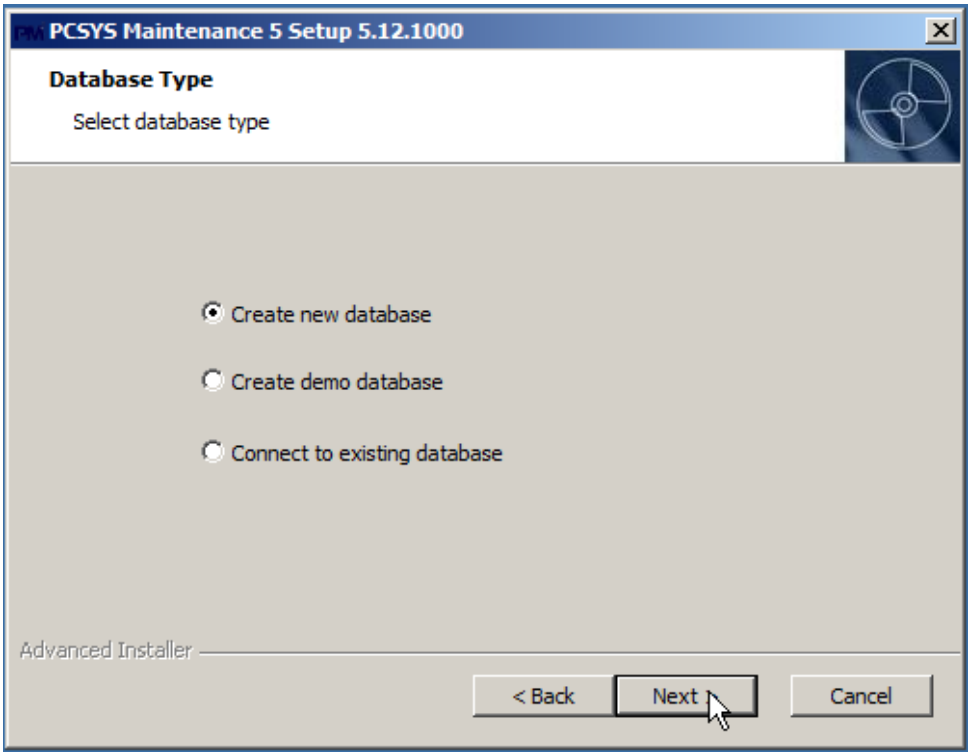


5. Select database type – here user is to select what type of database is to be used by PM5 client that is to be installed.

   * Create new database – this choice will prompt installation package to create new database on Microsoft SQL server specified in next step of installation procedure. The database will be empty. Name of database is by default always *PM5*.

   * Create demo database – this choice will prompt installation package to create new database on Microsoft SQL server specified in next step of installation procedure. The database will be populated with a small set of data useable for evaluation of PM5 software and educational purposes. Name of database is by default always *PM5*.

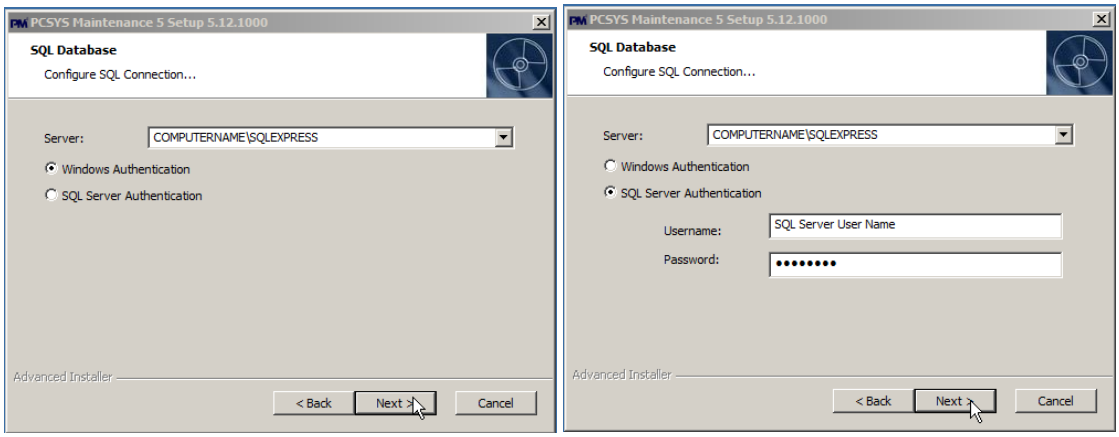
   * Connect to existing database – this choice indicates to the installation package that a pre-existing PM5 database is to be used by the PM5 client. User will be prompted to provide information about that database in next step of installation procedure.



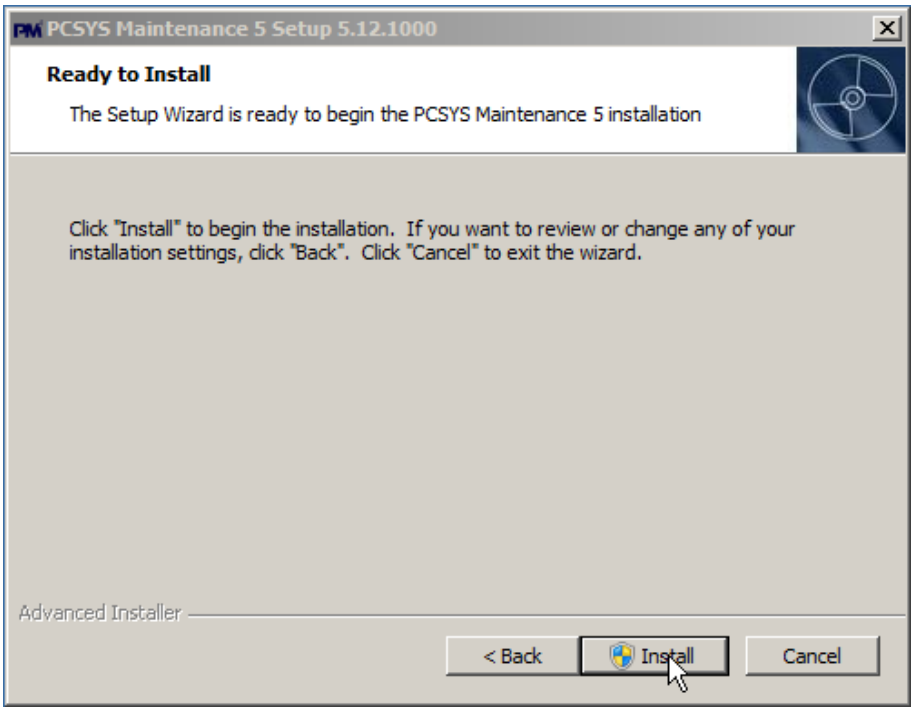
6. SQL Server information form - depending on selection of database used for installation in previous step, user is to provide information necessary for creation of new database. Following information needs to be provided:

    a. SQL Server name – complete name of Microsoft SQL Server where PM5 database is to be created and run. This information can be either selected from the list of SQL servers found on the network by installation package OR entered manually by user.
    b. SQL Server authentication mode – here user needs to select what type of authentication is to be used in communication with SQL Server during installation process. Two alternatives are available:
    * Windows Authentication – can be used if user currently logged in on the computer where PM5 is to be installed **also** has administrative credentials on Microsoft SQL Server where PM5 database is to be created.
    * SQL Server Authentication – the recommended selection. When this alternative is selected, user needs to provide the user name and password of an **SQL Server user with administrative rights.** It is recommended to provide credentials of SQL Server user with *Sysadmin* server role on the SQL Server where PM5 database is to be created.

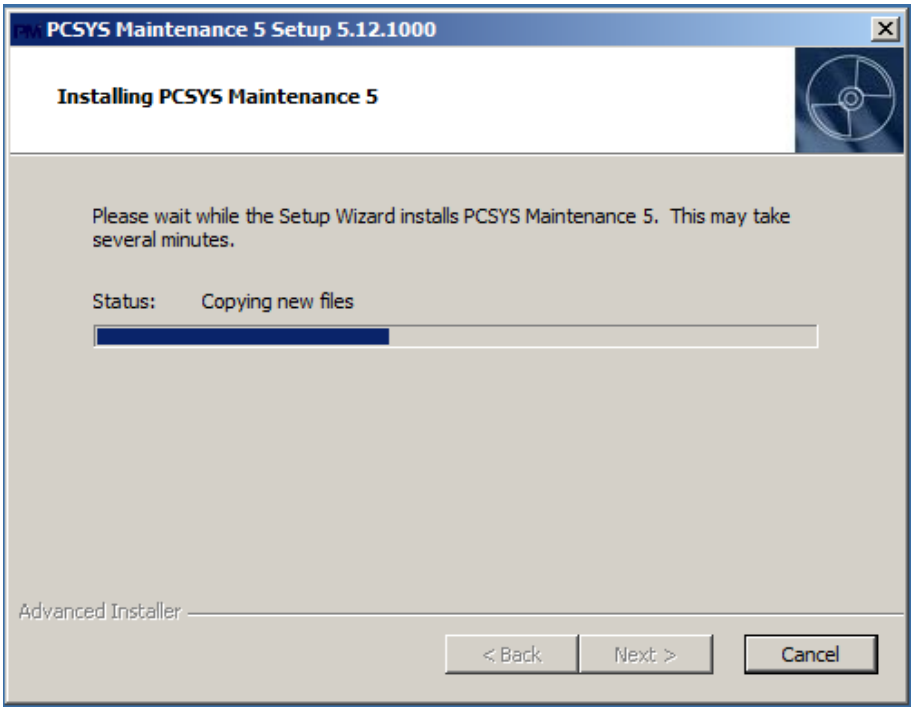
Once necessary data is entered, press button 'Next' to proceed. Installation package will now validate entered information (connection to SQL Server and provided user credentials) and if validation is successful, the installation of PM5 software and creation of database will commence.



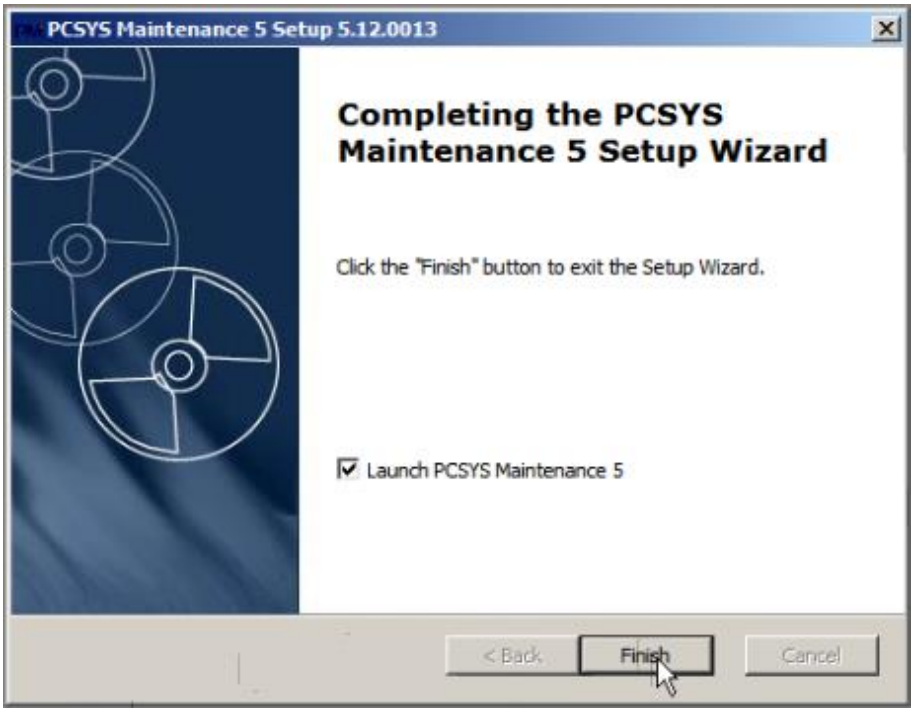
7. Final confirmation form – to proceed, user needs to press ‘Install’ button. This will start the installation process.



8. Installation progress form – this form is used to show installation progress to the user. Once installation is completed, PM5 is ready for use.



9. Installation finished form – this form indicates that installation of PM5 PM5 client has been completed successfully. To close the form and finish installation, press on ‘Finish’ button. If checkbox ‘Launch PCSYS Maintenance 5’ is checked in, PM5 client will launch immediately after installation form is closed.



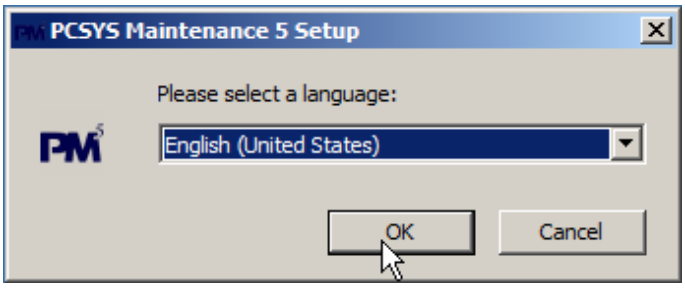
Installation of PM5 Client using pre-existing database

Installation of a client that is to use an already existing PM5 database is by far the most common installation type of PM5 software.

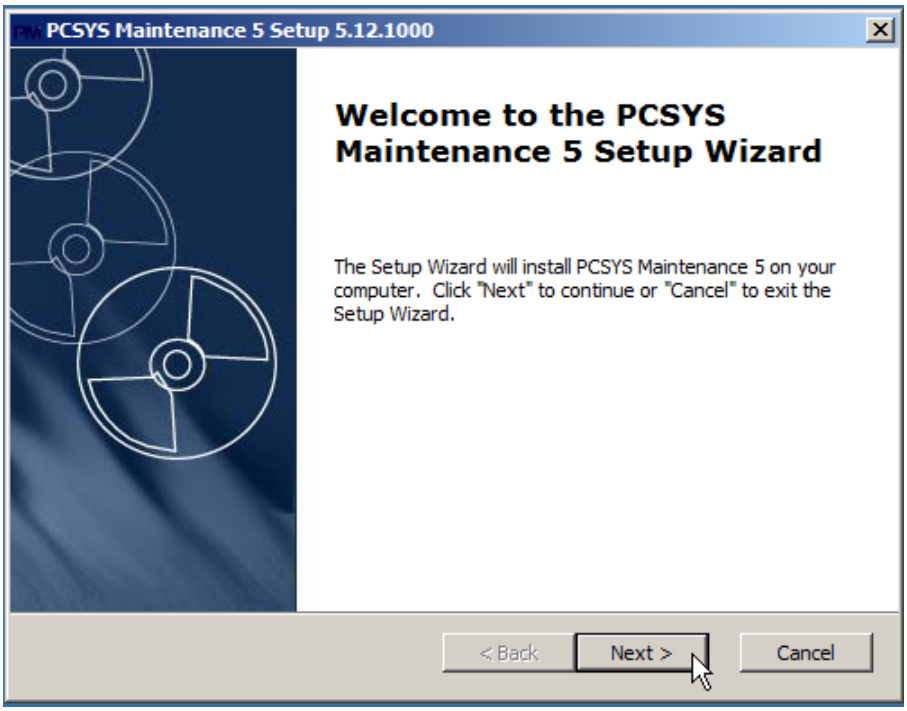
Installation procedure

1. Language selection – here user is to select the language used during the installation procedure. The two languages available for selection are English and Danish.

   Select the language and press 'OK' button to proceed.

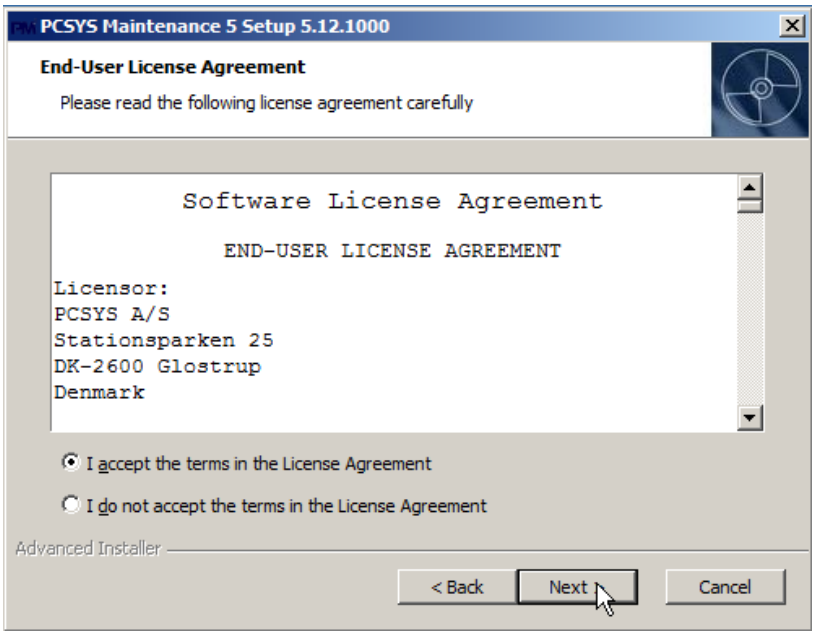


2. Start form – this form is shown for information purposes only. Press 'Next' to continue.



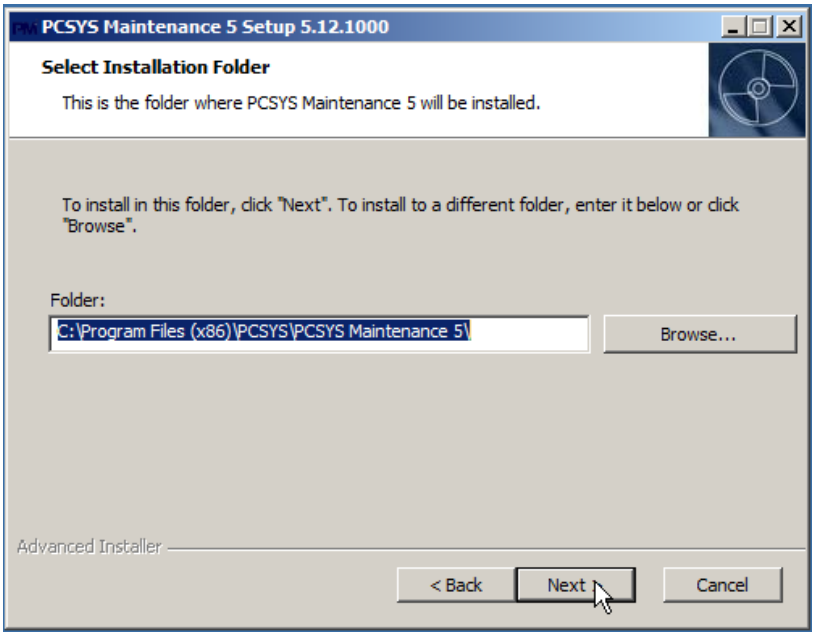
3. License agreement form – here user is presented the license agreement between PCSYS A/S and end users of PM5.

   To proceed with installation user needs to select 'I accept the terms in the License Agreement' and press on 'Next' button.

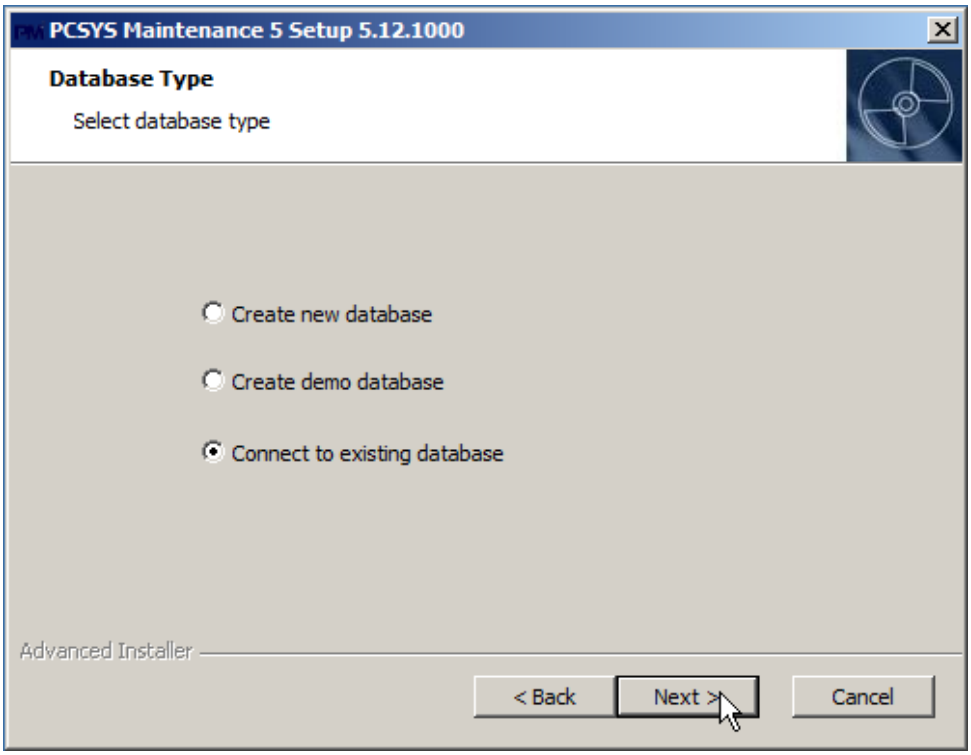


4. Installation location form – here user is to specify into which folder files belonging to PM5 Client are to be copied. A default location is predefined, but can be changed by clicking on button 'Browse' and selecting alternative directory. Path can also be edited manually.

   Once selection of directory is done, user is to press on button 'Next' to proceed with installation.

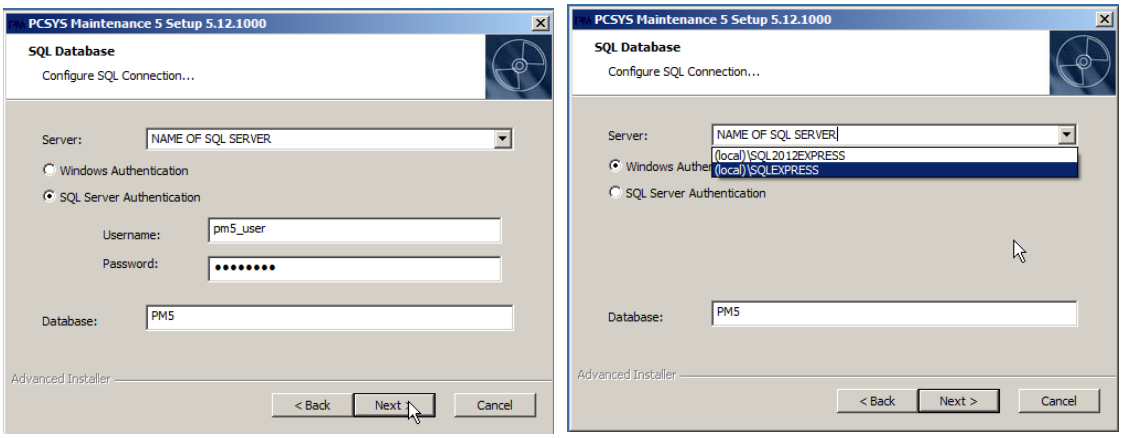


5. Select database type – when installing a PM5 client that is intended to use an already existing database, in this step **always** select ‘Connect to existing database’.



6. SQL Server and database information form – in this form user is to provide information about PM5 database that is to be used and SQL server where this database resides. Following data needs to be provided:

    a. SQL Server name – complete name of Microsoft SQL Server where PM5 database is to be created and run. This information can be either selected from the list of SQL servers found on the network by installation package OR entered manually by user.
    b. SQL Server authentication mode – here user needs to select what type of authentication is to be used in communication with SQL Server during installation process. Two alternatives are available:
    * Windows Authentication – can be used if user currently logged in on the computer where PM5 is to be installed **also** has administrative credentials on Microsoft SQL Server where PM5 database is to be created.
    * SQL Server Authentication – the recommended selection. When this alternative is selected, user needs to provide the user name and password of **the SQL Server user that is used for access to PM5 database by PM5 clients.** PM5 installation package creates SQL Server user *pm5_user* with password *pa$$w0rd* for this purpose.
    c. Database name – name of PM5 database that is to be used by this PM5 client. Usually the name of database is always *PM5* and this name is also entered in 'Database' text field as default. If PM5 database name is other than that, correct database name needs to be specified.



Once necessary data is entered, press button 'Next' to proceed. Installation package will now validate entered information (connection to SQL Server and provided user credentials) and if validation is successful, the installation of PM5 client will commence.

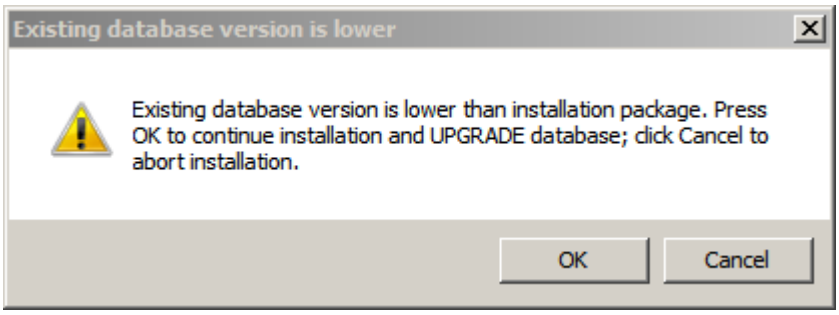
7. **IMPORTANT – Optional**

Warning about installation package being of later version than database

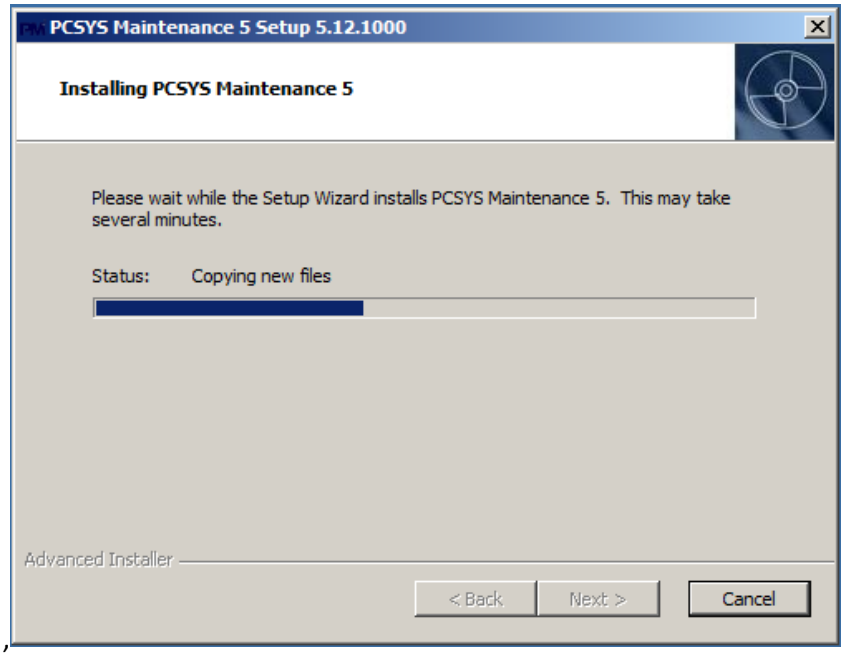
When database selected for use by PM5 client turns out to be of version that is earlier than that of installation package, a warning about this fact will be presented to the user. In this situation, user has two options:

a. Proceed with installation. **Database will be then be automatically upgraded to the same version of PM5 as that of installation package.** Basically, by continuing the installation, user agrees to an upgrade of the system to the version of installation package, so this step should not be taken lightly. Taking a backup of the database before proceeding with the installation is strongly recommended.

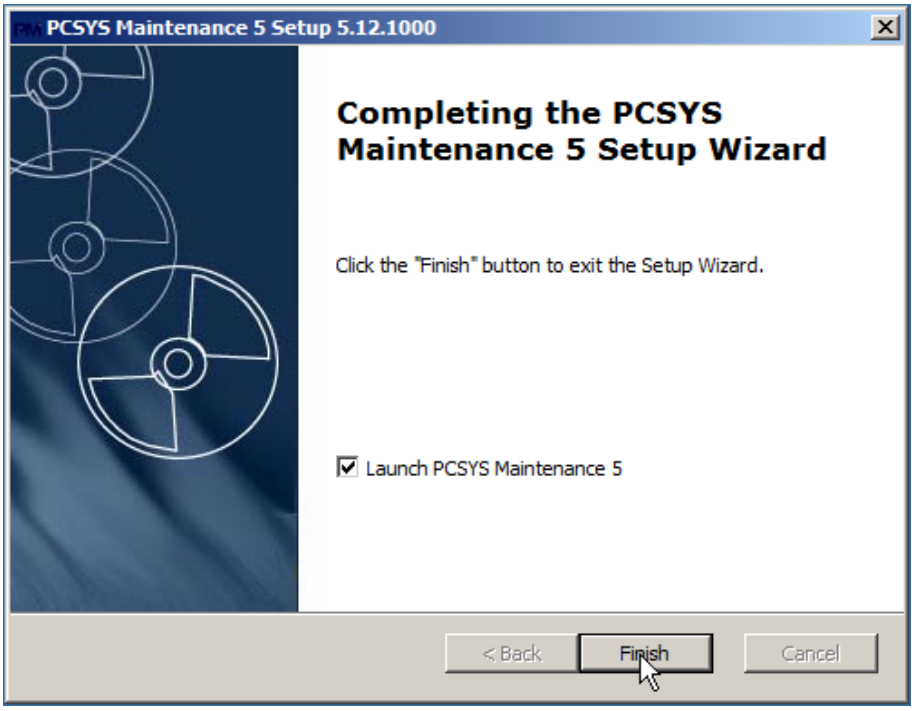
b. Abort installation. By choosing this option, user aborts the installation – PM5 client is not installed **and no changes are made to PM5 database.**



8. Installation progress form – this form is used to show progress of installation of PM5 client and upgrade of database (if such was necessary) to the user. Once installation is completed, PM5 is ready for use.



9. Installation finished form – this form indicates that installation of PM5 PM5 client has been completed successfully. To close the form and finish installation, press on ‘Finish’ button. If checkbox ‘Launch PCSYS Maintenance 5’ is checked in, PM5 client will launch immediately after installation form is closed.



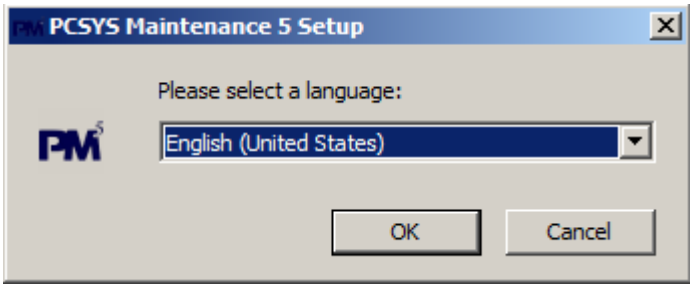
Update of PM5

IMPORTANT – Upgrade procedure described below is valid only for upgrades of PM5 version 5.12.1000 or later. When upgrading PM5 of versions earlier than 5.12.1000, user is to uninstall the PM5 client (do **not** uninstall database) and follow instructions for installation of PM5 client with pre-existing database.

Upgrade procedure

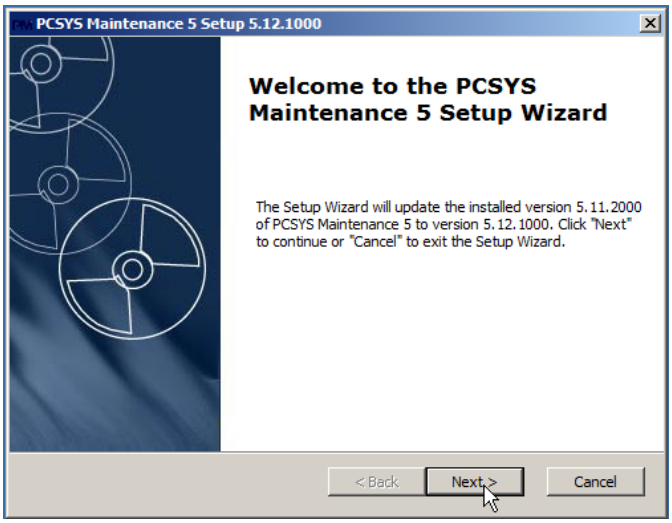
1. Language selection – here user is to select the language used during the installation procedure. The two languages available for selection are English and Danish.

   Select the language and press 'OK' button to proceed.

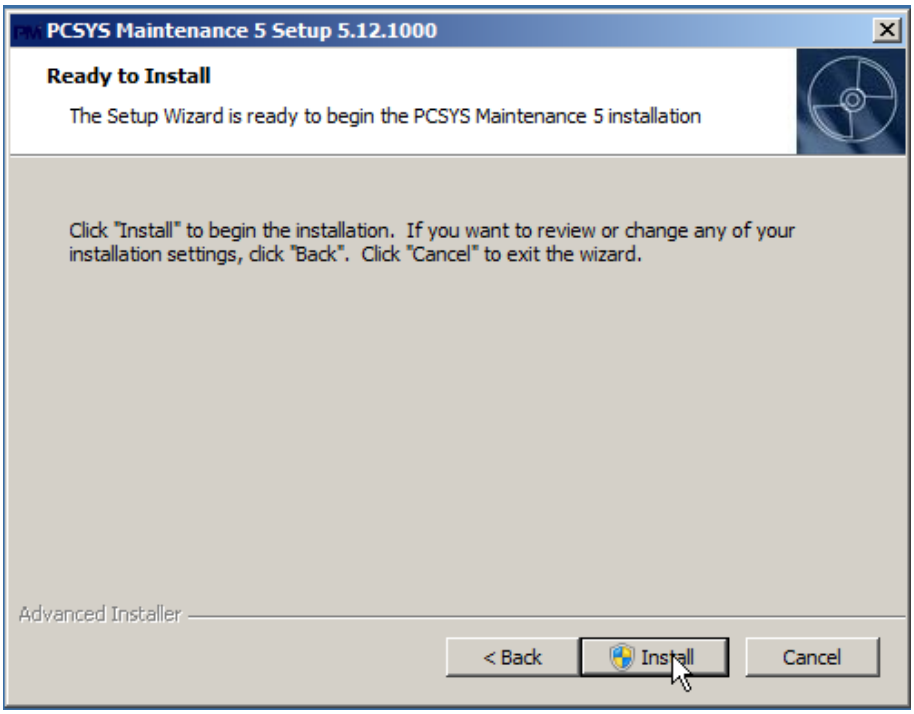


2. Upgrade information form – when previous version of PM5 client is detected on the computer, the installation procedure will notify the user that it will upgrade it to the version of installation package. Information text specifies current version of client and what version it will be updated to.

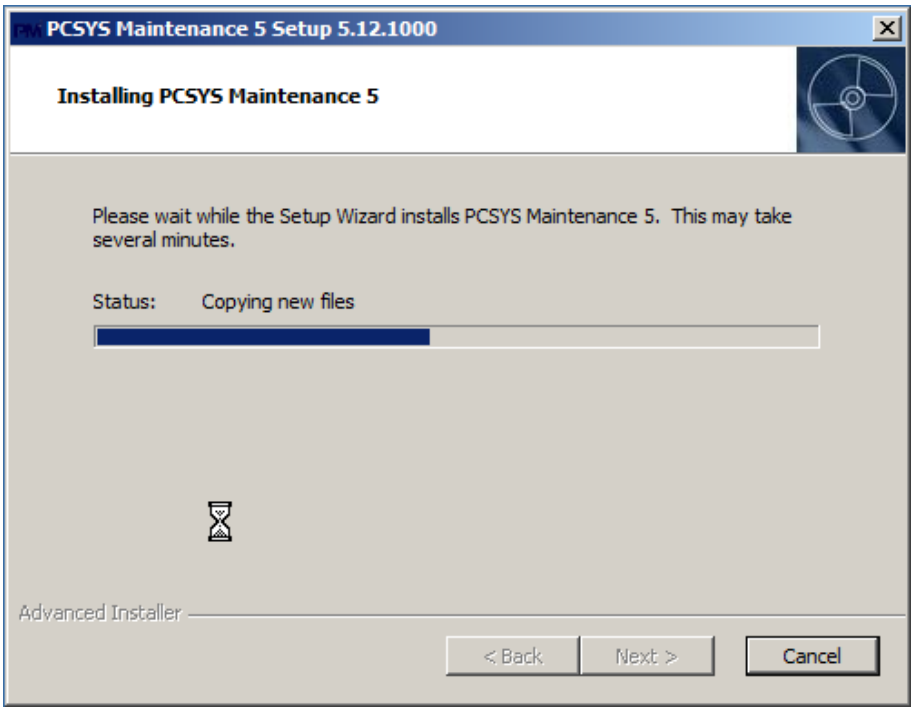
   IMPORTANT - If PM5 database used by PM5 client currently installed on the computer is of lower version than that of installation package and user presses on 'Next' button, that database will be automatically upgraded to the version of installation package. It is therefore strongly advised that a backup of database is taken **before** upgrade of the first PM5 client on your computer system.



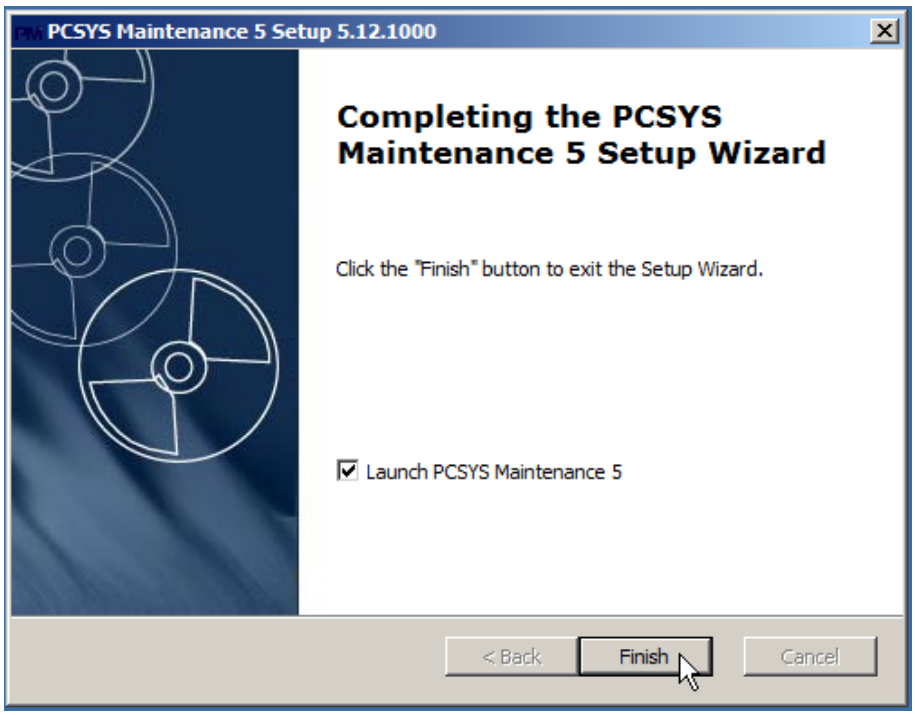
3. Final confirmation form – to proceed, user needs to press ‘Install’ button. This will start the installation process.



4. Upgrade progress form – this form is used to show progress of upgrade of PM5 client and upgrade of database to the user. Once installation is completed, PM5 is ready for use.



5. Upgrade finished form – this form indicates that installation of PM5 PM5 client has been completed successfully. To close the form and finish installation, press on ‘Finish’ button. If checkbox ‘Launch PCSYS Maintenance 5’ is checked in, PM5 client will launch immediately after installation form is closed.



Installation of PM5 OPC component

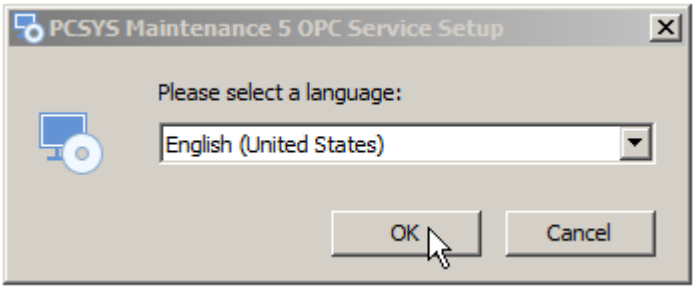
PM5 OPC component is used only in installations where machine counters are read by OPC servers and saved in PM5 for the purpose of automatic re-scheduling of activities. If you don't use this feature, then this step in installation process is not relevant and can be ignored.

PM5 OPC component was previously bundled together in single installation package together with PM5 client and other optional components. From version 5.12.1000 we have chosen to streamline main installation package – it now contains **only** PM5 clients and procedures for creation/update of PM5 database.

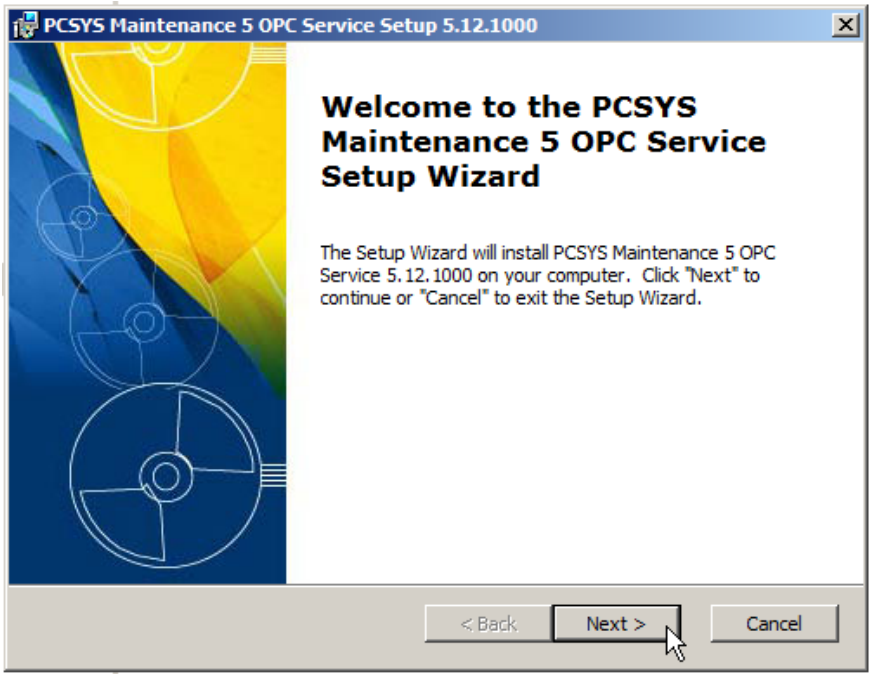
In PM5 version 5.12.1000 and thereafter, PM5 OPC component is provided as a separate installation package and needs to be installed after installation/upgrade of PM5 clients. Since PM5 OPC component is a Windows Service that is to run continuously, it needs to be installed on a single computer, preferably one with server role.

Installation procedure

1. Language selection.

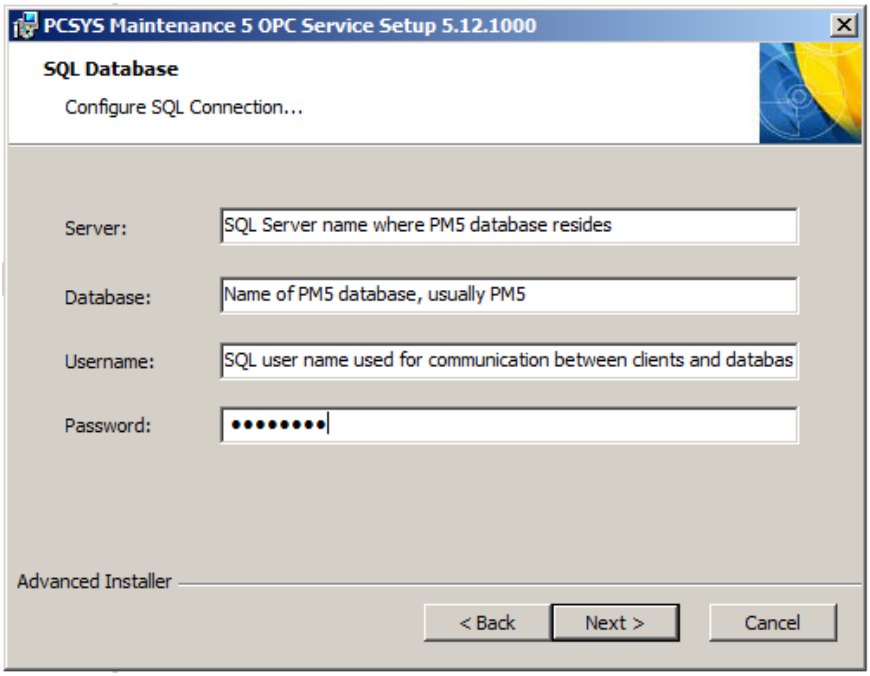


2. Information screen. Press 'Next' to continue.

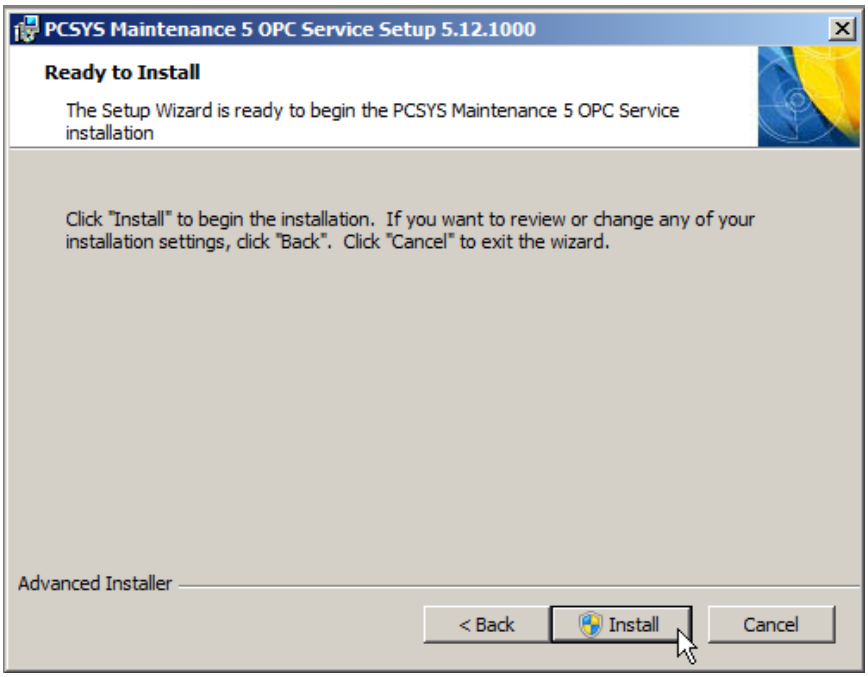


3. PM5 Information form – here user is to enter information about SQL server where PM5 database resides and PM5 database itself. It is the same information that is provided in installation procedure for PM5 client.

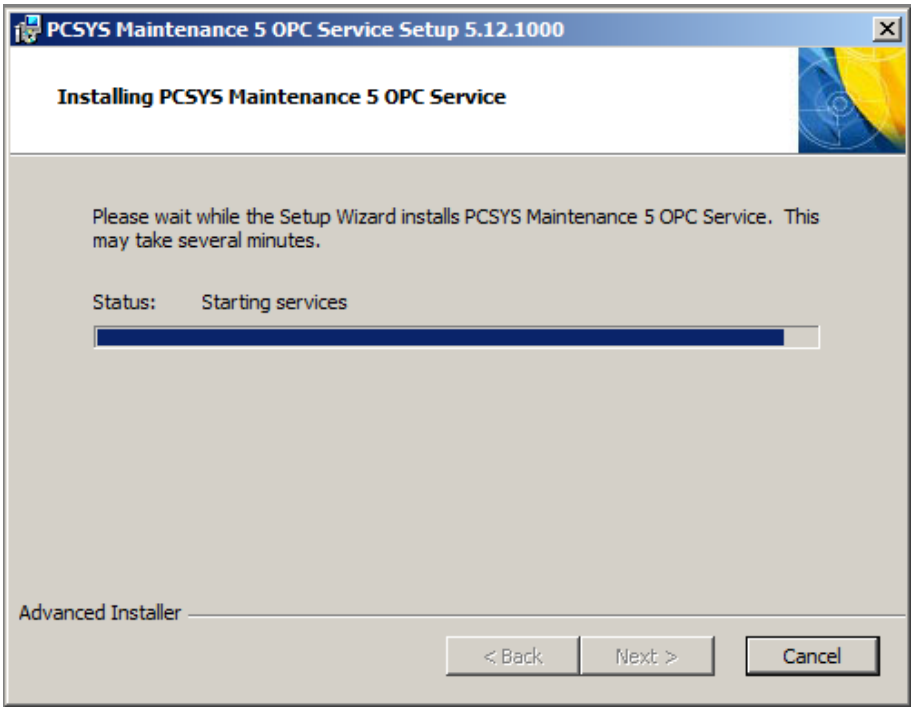
   Press 'Next' to proceed. Installation procedure will validate provided information before proceeding. User will be notified if SQL server cannot be found, connection cannot be established with provided user credentials or specified database is not PM5 database. Otherwise, the installation of OPC component will proceed.



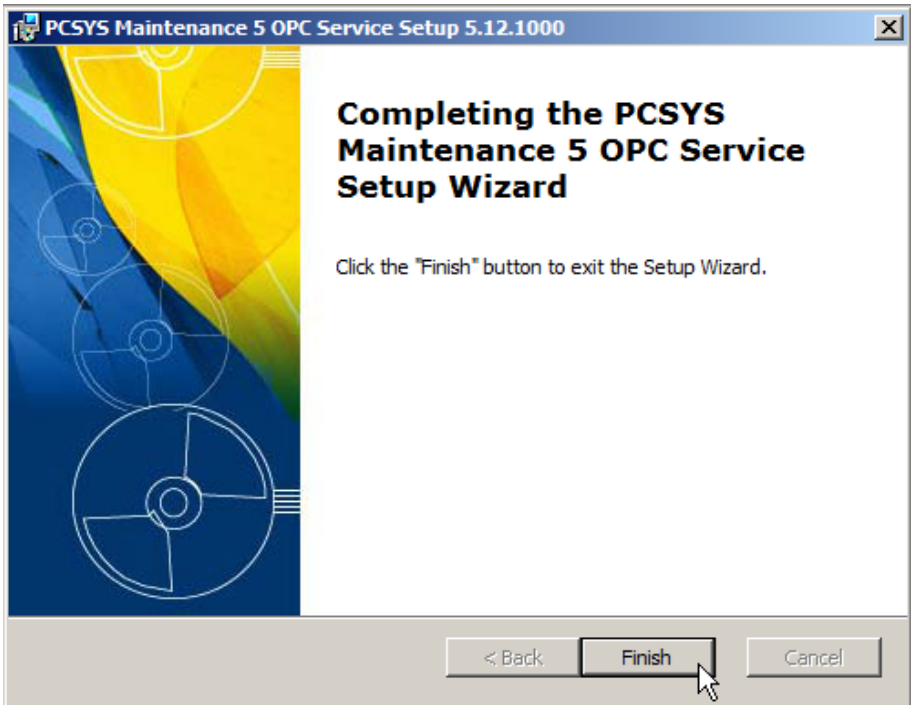
4. Final confirmation form. Press 'Install' to proceed with installation.



5. Installation progress form.

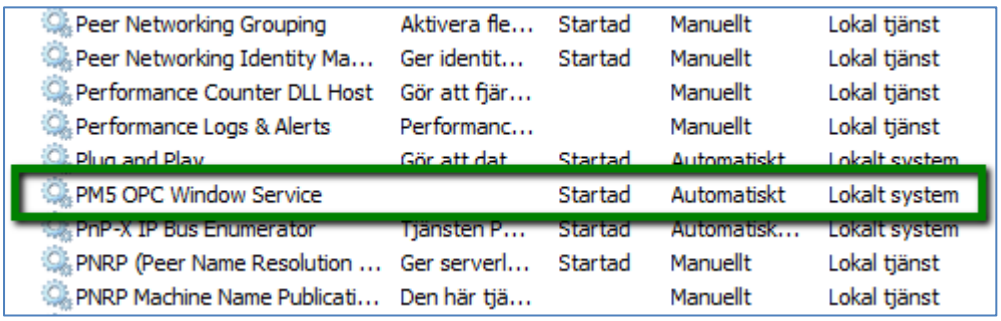


6. Installation finished form. Press ‘Finish’ button to finalize installation.



7. After installation, user can confirm that the PM5 OPC component is installed correctly and is running by opening Services list running on the computer and verifying that the service is present and running. Services list is easiest opened by typing *services.msc* in Run field of Windows.

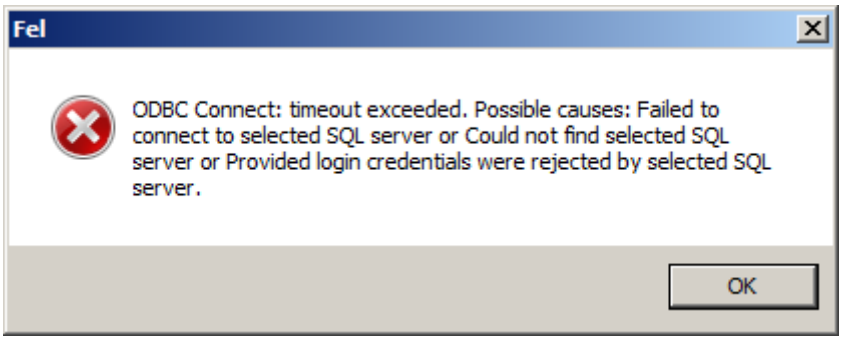
   Below is an example of the list with PM5 OPC component installed and running.



Troubleshooting

Below is a list of most common issues that can occur during installation of PM5 clients.

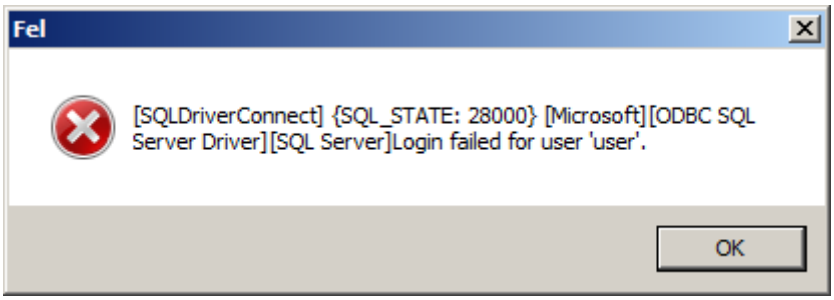
Connection timeout



This error indicates that PM5 installation package could not find or was otherwise stopped from connecting to the SQL server specified by user. This issue is usually caused by:

- incorrect input string
- firewall stopping connection
- SQL Server Browser service not being enabled on the computer where SQL server is running
- TCP/IP protocol not being enabled for SQL Server

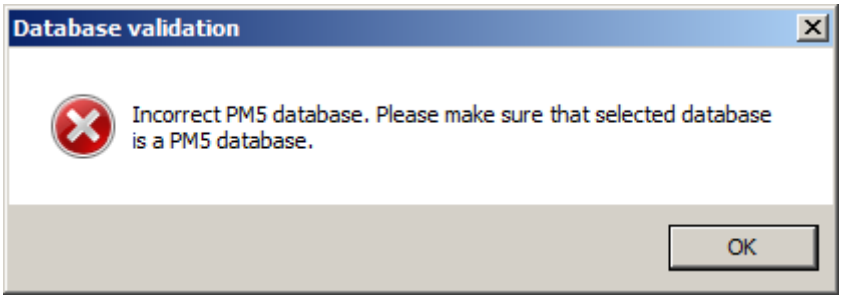
Incorrect user credentials



This error is shown when user specified for communication between installation package and SQL Server is invalid. When this error occurs, please double-check following:

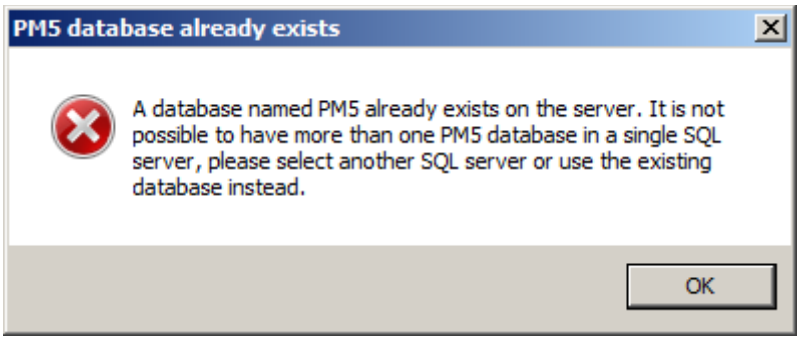
- If Windows Authentication was selected, verify that currently logged in Windows user has sufficient credentials on selected SQL server.
- If SQL Server Authentication was selected, verify that entered used name and password are correct and that the selected SQL Server user can log in onto SQL server.

Not a PM5 database



This error is shown when user runs an installation of PM5 client with pre-existing database and the selected database is not a PM5 database. To resolve this issue user needs to enter name of a valid PM5 database.

PM5 database already exists



Error message above is shown if a database with name PM5 already exists on the SQL server that user is trying to use for the installation. Since two databases with same name cannot exist on same SQL server, user needs to either delete or rename the already existing database before an installation can be completed. Alternatively, user can select to use the already existing database for the installation.

Frequently Asked Questions

On what operating systems can PM5 be used?

PM5 has been extensively tested on Windows XP, all variants of Windows Vista and Windows 7 as well as on Windows Server 2000 and all the way up to Windows Server 2008.

On what database servers can PM5 be used?

All versions of SQL Microsoft Server from Microsoft SQL Server 2008 and thereafter. PM5 can be run on complete enterprise versions as well as the freely distributed Express Editions of Microsoft SQL Server.

Can PM5 be installed on a virtual platform?

Yes. PM5 are supported on Citrix and Microsoft Terminal.

In previous versions of PM5 installation package there were several optional components. They are no longer available in installation package for version 5.12.1000. How can I get hold of them?

As of version 5.12.1000 we have removed all optional components from installation package for PCSYS PM5. From this version and forward the installation package contains only distribution of PM5 client and related SQL database.

Previous versions of PM5 installation package included distribution of SQL Server 2005 Express Edition. This version of SQL Server is now quite old and a decision has been taken to remove it. Users requiring Microsoft SQL Server are referred to Microsoft's site where relevant installation files can be downloaded free of charge.

OPC Server component – please contact PCSYS for further information.

Barcode Reader component – this component has been deprecated and is no longer included in standard installation package of PCSYS PM5. Barcode Reader's functionality is included in latest version of PM5 Mobile. For further information, please contact PCSYS.

Is it possible to automatize installation or upgrade of PM5?

At the moment, it is not possible to automatize installations of PM5 of latest version (5.12.1000).

PCSYS can provide iss-scripts for installation and upgrade of PM5 of version 5.11.2000 and earlier. Those scripts will assist user with so called ‘silent installations’ of different types. Please contact PCSYS for further information.

I have multiple PM5 clients installed on local computers. What do I need to think about before upgrading PM5 to new version?

- Making a backup of your database before proceeding with the upgrade, regardless of number of clients to be upgraded, is always a good first thing to do.
- Before starting the upgrade process, make sure that no one is using PM5. Please observe that unchecking logged in users in administration module **does not** mean that they are logged out by the system.
- Once the first upgrade of PM5 client is complete (the one where SQL database is also upgraded), none of the clients of old version will be able to connect to database until they too are upgraded.
- You **do not have to** upgrade all clients before PM5 can be used in production again. Individual Pm5 clients are ready for use immediately after they have been upgraded to new version.

I have installed PM5 client, have connection to the database, but cannot login onto PM5 with user pm5_user.

User pm5_user is not a PM5 user. It is an SQL Server user created and dedicated exclusively for the background communication between the client and the database.
Default PM5 user (with full administrative credentials) is:
User: pm5
Password: pm5

I have PM5 installed, but it's of older version. I would like to install latest version of PM5 and do the upgrade at the same time. Is it possible to combine an upgrade with a "clean" installation of PM5 client on a new computer?

Yes.

First, you need to uninstall your current installation of PM5 client.

Next, start PM5 Installation and select installation with existing database. Select your PM5 database as the database that is to be used by PM5 client. Installation procedure will warn you that database is of earlier version than installation package and will be upgraded if installation is to proceed. If you agree to this, the database will be automatically upgraded as part of installation procedure.