

THIS IS FOR THOSE RESPONSIBLE FOR INSTALLATIONS AND UPDATES

# Pedago lön 2.21.o.x - Technical

January 2024



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# Update and installation

Please read this BEFORE starting the update and do not hesitate to contact us if there is anything unclear.

We always strive to make our documentation better so if there is anything unclear, then please contact us via e-mail [support@pedago.fi](mailto:support@pedago.fi) or phone +358 18 12060.

## Update to version 2.21.0.x

### 1.1 When to update

You should update to 2.21.0.x **when convenient for the payroll administrators!**

#### 1.1.1 Before updating

- **Please, back up all databases before updating!**
- Program files are usually installed in `C:\Program\Pedago`.
- Use SQL Server administrative tools to perform a backup.
- Check what version you are updating from.

Our recommendation is to update at least yearly when the new version is released.

- The client (lp.exe) can update from any version if you can log in with the master user 'sa'. If not, then update using SQL-scripts. To update from 2.20.6.x to 2.21.0.x you use the script `update2210.sql`.
- If you are updating from an earlier version, then you need to run several scripts in succession. Say that you need to update from 2.20.5.x to 2.21.0.x. In that case you need to run `update2206.sql` and `update2210.sql`. Scripts are located in a subfolder named `sql` under the main program directory, usually `C:\Program Files (x86)\Pedago`.
- If you use encryption when sending payslips as pdf-files to employees via e-mail you should note that as of version 2.40.4.x we use Apaches PDFBox as encryption tool. It is automatically installed under the menu `\Tools` when installing the update of Pedago lön version 2.40.4.x. Apaches PDFBox requires Java to be installed.

## 1.2 Please note possible breaking change

This version changes all statistics variables from accumulators in table fields to dynamically calculated fields in views. If you have reports that have been custom-built for you, then they may need to be adjusted if they refer to `LP_ARS-STATISTIK` och `LP_PERIODSTATISTIK`.

User defined reports can be found last in the main menu under “Egna listor”. Check what you have here and consult with us if unsure.

## 1.3 Make sure that the folder Reports.tmp is empty

This folder is used by the installer as temporary storage. New reports are installed here and then moved to Reports.

## 1.4 Download the installer before running

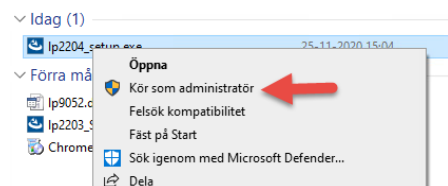
Download the installer (`lp2210_setup.exe`) from our web

- <http://www.pedago.fi/pa/index.html>

## 1.5 Install the update

### 1.5.1 Run the installer “as administrator”

Right click on the downloaded file and then “Run administrator”.



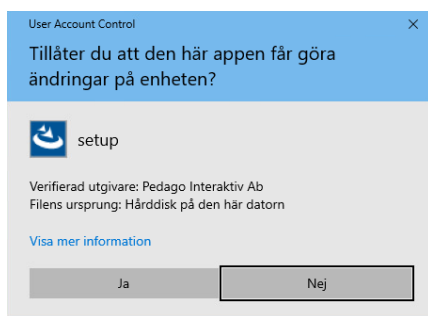
### 1.5.2 If you see a windows defender warning

Select “Mera info”.

Select “Kör ändå”:



Click "Ja":

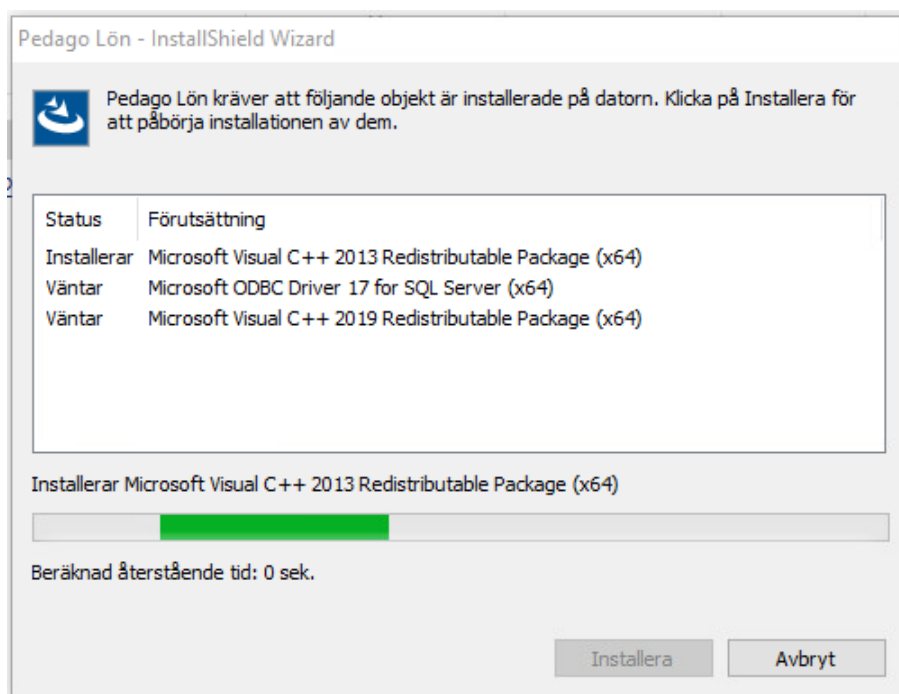


### 1.5.3 Install "for all users"

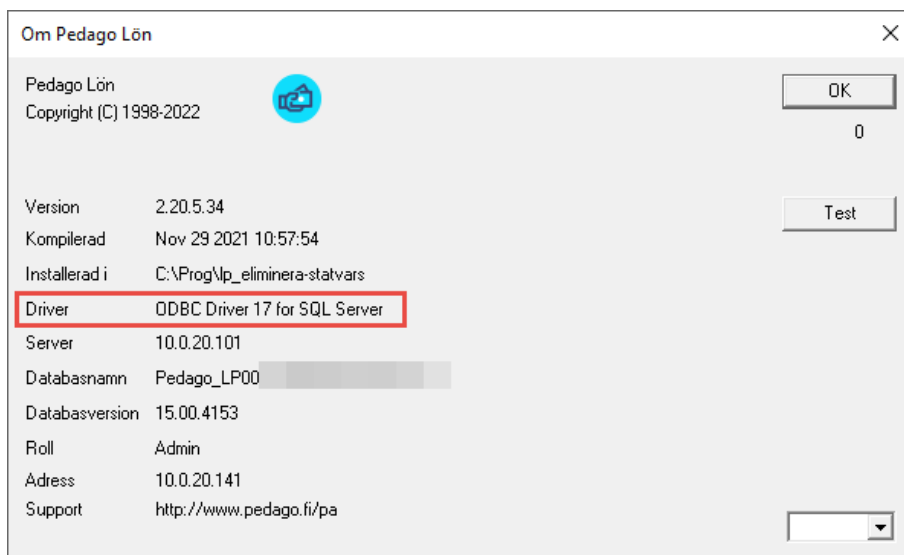
If asked to install "for you" or "all users". Select the latter.

### 1.5.4 Installation of .Net components

This version requires Microsoft .Net version 4.x. It is installed automatically if needed. This might require a restart.

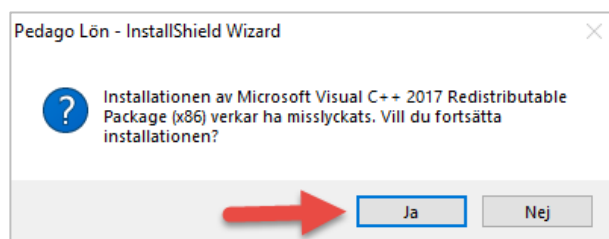


We would very much like to see that everyone uses the latest ODBC Driver:



If the ODBC Driver 17 for SQL server is not installed, then the installer will install it. You will however need to adjust your DSN-files manually.

You might see the following message:



This just means that a later version of the package is already installed.

## 1.6 Database update

You need to update the database schema after the install. This can be done in two ways. Use the one that suits you best:

- **Alternative 1:** If you can log in as a user with owner rights, then do so. The Client will then update the database as needed. This will work from any previous version. Do this for all companies.
- **Alternative 2:** If you have just read/write rights which is the normal setup, then ask your DBA to run the script `update2210.sql` in subfolder 'sql' in the program installation folder. That folder also contains scripts to update all databases at once, should you have many. The script will update from one version to the next.

## 1.7 For MS SQL Server

Use Microsoft® ODBC Driver xx.x for SQL Server.

## 1.8 Date format

We recommend that you use the international standard (ISO 8601), but the client is itself agnostic and will use the date format of the windows host with the limitation that it should be either `yyyy-MM-dd` or `dd.MM.yyyy`.

# Known problems

## 2.1 Create new company

The user entered in "Ge rättigheter till" must exist in SQL server and cannot be 'sa'.

## 2.2 Online help when run from a network drive

A security setting in windows prevents content from the network. This results in an empty window.

- This can be fixed through the registry by running `AllowHTMLHelp.reg` in `\Tools` under the install dir.

## 2.3 Move System database LPSYS.MDB

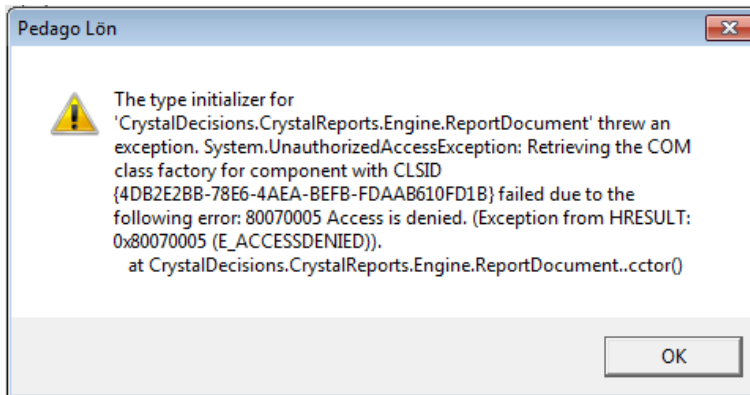
We recommend moving `lpsys.mdb` (contains license info) to a writable folder, ie `ProgramData\Pedago`. This will be done by the installer for new installs, beginning 2.20. To move manually you do the following:

- Create a new folder `Pedago` under `C:\ProgramData`
- Move `lpsys.mdb` here.
- Edit `lpsys.dsn` in the program folder, changing: `DBQ=lpsys.mdb` to `DBQ=C:\ProgramData\Pedago\lpsys.mdb`
- Give write-rights to the folder and contents `C:\ProgramFiles\Pedago`

## 2.4 Crystal Reports runtime

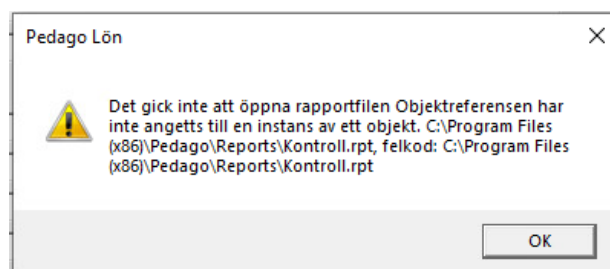
Note! Pedago lön requires Crystal Reports runtime 25 or later (13\_0\_25). The installer will automatically install the latest at time of writing, sp35.

If the runtime is outdated, then you will see the following message:



- A separate installer for the runtime can be downloaded from [www.pedago.fi/pa](http://www.pedago.fi/pa): **Ladda ned Crystal Reports Runtime v13.0.35 (32-bit MSI)**
- Unpack the zip-file and install `CRRuntime_32bit_13_0_35.msi` by clicking.

Note that there is a problem updating to Crystal Reports SP25 and later versions. If you update from SP25 to say SP29 then you may see the following error:

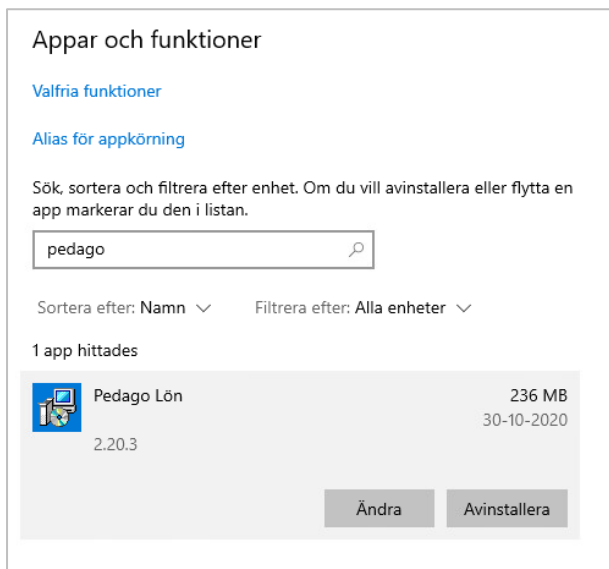


The cause is that SAP has backrevved one DLL in Crystal Reports and that means that it will not be updated.

The fix is this:

1. Download a small app that deletes the offending files <http://www.pedago.fi/pa/FixaCrystal.exe> and run it.
2. Launch the Windows App tool.





3. Locate Pedago Lön, markera, choose *Ändra* and then *Reparera*. This usually fixes the problem by installing the correct files.

#### 2.4.1 Crystal Reports windows support

Supported versions are:

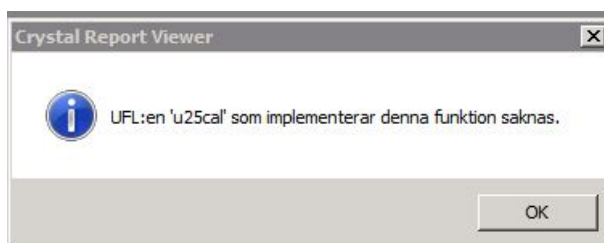
- Windows 8
- Windows 8.1
- Windows 10
- Windows 11
- Windows 2008 Server SP2
- Windows 2008 Server R2
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016

#### 2.5 Run as Administrator

Important for Windows 8/10/11.

#### 2.6 u25cal.dll or u25C128.dll missing

Should not happen, but we document it anyway.



Files `u25cal.dll` and `u25C128.dll` are add-ons to Crystal Reports, which we have developed. They normally are located under `[Program]\SAP`

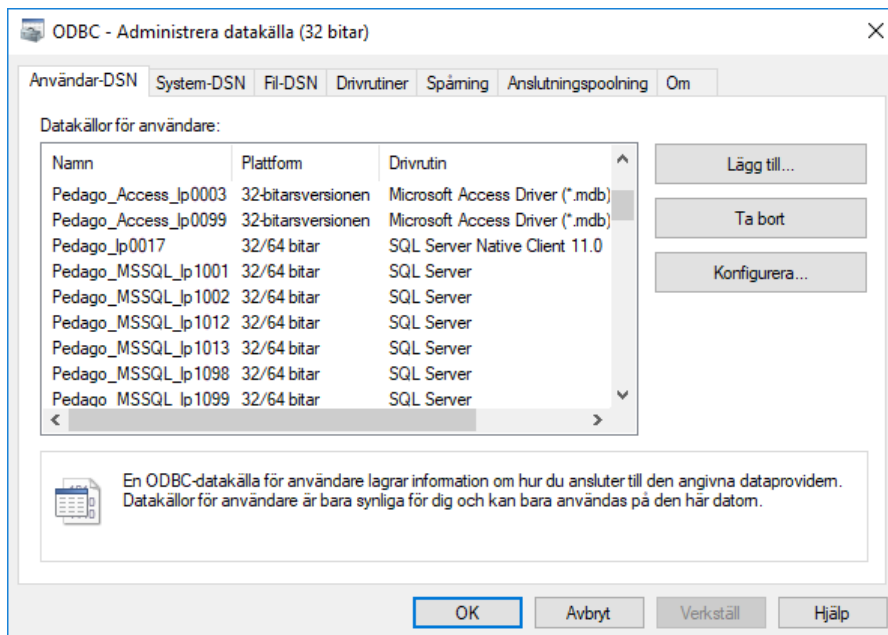
BusinessObjects\Crystal Reports for .NET Framework 4.0\Com-  
mon\SAP BusinessObjects Enterprise XI 4.0\win32\_x86.

- You may have to move those manually.

## 2.7 Data sources are created automatically

The .NET-version of Crystal Reports requires a data source for each connection.

They are created automatically if they do not exist:

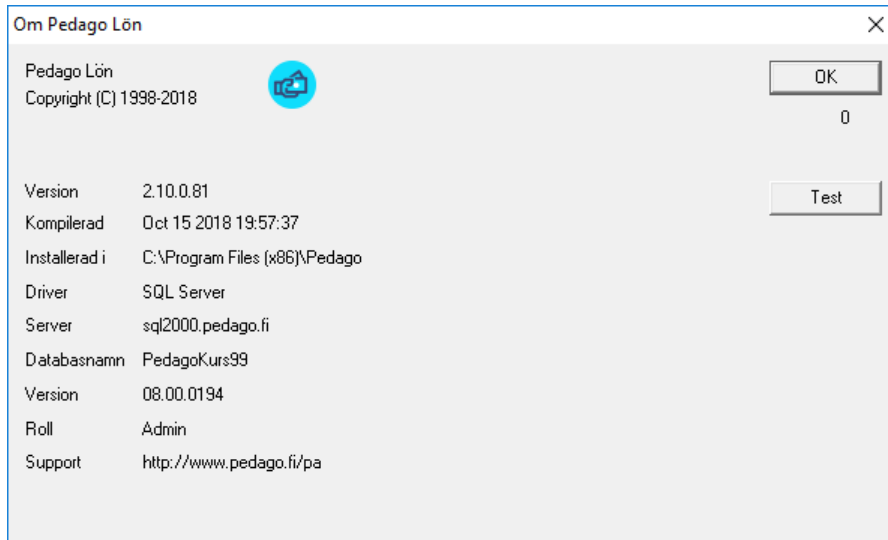


Created Pedago\_Databastyp\_lp<nummer>.

- Note that they are created if needed. They contain the address of your database server, so if you move the database, they will need to be created again. Just delete them and they will be recreated. In version 2.20.5.x and later we check the address and driver automatically and recreate if necessary.

## Reinstallation, etc

These are things you need to check if replacing a computer running Pedago lön.  
First document the version, database connection and database (Hjälp, Om/Help, About).



- In the example above the version is 2.10.0.81

### 3.1 Backup

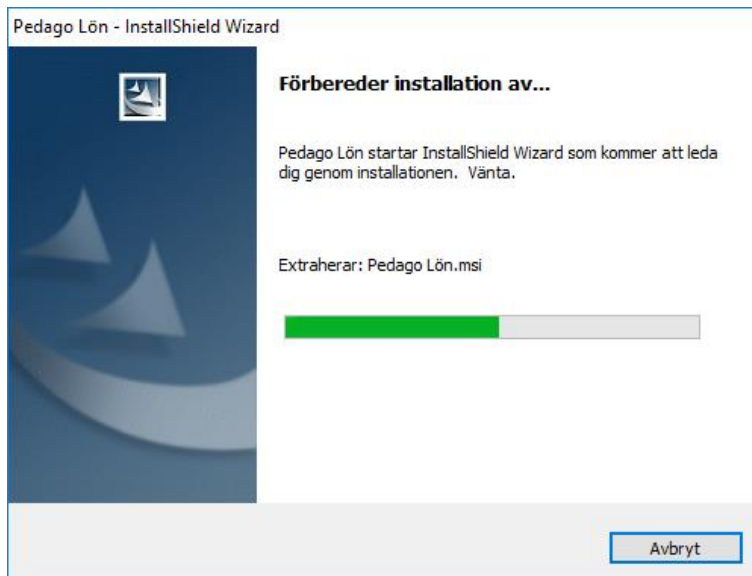
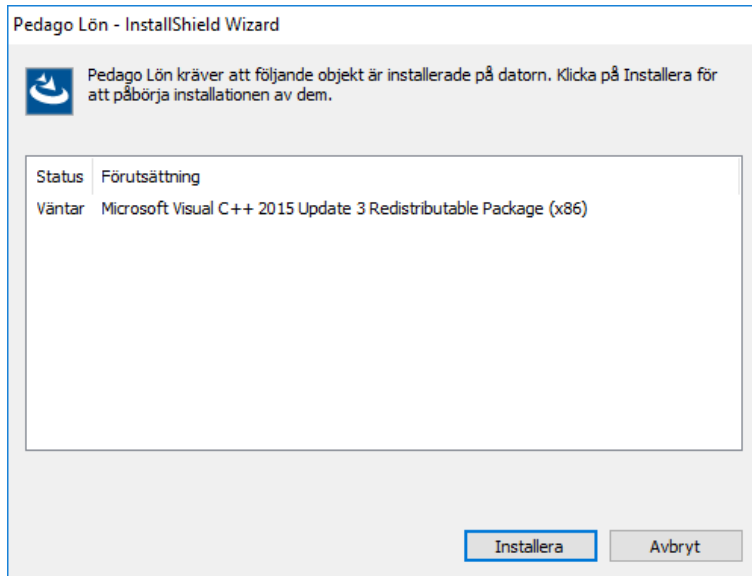
#### 3.1.1 Backup the folder above

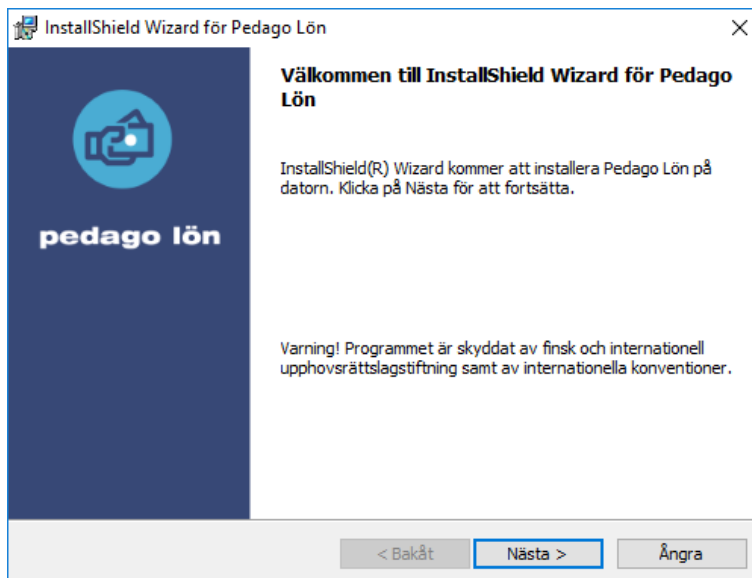
- Backup registry.  
Registry contains volatile data such as window positions etc.
- Start Regedit (Start, Run regedit), navigate to till `HKCU\Software\Pedago Lön`.
- Choose File, export.
- Put the file somewhere safe.

### 3.2 Installation

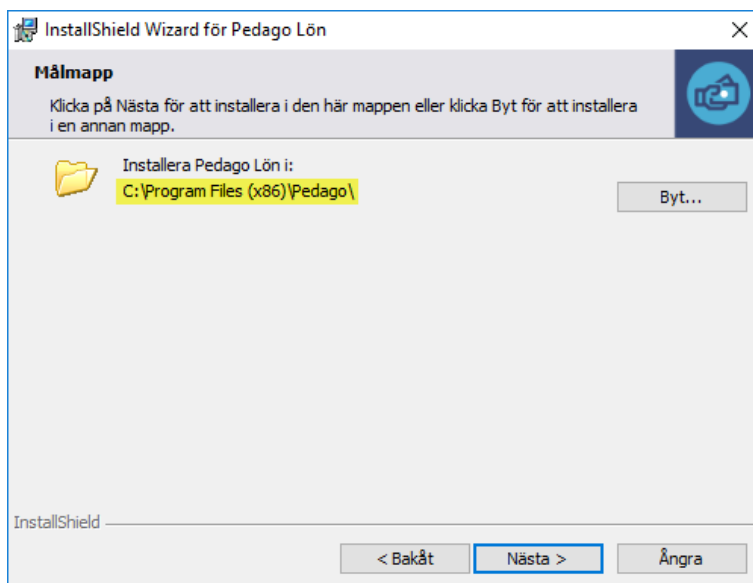
Installation of the client is the same for installations, reinstallations, and updates. Download the latest installer from [www.pedago.fi/pa](http://www.pedago.fi/pa). Run installer as administrator.

The installer will check for prerequisites:

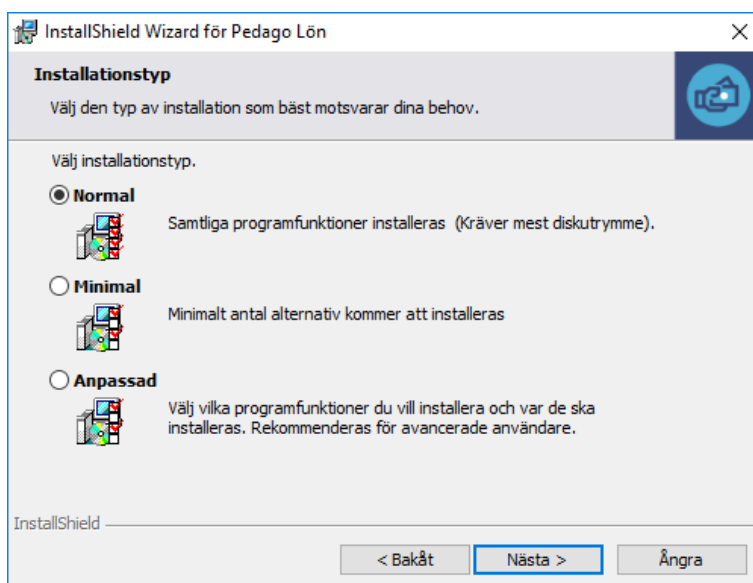




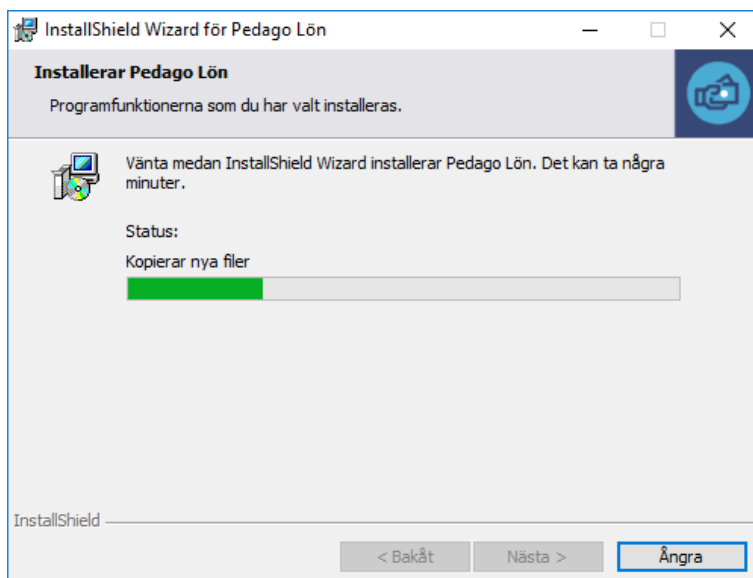
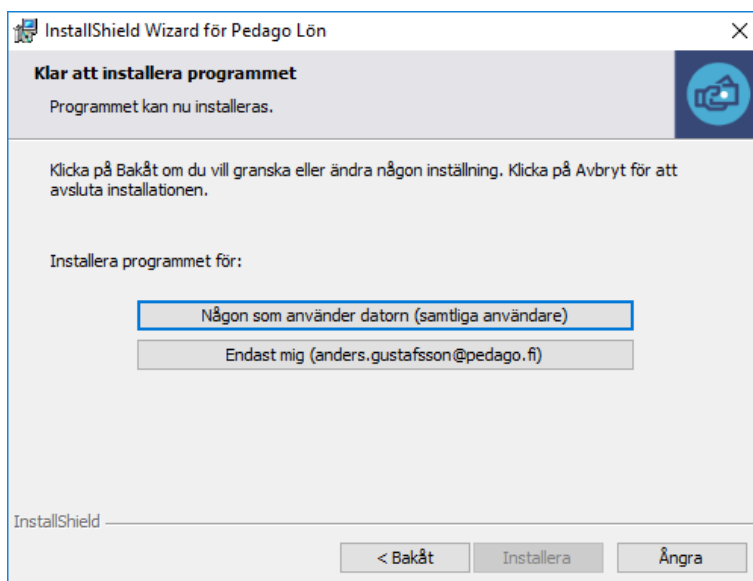
You can change the installation folder if needed:

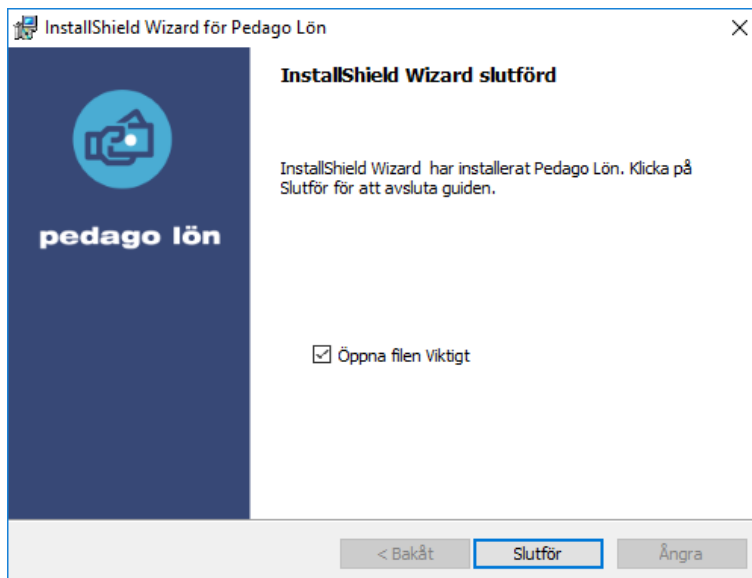


Select "Normal":



Select "samtliga användare/all users":





- Please read the file.
- If needed, give users rights to `lpsys.mdb` in `C:\ProgramFiles\Pedago`.

### 3.3 Restore backups

#### 3.3.1 Restore files

In case of reinstallation, you might have to restore files from backup (heading 3.1 Backup)**Fel! Hittar inte referenskälla.**

#### 3.3.2 Restore registry

- Start Explorer
- Find file from 3.1.1 (`pedago.reg`) and double-click.
- Answer Yes to the question.

#### 3.3.3 Restore database connection info

Restore `lpsys.mdb`, `lpsys.dsn` and all `lpxxxx.dsn` from backup and put in installation directory (`lpxxxx.dsn` are `lp0001.dsn`, `lp0002.dsn`, etc)

#### 3.3.4 If needed restore `lp.exe`

Restore `lp.exe` if you end up with an older version after the install.

### 3.4 Database connections and log ins

Pedago lön finds its databases thru DSN files and DSN- strings. The first database is the file `lpsys.mdb`, which contains license information and the list of companies entered in Pedago lön for the user in question. The program finds this information in the file `lpsys.dsn`:

```
[ODBC]
DRIVER=Microsoft Access Driver (*.mdb)
UID=admin
UserCommitSync=Yes
```

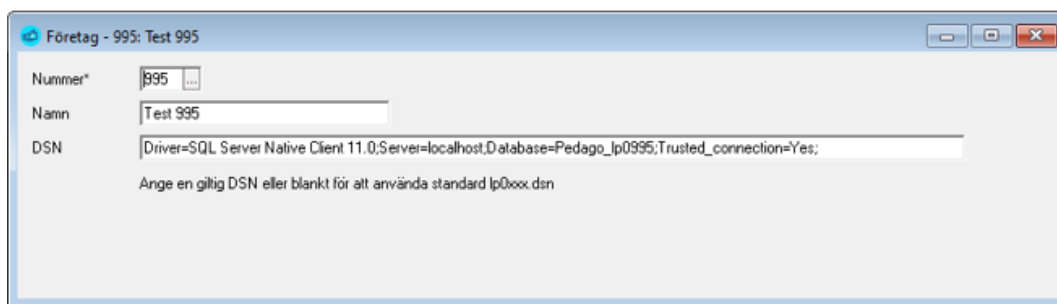


```

Threads=3
SafeTransactions=0
PageTimeout=5
MaxScanRows=8
MaxBufferSize=512
ImplicitCommitSync=Yes
FIL=MS Access
DriverId=25
DBQ=C:\ProgramData\Pedago\lpsys.mdb

```

When you choose a company name, eg 1, Pedago lön searches firstly for a DSN string in the company register “Registervård, Basuppgifter, Företag”.



Secondly it searches for a file named lp0001.dsn in the program catalogue:

```

[ODBC]
DRIVER=ODBC Driver 17 for SQL Server
MARS_Connection=Yes
UID=sa
AnsiNPW=No
DATABASE=Pedago_LP0001_Acme
APP=Microsoft Open Database Connectivity
SERVER=10.0.20.100
Description=Pedago Lön på SQL-Server 2017

```

Note that the driver stated after DRIVER= has to be installed. In Pedago lön version 2.20.5.x and later ones the ODBC Driver 17 for SQL Server is installed automatically when the program is installed.

To summarize the process:

1. You start Pedago lön by using a link which starts `lp.exe`
2. `lp.exe` opens the file `lpsys.dsn` in the same catalogue to find `lpsys.mdb`
3. `Lpsys.mdb` is opened to read license information and company list. If license information is missing the program will ask you to enter it
4. Log in request is shown
5. Choose company and click ok

6. If you chose eg company 1: the file `lp0001.dsn` opens and the server shown there is contacted and the driver used to locate it.

#### 3.4.1 Problems that could occur

- **The program asks for license information when reinstalling.**
  - a) Check that the file `lpsys.dsn` points to the correct `lpsys.mdb`. The `lpsys.dsn` is a text file and can be opened by notes.
- **Error message: Could not open the database: Login failed.**
  - b) The user does not have the right to access to the database.

#### 3.5 Certificate for Skatte-API and the Inkomstregister

Pedago lön shows how much longer a certificate is valid. When the certificate is entered the program verifies that the certificate and the key match. If there is a problem with this there is a way to check it manually by the commands below:

```
openssl x509 -noout -modulus -in 1090894-4.cer | openssl md5
openssl rsa -noout -modulus -in 1090894-4_private.key |
openssl md5
```

You can also use other openssl alternatives to check it. A windows version of OpenSSL can be found in Tools.

If you encounter a problem in the request of a certificate it could be caused by an older version of OpenSSL installed on the computer. One way of testing is to copy `LpCert.EXE` as well as the files `libcrypto-1_1.dll` samt `libssl-1_1.dll` in the same catalogue and run the request for certificate from there.

#### 3.6 If you send payslips by e-mail

The later versions of Pedago lön include the option of sending payslips. If you are using the program WMailTo in order to send payslips we recommend that you use the function in Pedago lön instead.

## Miscellaneous

#### 3.7 Pedago lön development info

This version is built using MS Visual Studio 2017 and installer with Installshield 2022 R2.

We use Open SSL 1.11 and libcurl 7.79.1 for some functions.

Apache PDFBox is used for encryption of PDF documents.