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# 1 Introduction

## 1.1 Audience

This document is intended for users who are responsible for running system administration operations. We recommend that only people with the necessary knowledge and corresponding training perform the system installation.

Please read this manual carefully and thoroughly before installing PipetteX. Ensure you are familiar with all components within the system. You must be familiar with the database tools and hardware components.

## 1.2 Purpose of this Document

This document provides installation and maintenance information for PipetteX. We recommend that before installation, upgrade, or maintenance of the software you read the related chapters in this document.

## 1.3 Related Documents

For more information, visit ► <https://www.mt.com/rainin-sstanddocs>. Here you will find more tutorials and other documentation or videos.

► <https://www.mt.com/smartcheck>

► [EasyScan LAN / EasyScan USB](#)

► [EasyScan TM USB](#)

► [EasyScan Flex](#)

## 1.4 End User License Agreement (EULA)

The software in this product is licensed under Rainin PipetteX End User License Agreement (EULA) for software, available at ► <https://www.mt.com/eula>. When using this product you agree to the terms of the EULA.

## 1.5 Disclaimer

This document may contain inaccuracies or errors of substantive or typographical nature. METTLER TOLEDO does not assume any responsibility or risk for your use of the information provided in this document. Nothing in this document shall be construed as a guarantee or warranty, either express or implied (including without limitation warranties as to merchantability or fitness for a particular purpose). The software described herein may be dependent on various external factors and configurations, such as system configuration, customer data, and operator control.

The implementation of the products this document relates to may vary consequently, the suitability of specific product configurations and applications must be determined by the customer and is not warranted by METTLER TOLEDO. If you rely on the information or any advice, opinion, or statement in this document, you are doing so at your sole risk. To allow improvements, the information in this document is subject to change.

## 1.6 Use of Third-Party Licenses

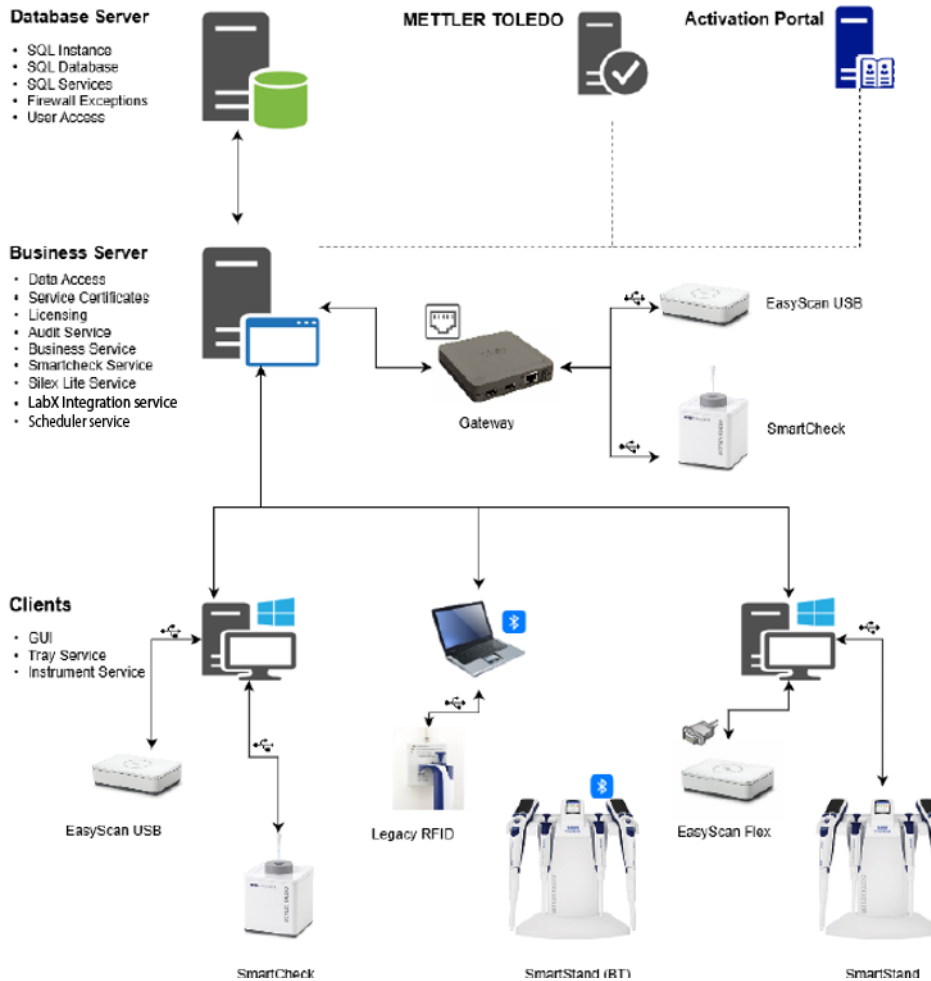
PipetteX uses standard components from third parties. An overview of third-party licenses can be found on ► <http://www.mt.com/licenses>.

## 2 PipetteX System Overview

PipetteX can be installed within your organization either as a standalone or as a distributed system. When installed as a distributed system, all the asset details are stored in a centralized location (database) and all the PipetteX clients available in the network can view and share all the assets.

PipetteX software consists of four main components:

- Client UI Application (User Interface Component)
- Background Application (Windows Service Component)
- Business Server (Windows Service Components for Business Server, SmartCheck, LabX Integration Service, Scheduler Service, Silex Virtual Link Life & Audit Trail)
- Database Server (Microsoft SQL Server)



### PipetteX

#### Client application

The client application is the main interface through which you can view the assets and other instruments connected to your PC. You can configure the way PipetteX behaves using this application.

#### Background application

The background application resides within the client application on your PC and automatically runs even when the PC is not logged in. The status will be indicated with an **X** in the Windows taskbar. The background application maintains the connection to the RFID readers and the database through the Business Server. It logs data received from the connected readers regardless of whether you are logged in or not.

To view data stored in the database, the client application has to be open, and depending on your user rights, information can be looked at. The collected data are shown in different views and tables.

- Dashboard
  - Graph
  - Event viewer
- Assets
  - Manual & Electronic
  - Manual
  - Electronic
- SmartChecks/Balances
  - XSE/XPE/XPR/XSR balances
  - SmartChecks
- Peripherals
  - Readers
  - Method card
  - Gateway
- Address
- User Management
  - Users
  - User roles
  - User qualification
- Metrology
  - Method
  - Test plan
  - Audit trail
  - Bulk E-sign
- Settings
  - Settings (with policies)
  - LabX API configurations
  - Scheduler
  - Print configuration
  - Asset groups
  - Lab regulation levels
  - Comments
  - Reasons

### **Business Server**

The Business Server runs automatically in the background when the PC is running. This component can be run either on the same PC (standalone) or a different PC (distributed system). The Business Server acts as a bridge between the database server and the client applications installed across the network. The following components are installed along with the Business Server:

- PipetteX Audit Service
- PipetteX DB Utility Scheduler Service
- PipetteX Instrument Service
- PipetteX Scheduler Service
- PipetteX LabX Integration Service
- PipetteX SmartCheck Service

The Business Server periodically connects to the METTLER TOLEDO server

- and retrieves: new pipette models available in the market.
- certificates of pipettes for which service or calibration is done through METTLER TOLEDO along with other details.

The Business Server also validates your license subscriptions.



## 3 Preparing the System Installation

### 3.1 System Requirements

PipetteX can be installed either as a **standalone system**, where all the components along with the database are available on the same PC, or as a **distributed system**, where each component resides on a different PC. PipetteX clients can be installed on multiple PCs connected to a Business Server.

#### 3.1.1 Computer

The following tables show the minimal and optimal hardware requirements for running PipetteX. However, the hardware requirements depend heavily on the number of connected readers/type of readers and the operating rate of the readers along with the network capabilities.

If the CPU supports Hyper-Threading, you can double the available cores when calculating the hardware requirements. A dual-core CPU would therefore be counted as a quad-core.

##### 3.1.1.1 Standalone system

Computer	Minimum	Optimum
CPU	2 GHz Dual Core	3 GHz Quad Core
RAM	8 GB	16 GB
Display Resolution	1280 × 768	1920 × 1080
Hard Disk	20 GB free space	40 GB free space
Operating System	Windows 10 - 64 bit (update ≥21H2)	Windows 10 - 64 bit (update ≥21H2)
Installed Components	PC Client, Instrument Service, Business Service, Audit Service, SmartCheck Service, MS SQL Server 2014 SP3	PC Client, Instrument Service, Business Service, Audit Service, SmartCheck Service, MS SQL Server 2022

For standalone systems, all the components (Database, Business Server, and Client) will be installed in the same PC.

##### 3.1.1.2 Distributed system

###### Database Server

Computer	Minimum	Optimum
CPU	2 GHz Dual Core	3 GHz Quad Core
RAM	16 GB	32 GB
Display Resolution	1280 × 768	1280 × 1024
Hard Disk	50 GB free space	100 GB free space
Operating System	Windows Server 2016	Windows Server 2019
SQL Server	MS SQL Server 2014 SP3	MS SQL Server 2022

###### PipetteX Business Server

Computer	Minimum	Optimum
CPU	2 GHz Dual Core	3 GHz Quad Core
RAM	16 GB	32 GB
Display Resolution	1280 × 768	1280 × 1024
Hard Disk	10 GB free space	20 GB free space
Operating System	Windows Server 2016	Windows Server 2019
Installed Components	Business Service, Audit Service, SmartCheck Service	Business Service, Audit Service, SmartCheck Service

## PipetteX Client

Computer	Minimum	Optimum
CPU	2 GHz Dual Core	3 GHz Quad Core
RAM	8 GB	16 GB
Display Resolution	1280 × 768	1920 × 1080
Hard Disk	20 GB free space	40 GB free space
Operating System	Windows 10 - 64 bit (update ≥21H2)	Windows 10 - 64 bit (update ≥21H2)
Installed Components	PC Client, Instrument Service	PC Client, Instrument Service

For distributed systems, we recommend installing the Business Server on a PC/server hardware that is always ON, as it will be constantly polling the METTLER TOLEDO server to synchronize asset and service data.

### 3.1.2 Supported operating systems

The following list shows the supported operating systems of PipetteX.

#### Operating Systems

	Service Pack	Editions	32bit	64bit
Windows 10	21H2	Customer, Business, Education		•
Windows 10	21H2	Long Term Service Channel (LTSC)		•
Windows 11	21H2	Customer, Business, Education		•
Windows 11	21H2	Long Term Service Channel (LTSC)		•
Windows Server 2016		Essential, Datacenter, Standard		•
Windows Server 2019		Essential, Datacenter, Standard		•
Windows Server 2022		Essential, Datacenter, Standard		•

### 3.1.3 Supported SQL servers

PipetteX will install an instance of Microsoft SQL Server 2022 Express Edition to create a database if your PC does not contain an Instance **PipetteX**.

The users can also connect to an already existing Microsoft SQL Server. Details on how to connect to an existing database server are included in [Distributed System ▶ Page 22].

The following list shows the supported SQL servers of PipetteX.

#### SQL Servers

	Service Pack	Editions	32bit	64bit
SQL Server 2014	SP3	Standard, Enterprise & Express	•	•
SQL Server 2016	SP2	Standard, Enterprise & Express		•
SQL Server 2017		Standard, Enterprise & Express		•
SQL Server 2019		Standard, Enterprise & Express		•
SQL Server 2022		Standard, Enterprise & Express		•

### 3.1.4 Additional Requirements

You need to disable the **Hibernate** and or **Standby** options on the PC that are running on the Business server, as PipetteX does not support the **Hibernate** and **Standby** modes. You will find more information, on how to deactivate the **Hibernate** and **Standby** modes under: ▶ <http://support.microsoft.com/kb/920730/en>

### 3.1.5 Additional Software Installed

The following third-party software is required by PipetteX to run. This will install the necessary components automatically.

### Additional Software

Name	Version	Installed by PipetteX
.Net Framework	4.8	•
SQL Server Express 2022	2022	•

**Note**

- The Microsoft Message Queuing (MSMQ) feature will be turned on by the PipetteX installer.

### 3.1.6 Readers

PipetteX supports the following RFID readers with the corresponding configuration. The readers must fulfill the requirements to operate with PipetteX.

#### RFID Reader Devices

	Firmware	USB	Serial	Ethernet	Bluetooth
SmartStand	1.1.1.1	•			•
EasyScan USB	1.1.0.1 0.0.0.0.0	•			
RFID Reader (Legacy)	--	•			
FlexScan Reader	1.0.2.21		•		

**Note**

Driver installation required (Creating Virtual COM)

### 3.1.7 Balances and gateways

PipetteX supports the following instruments with the corresponding configuration. The instruments must fulfill the requirements to operate with PipetteX.

#### Devices

	Firmware	USB	Serial	Ethernet	Bluetooth
XPE Balance	2.20			•	
XSE Balance	2.21			•	
XPR Balance	2.0.401	•		•	
XSR Balance	2.0.501	•		•	
SmartCheck	2.0.3	•+			
Silex Gateway	1.4.0			•	

+ Communication via USB as well as through Gateway

**Note**

To avoid a PC restart, disconnect the Silex gateway from any PipetteX client before upgrading the Business Server.

### 3.1.8 Virtualized environments

Device readers supported by PipetteX are not tested in virtualized environments. However, if the instructions for connecting/redirecting USB/Bluetooth devices in a virtual environment are followed, PipetteX should run correctly.

**Note**

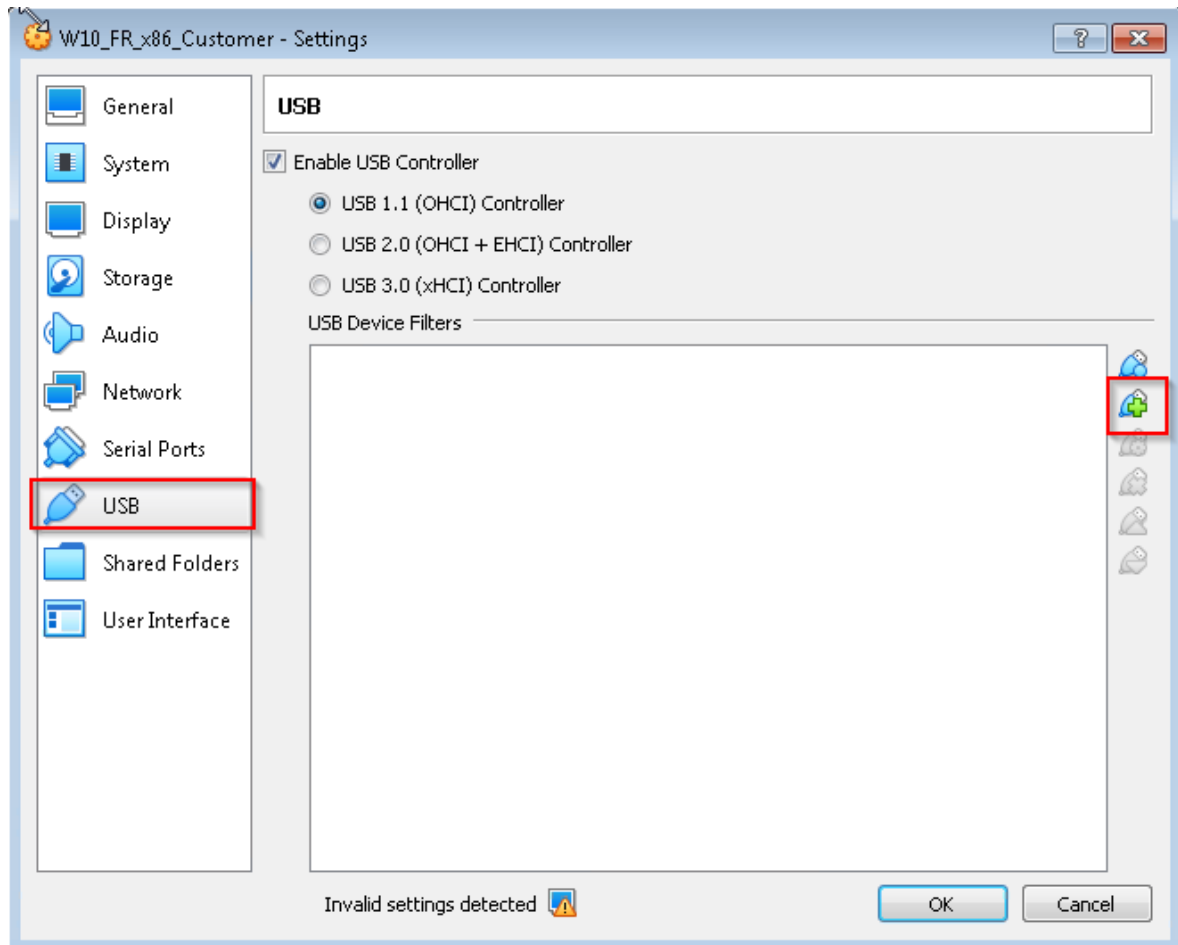
If the Business Server is installed in a virtual environment, the Business Server must be running for it to connect with and retrieve asset details from the METTLER TOLEDO server.

Virtualization Software	PipetteX Installation		Device Connection & Data Transfer	Comments
	Standalone	Distributed		
Oracle: Virtual Box	Not verified	Not verified	Not verified	Use the built-in port forward option in VBox. Refer short setup instructions below.
Microsoft: Hyper-V Manager	Verified	Verified	Not verified	The use of third-party tools like the one specified below allows us to connect with supported devices in virtualized environments, ► <a href="#">COM port in Virtual Machine</a> .
VMWare: Workstation	Not verified	Not verified	Not verified	The use of third-party tools like the one specified below allows us to connect with supported devices in virtualized environments, ► <a href="#">COM port in Virtual Machine</a> .

### Oracle Virtual Box Settings – COM Port Forward

- Ensure the Virtual Box extension pack is installed/enabled
- 1 Plug in the devices, EasyScan USB or SmartCheck in the Host Server, where Virtual Box was installed.
  - ➔ System will list the ports in the device manager of Host Server
- 2 Launch the virtual environment with supported operating system.

3 From the **Settings** tab, navigate to **USB** section and add the relevant port.



→ When the tray service is running in the virtual environment, the pipette system will display the auto-detect popup to add the devices to the application.

### 3.1.9 Supported Active Directory configurations

PipetteX supports the following Active Directory (AD) configurations-domain formats:

- prefix.domain.com
- domain.com
- domain.Forest.suffix.com

### 3.1.10 Supported languages

PipetteX, SmartStand, XPE/XSE, and XPR/XSR support a different list of languages. Mixed languages do not negatively affect any system. The following languages are supported:

#### Languages

Language	PipetteX	SmartStand	XPE/XSE	XPR/XSR
Chinese (simplified)	•			•
Chinese (traditional)	•			•
Czech				•
English	•	•	•	•
French	•		•	•
German	•		•	•
Hungarian				•

Language	PipetteX	SmartStand	XPE/XSE	XPR/XSR
Italian				•
Japanese	•			•
Korean	•			
Polish				•
Portuguese	•			•
Russian				•
Spanish	•		•	•

## 3.2 Pipettes

PipetteX supports Rainin RFID pipettes (manual, electronic, single/multichannel) as well as non-RFID pipettes (any brand).

## 3.3 Pipette Verification

### 3.3.1 Balances

PipetteX supports retrieving routine test reports from XPE and XSE balances connected through network. Support for a RS232/serial connection directly from the balance is not available. Refer to the table below to set up a QuickCheck verification station.

	XPE analytical balance	XPR analytical balance*
<b>Balance**</b>		
<b>Volume to be tested</b>		
≤10 µl	30105893 XPE26 (0.0015mg) 30105897 XPE26DR (0.01-0.005mg)	30355476 XPR26 (0.001mg) 30355530 XPR26DR (0.01-0.001mg)
>10-10'000 µl	30087653 XPE205 (0.01mg) 30087700 XPE205DR (0.1-0.01mg)	30355411 XPR205 (0.01mg) 30355415 XPR205DR (0.1-0.01mg)
<b>Cables and accessories</b>		
USB-RS232 converter cable incl f/f converter	30364315	N/A
Optional LAN port for balance	11132515	N/A
<b>Evaporation trap</b>		
SmartCheck trap 50 mL (for XPE/R205)	30215436	30215436
Evaporation trap 10 mL (for XPE/R26)	11140041	11140041
<b>RFID reader (desktop model)</b>		
EasyScan Flex Reader RS232	30215407	N/A
EasyScan Flex Reader USB	N/A	30416173
<b>RFID tags/cards</b>		
Smart Tag RFID labels 50pcs	30101517	30101517
Smart Tag RFID labels 200pcs	30101518	30101518
Method Card 5pcs	30300929	30300929
Method Card 25pcs	30300930	30300930

\* Released in 2021. Please check feature availability in your country. No rights can be obtained from this document.

\*\* Balance recommendation according to ISO8655-6 2002(E), section 4.1

### 3.3.2 SmartCheck

The SmartCheck is an easy-to-use pipette verification instrument. By default, it will measure to 5% tolerance. Hooking it up to PipetteX allows you to do several things.

#### Connected via USB (standalone case)

Connect to SmartCheck to perform any of the 2 actions below. Afterwards, disconnect the SmartCheck from PipetteX and place it back on the bench.

- Change the tolerance of the SmartCheck (change it to any value between 3-10%).
- Change the firmware of SmartCheck.

#### Connected via USB (connected case)

Connect a SmartCheck to a PC that has PipetteX on it and leave it connected via USB. In addition to the above, you can also:

- Start the Pipette Verification from PipetteX and measure against pipette specific tolerances. Get the verification report automatically assigned to the document history of the pipette (only for the paid license)
- With an EasyScan Flex USB reader, you can turn any PC into an automated pipette verification station.
- Hold an RFID enabled pipette over the reader, have the SmartCheck set itself to the correct tolerance for the pipette.
- Check the pipette and the report will be automatically captured in the software.

#### Connected via a USB-LAN gateway (autonomous case)

Automate your pipette verification process without the need for a PC at the bench. Hookup a SmartCheck and an EasyScan LAN reader to your network and verify any pipette without touching the PC. Note that you will need to install the Silex Gateway in your network environment.

### 3.3.3 Smart tags

PipetteX supports Smart Tags affixed to non-RFID pipettes (both Rainin and non-Rainin).

### 3.3.4 Method cards

PipetteX supports Rainin Method Cards for use in conjunction with non-RFID pipettes to store routine test method parameters.

## 3.4 System Backup

Users are solely responsible for assuring that the SQL database and all data related to PipetteX is backed up in a timely manner.

PipetteX comes with a simple database backup utility installed. For more information and instructions, download the User Manual at ► [www.mt.com/rainin-sstanddocs](http://www.mt.com/rainin-sstanddocs).

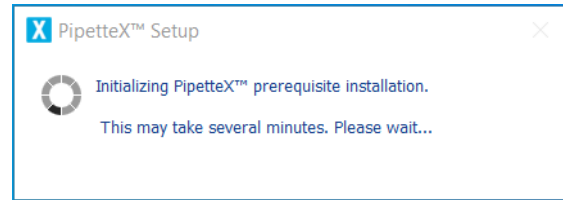
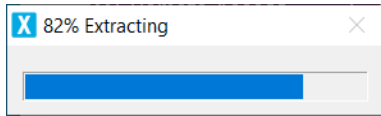
► [PipetteX Support Site](#)

## 4 Installing the PipetteX Software

PipetteX can be installed as a **Standalone System** where all the components are installed and made available on the same PC, or as a **Distributed System** where every component can be installed in a different PC based on your requirement.

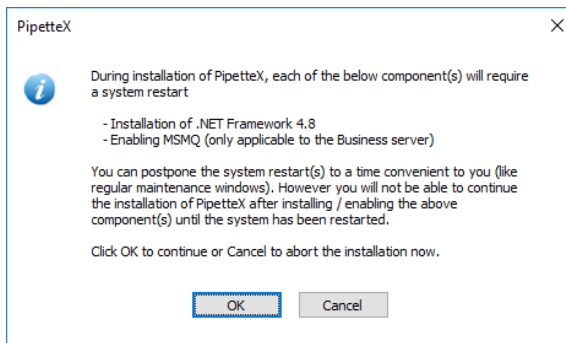
Follow the instructions below to install PipetteX:

- 1 Run the PipetteX installation **PipetteX Setup.exe** as an administrator.
  - ➔ Installation will first check for prerequisites and try to install all the required and missing third party components and Windows services, which are necessary for PipetteX to run.

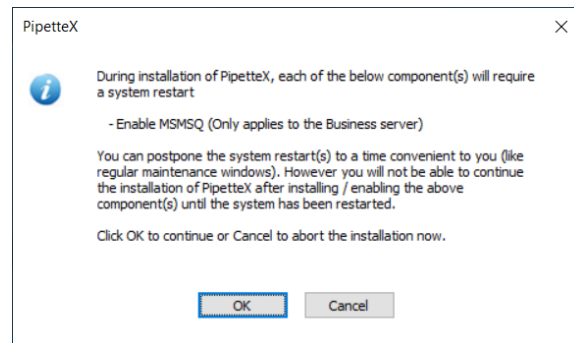


The wizard will inform you about system restart(s) if any of the mandatory prerequisites are not available and ask for your confirmation (see screenshot below) to proceed with the installation.

No prerequisites are available

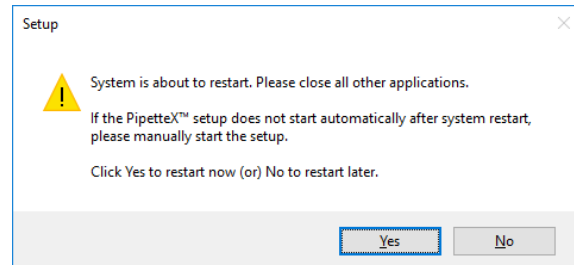
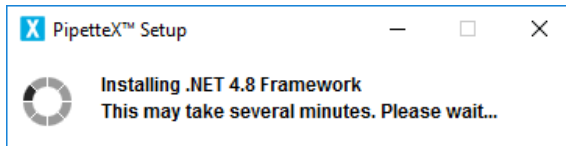


MSMQ not enabled



Similarly message content will list only .Net components, if the .Net version alone is not available. If the PC hardware or server does not have .Net 4.8 installed, PipetteX will install it and the user must restart the PC to proceed.

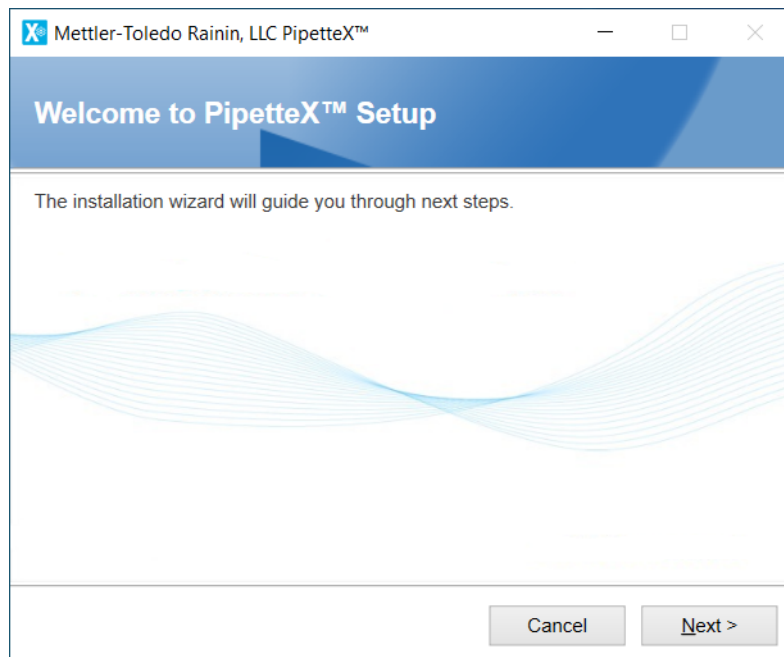
**While installing .Net 4.8 on an active server running other software applications, note that .Net 4.8 in an active server also handles other software applications.**



After the required components are installed, installation of PipetteX starts automatically. If the installation does not start automatically (after re-start), then run the setup again.



2 The PipetteX setup wizard guides you through installation of PipetteX.



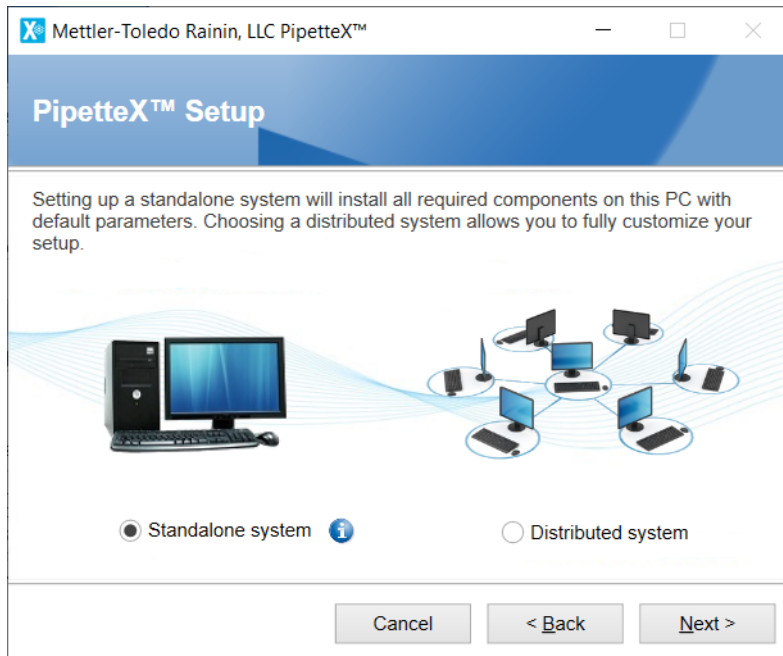
3 Click **Next**.

➔ The **End-User License Agreement** window is displayed.



4 You must accept the **End-User License Agreement** and click **Next** to proceed with installation.

5 Select one of the systems (standalone or distributed).



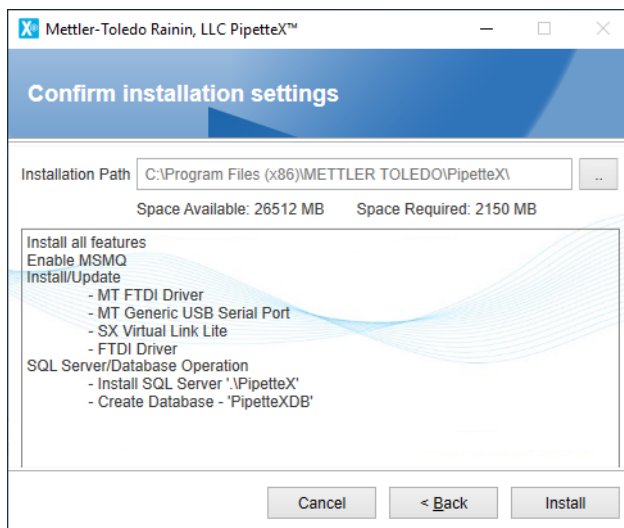
By selecting **Standalone system**, all the components are installed in the same PC and your PC is self-sustained.

By selecting **Distributed system**, all the components are installed across the network.

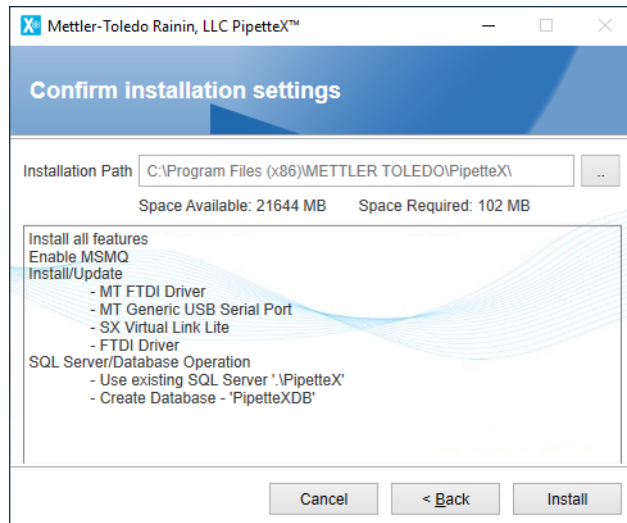
## 4.1 Standalone System

After selecting **Standalone system**, follow the steps below:

1 Click **Next** to begin installation of SQL Server and other components, including drivers.

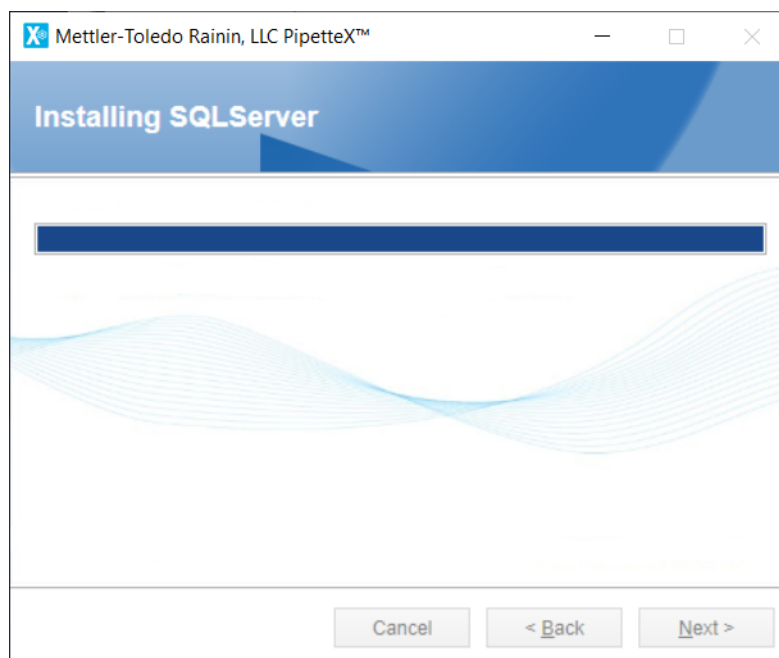


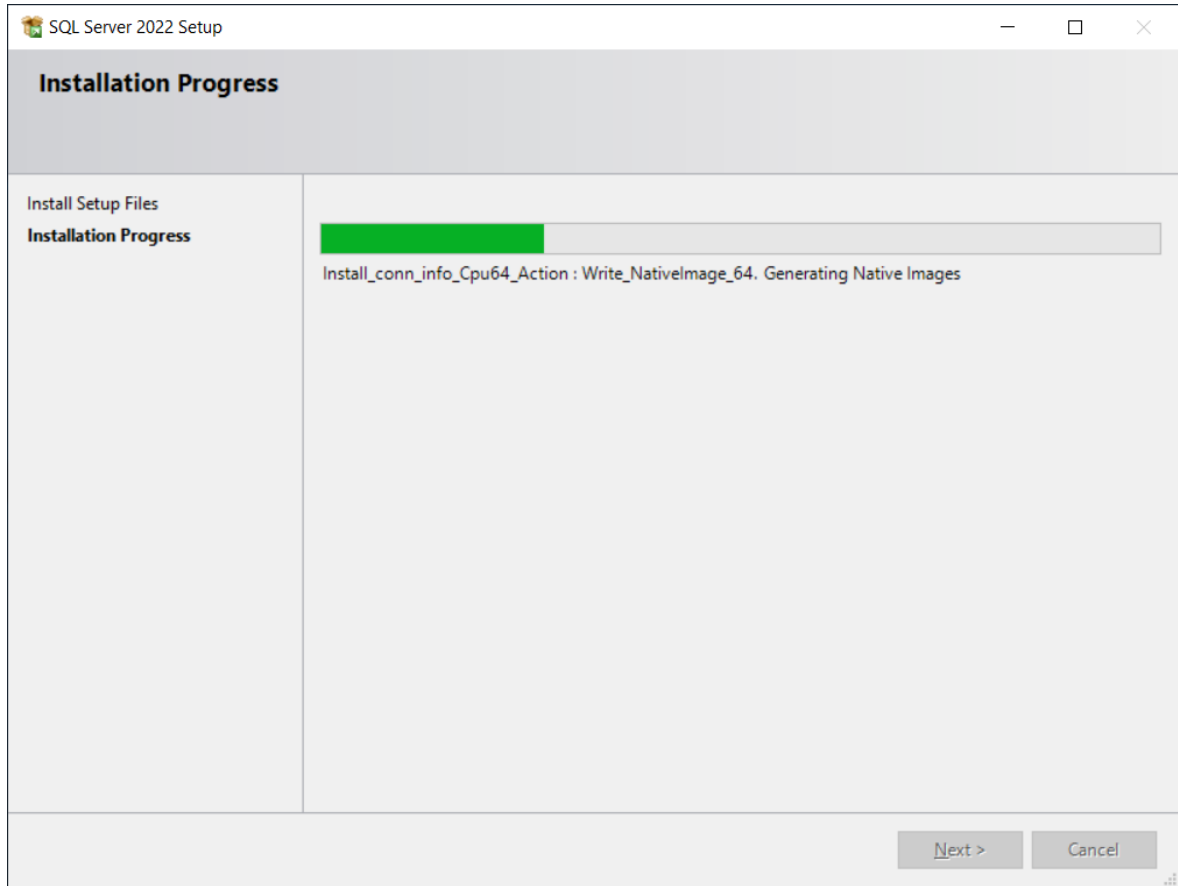
- 2 If the PipetteX SQL server is already installed on your PC, this installation does not create an additional instance of PipetteX. All of the components (Business Server, client, etc.) is installed on the same PC.



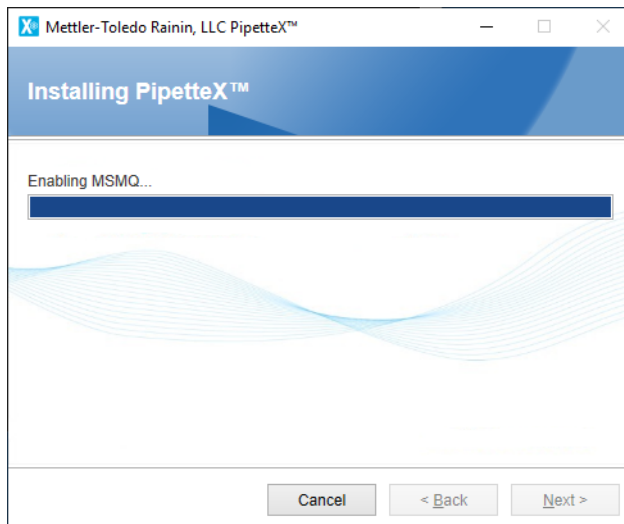
- ➔ On installation, associated data and log files are created and updated in C:\Program Files (x86)\METTLER TOLEDO\PipetteX.

- 3 If the SQL server is already installed, then PipetteX skips the SQL instance alone and other components are installed.

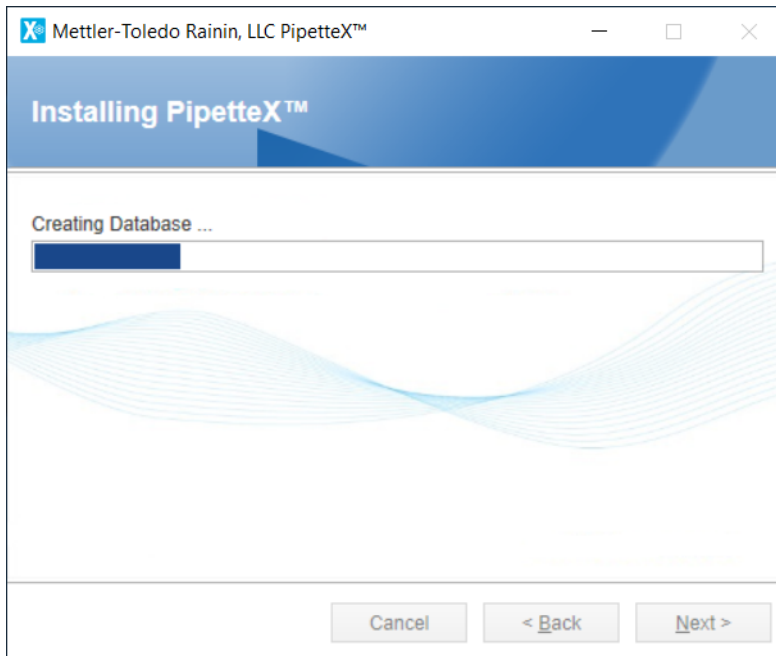




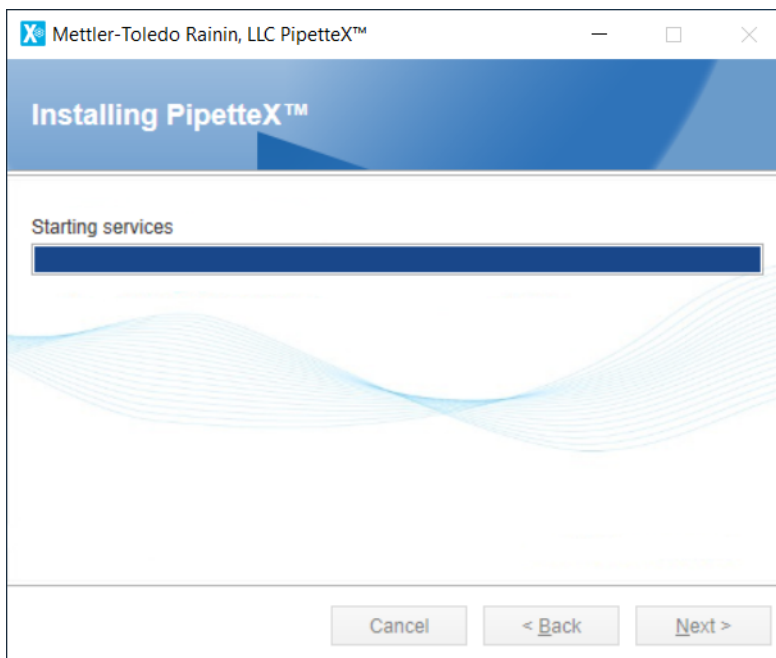
4 You must enable MSMQ. If not, the installer will enable the MSMQ and start installing the other components.



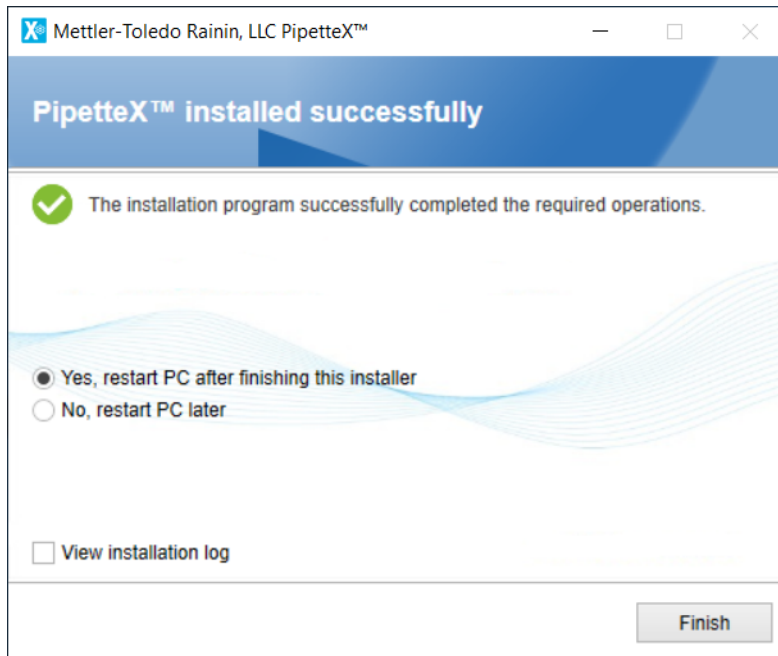
5 The installation continues with a new database creation.



6 After installing all of the components, the PipetteX service will start.



➔ On successful installation, the screen below is displayed.



#### 4.1.1 Supporting information

Make sure the listed components below are available after successful installation. You can find services by typing in "services" in the windows search bar.

##### Services

- PipetteX Audit Service
- PipetteX DB Utility Scheduler Service
- PipetteX Instrument Service
- PipetteX Scheduler Service
- PipetteX LabX Integration Service
- PipetteX SmartCheck Service
- PipetteX Business Service

\*Services run using Logon As user, Network Service.

##### Firewall Ports

Control Panel\All Control Panel Items\Windows Firewall --> Advanced Settings

##### Inbound Rule

- PipetteX Business Service Discovery\_IN (UDP) - 3702
- PipetteX Business Service\_IN (TCP) - 58889
- PipetteX SmartCheck Service\_IN (TCP) - 58890
- PipetteX Instrument Service\_IN (TCP) - 58888
- PipetteX LabX Integration Server\_IN (TCP) - 51138
- PipetteX LabX Integration Client\_IN (TCP) - 51159

##### Outbound Rule

- PipetteX Business Service Discovery\_OUT (UDP) - 3702
- PipetteX Business Service\_OUT (TCP) - 58889
- PipetteX SmartCheck Service\_OUT (TCP) - 58890
- PipetteX Instrument Service\_OUT (TCP) - 58888
- PipetteX LabX Integration Server\_OUT (TCP) - 51138
- PipetteX LabX Integration Client\_OUT (TCP) - 51159

\*Default firewall ports are added during the installation.

## Message Queue

Control Panel\System and Security\Administrative Tools --> Computer Management --> Services and Applications --> Message Queuing --> Private Queues --> pamactivitylog

### 4.1.2 Installation checker

The Installation checker tool delivered with PipetteX helps to identify errors and warnings that are open after the software installation.

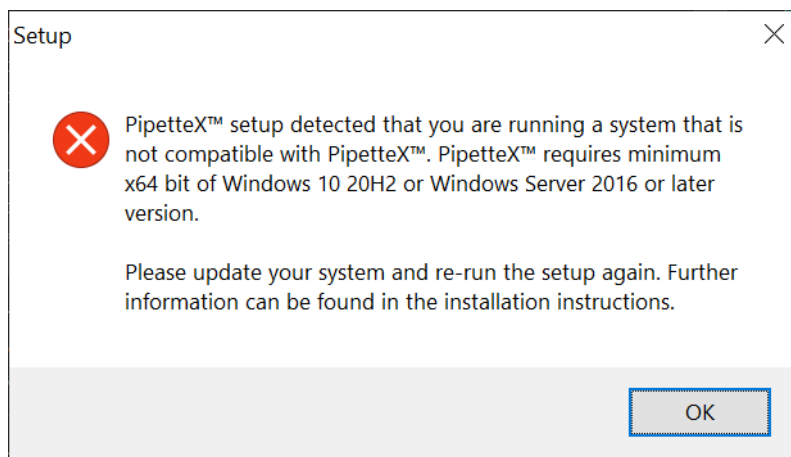
Entry	Parameter1	Parameter2	Parameter3	Parameter4
<b>Installation checker</b>				
IC Version	4.0.0.48			
IC Rating Definition Version	4.0.0.48			
IC Selected Components	Standalone			
<b>System</b>				
PipetteX Version	PipetteX	4.0.0.48		
PipetteX Activation State	Not Activated			
Operating System	Windows 10 Enterprise Edition, 64-bit, 10.0.19044.0	Service Pack (None)	X64	English (United States)
Installed Patches	Installed Patch ID	Installed Patch Date		
System Localization	en-US	1234567890.00	Date (Short):03-Apr-23; (Long) :Monday, April 3, 2023; Time :5:08:59 PM	Keyboard :US
Installed Keyboard Layouts	en-US	1234567890.00	Date (Short):03-Apr-23; (Long) :Monday, April 3, 2023; Time :5:08:59 PM	Keyboard :US
System CPU (min. = 2 GHz)	Name : 11th Gen Intel(R) Core(TM) i7-1165G7 @ 2.80GHz	Type : Central Processor	Clock Speed : 1.69 GHz	Core: 4
System Memory (min. = 2 GB)	Total : 31.76 GB	Free : 17.77 GB		
Current User	DHARMARA-2			
Group Membership	Name of the user			
Users and Groups	Name of the user	Assigned group		

### 4.1.3 Installation on x86 systems

The following conditions are applicable only for **Standalone system**:

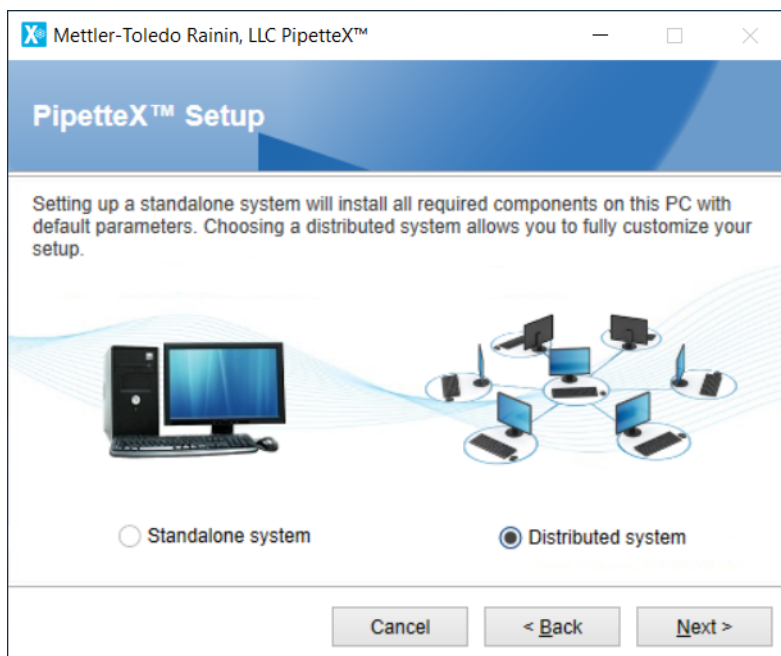
- By default, the installer comes with an SQL server that supports only x64 systems. Hence fresh installation is not supported in x86 systems.
- If SQL server is already available on your PC, it is possible to install or upgrade PipetteX.

You can select a distributed system to install all PipetteX components on a single PC.



## 4.2 Distributed System

By selecting a distributed system, you can fully customize your setup.



### **i** Note

- Only PipetteX-specific components and their associated services are removed when you uncheck the components during the modification operation. The third-party components like SQL Instance, Drivers, .Net, and MSMQ are not reverted, even if it was installed with PipetteX components.
- During modification operation, the existing firewall ports are not cleared. Only new firewall ports are added for the new component.



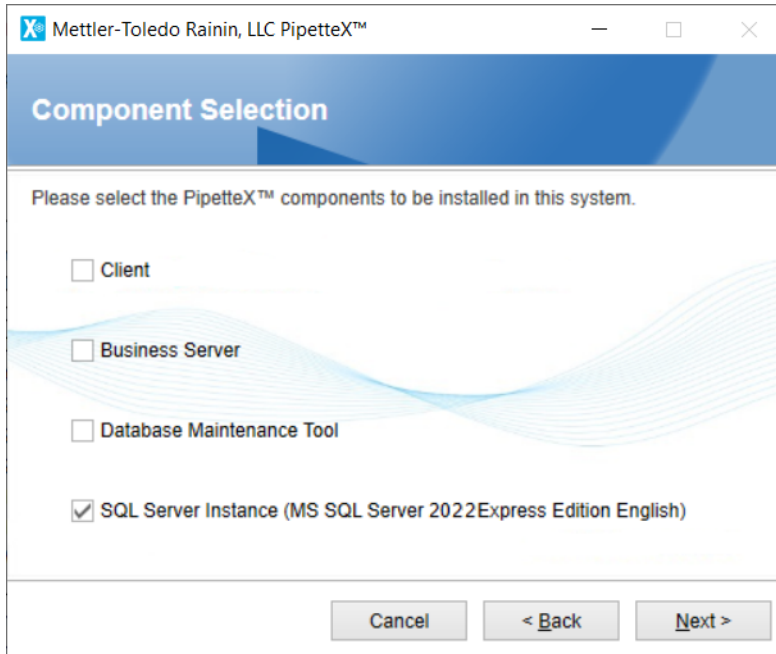
## 4.2.1 SQL server instance installation

To create a new SQL instance and to access over the network, follow the steps below:

- 1 Select the **SQL Server instance** option.

**Note**

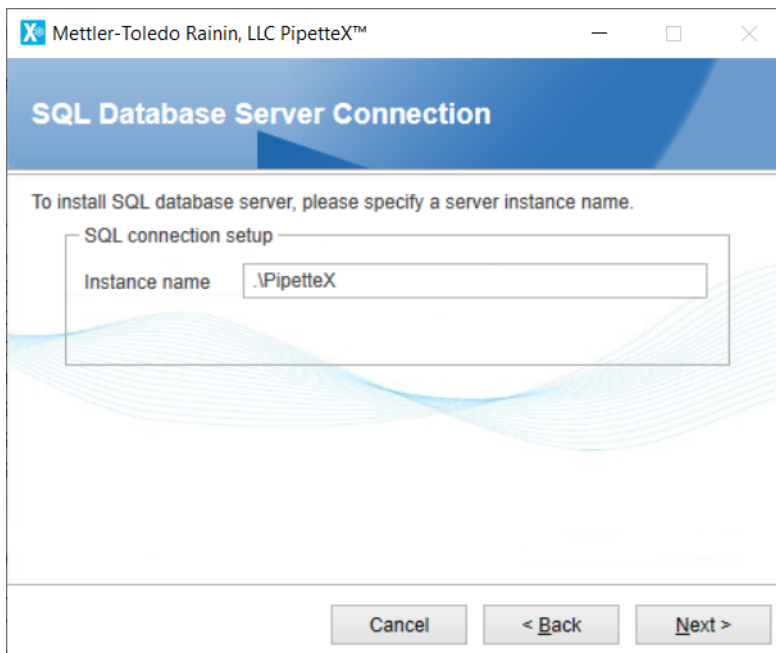
The Database Maintenance Tool option should be checked only when the PC hardware already contains the PipetteX database. Since it is a fresh installation, no database exists. Hence, the option is unchecked.



- 2 The screen below shows where you can specify the **Instance name**. Otherwise, the default name "PipetteX" is used for the new SQL server.

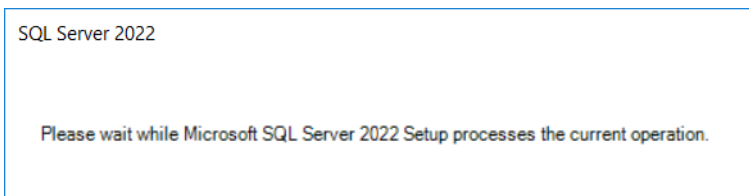
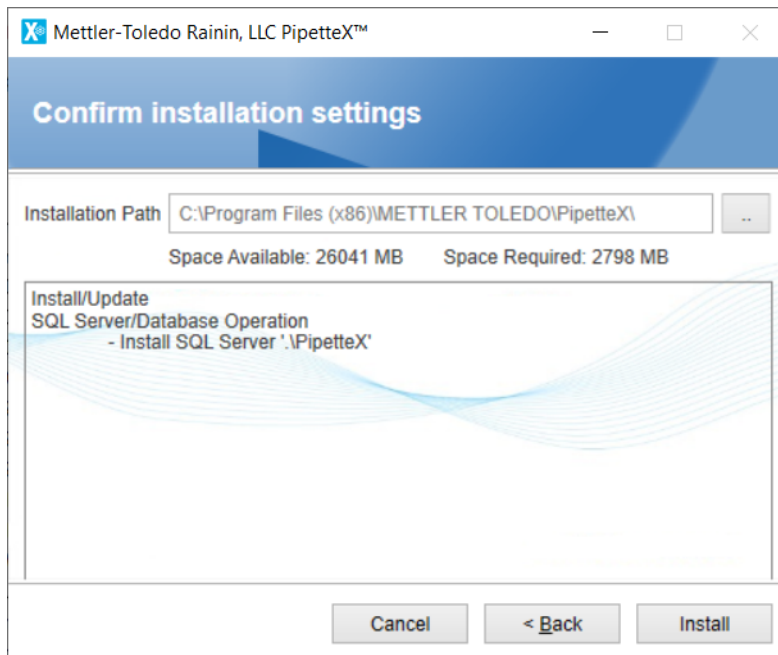
**Note**

If you would like to use any of the existing SQL servers (either existing "PipetteX" or other named instances), then discard this setting. During "Business Server" installation, the system will ask you to fetch the existing SQL instances.

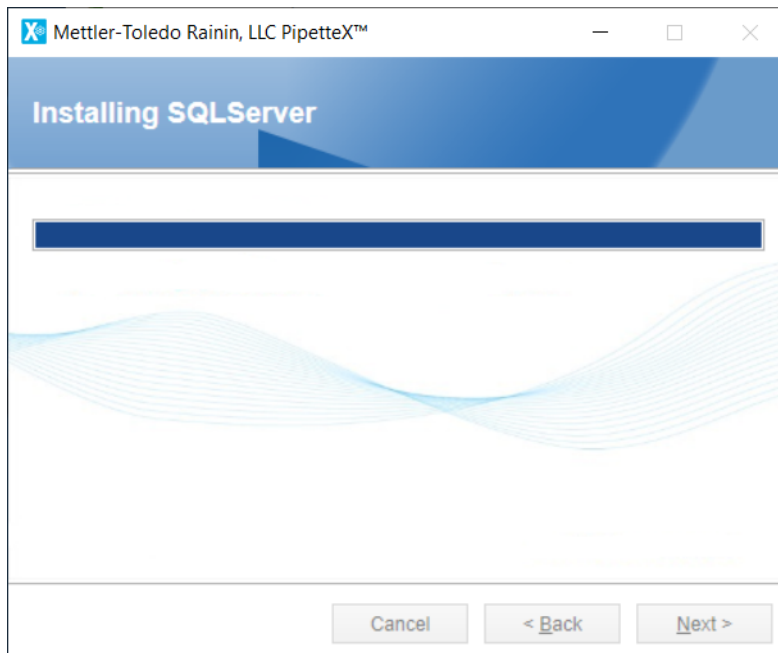


3 Click **Install**.

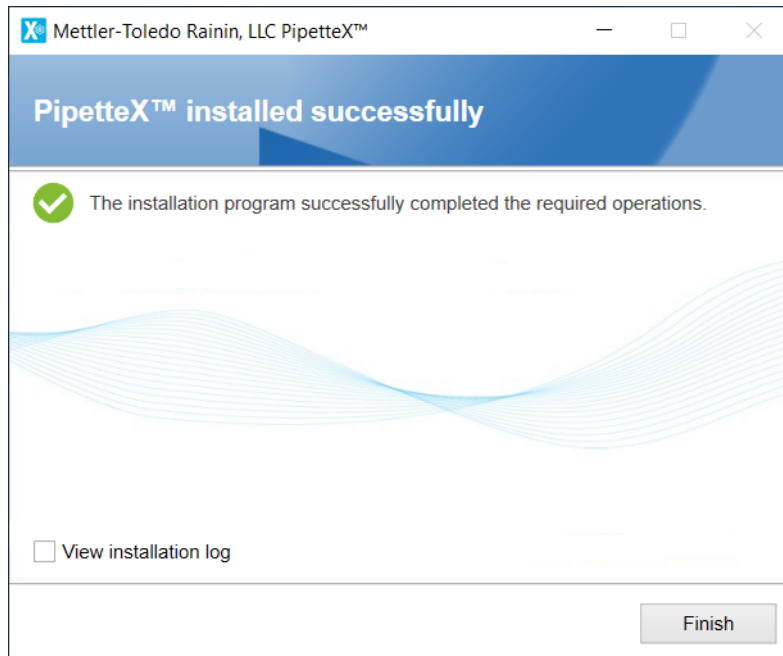
➔ You agree to create SQL server as specified in the confirm installation settings page.



➔ The SQL server proceeds with the installation.



4 After successful installation, restart the server (if prompted).



**Note**

- Prerequisite installation of .Net 4.8 is not installed already
  - Restart mandatory, whether it's a PC client or server
- PipetteX installation: MSMQ (Message Queuing) not enabled already (installed along with Business Server)
  - Restart mandatory, installation is rolled back.
- SQL installation cannot proceed due to pending restart (installed along with SQL)
  - Restart mandatory, SQL Error code 2067919934

#### 4.2.1.1 Supporting information

Ensure the components listed below are available after successful installation of SQL instance.

##### Services

- SQL Server (PIPETTEX)
- SQL Browser

**Note**

Services run using Logon As user Network Service and Local Service respectively.

##### SQL Protocols

Control Panel\System and Security\Administrative Tools → Computer Management → Services and Applications → SQL Server Configuration Manager → SQL Server Network Configuration → Protocols for PipetteX. Status → Enabled for all protocols.

##### Firewall exceptions

Firewall exceptions are added automatically when installed using the PipetteX Installer. For existing SQL instances, refer [► Configure the Windows Firewall to allow SQL Server access.](#)

**Note**

- The service detail and SQL protocols above are specific to the new "PipetteX" instance created by the installer. If you are using an existing instance, ensure the services are up and running, permissions are granted on relevant protocols and firewall exceptions are set.

#### 4.2.2 Business server installation

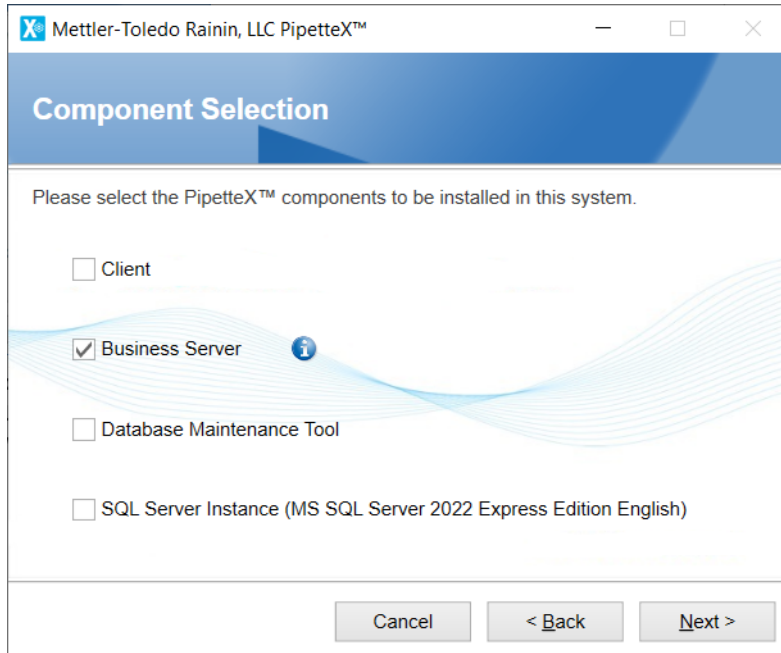
For a distributed setup, you must involve an IT admin with domain knowledge since it could require domain admin rights to setup the server.

**Note**

- A Business Server installation is possible without the "SYSADMIN" access to the service account user
- The permissions below should be available for the user running the Business Server
  - "DBCREATOR" to establish connection between Business Server and DB Server
  - "DBOWNER" to backup and restore the database using third party tools
  - "Alter Any Login" to modify/repair the business service installation

Follow the steps below to install the **Business Server**:

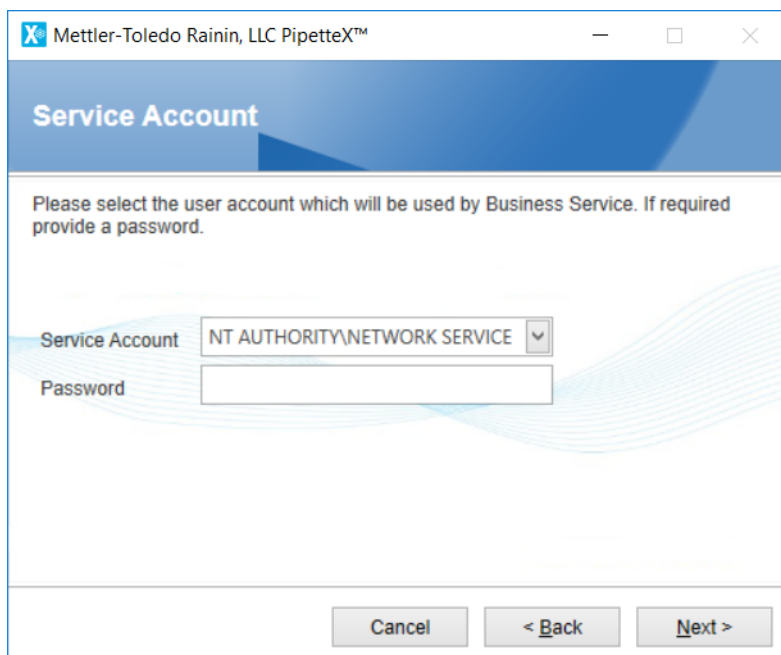
1 Select the corresponding option from the **Component Selection** screen.



➔ The following screen is displayed where you can either:

- Enter the domain user with Admin privileges for the SQL server to make the Business Server run seamlessly.
- Select **NTAUTHORITY\NETWORK SERVICE** from the **Service Account** drop-down list.

**Option 1 – Default service account**



## Option 2 – Domain user who has relevant access to SQL server

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### Service Account

Please select the user account which will be used by Business Service. If required provide a password.

Service Account: ap/raininet-2

Password: ●●●●●●

Cancel < Back Next >

2 After you select the **Service Account**, the installer proceeds with the database installation.

➔ The following screen is displayed where you can either:

- Choose the SQL Server instance or edit the **Instance name** if the SQL Server instance is installed in a different subnet with the help of PC name or IP address.
- Provide the SQL Authentication details to have full access to the database if the SQL Server instance is installed with SQL Authentication.

There are two options to continue, either to specify the **PC name** or the **IP address** where the SQL instance exists:

### Option 1 - Connect with the Database Server using IP details

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### SQL Database Server Connection

Please provide SQL server details

SQL connection setup

Instance name: 172.29.125.122\PipetteX

Database name: PipetteXDB

Test connection

Cancel < Back Next >

**Note**

You can only proceed after a successful connection test with the instance you have specified. If the connection fails, you can check for an error message by hovering over the fail icon in the tip tool.

- Select a time zone from the **Time Zones** drop-down list.

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### Time Zone Screen

Please select a Time zone

Time Zones (UTC+05:30) Chennai, Kolkata, Muml

**!** The selected time zone should match with the time zone of existing business server machine. All date/time columns in database will take and apply this time zone. This action cannot be reverted back once done.

Cancel < Back Next >

- Click **Next**.

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### Business Server Port Configuration

Define the ports for the Business Server

Business Server Port 58889

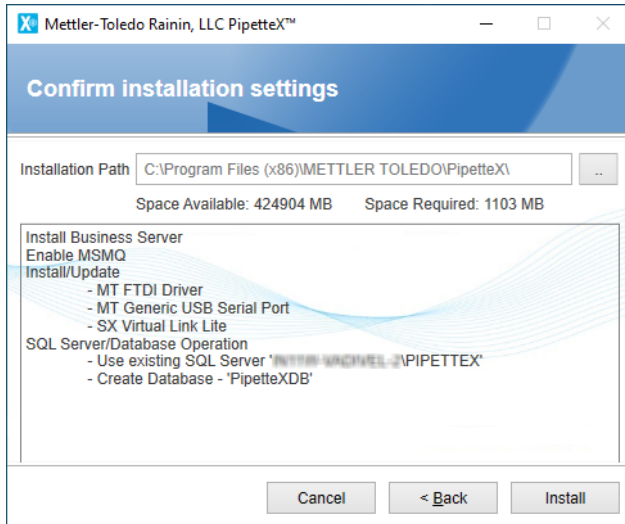
SmartCheck Server Port 58890

PipetteX LabX Integration Server Port 51138

PipetteX LabX Integration Client Port 51159

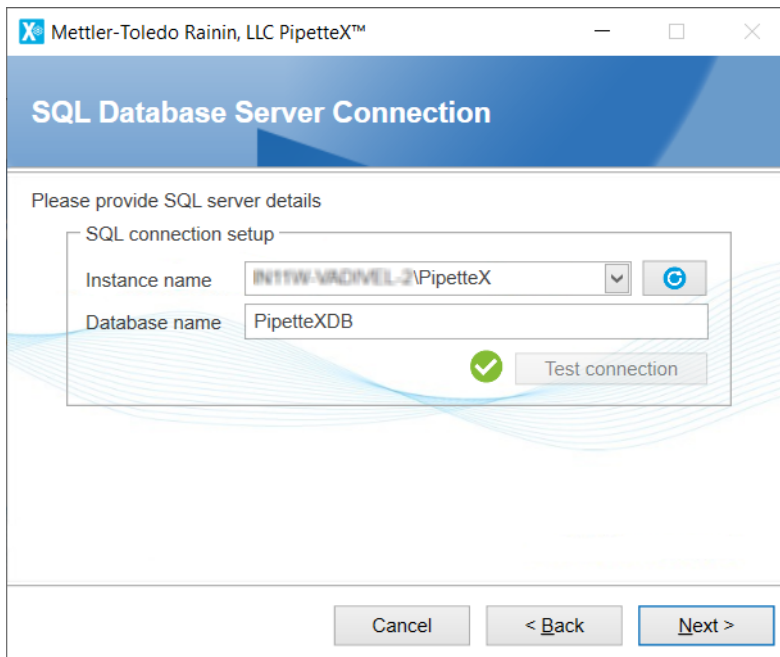
Cancel < Back Next >

- Click **Install**.

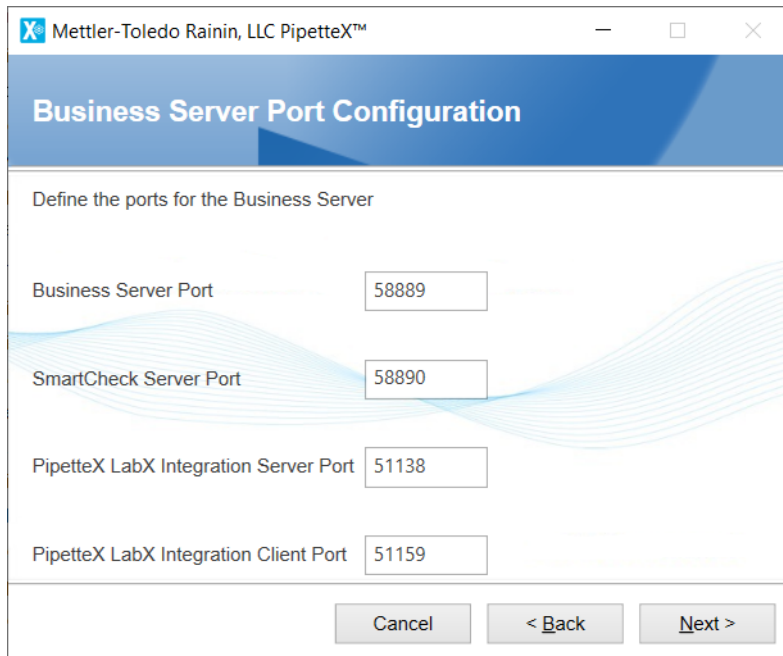


## Option 2 - Connect with the Database Server using PC name details

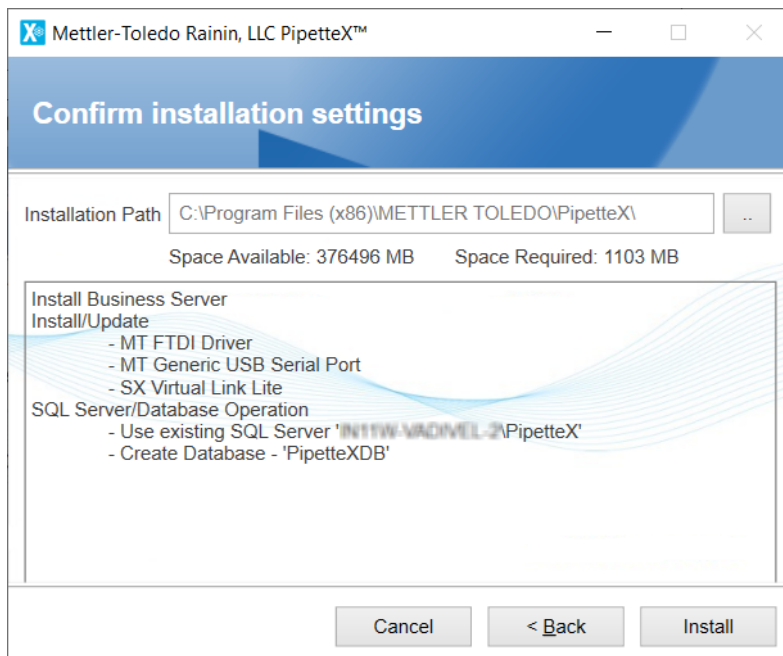
- Click **Next**.



- Enter the ports for the Business Server and click **Next**.



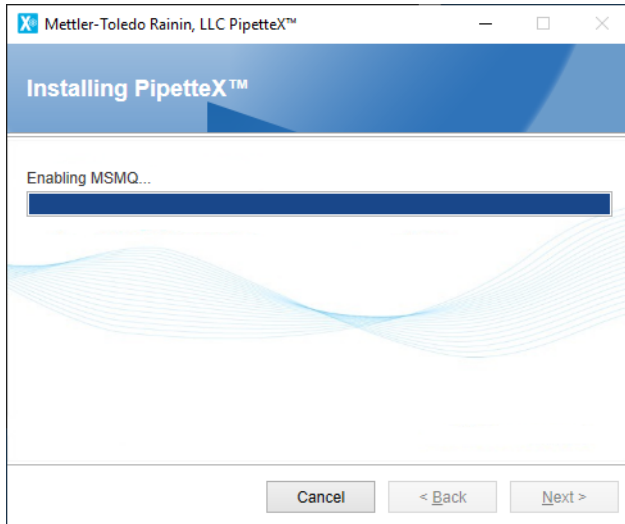
- Click **Install**.



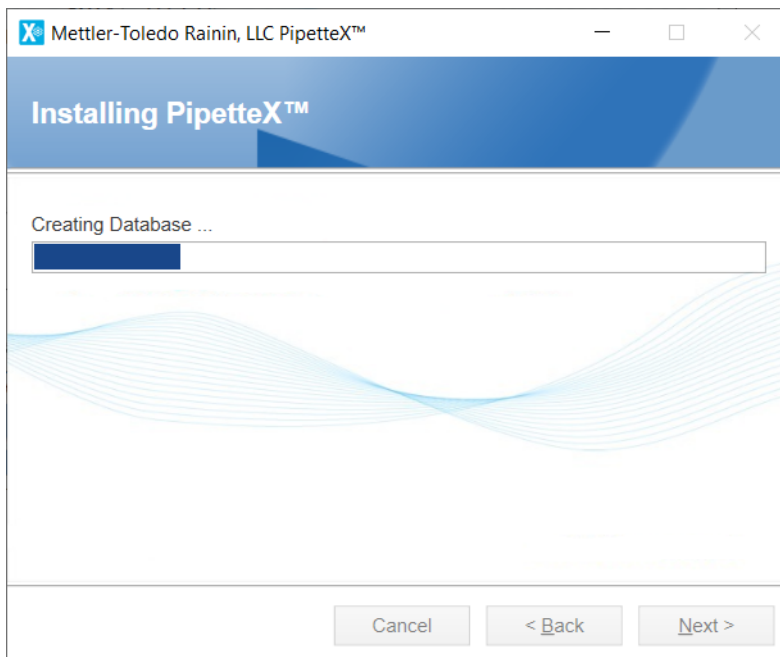
**Note**

- The line item **Enable MSMQ** will be displayed only when the feature is not enabled in the hardware.
- Choose any one of the options mentioned above to install the Business Server component. Installation starts with enabling MSMQ feature in the PC hardware as SQL instance exists already on the remote server.

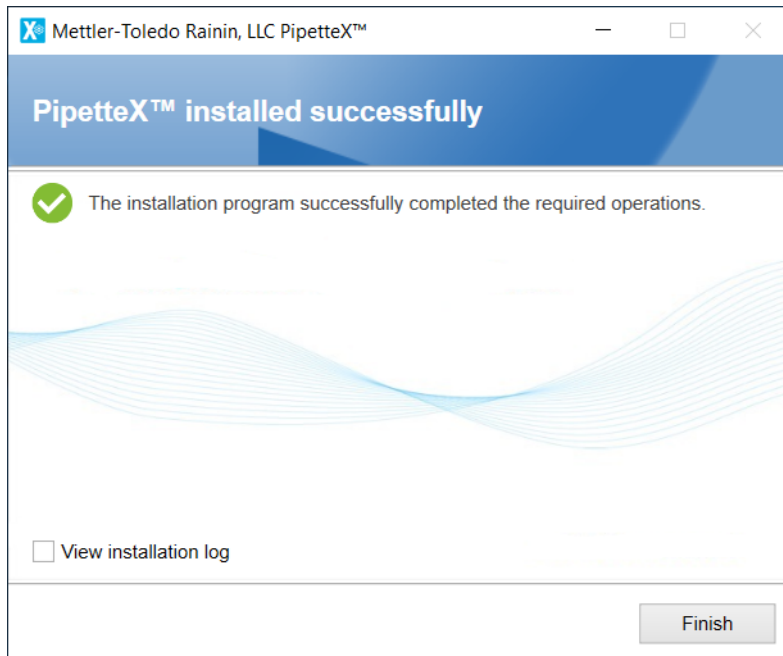




3 The installation continues with the creation of a new "PipetteXDB" database in the selected SQL instance.

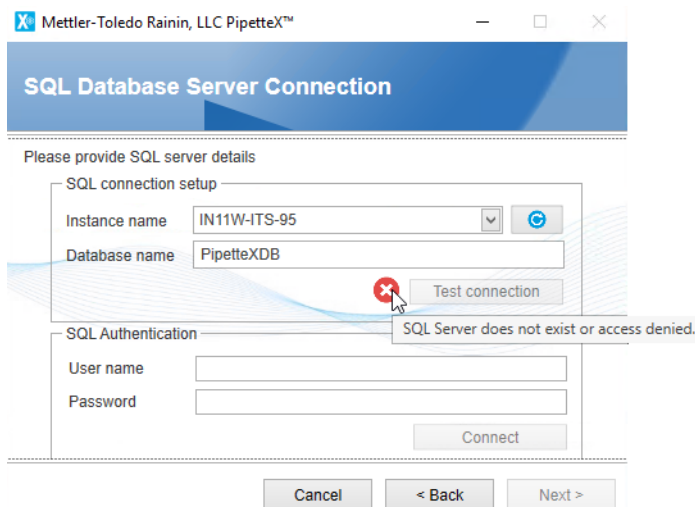


4 The installer then proceeds with installing the Business Server and associated components.  
➔ After successful installation, restart the server if prompted.



**Note**

- If you see the error message below during Business Server installation (even after proper configuration), refer to this link to update your registry entries ► [https://support.pitneybowes.com/VFPO6\\_KnowledgeWithSidebarTroubleshoot?id=KA21E00000fxn4SAA&popup=false&lang=en\\_US](https://support.pitneybowes.com/VFPO6_KnowledgeWithSidebarTroubleshoot?id=KA21E00000fxn4SAA&popup=false&lang=en_US)



#### 4.2.2.1 Supporting information

Ensure the components listed below are available after successful Business Server installation.

##### Services

- PipetteX Audit Service
- PipetteX DB Utility Scheduler Service
- PipetteX Instrument Service
- PipetteX Scheduler Service
- PipetteX LabX Integration Service
- PipetteX SmartCheck Service

\*Services run using the **Logon As user** you specified during installation (e.g., Network Service or designated user who has relevant access to the database).

## Firewall Ports

Control Panel\All Control Panel Items\Windows Firewall or Windows Defender Firewall depending on the Windows version --> Advanced Settings

Inbound Rule

- PipetteX Business Service Discovery\_IN (UDP) - 3702
- PipetteX Business Service\_IN (TCP) - 58889
- PipetteX SmartCheck Service\_IN (TCP) - 58890
- PipetteX LabX Integration Server\_IN (TCP) - 51138
- PipetteX LabX Integration Client\_IN (TCP) - 51159

Outbound Rule

- PipetteX Business Service Discovery\_OUT (UDP) - 3702
- PipetteX Business Service\_OUT (TCP) - 58889
- PipetteX SmartCheck Service\_OUT (TCP) - 58890
- PipetteX LabX Integration Server\_OUT (TCP) - 51138
- PipetteX LabX Integration Client\_OUT (TCP) - 51159

\*Firewall ports are added based on the user input provided during the installation.

## Message Queue

Control Panel\System and Security\Administrative Tools → Computer Management → Services and Applications → Message Queuing → Private Queues → pamactivitylog

### 4.2.3 Database maintenance tool installation in database server (optional)

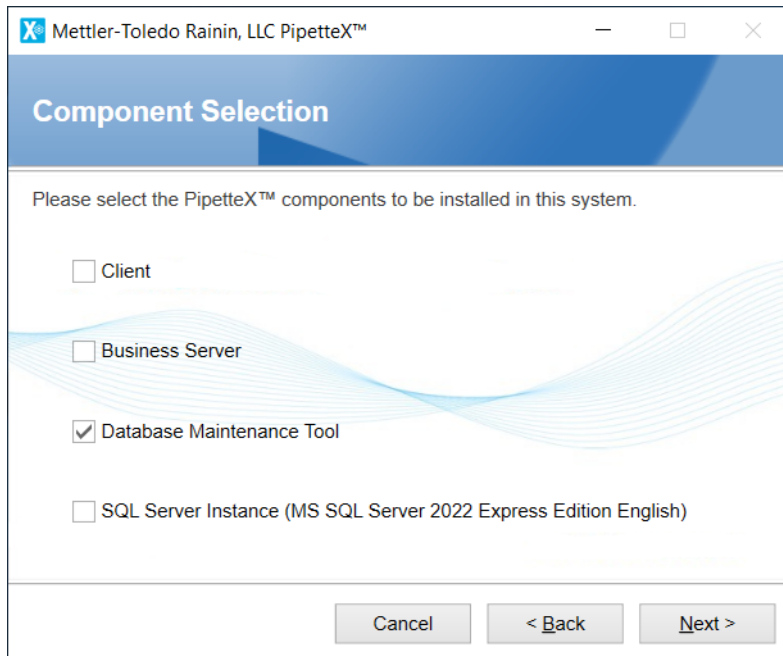
Along with other features, the **Database Maintenance Tool** is used to backup and restore your database.

#### Note

- The tool must be installed on to the same PC where the database is installed.
- The Database Maintenance Tool also works for the user with:
  - "DBOWNER" access for the database
  - "DBCREATOR", "Alter any login" and "View Server state" access for the instance

#### **Option 1: Before installing Database Maintenance Tool, consider using a database created in any of the existing SQL Instance**

- 1 Select the **Database Maintenance Tool** check box and click **Next**.

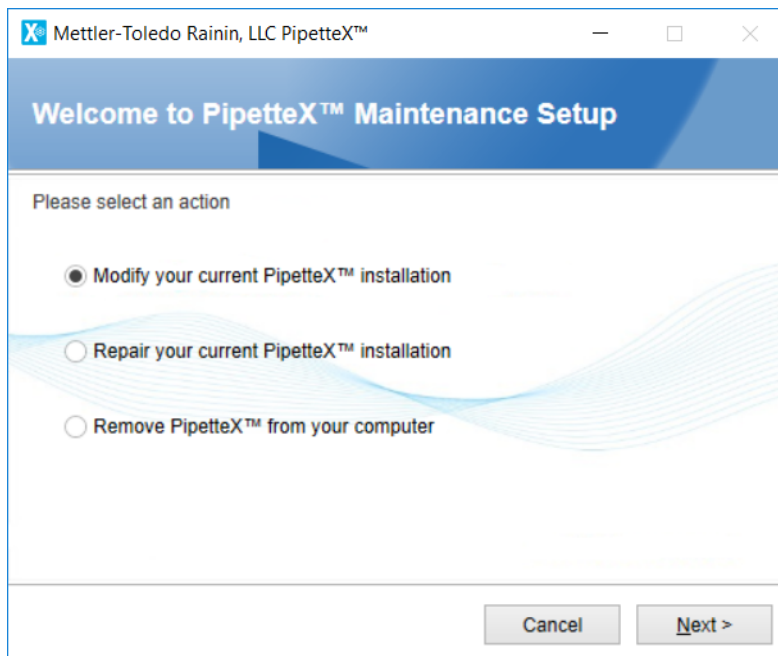


**Note**

The **Database Maintenance Tool** option should be checked only when the PC hardware already contains a PipetteX database.

**Option 2: When installing the Database Maintenance Tool, consider using a database created in the PipetteX instance**

2 Select the **Modify your current PipetteX installation** check box.



3 Click **Next**

- 4 Select the **Database Maintenance Tool** check box and click **Next**.

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### Component Selection

Please select the PipetteX™ components to be modified in this system.

Client

Business Server

Database Maintenance Tool

Cancel < Back Next >

- 5 Provide the service account information - **Service Account** and **Password**.


Mettler-Toledo Rainin, LLC PipetteX™

### Service Account

Please select the user account which will be used by DB Utility Scheduler Service and also provide a password.

Service Account AP\bala-2

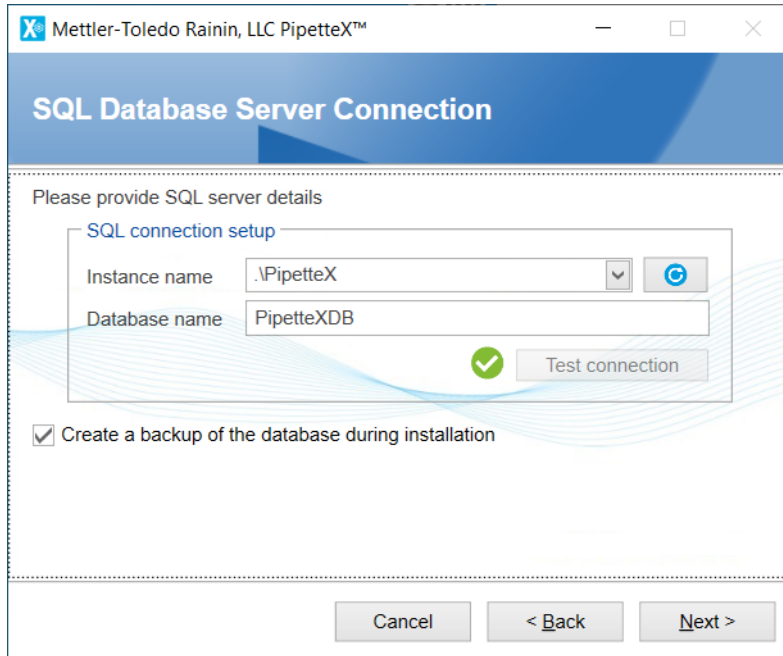
Password .....

 The service account must have DB backup rights.

Cancel < Back Next >

Continue with any of the options provided above. The installer checks for SQL instance and a valid database instance before you can install this tool.

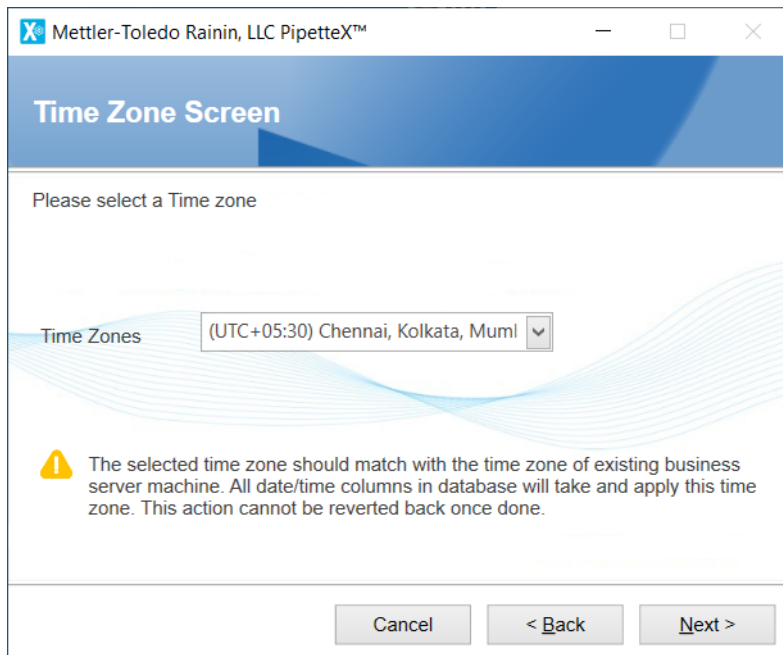
- 6 Select the database instance from the **Instance name** drop-down list.



**Note**

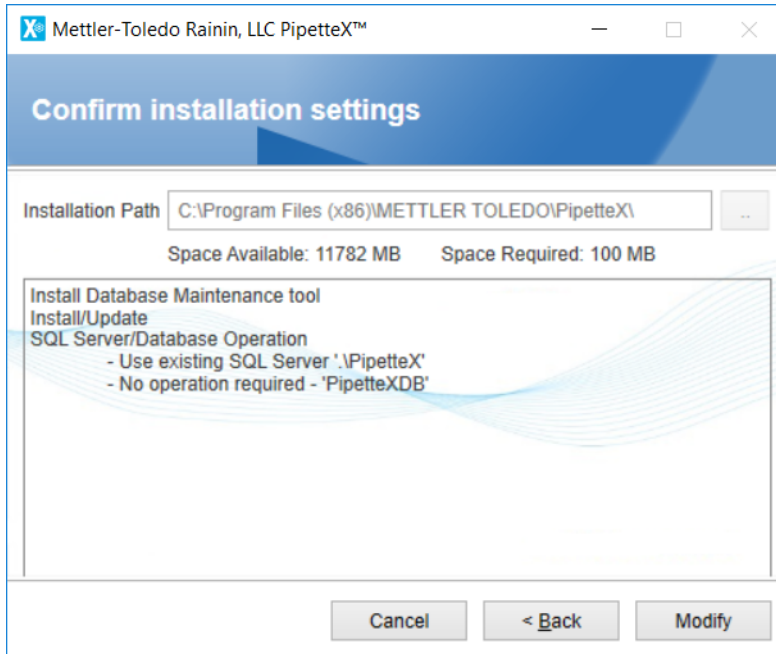
As a follow-up to the distributed installation specified, the "PipetteX" instance created above as the reference. If you are using an existing instance, ensure the relevant instance is selected.

7 Select a time zone from the **Time Zones** drop-down list.

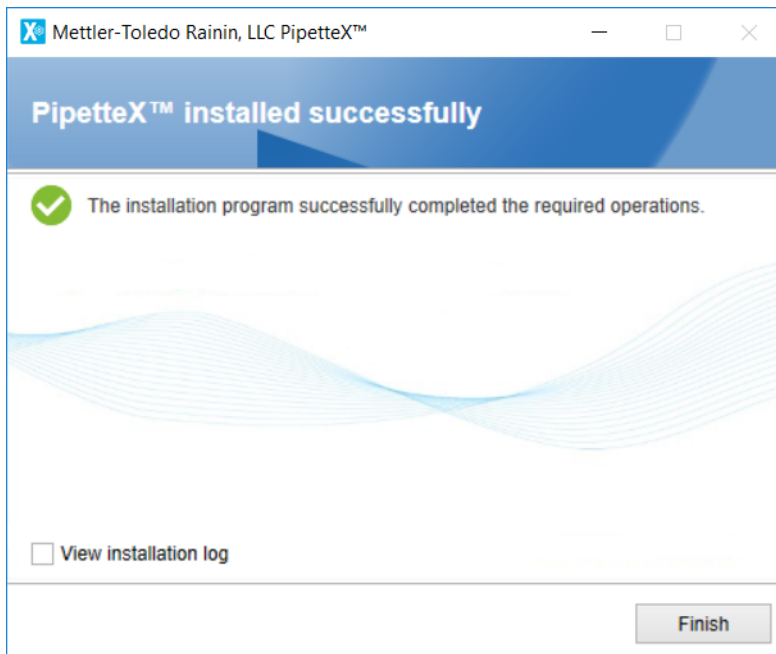


8 Click **Next**

- ➔ Once the valid SQL instance and the database are selected and the test connection is successful, the installer allows you to proceed with installing the Database Maintenance Tool.

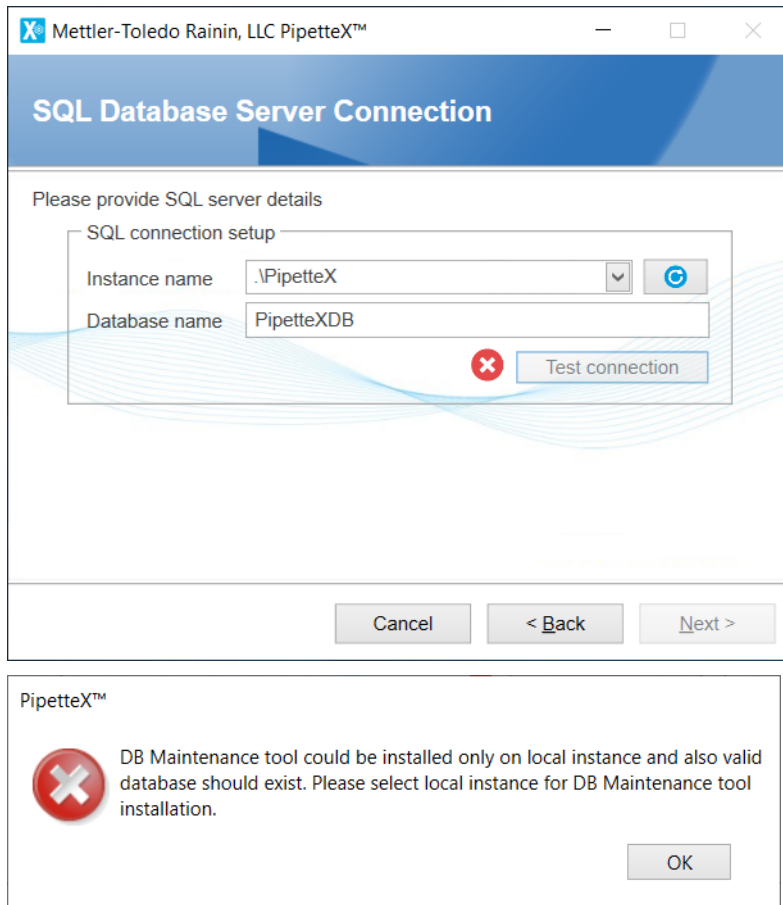


9 Click **Modify**.



**Note**

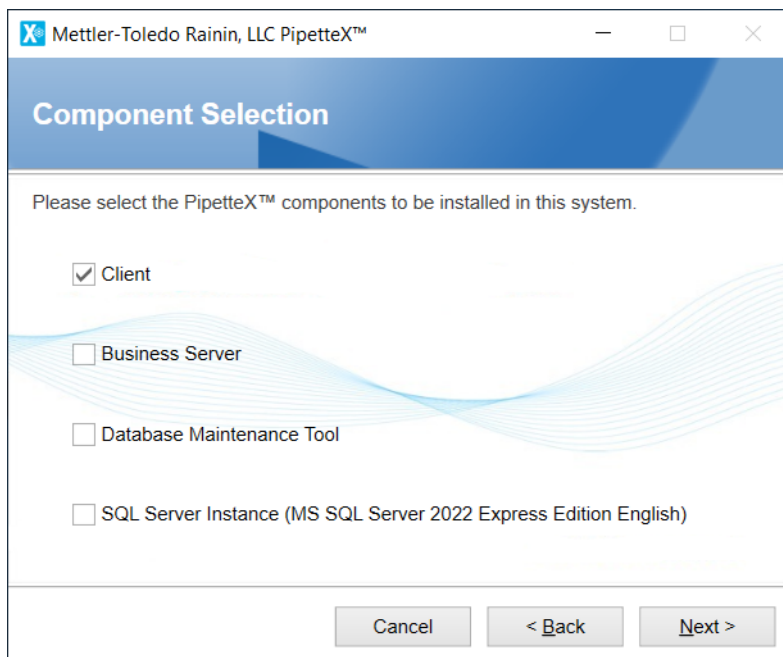
If no valid database exists in the selected SQL instance, the installation wizard will notify you that the test connection has failed. The error message dialog box below appears when you click the error icon.



#### 4.2.4 Client component installation

Follow the instructions below to install the PipetteX Client onto your PC:

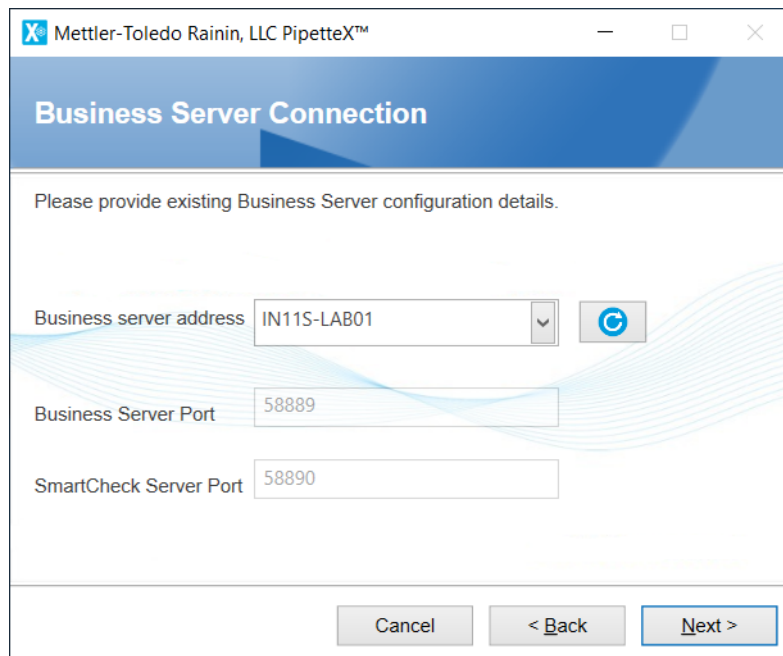
- 1 Select the **Client** option from the **Component Selection** screen.



- 2 Click **Next**.



**Option 1:** You will be prompted to choose the **Business Server address** from the screen below. The installation wizard, by default, fetches the firewall ports defined in Business Server for communication, while we select a Business Server from the list. The firewall ports displayed in this case are not editable:



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### Business Server Connection

Please provide existing Business Server configuration details.

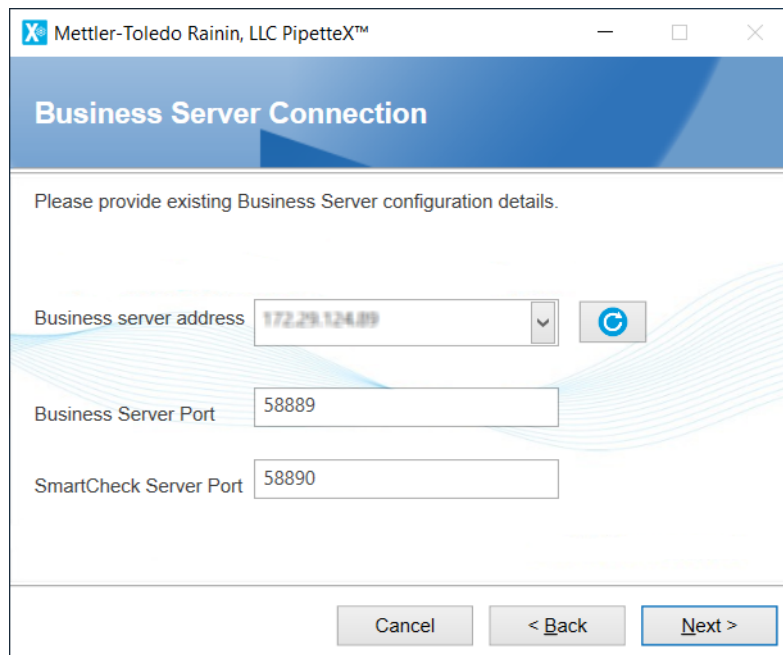
Business server address: IN11S-LAB01

Business Server Port: 58889

SmartCheck Server Port: 58890

Buttons: Cancel, < Back, Next >

**Option 2:** If the Business Server is not listed for any reason. You must enter the Business Server name or its IP address to continue. In this case, it is your responsibility to provide the correct firewall ports during Business Server installation. If not, this may lead to installation failure.



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### Business Server Connection

Please provide existing Business Server configuration details.

Business server address: 172.29.124.89

Business Server Port: 58889

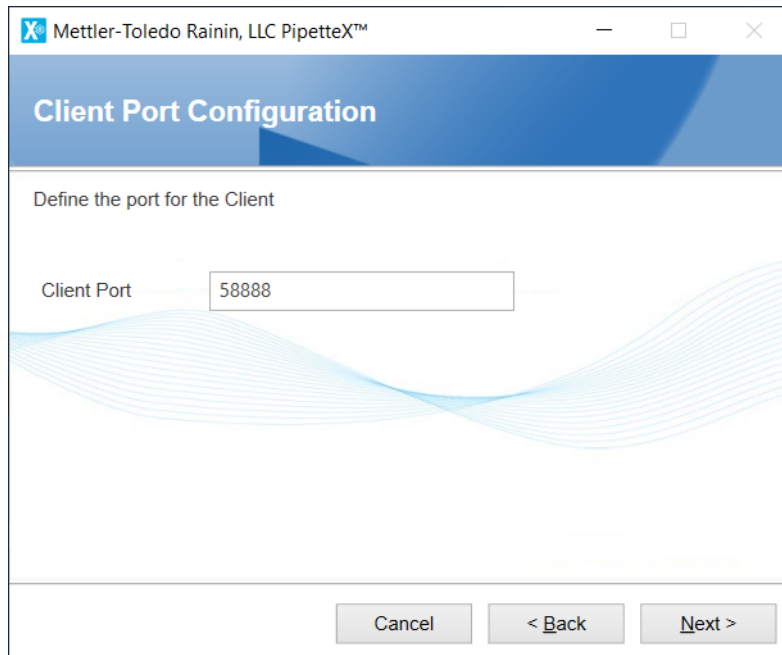
SmartCheck Server Port: 58890

Buttons: Cancel, < Back, Next >

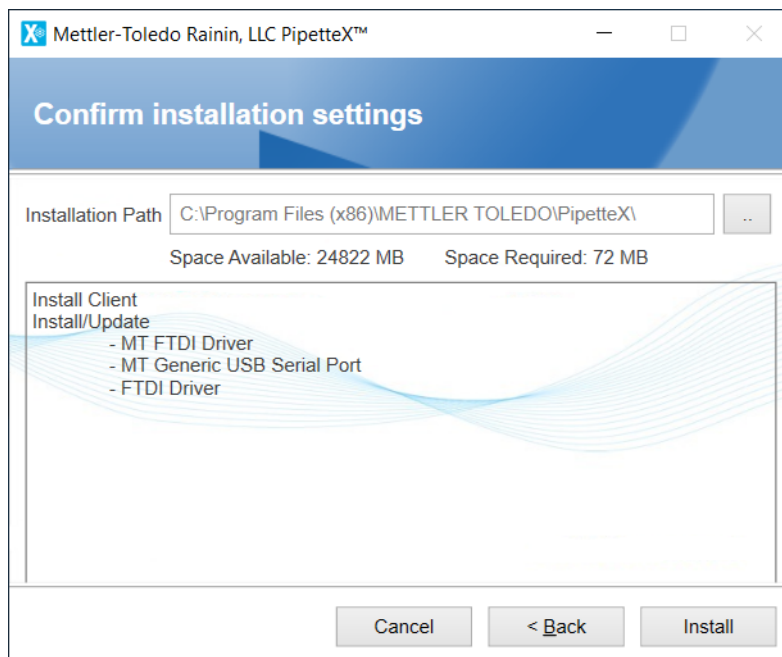
**Note**

- You can have multiple Business Servers existing in the network, hence the need to choose the correct one. Once selected, you cannot change the Business Server. To change the Business Server, you need to return the installation wizard and choose the appropriate Business Server.
- 3 Select one of the following Business Server account:
- **System account** - Select this option only when Business Server is running using **Log On As - Network service** or **Local service**. You can find the service information by typing **services** in the windows search bar. The **Services** window appears as shown in the image below.
  - **User account** - In Windows Active Directory, a User Principal Name (UPN) is the name of a system user in an email address format. e.g. john.doe@domain.com consists of the user name (logon name), separator (the @ symbol), and domain name (UPN suffix). A UPN is not the same as an email address. If you select **User account**, enter the **User principal name**. For more information, see [User Principal Name](#).

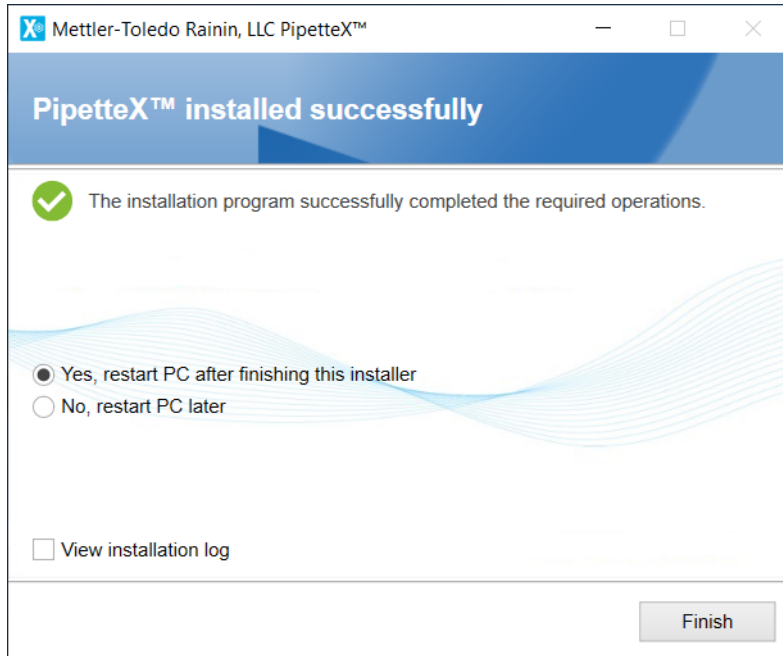
- 4 Click **Next**.
- 5 The screen below shows the user has specified the client port 58888 to communicate with the **Business Server**.



- 6 Confirm the installation of the client component and relevant device drivers. Click **Install**.



- 7 After successful installation, restart your PC if prompted.



#### 4.2.4.1 Supporting information

Ensure the components listed below are available after successful client installation:

##### **Service**

PipetteX Instrument Service

\*Service run using Logon As user as Network Service.

##### **Firewall Ports**

Control Panel\All Control Panel Items\Windows Firewall or 'Windows Defender Firewall' depending on the Windows version --> Advanced Settings

Inbound Rule

- PipetteX Instrument Service\_IN - 58888

Outbound Rule

- PipetteX Instrument Service\_OUT - 58888

\*Firewall ports are added based on the user input provided during the installation.

#### 4.2.5 Installation Checker

The Installation Checker tool that is delivered as part of the PipetteX application is part of the distributed installation and helps to identify errors and warnings that are open after the distributed software is installed.

##### **Note**

Launch the Installation checker tool as an Administrator, otherwise the tool may not function properly.

PipetteX™ - Installation checker - Viewing <CurrentSystem>

Save Open Print Print Preview Check System Zip Log Files Errors Errors and Warnings All Expand All Collapse All About

Entry	Parameter1	Parameter2	Parameter3	Parameter4
<b>Installation checker</b>				
IC Version	3.0.0.19			
IC Rating Definition Version	3.0.0.19			
IC Selected Components	Standalone			
<b>System</b>				
PipetteX Version	PipetteX			
PipetteX Activation State	Activated			
Operating System	Windows 10 Enterprise, 10.0.16299.0		X64	English (United States)
Installed Patches	Installed Patch ID			
System Localization	en-US	1234567890.00	Date (Short):17-Jun-20; (Long):Wednesday, June 17, 2020; Time :12:54:01 PM	Keyboard :US
Installed Keyboard Layouts	en-US	1234567890.00	Date (Short):17-Jun-20; (Long):Wednesday, June 17, 2020; Time :12:54:01 PM	Keyboard :US
System CPU (min. = 2 GHz)	Name : Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	Type : Central Processor	Clock Speed : 3.41 GHz	Core: 4
System Memory (min. = 2 GB)	Total : 15.89 GB	Free : 10.40 GB		
Current User	admin-2			
Group Membership	Name of the user			
Users and Groups	Name of the user	Assigned group		
<b>Network</b>				

**Installation Options**

Installed type  
 Standalone  Distributed

Configuration

- Client
- Business Server
- Database
  - Database Server
  - Database maintenance tool

Check System

## 4.3 Upgrading your Existing PipetteX

### 4.3.1 Upgrade from EasyDirect PAM 1.x to PipetteX 3.x

If you are migrating from EasyDirect PAM 1.x, read through the scenario below to define your path of migration. Otherwise, continue to section [License Activation and Management ▶ Page 55].

Upgrade path	PipetteX setup before upgrade	Recommended license for PipetteX	Actions required
1.x to PipetteX 3.x	Standalone <b>and</b> ≤200 assets and/or ≤5 connected SmartStands	Standalone (free version) Connected version (either Site license or Unlimited license). You can decide for standalone or distributed installation	<ol style="list-style-type: none"> <li>1 Export all asset information from your 1.x installation, using the export functionality on the asset tab. You cannot export the data from the address tab or users tab. If you have a large database, contact METTLER TOLEDO before continuing.</li> <li>2 Remove EasyDirect PAM 1.x, including the database.</li> <li>3 Install PipetteX</li> <li>4 Activate your license</li> <li>5 Import all your assets using the import functionality of PipetteX</li> </ol>
	Standalone <b>and</b> >200 assets and/or >5 more connected SmartStands	Connected version (either Site license or Unlimited license). You can decide for standalone or distributed installation	<ol style="list-style-type: none"> <li>1 Export all asset information from your 1.x installation, using the export functionality on the asset tab. You cannot export the data from the address tab or users tab. If you have a large database, contact METTLER TOLEDO before continuing.</li> <li>2 Remove EasyDirect PAM 1.x, including the database.</li> <li>3 Ensure you purchase the correct license key</li> <li>4 Install PipetteX</li> <li>5 Activate your license</li> <li>6 Import all your assets using the import functionality of PipetteX</li> </ol>

### 4.3.2 Upgrade from EasyDirect PAM 2.x to PipetteX 4.x

You cannot upgrade directly from EasyDirect PAM 2.x to PipetteX 4.0.1, or later versions. To upgrade to any of these versions, you must first upgrade to 4.0.

 **Note**

PipetteX versions earlier than 3.0 are not supported.



#### NOTICE

##### Distributed systems

For those that have deployed EasyDirect PAM 2.x as a server-client system, follow the steps below.

To upgrade from EasyDirect PAM 2.x to PipetteX 4.0, follow the steps below:

- 1 To download any PipetteX version between 3.x and 4.0, contact your local METTLER TOLEDO representative.

- 2 Create a backup of your database (you can use the DB utility tool for this or run a backup with your SQL tools), see the section Database Utility.
  - 3 Go to your business server environment and run the `PipetteX Setup.exe` file and choose to run:
    - a. the business server component
    - b. the database component
    - c. install the Silex Virtual Link lite component on your business server. See the section Gateway for more information on the Silex Virtual Link lite component
  - 4 Update every connected client by running the `PipetteX Setup.exe` file and choose to run the client part.
  - 5 Reconnect every client to your business server using the wizard of PipetteX.
- ➔ EasyDirect PAM application will be migrated to PipetteX.

Once PipetteX 4.0 is installed, the application automatically checks for new updates every day (if connected to the internet), informs you, and lets you install any available updates. You can also manually check if the latest version of PipetteX is available from the **About** window.

**Note**

- When installing PipetteX 4.0, the existing database will be automatically upgraded (if applicable).
- The Timezone selection pop-up appears during the upgrade from 2.x to 4.0.
- After upgrading from EasyDirect PAM 2.x to PipetteX 4.0, proceed with upgrading to PipetteX 4.0.1 or above.
- **Distributed Setup:**
  - Before you initiate the software upgrade process in a distributed setup, ensure the latest setup file of PipetteX is available in the Business Server and all the client hardware (see C:\Users\Public\Mettler Toledo\EasyDirect PAMUpdates).
  - After a successful upgrade, all existing user configurations (e.g., language settings, column chooser, user roles, notifications, methods, or auto export configuration) set in the previous version may change. You must configure it again in the new software version.

### 4.3.3 Upgrade from PipetteX 3.x to PipetteX 4.x

You can upgrade from PipetteX 3.x to PipetteX 4.x by downloading the software from <http://www.mt.com/pipettex> and running the .exe file. Your PipetteX 3.x application should automatically migrate to PipetteX 4.x.

It is strongly advised to back up your database and read the breaking changes (in the installation wizard) before running the upgrade.

**Note**

- Ensure you have appropriate DB backup rights.
- Ensure you update the business server first, followed by the client-server to use PipetteX.
- The Timezone selection pop-up appears during the upgrade from 3.x to 4.x. The Timezone selection does not appear when upgrading from 4.x to higher versions.

- 1 Download PipetteX 4.x.
- 2 Make a backup of your database (you can use the DB utility tool for this or run a backup with your SQL tools). See the section Database Utility.
- 3 Go to the business server environment, run the `PipetteX Setup.exe` file and choose to run:
  - a. the business server component
  - b. the database component
  - c. install the Silex Virtual Link lite component on your business server. See section Gateway for more information on the Silex Virtual Link lite component
- 4 Update every connected client by running the `PipetteX Setup.exe` file and choose to run the client part.
- 5 Reconnect every client to your business server using the wizard of PipetteX 4.x.

## 4.4 Troubleshooting

### Problem 1: MSMQ requires a PC restart to enable its component, if not enabled already

Installation may not have been successful because the audit service for PipetteX can only be restarted if MSMQ is enabled. You can find details in the log files specified below:

- **MSIPipetteX\_%.log** [Path: "C:\Users\Admin\AppData\Local\Temp"]  
Error 1920. The service "PipetteX Audit Service" failed to start. Verify that you have sufficient privileges to start system services.
- **PipetteX.AuditLog.Service.Host** [Path: "<Installation Directory>\Logging"]  
Message: Windows service OnStart: The Type Initializer for "System.ServiceModel.Channels.Msmq" caused an exception.
- Solution: PC restart is mandatory

### Problem 2: Installation failed due to a SQL error code -2067919934

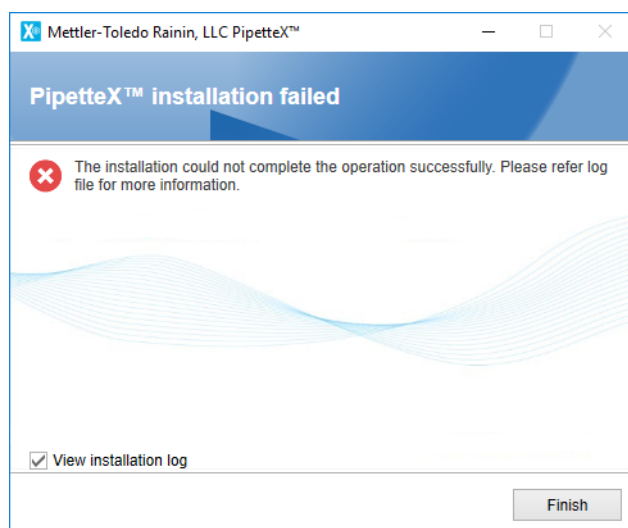
Installation of the new SQL instance using the installation wizard will not be completed when a PC restart event is pending due to any previous installation.

- Solution: PC restart is mandatory

### Problem 3: Your PC has EasyDirect software installed, and you have deleted an older version of PipetteX and tried to install a newer version

Installation failure can occur due to a conflict between PipetteX and EasyDirect software, both of which rely on the **Windows Management Instrumentation** service. This conflict can lead to a quota violation.

- **PipetteX.Service.SA.Host.log** [Path: "<Installation Directory>\Logging"]  
Message: Exception message: Quota violation



- Solution: Either restart the "Windows Management Instrumentation" service from services.msc (or) restart the PC manually and retry the installation.

### Problem 4: The date and time format of the test report do not match the PC date and time

In PipetteX standalone condition, when there is any update in PC date and time, the change is not reflected automatically in PipetteX test reports.

- Solution: Restart your PC twice to synchronize the date and time between PC and PipetteX.

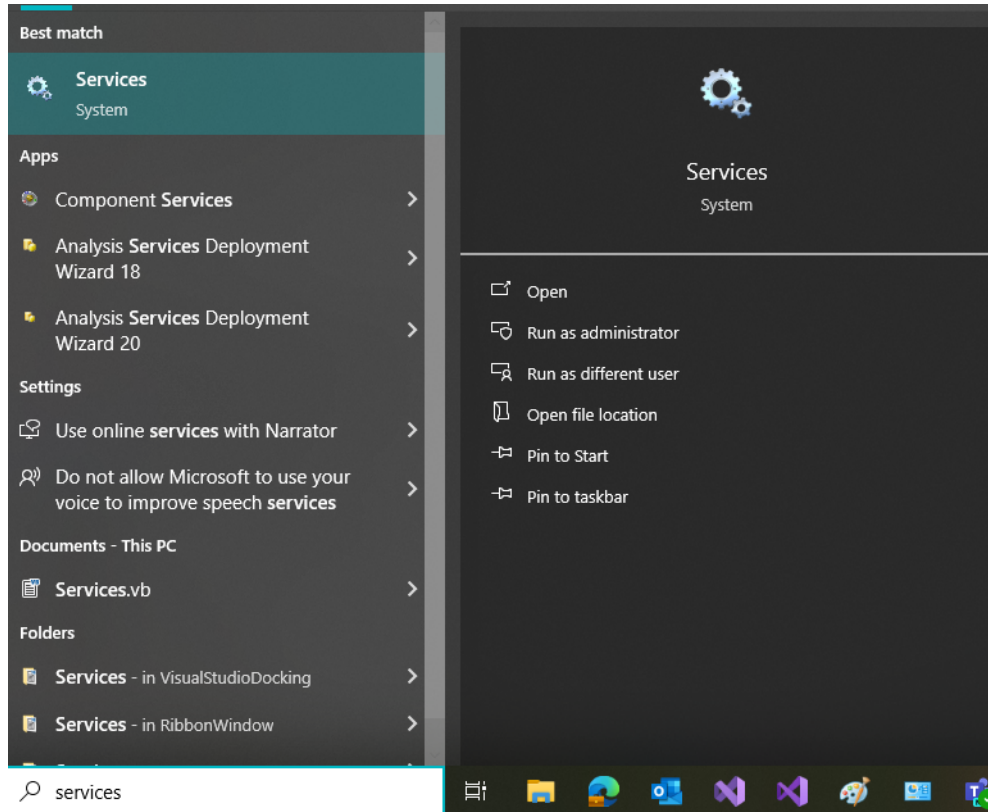
### Problem 5: Installation failed with message "Unable to start/stop Instrument service"

Installation failure can occur depending on the service startup type selected.



Solution: You can follow the steps below to complete the installation:

- 1 Type "services" in the Windows search bar and select **Run as administrator**.



- 2 Check **SQL Server (PipetteX)** and set the startup type from **Automatic (Delayed Start)** to **Automatic** by right-click on the "service" → **Properties** → **Change Startup type**.

SQL Server (PIPETTEX)	Provides storage, processin...	Running	Automatic	Network Service
SQL Server Agent (PIPETTEX)	Executes jobs, monitors SQ...	Disabled	Disabled	Network Service
SQL Server Browser	Provides SQL Server connec...	Running	Automatic	Local Service

- If the startup type is still **Automatic (Delayed Start)**, then restart the WMI (Windows Management Instrumentation) Service on both the client and server, depending on the setup.
- If the Instrument Service is stuck in the "Starting" state and did not get removed after installation failure, change the startup type to "Manual" and restart the PC. If this does not work, disable the instrument service and restart the PC again.

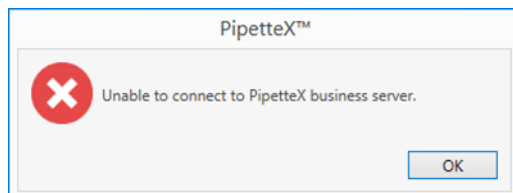
### **Problem 6: Installation failed due to "DB Scheduler service" failed to start.**

Installation failure can occur depending on the user permission to make a database backup.

- Solution: Ensure you have permission on the database to make a backup and perform installation again. For more information about permission, see the [Business server installation ▶ Page 25] section.

### **Problem 7: Unable to connect to PipetteX business server**

After successful installation, PipetteX can give below error:



Solution: You can follow the steps below to connect to PipetteX business server

- 1 Open "Services" window and check if all the PipetteX services are running properly (see the third and fourth columns).

PipetteX Audit Service	PipetteX Audit Service	Running	Automatic	Network Service
PipetteX Business Service	PipetteX Business Service	Running	Automatic	Network Service
PipetteX DBUtility Scheduler Service	PipetteX DBUtility Schedule...	Running	Automatic	AP\mulla-2
PipetteX Instrument Service	PipetteX Instrument Service	Running	Automatic	Network Service
PipetteX LabX Integration Service	PipetteX LabX Integration S...	Running	Automatic	Network Service
PipetteX Scheduler Service	PipetteX Scheduler Service	Running	Automatic	Network Service
PipetteX SmartCheck Service	PipetteX SmartCheck Service	Running	Automatic	Network Service

- 2 Ensure **SQL Server (PIPETTEX)** and **SQL Server Browser** services are running.

SQL Server (PIPETTEX)	Provides storage, processin...	Running	Automatic	Network Service
SQL Server Agent (PIPETTEX)	Executes jobs, monitors SQ...		Disabled	Network Service
SQL Server Browser	Provides SQL Server connec...	Running	Automatic	Local Service

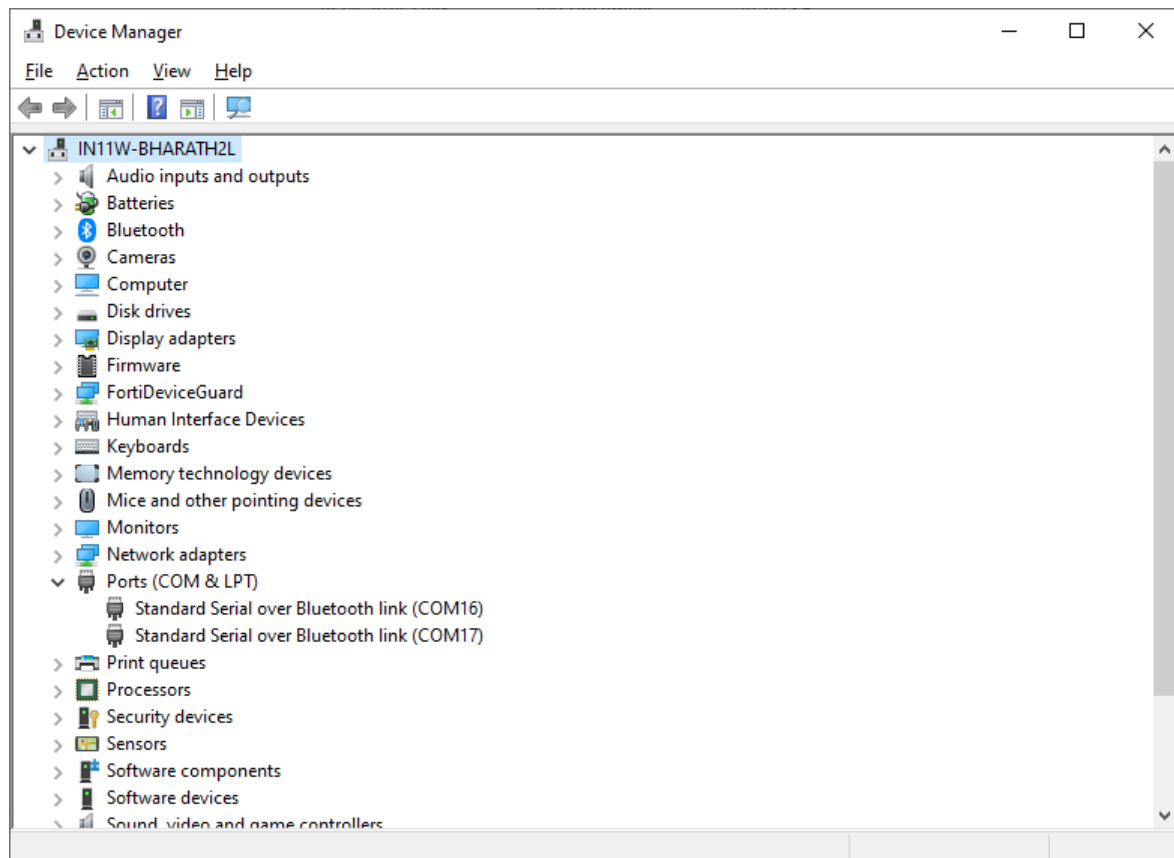
- 3 Restart WMI (Windows Management Instrumentation) Service.

### Problem 8: USB instruments like SmartCheck or EasyScan are not getting recognized by PipetteX

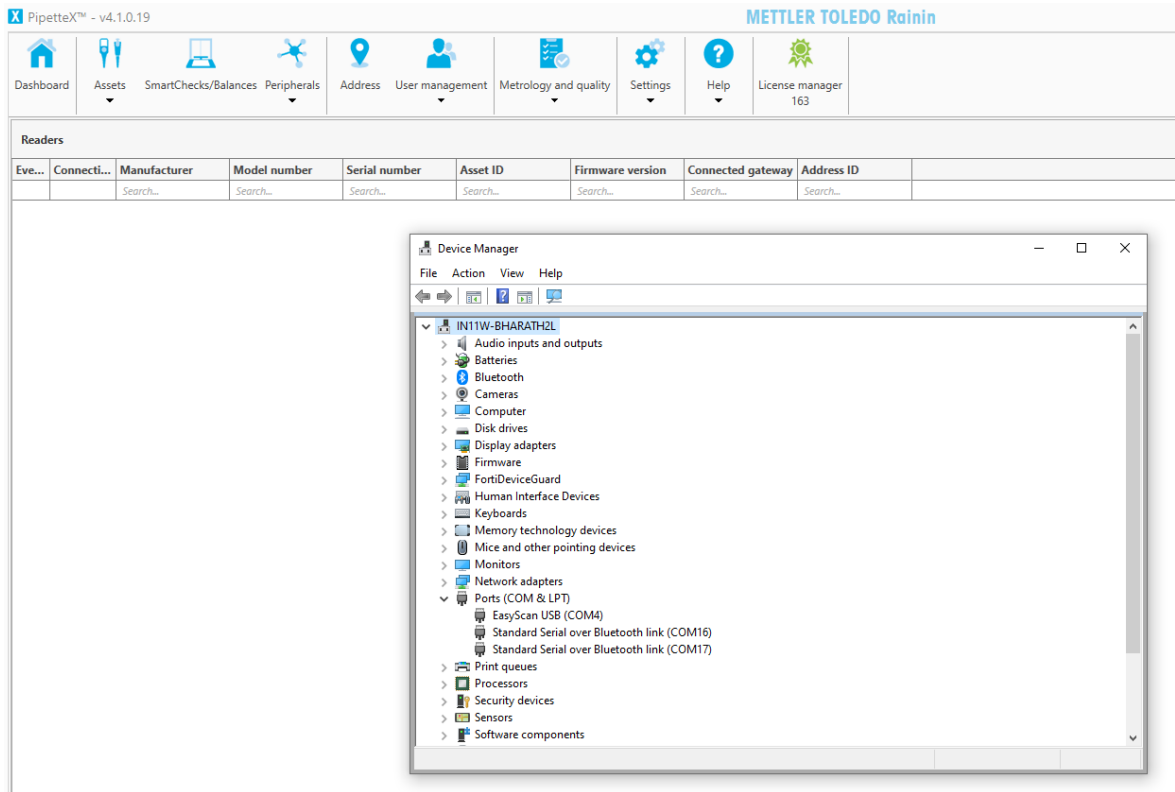
You may observe that your EasyScan or SmartCheck is not detected in PipetteX. One reason could be the Windows power setting option.

- Solution: Restart the "PipetteX Instrument Service", then start the "PipetteX Tray", and reconnect the instruments by unplugging and plugging them back into the USB port.
- If the **Device Manager** detects instruments, then change the power settings as follows:

- 1 No USB device in the device manager at the beginning.



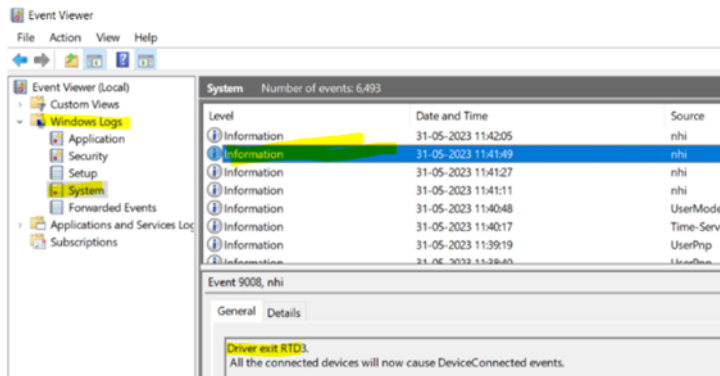
- After you plug in the instrument, you will see that the device is recognized inside **Device Manager** but not in PipetteX.



- Check the event logs. You will see two information events under **System** logs.

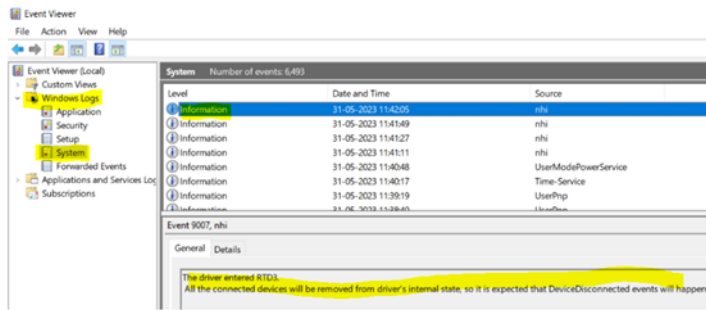
### Event 1: Driver exit RTD3

All the connected devices will now cause DeviceConnected events.



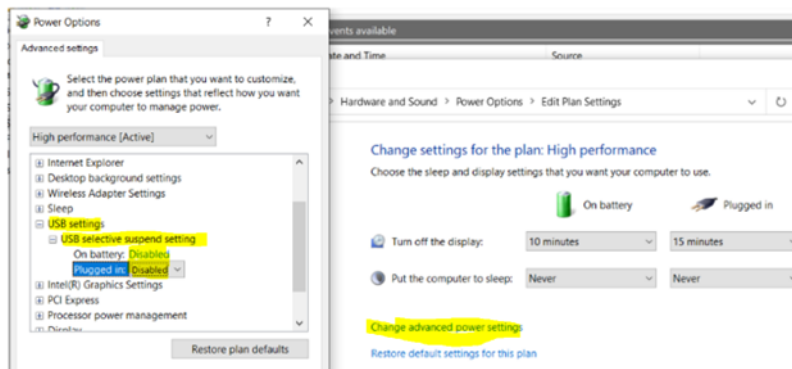
## Event 2: The driver entered RTD3

All connected devices will be removed from the driver's internal state, so DeviceDisconnected events are expected.

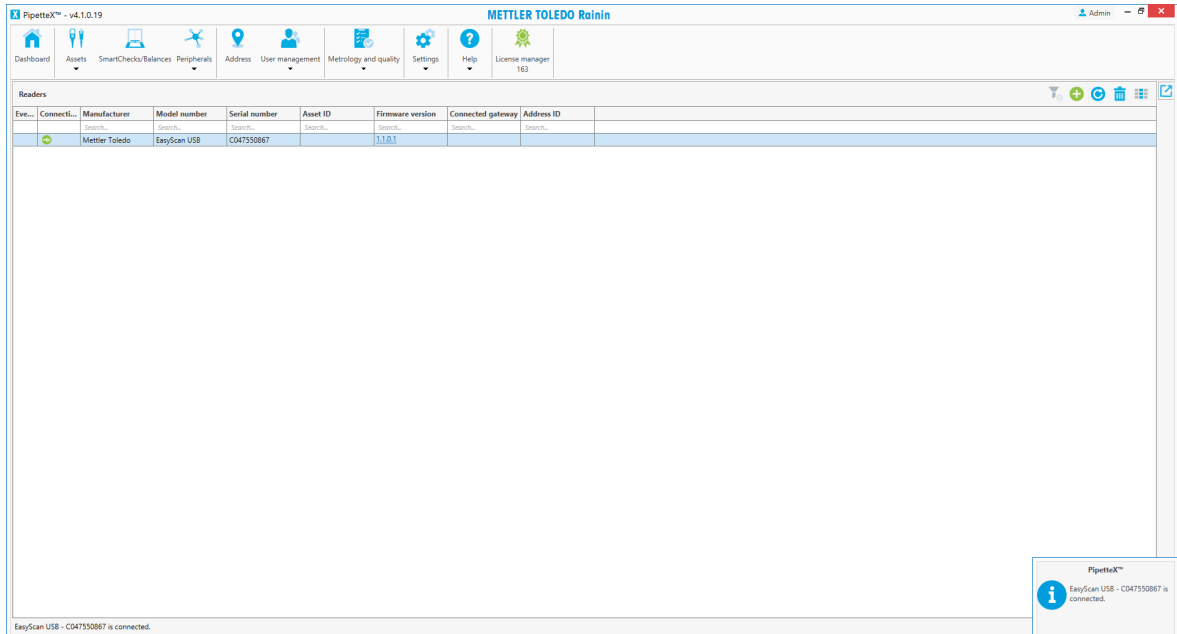


If you see the above events, then the below solution must be applicable:

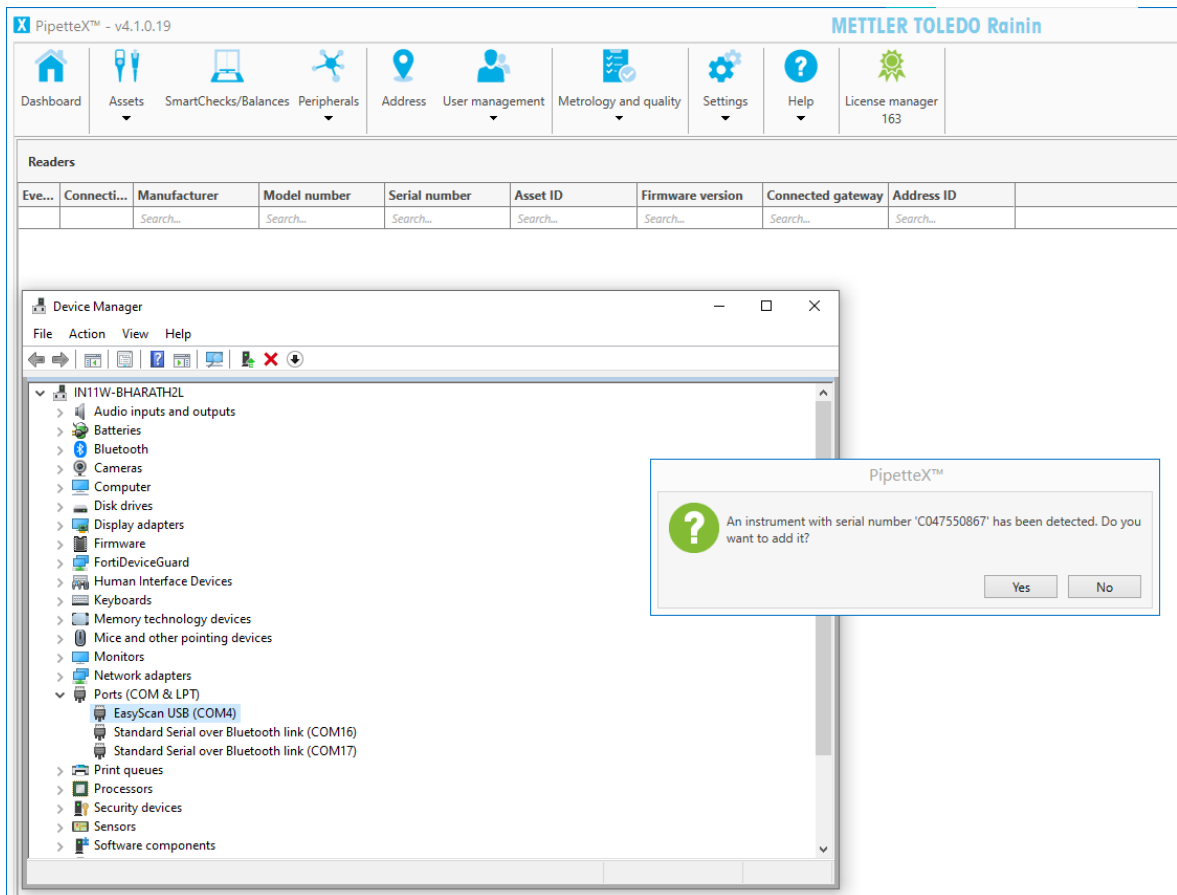
- 1 Navigate to **Control Panel > Hardware & Sound > Power Options > Edit Plan Settings**.
- 2 Select **Change advanced power settings**.
- 3 Expand the **USB Settings** drop-down.
- 4 Expand the **USB selective suspend setting** drop-down.
- 5 Select **Disabled** from the drop-down for **On battery** and **Plugged in**.
- 6 Click **Apply**, then **OK** to save the settings.  
You may need to restart your PC.



- If you plug in the device, you can see the tray notification (bottom right corner) and EasyScan USB in the device manager.




- The instrument is detected, and the following pop-up appears.



- If you do not see the option to change the USB settings, follow the Microsoft document to enable it, and then try the above steps again using [Why no USB Settings in Advanced Power Settings?](#)

## 4.5 Logging in for the First Time

- If you have never logged in to PipetteX before or you still have to set up PipetteX for the first time, you must follow the manual sign-in procedure.
- 1 Manual sign-in is possible using the desktop shortcut  or from the start menu **METTLER TOLEDO > PipetteX/PipetteX with Login**.
- 2 Use "Admin" (capital A) for both **User ID** and **Password**.
- 3 It is recommended to change the password of the default admin account.
- 4 Consider your account and password policies. For more information, see section Security.
- 5 If you have activated SSO under **Settings > Settings (with policies) > Security**, you can start setting up the SSO user accounts for future log-ins.

## 5 Separate Driver Installation

### 5.1 USB Drivers

#### 5.1.1 SmartStand

When you connect the SmartStand to the PC via USB cable, the PC automatically recognizes the required device driver. If the automatic driver installation does not work, download the driver from ► [Drivers](#) and install it.

After downloading the driver from the site, run the installation before connecting the SmartStand. A reboot might be required after the driver installation.

**Note**

You need to wait until the drivers are installed successfully. Then you will get a status notification on the driver installation. Once the drivers are installed successfully, unplug, and plug in the USB cable again for the PipetteX to detect the SmartStand.

#### 5.1.2 EasyScan Flex

Connecting the EasyScan Flex using a serial cable does not require driver installation.

When using a USB Serial cable, use a null modem/gender changer adapter and that the drivers of the USB Serial cable are installed before plugging in the cable the first time.

After successful driver installation, you will see an additional (virtual) COM Port in your windows system.

A reboot may be required after the driver installation.

**Note**

In some PCs, after recovering from Sleep/Hibernate (particularly when using a docking station), the port does not work properly though the port is still available. You must unplug and then plug in the cable for communication to resume.

#### 5.1.3 Bluetooth dongle

Either the built-in Bluetooth from your laptop or a supported USB-BT dongle can be used to communicate with SmartStands. For a dongle, we recommend using dongle LM506 which is available from METTLER TOLEDO.

Dongles tested successfully with PipetteX:

- LM506 (Broadcom stack)
- ASUS USB-BT400 (Broadcom stack)
- Trendnet TBW-106UB (CSR with Win stack)
- Startech USBBT1EDR4 (CSR with Win stack)
- LAIRD ST820 (TDK with Win stack)

Drivers for USB-BT dongles come with the dongle. If necessary, you can find the driver for the LM506 USB-BT dongle here: ► <http://www.lm-technologies.com/downloads/software/>

After successful driver installation, you will see an additional (virtual) COM Port in your windows system.

A reboot might be required after the driver installation.

#### 5.1.4 Silex Gateway

The Silex Gateway connected via Ethernet is recognized since the required device driver is installed by the PipetteX installer where the Business Server component is installed.

##### Limitation

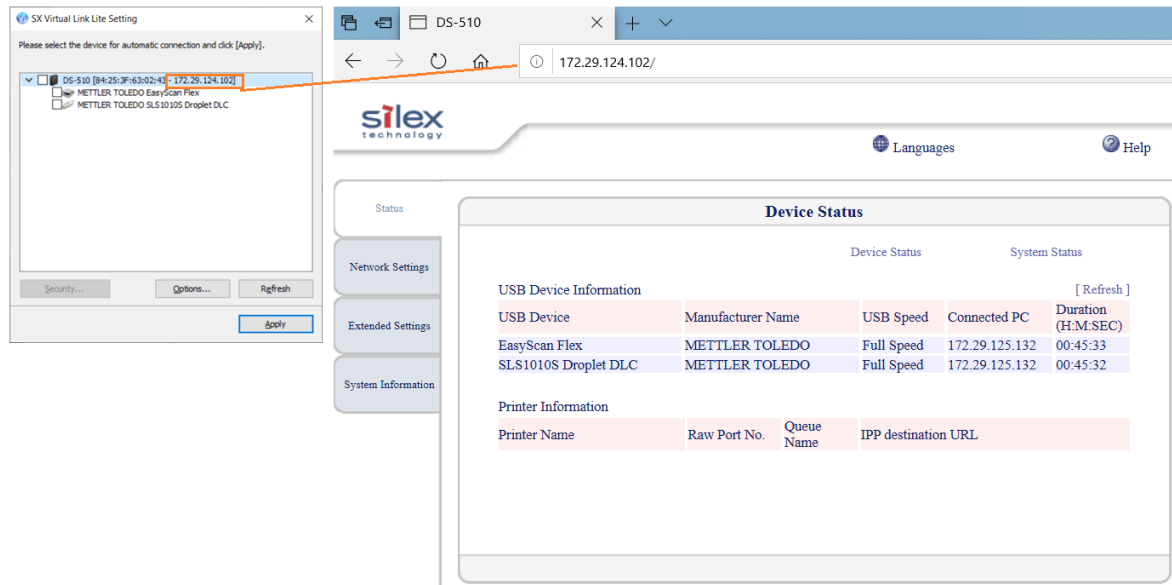
The PC will force a restart when the Silex Lite app is installed above the Silex Desktop app either manually or through PipetteX installer.

- The PipetteX installer contains only the Silex Lite app and its driver. The Silex Desktop app is not part of the provided installer. Therefore, a force reboot will not happen in a new PC.
- If the PC used for the PipetteX installation is pre-installed with Silex Desktop app, then you should uninstall the component before PipetteX installation. Otherwise, PC will force a restart after PipetteX installation.

- If you try to install Silex Desktop app over the PipetteX installation, then the third-party software itself will prompt for a restart option.

## Configuration

Silex Lite (SX Virtual Link Lite, installed as part of PipetteX) itself provides the user an option to configure gateway devices (refer screenshot below). In addition, if the end user is required to install the Silex Desktop app, we recommend having it on a separate PC (rather than installing it with PipetteX). Configure the Silex gateway. This way you can avoid the PC forcing a restart during the PipetteX installation.



### 5.1.5 SmartCheck

When connecting SmartCheck to the PC via USB cable or Silex gateway, windows will automatically recognize the required device installed with PipetteX.

#### **Note**

For the first time, you need to wait until the drivers are installed successfully. Then you will get a status notification on the driver installation. Once the drivers are installed successfully, unplug the USB cable, and plug it again for the PipetteX to detect the SmartCheck.

### 5.1.6 EasyScan USB

When connecting EasyScan to the PC via USB cable or Silex gateway, windows will automatically recognize the required device installed with PipetteX.

#### **Note**




For the first time, you need to wait until the drivers are installed successfully. Then you will get a status notification on the driver installation. Once the drivers are installed successfully, unplug the USB cable, and plug it again for the PipetteX to detect the EasyScan USB.



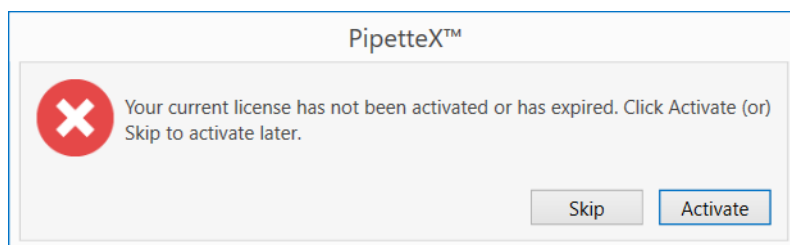
## 6 License Activation and Management

### 6.1 License Management

PipetteX is free for the first 60 days. After 60 days the software user needs to be registered, regardless of whether you are using the free or a paid version. The main screen toolbar shows the activation status of the license:

- The icon  indicates the license is activated and the remaining days before renewal.
- The icon turns  to warn you that the remaining activation period is less than 60 days.
- The icon turns  when the remaining period is less than 10 days.

After the license expires, the following error message is displayed. After this, data cannot be added or changed.



### 6.2 License Types

You can try each license edition to test a distributed setup within your organization. You can use the same license key twice, even on different hardware if needed. This option is meant for reinstallation purposes only. Be aware that with the re-use of a key, the installation on the old hardware will be deactivated on the activation portal, and connectivity to the server - in case of a distributed scenario - will be lost for the instance.

 **Note**

You can try each license edition for up to 60 days without activating it.

#### 6.2.1 License editions

There are different license editions, each with its features depending on license type and activation status. You can try out the software for 60 days without activating it using a license key. Functionality for the trial period is restricted: you cannot test the system connectivity for model list downloads or certificate downloads.

	Starter	Site	Unlimited	Optional License
<b>Software:</b>				
Model List				
Always up to date	▪	▪	▪	
Electronic documents*				
Calibration certificates**	M	M   A***	M   A***	
Routine test reports	M	M   A	M   A	
Software setup				
Standalone	▪	▪	▪	
Server		▪	▪	
Audit Trail				
View audit trail data				▪
View archive data				▪
<b>Hardware:</b>				
Assets	200	1500	>1500	
SmartStands	5	200	>200	

	Starter	Site	Unlimited	Optional License
SmartChecks	5	200	>200	
EasyScan USBs	5	200	>200	
Balances	5	200	>200	
Gateways	0	200	>200	

\* M = Manual | A = Automated

\*\* Availability country dependent

\*\*\* NFS license shall receive certificate until an asset is registered with a full license (Site/Unlimited)

## 6.2.2 First time vs. renewal license

Each edition has two types of licenses:

- **First time license:** required to activate your license subscription (valid for 365 days upon activation).
- **Renewal license:** required for each renewal of your existing license (valid for 365 days upon activation).  
The days left from the first-time license roll-over to the renewal license (if renewing the same edition).

An overview of the different license types you can find below:

First Time		Renewal	
Part No.	Description	Part No.	Description
30475911	PipetteX Key-Start	30478258	PipetteX Renewal Key-Start
30475913	PipetteX Key-Site	30478260	PipetteX Renewal Key-Site
30475915	PipetteX Key-Unlimited	30478262	PipetteX Renewal Key-Unlimited
30587187	PipetteX Key-Audit Trail	30587190	PipetteX Key-Audit Trail

## 6.2.3 Distributed vs. standalone

For the license (re-)activation, there are a few important nuances between a distributed and standalone setup.

### (Re-)activation of license

- **Standalone:** activation of the license key is done on the PC that PipetteX is running. The key is connected to the hardware ID of the PC.
- **Distributed:** activation of the license key is done on the PipetteX Business Server. No activation is needed on client level (once the business server component is installed and the client points to the activated business server).

#### Note

PipetteX license can be activated from any client connected to the Business Server since the Business Server component alone will not have a user interface to activate the license.

### Connectivity

- **Standalone:** none
- **Distributed:** provided when an active internet connection exists for the Business Server. When reinstalling the same license key on a new PC or system, connectivity drops on the old system and is activated on the new system.

## 6.2.4 Upgrading or downgrading licenses

If you want to upgrade or downgrade your license, you should do it when your current license is about to expire. You can change before the license end date, however, the days left on the old license will not roll over to your new license. Ensure you purchase the first-time license part number of the down or upgrade of your license (not the renewal part number).

The user effect of downgrading or upgrading your license is described below. The activation portal creates a new system registration in combination with your new license. If you do not renew your old license in either case (down- or upgrade), the old license will expire at the end of its effective period and will be deactivated on the activation portal.

### Upgrade paths (PipetteX 3.x)

Upgrade path	PipetteX setup before upgrade	Actions required
Start -> Site, Start -> Unlimited	≤200 assets (local only) and/or ≤5 connected SmartStands	<ol style="list-style-type: none"> <li>1 Remove the old license key in license manager</li> <li>2 Add a new license key in license manager</li> <li>3 Activate your license</li> <li>4 Continue using PipetteX</li> </ol>
Site -> Unlimited	≤1,500 assets	<ol style="list-style-type: none"> <li>1 Remove the old license key in license manager</li> <li>2 Add a new license key in license manager</li> <li>3 Activate your license</li> <li>4 Continue using PipetteX</li> </ol>

### Downgrade paths (PipetteX 3.x)

Downgrade path	PipetteX setup before downgrade	Actions required
Site -> Start, Unlimited -> Start	≤200 assets and/or ≤5 connected SmartStands	<ol style="list-style-type: none"> <li>1 Remove the old license key in license manager</li> <li>2 Add a new license key in license manager</li> <li>3 Activate your license</li> <li>4 Continue using PipetteX</li> </ol>
	>200 assets and/or >5 connected SmartStands	<p>In your new setup you will only be able to manage 200 assets in PipetteX and no more than five connected SmartStands. You will lose the central server aspect and automatic certificate retrieval. Refer to the license edition table [License editions ▶ Page 55] to see which functionality you will lose. To continue:</p> <ol style="list-style-type: none"> <li>1 Define which assets you continuously want to manage with PipetteX</li> <li>2 Download the data, including any certificates you might have, of all assets that you no longer want to from PipetteX</li> <li>3 Delete these assets from PipetteX so you meet the 200 assets threshold</li> <li>4 Delete the number of SmartStands to meet the threshold of 5 SmartStands</li> <li>5 Uninstall PipetteX but do not remove your database</li> <li>6 Activate PipetteX with the start license key</li> <li>7 Continue using PipetteX</li> </ol>

Downgrade path	PipetteX setup before downgrade	Actions required
Unlimited -> Site	≤1,500 assets and/or ≤200 connected SmartStands	<ol style="list-style-type: none"> <li>1 Remove the old license key in license manager</li> <li>2 Add a new license key in license manager</li> <li>3 Activate your license</li> <li>4 Continue using PipetteX</li> </ol>
	> 1,500 assets and/or > 200 connected SmartStands	<p>In your new setup you will be able to manage 1,500 assets on PipetteX and no more than 200 connected SmartStands. Refer to the license edition table in section [License editions ▶ Page 55] to see which functionality you will lose.</p> <p>To continue:</p> <ol style="list-style-type: none"> <li>1 Define which assets you continuously want to manage with PipetteX</li> <li>2 Download the data, including any certificates you might have, of all assets that you no longer want to manage from PipetteX</li> <li>3 Delete these assets from PipetteX so you meet the 1,500 assets threshold</li> <li>4 Delete the number of SmartStands to meet the 200 SmartStands threshold</li> <li>5 Uninstall PipetteX but do not remove your database</li> <li>6 Activate PipetteX with the start license key</li> <li>7 Continue using PipetteX</li> </ol>


### 6.2.5 Combining or reassigning licenses

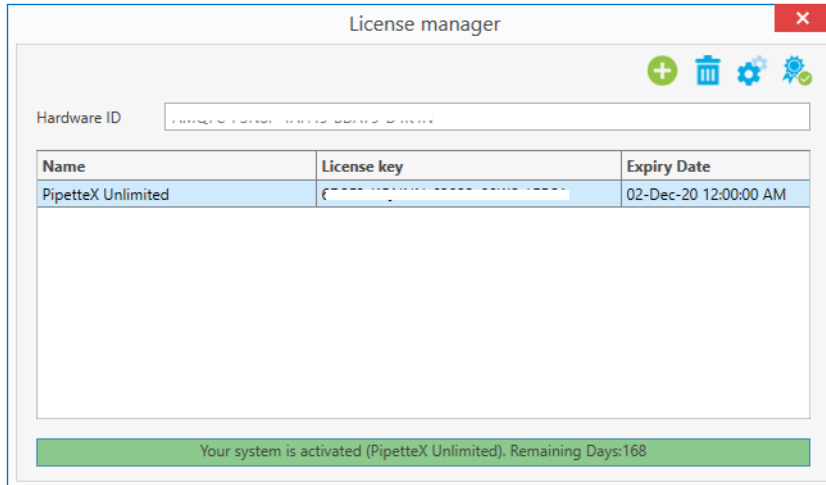
Contact Rainin technical support if you:




- Have purchased several licenses that need to be combined under one activation portal sign-in account.
- Need an existing license to be re-assigned to a new activation portal sign-in.

### 6.3 How to access the (re)activation process?

For both first-time activation after installing or renewing an existing license, the same (re)activation process is followed. Accessing the license activation process differs slightly between a first-time activation and a renewal. For first-time activation, the license activation process is part of the installation (continue to the section [License activation during first-time installation ▶ Page 59]).

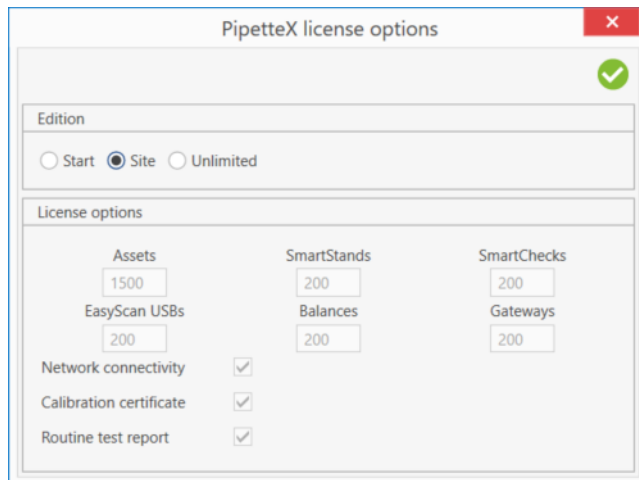
To access the activation process after a successful installation, click on the  icon in the main screen toolbar. The following screen with all of the licensing information is displayed.




- Add a new license by clicking on the  icon.
- Remove an existing license by clicking on the  icon.
- The license can be activated by clicking on the  icon, a wizard is displayed to guide you through the license activation process.

**Note**

- You can have only one base (Start | Site | Unlimited) license information in the list before you can activate. In addition, you can add the optional license for "Audit Trail" in the license manager screen. Activation of base + optional license combination is also possible from PipetteX.

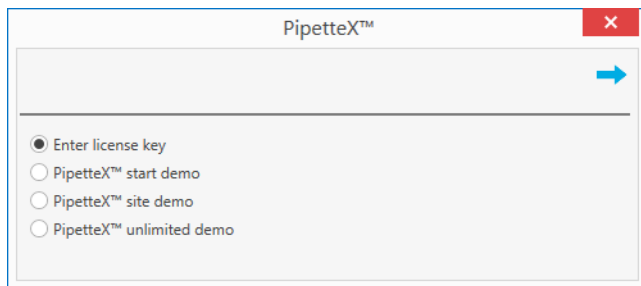


- View the license information by clicking on the  icon.
- You change the edition during the demo period or view the licensing details.


## 6.4 License activation during first-time installation

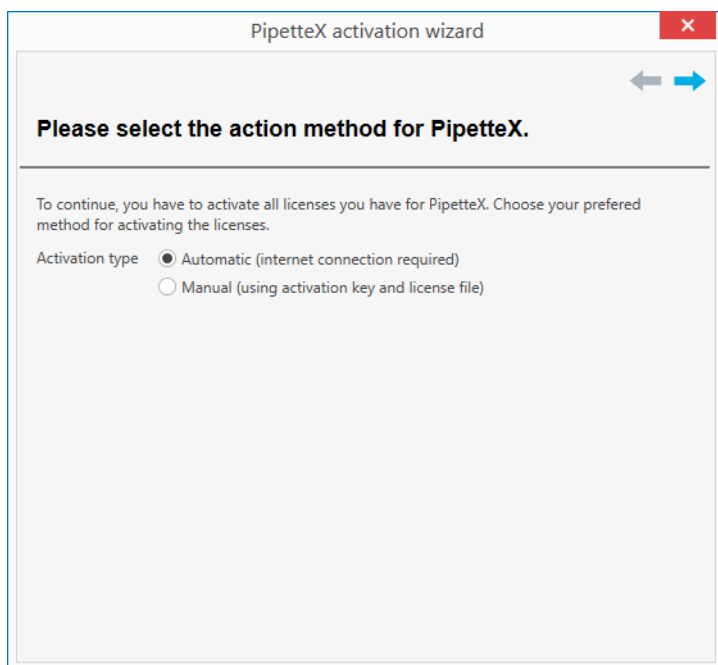
After installing PipetteX and running it for the first time, you will be prompted to activate the license or to run the application as a demo for a fixed period to evaluate the software.

The following window appears when you start the application for the first time. You can enter the valid license key which you have purchased, activate the license or you can evaluate the software for the next 60 days.

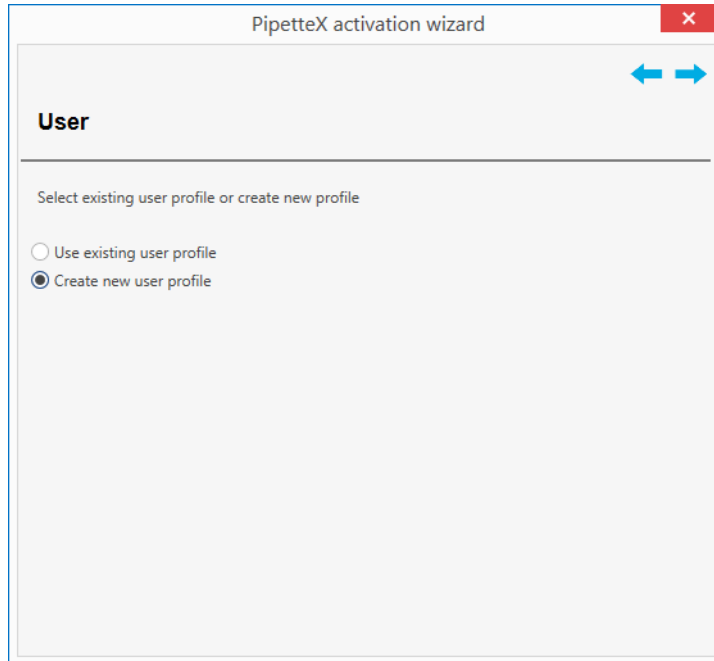


#### 6.4.1 Activating a license using automatic method

- You must have an active internet connection to activate your license automatically.
- 1 Select the **Automatic (internet connection required)** option and click on the  icon.
  - ➔ The wizard will then move to the next step as follows:  
You need a customer profile to activate the license.

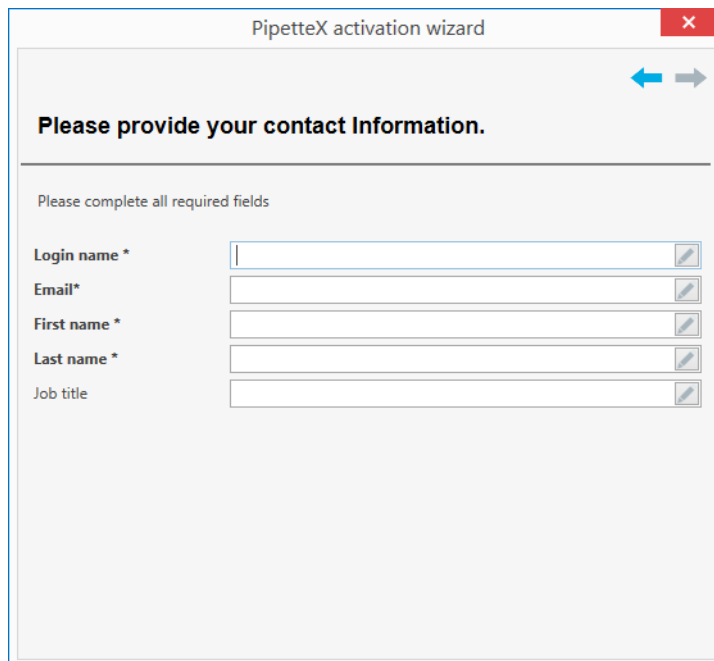


- 2 If you already have a METTLER TOLEDO software licensing portal profile, select the **Use existing user profile** option or select **Create new user profile** option.



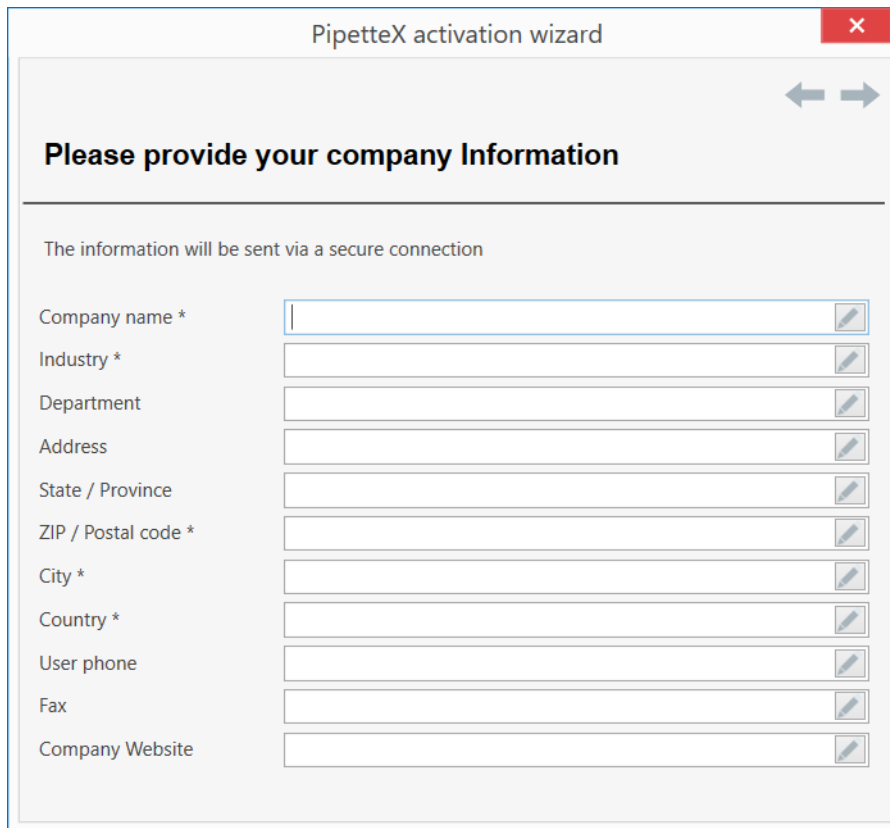
The screenshot shows a window titled "PipetteX activation wizard" with a close button in the top right corner. Below the title bar are navigation arrows. The main heading is "User". Underneath, it says "Select existing user profile or create new profile". There are two radio button options: "Use existing user profile" (which is unselected) and "Create new user profile" (which is selected).

- 3 Enter your **contact information**,  
Beware of the following limitations:
- **Login name** cannot contain spaces, commas, or semicolons.
  - **Email**: only one e-mail address is allowed. Special characters are limited to dash and underscore (no space, comma, semicolon or other special characters).
  - **Industry**: select from the drop-down list (**please choose an option** is not allowed).
  - **Country**: select from the drop-down list (**please choose an option** is not allowed).
  - Password must contain one of the special characters: !\$%()=?\*+,-



The screenshot shows a window titled "PipetteX activation wizard" with a close button in the top right corner. Below the title bar are navigation arrows. The main heading is "Please provide your contact information.". Below this, it says "Please complete all required fields". There are five input fields, each with a small icon on the right side: "Login name \*", "Email\*", "First name \*", "Last name \*", and "Job title".

4 **Company** and address details to be specified



PipetteX activation wizard

Please provide your company information

The information will be sent via a secure connection

Company name \*

Industry \*

Department

Address

State / Province

ZIP / Postal code \*

City \*

Country \*

User phone

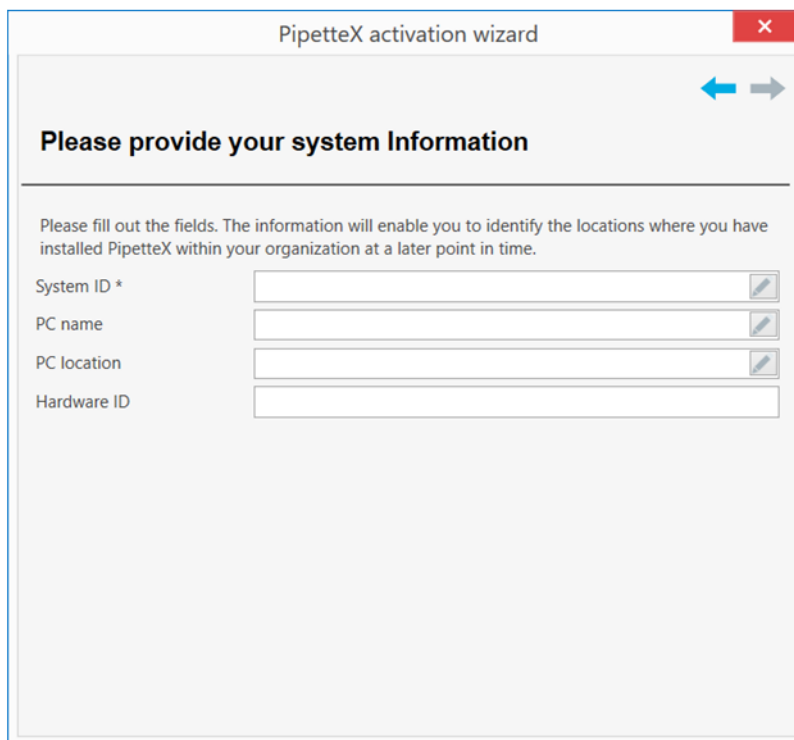
Fax

Company Website

5 **System** information.

**Note**

The **System ID**, **PC name**, and **PC location** are for your internal reference purposes so you know where the software has been installed. Any value can be entered.



PipetteX activation wizard

Please provide your system information

Please fill out the fields. The information will enable you to identify the locations where you have installed PipetteX within your organization at a later point in time.

System ID \*

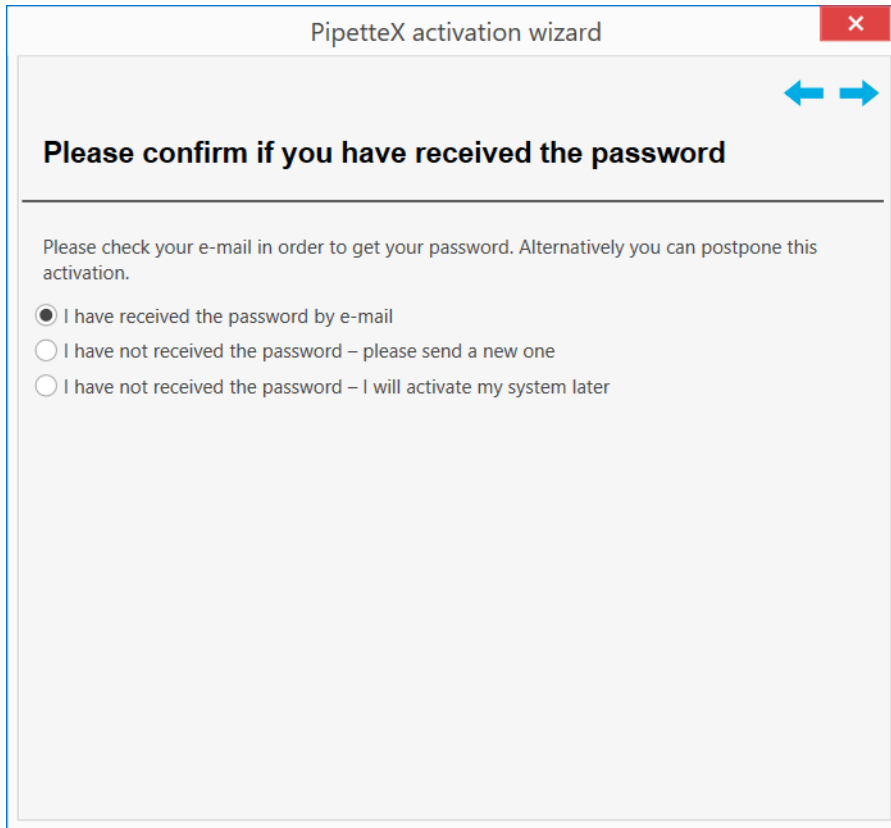
PC name

PC location

Hardware ID




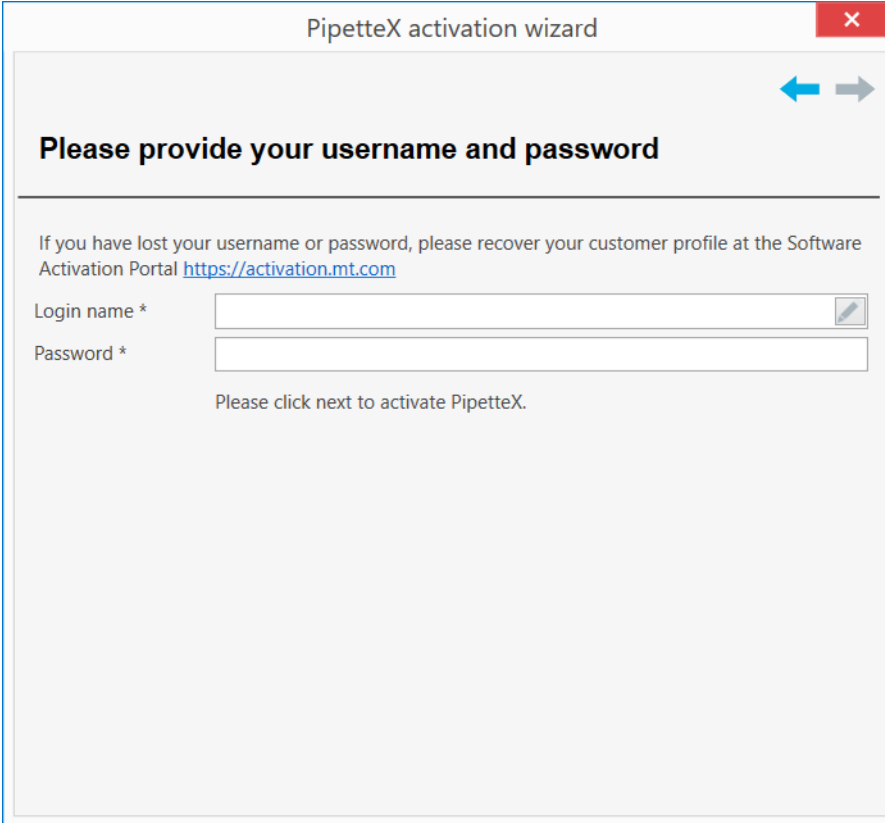
- 6 After you enter the above information, you will receive a password by email that you have provided in the **contact information** page.



The image shows a screenshot of a software dialog box titled "PipetteX activation wizard". The dialog has a standard Windows-style title bar with a red close button (an 'X' in a red square) in the top right corner. Below the title bar, there are two blue arrows pointing left and right. The main content area has a bold heading: "Please confirm if you have received the password". Below this heading is a horizontal line, followed by a paragraph of text: "Please check your e-mail in order to get your password. Alternatively you can postpone this activation." Underneath the text are three radio button options: the first is selected and reads "I have received the password by e-mail"; the second is unselected and reads "I have not received the password – please send a new one"; the third is unselected and reads "I have not received the password – I will activate my system later".

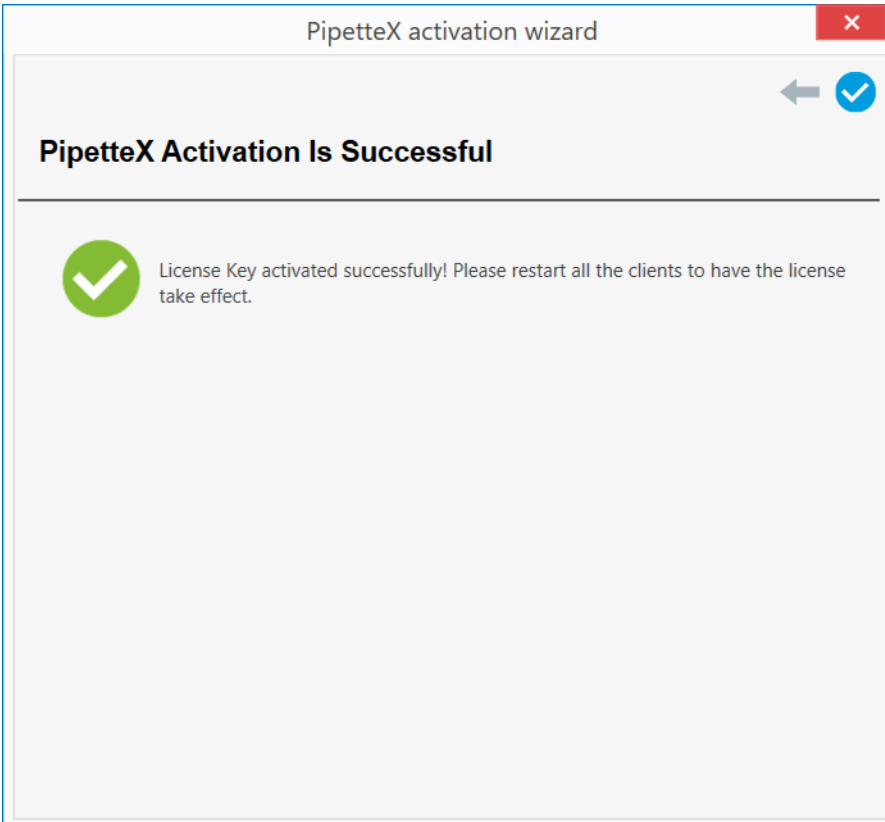
- 7 If you have received the password, you may proceed with the **I have received the password by e-mail** option. Otherwise, select the appropriate option.

- 8 Once you have received the password, copy the password, and click on the  icon to proceed with activation.



The screenshot shows a window titled "PipetteX activation wizard" with a red close button in the top right corner. Below the title bar, there are navigation arrows: a blue arrow pointing left and a grey arrow pointing right. The main heading is "Please provide your username and password". Below this, there is a line of text: "If you have lost your username or password, please recover your customer profile at the Software Activation Portal <https://activation.mt.com>". There are two input fields: "Login name \*" and "Password \*". Below the input fields, there is a button with a blue arrow pointing right. The text "Please click next to activate PipetteX." is centered below the button.



- 9 Enter the login name and the password in the following screen.

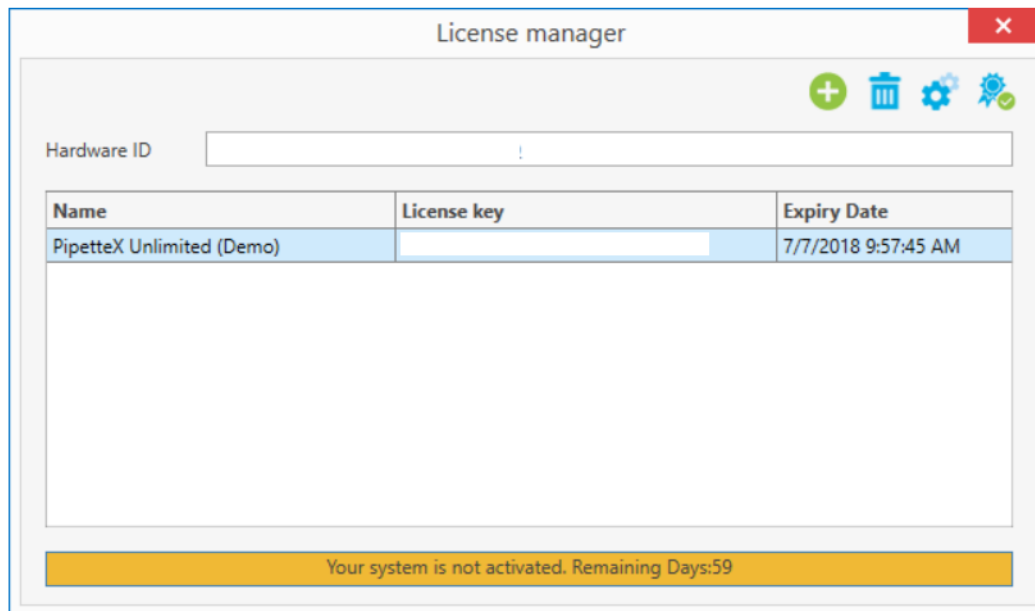


The screenshot shows a window titled "PipetteX activation wizard" with a red close button in the top right corner. Below the title bar, there are navigation arrows: a grey arrow pointing left and a blue checkmark icon. The main heading is "PipetteX Activation Is Successful". Below this, there is a green checkmark icon in a circle. To the right of the icon, the text reads: "License Key activated successfully! Please restart all the clients to have the license take effect."

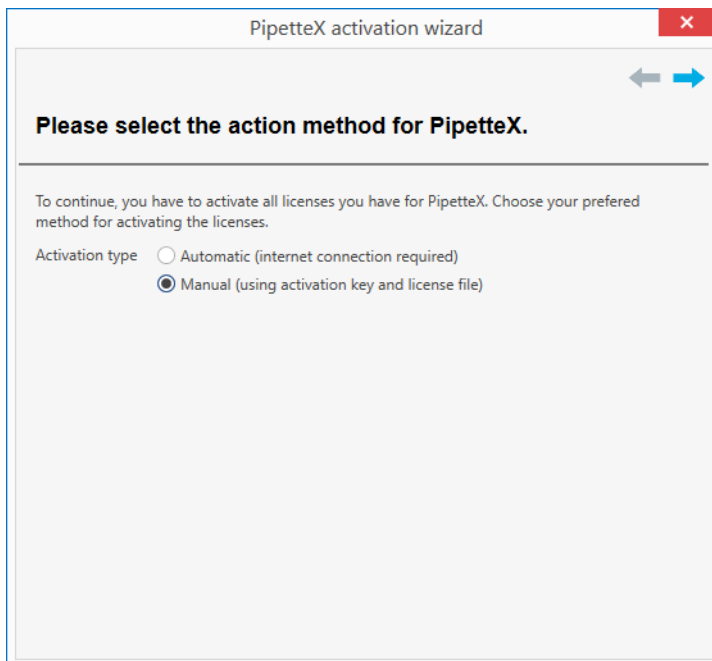
- ➔ Your license is now activated.

## 6.4.2 Activating a license using manual method

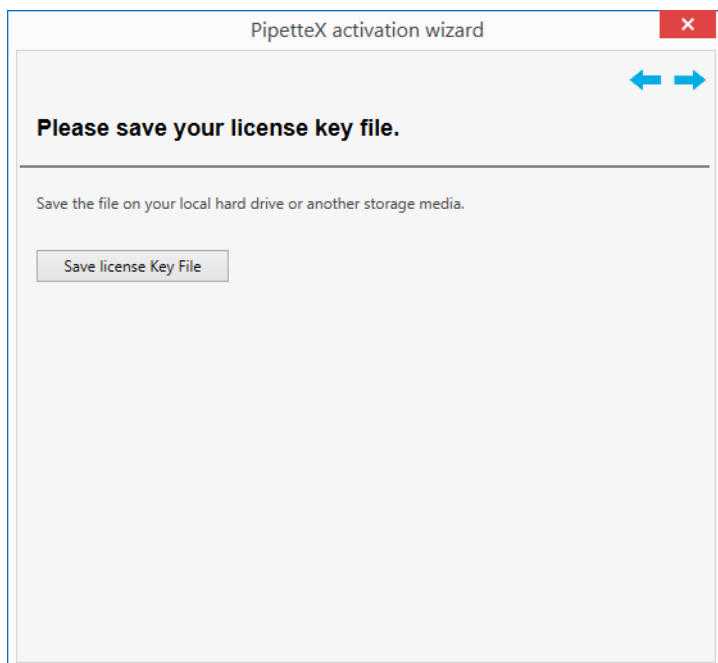
- You can activate the license when your PC is not connected to the internet.
- 1 Add a new license by clicking on the  icon. You can remove an existing license by clicking on the  icon.




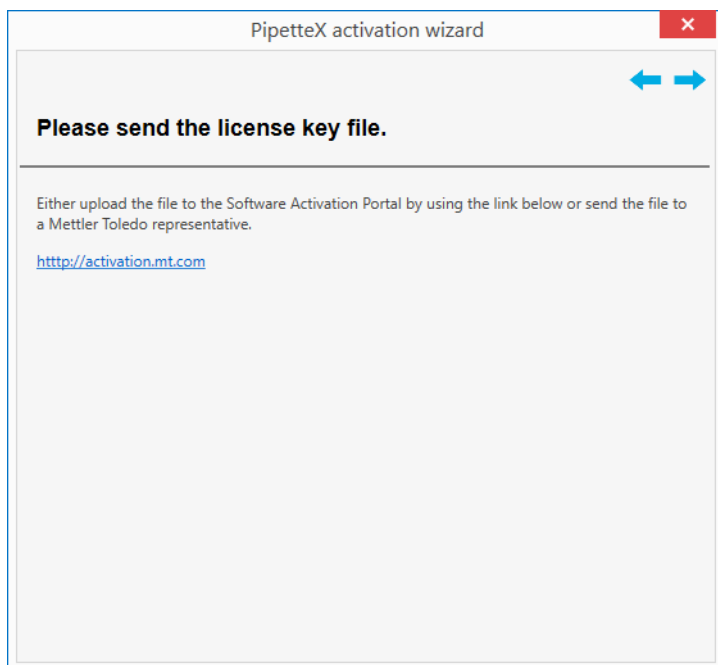
- 2 The license can be activated by clicking on the  icon from the toolbar.



- 3 Select the **Manual (using activation key and license file)** option and click on the  icon. This wizard will move to the next step as follows:

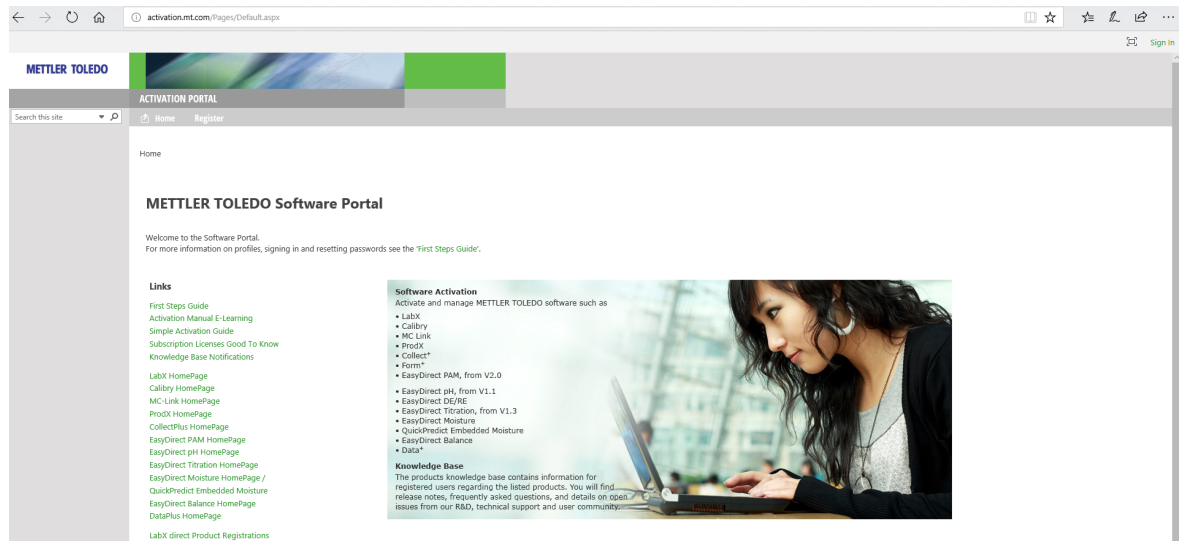


- 4 Click on the **Save License Key File** button and save the generated license key file to a known location.
- 5 Click on the  icon to upload the saved license key file to the activation portal.



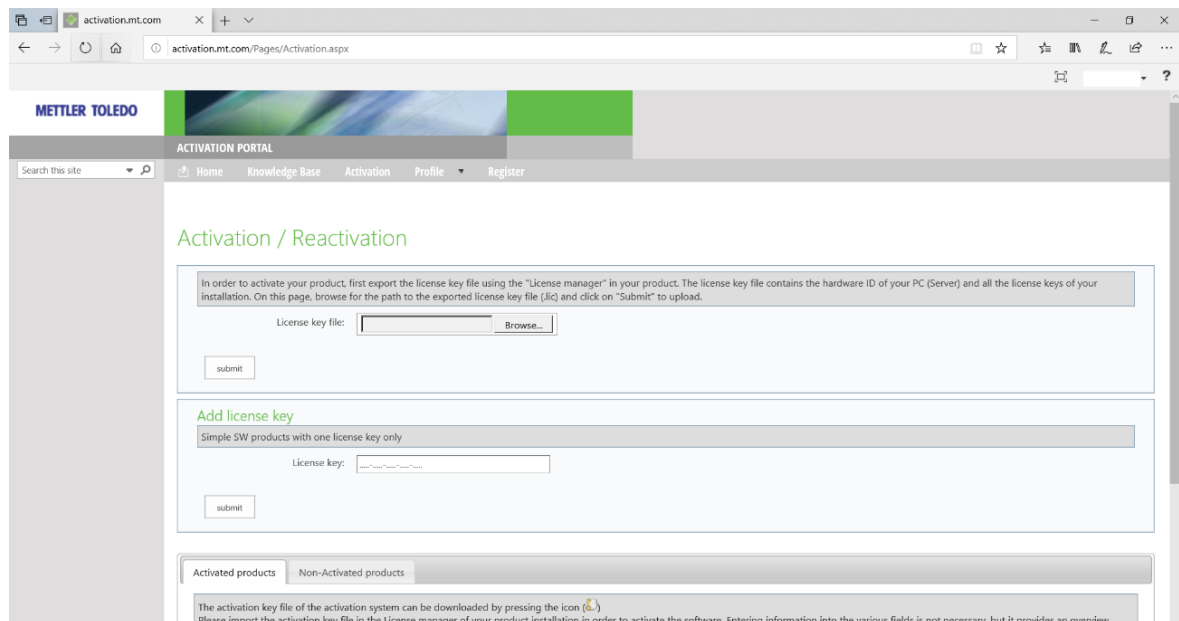
- 6 Copy license key file to a computer with internet access.
- 7 Enter <https://activation.mt.com> into a browser.

- 8 Sign in with the credentials of your user account on the METTLER TOLEDO software licensing portal by clicking **Sign in** in the top right corner or register a new user account by clicking **Register** in the menu ribbon.

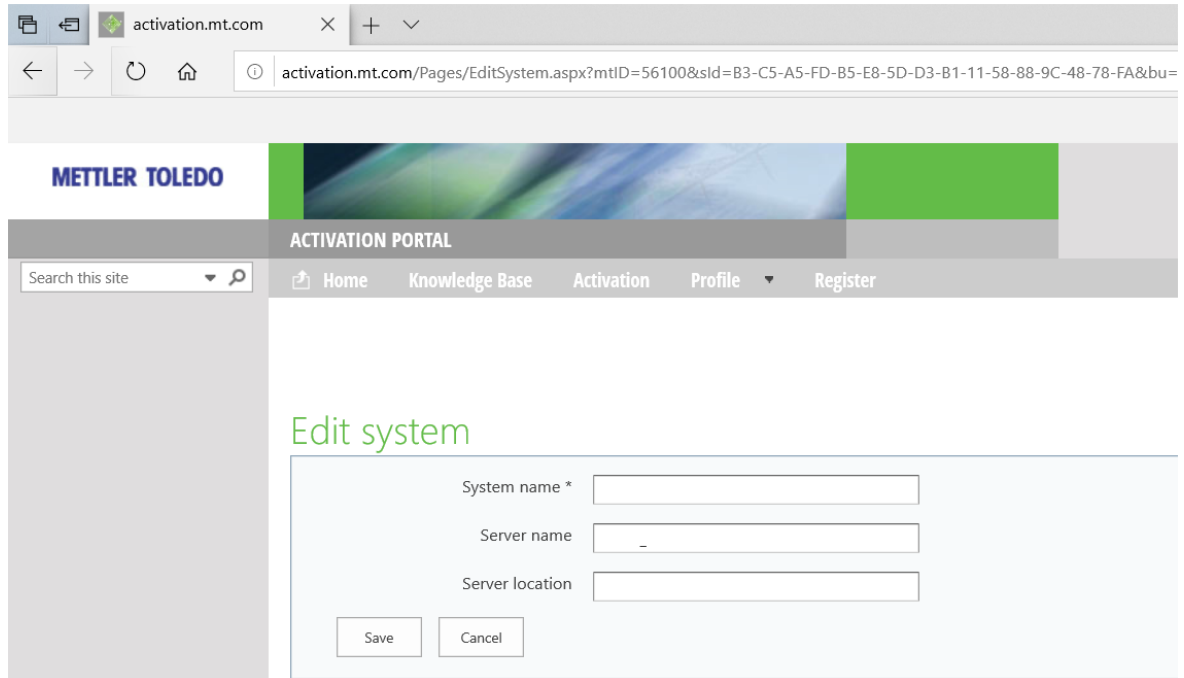


- 9 After you sign in, refer to **Activation**.

- 10 Browse to your license key file and upload it.

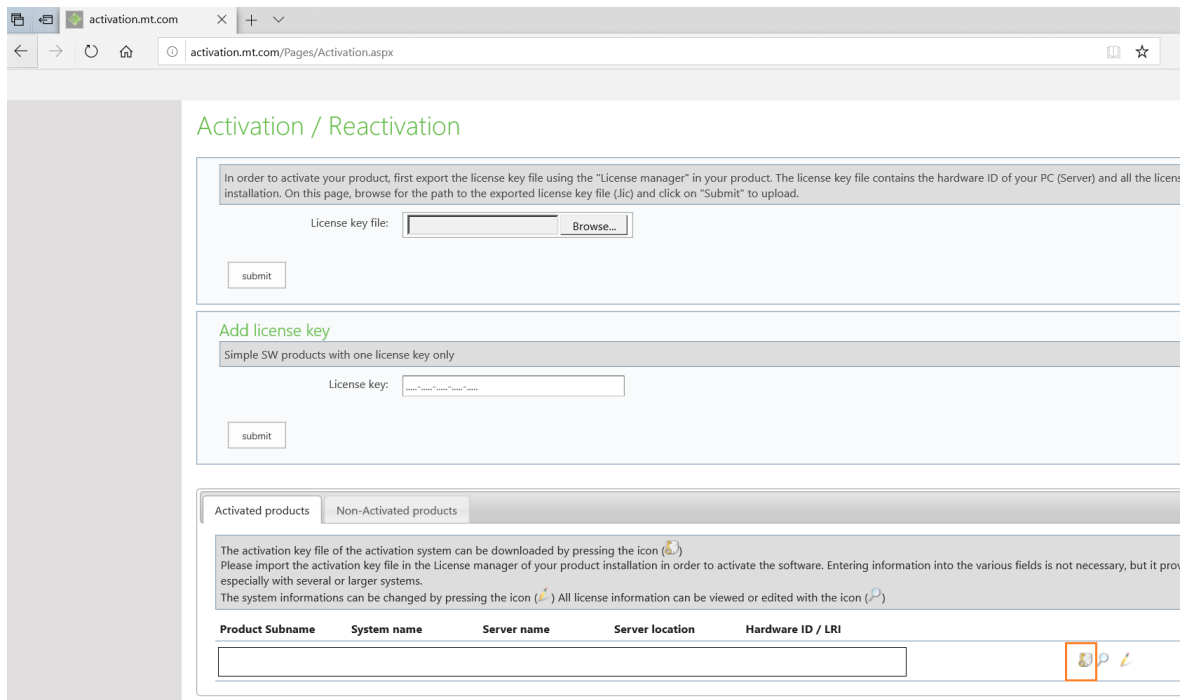


11 Add a system name. The system name is an internal reference for you, so you know on which system you have activated the license. You can optionally fill out the other fields.

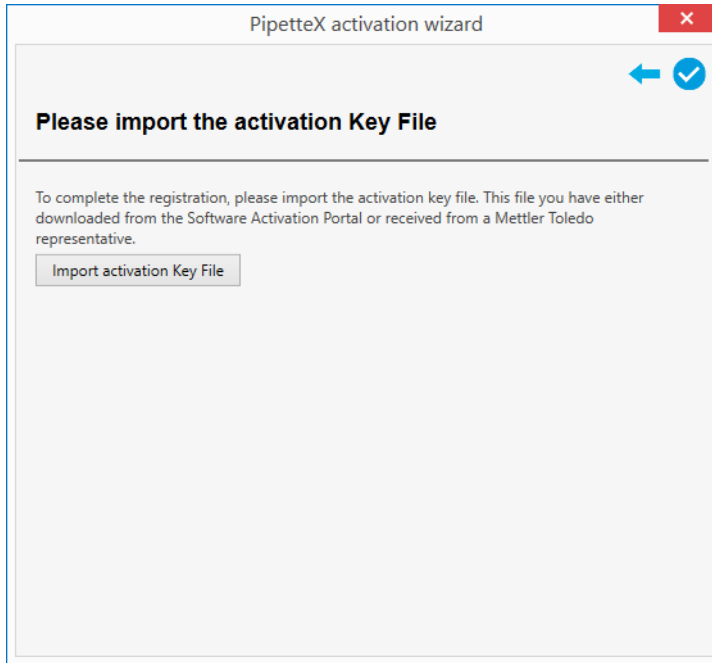


12 Select **Save**, then **Cancel**.

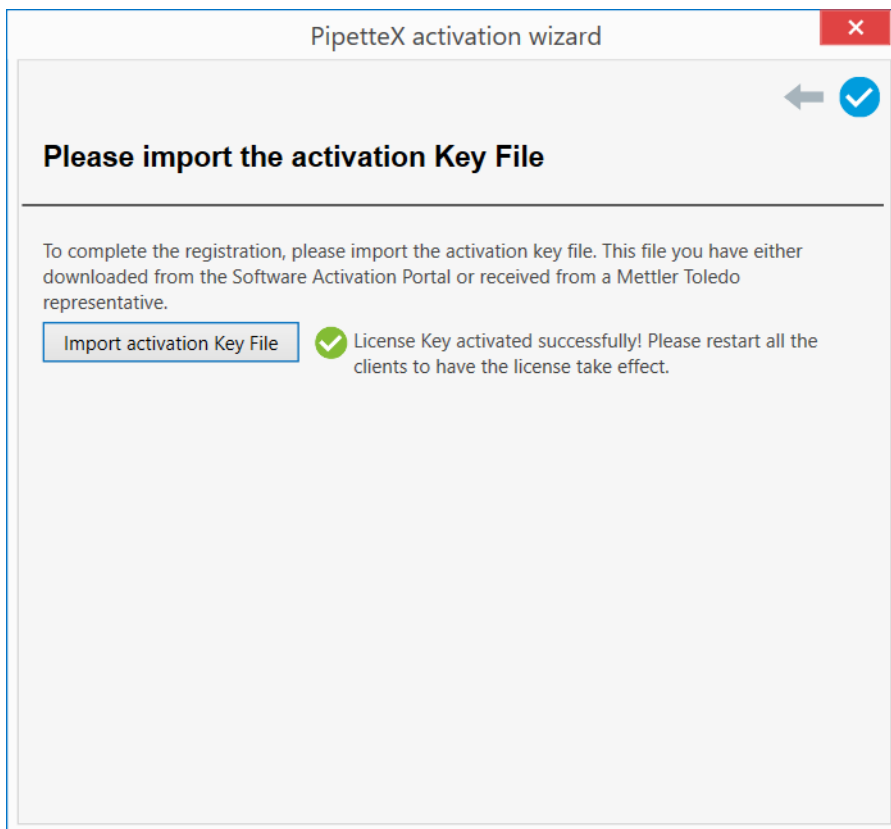
13 When successfully activated, download the activation key file (📄) and save it to a known location.



14 Copy the activation key file to the computer with your PipetteX installation.



15 Click the **Import Activation Key File** button and select the file.



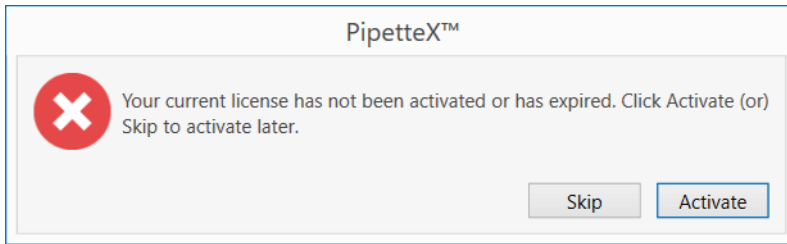
➔ Your license is now activated.

## 6.5 License renewal

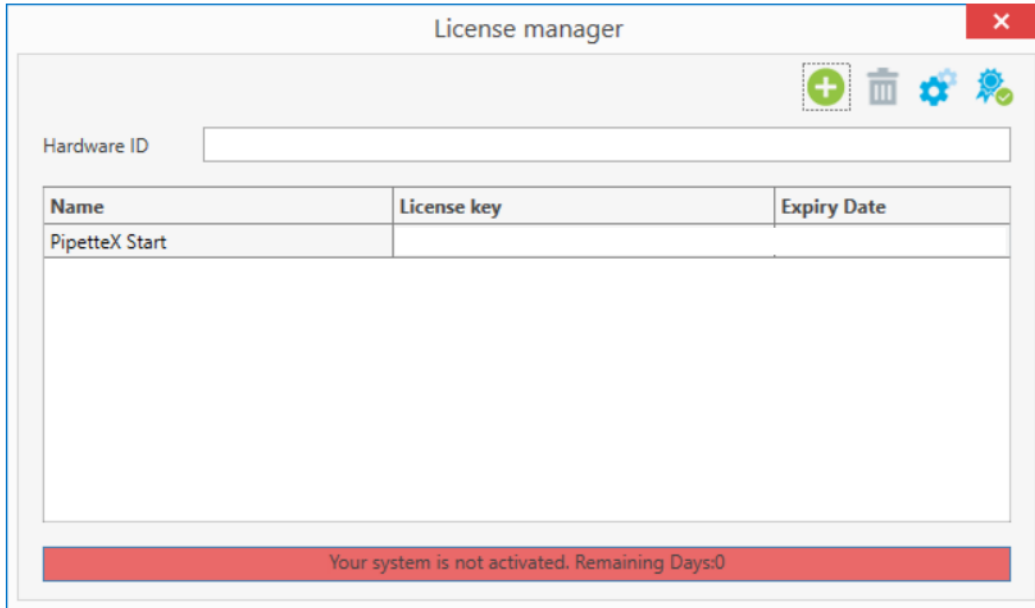
The license renewal process is similar to the first-time activation. Ensure you have a **renewal** license key, not a **first-time** license key. Side grade of license edition is possible (Start → Site/Unlimited, Site → Unlimited) in PipetteX.

### 6.5.1 License renewal using automatic method

You need to have an active internet connection to renew your license.  
The following screen will be displayed when the license activation is expired.

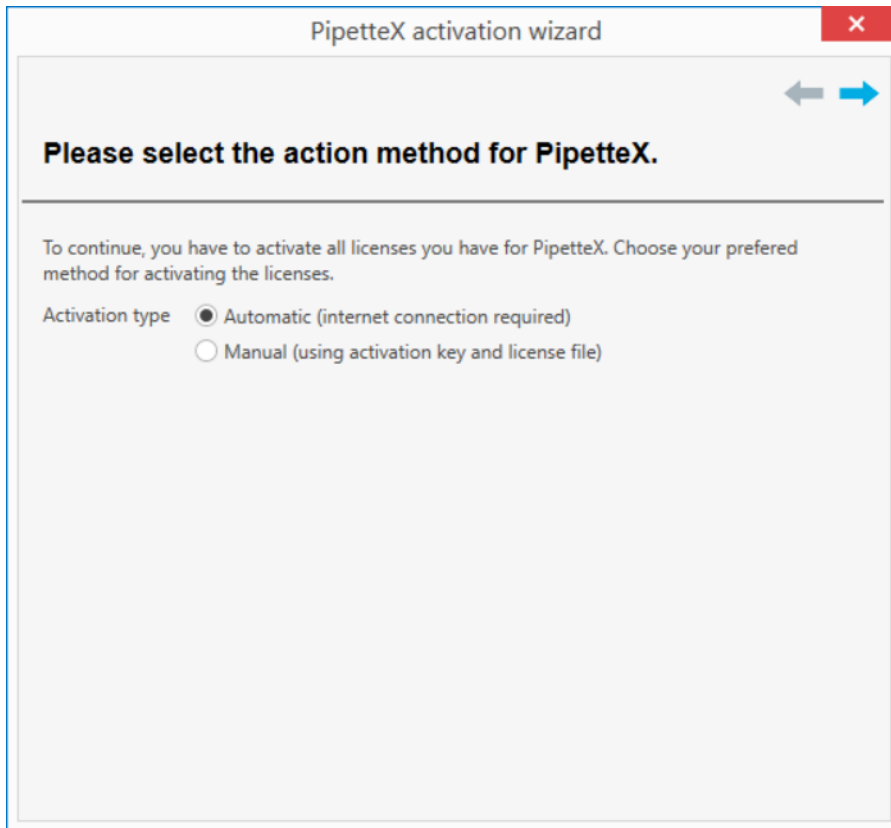



1 Add a new license by clicking the  icon. Remove an existing license by clicking the  icon.

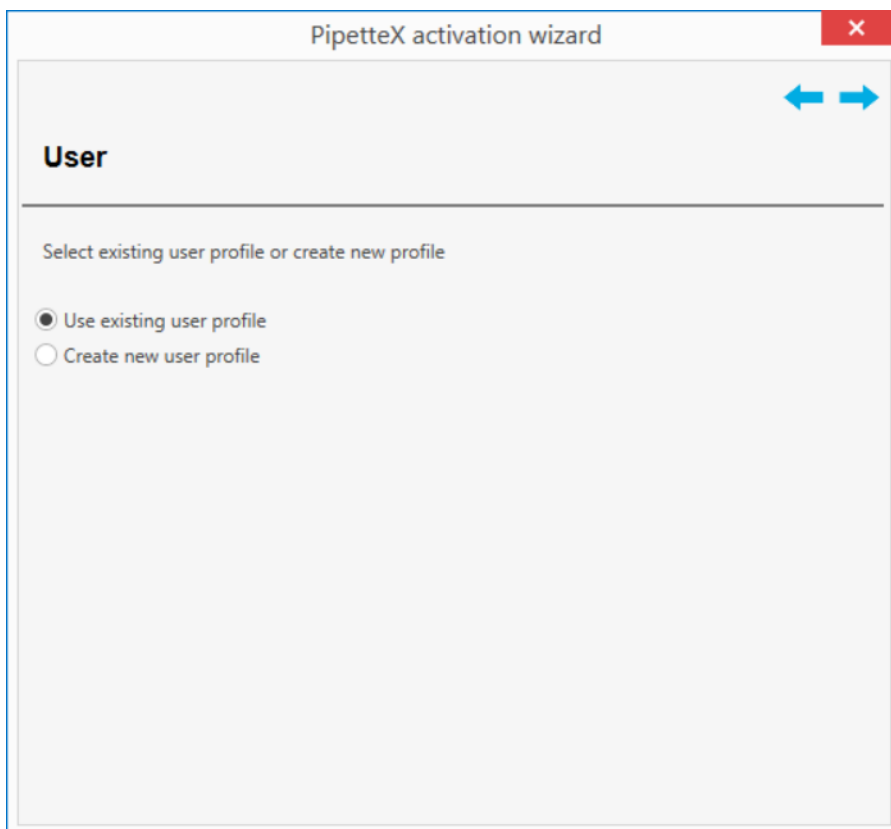





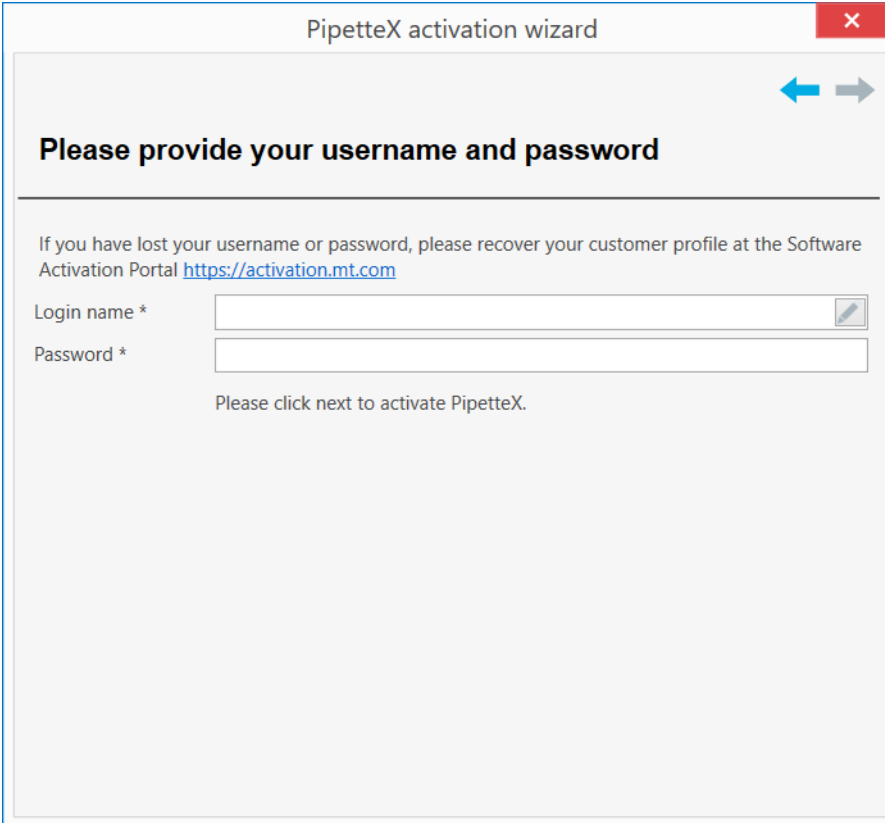
- 2 You can renew the license by clicking on the  icon from the toolbar.



- 3 Select the **Automatic (internet connection required)** option and click the  icon. The wizard moves to the next step.

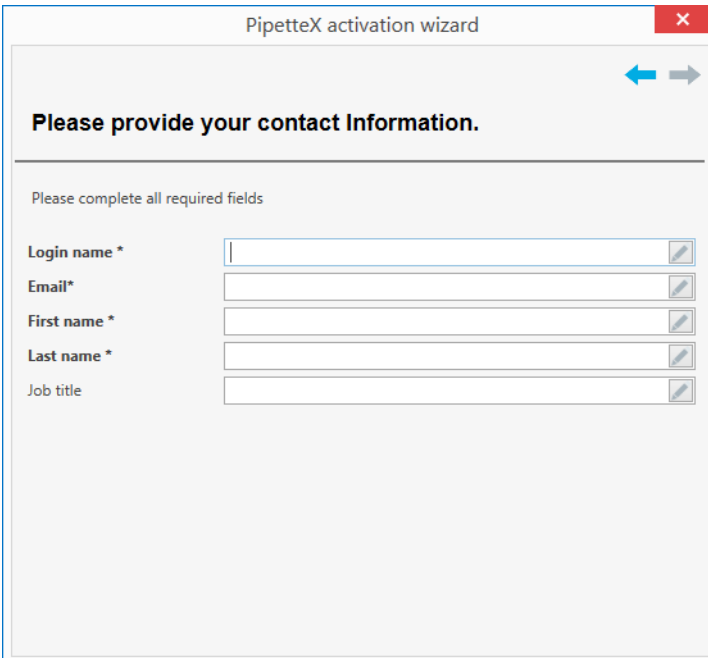


- 4 If you would like to create a new profile, then choose **Create new user profile**. If you already have a profile, choose **Use existing user profile** option and click the  icon.
- 5 Enter the login name and the password in the following screen.



The screenshot shows a window titled "PipetteX activation wizard" with a close button (X) in the top right corner. Below the title bar are navigation arrows (left and right). The main heading is "Please provide your username and password". Below this, there is a note: "If you have lost your username or password, please recover your customer profile at the Software Activation Portal <https://activation.mt.com>". There are two input fields: "Login name \*" and "Password \*". Below the fields is the instruction "Please click next to activate PipetteX."

- 6 You can verify or update your contact information, company information, and system information in the following screens.



The screenshot shows a window titled "PipetteX activation wizard" with a close button (X) in the top right corner. Below the title bar are navigation arrows (left and right). The main heading is "Please provide your contact Information.". Below this, there is a note: "Please complete all required fields". There are five input fields: "Login name \*", "Email\*", "First name \*", "Last name \*", and "Job title". Each field has a small icon (a square with a diagonal line) to its right, likely for clearing the field.

PipetteX activation wizard ✕

← →

### Please provide your company Information

---

The information will be sent via a secure connection

Company name *	<input type="text"/>	
Industry *	<input type="text"/>	
Department	<input type="text"/>	
Address	<input type="text"/>	
State / Province	<input type="text"/>	
ZIP / Postal code *	<input type="text"/>	
City *	<input type="text"/>	
Country *	<input type="text"/>	
User phone	<input type="text"/>	
Fax	<input type="text"/>	
Company Website	<input type="text"/>	

PipetteX activation wizard ✕

← →

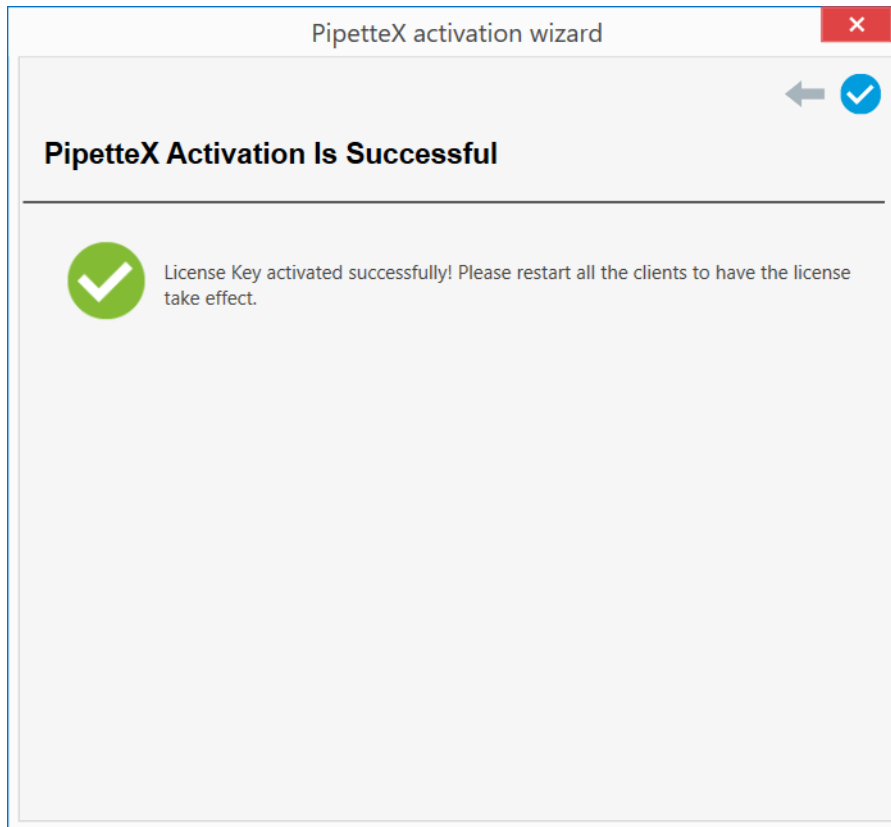
### Please provide your system Information

---

Please fill out the fields. The information will enable you to identify the locations where you have installed PipetteX within your organization at a later point in time.

System ID *	<input type="text"/>	
PC name	<input type="text"/>	
PC location	<input type="text"/>	
Hardware ID	<input type="text"/>	

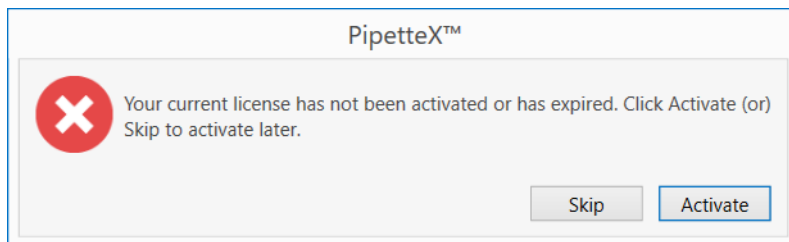
7 After you verify or update your information, click the icon to activate the license.





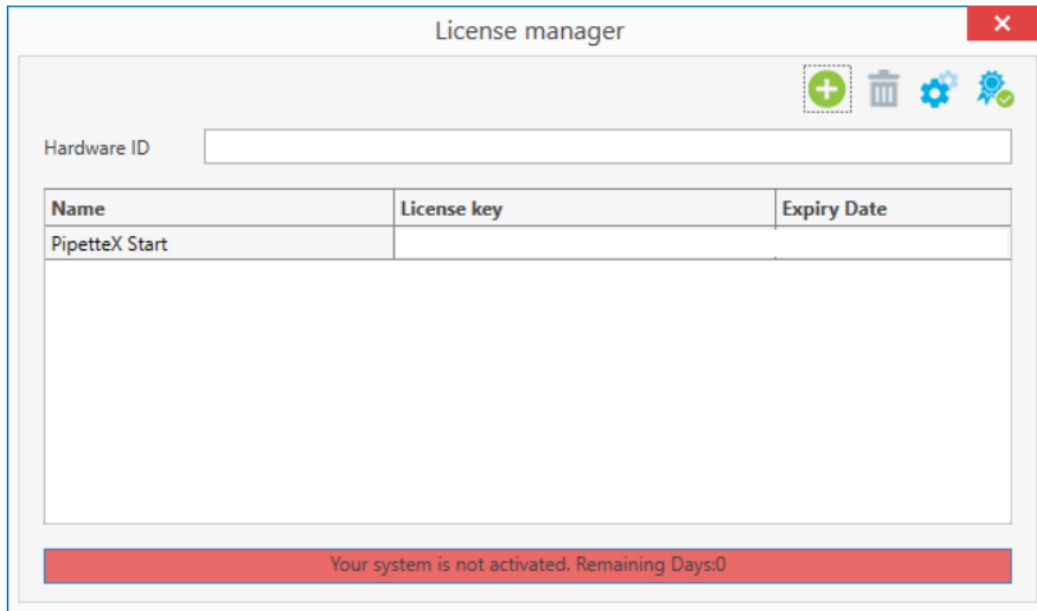
➔ Your license is now activated.

### 6.5.2 License renewal using manual method

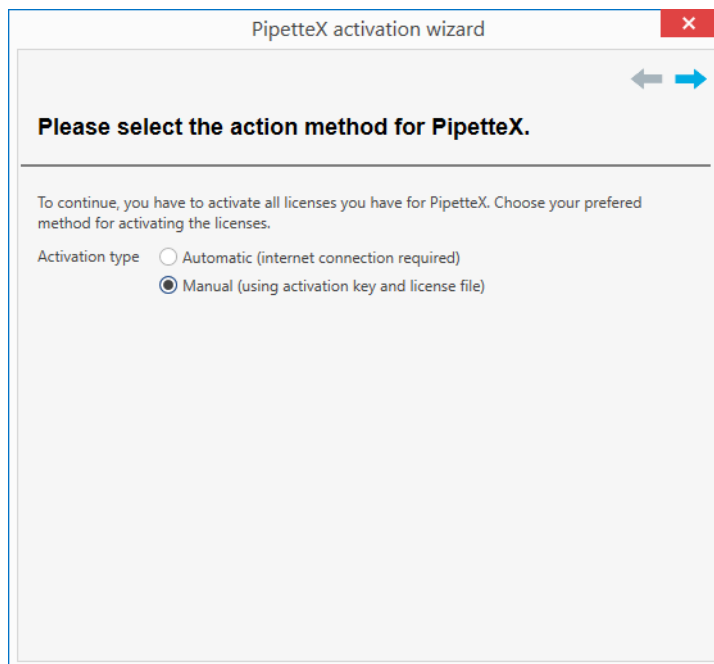
You can renew the license on a PC that is not connected to the internet. The following screen will be displayed when the license activation is expired.



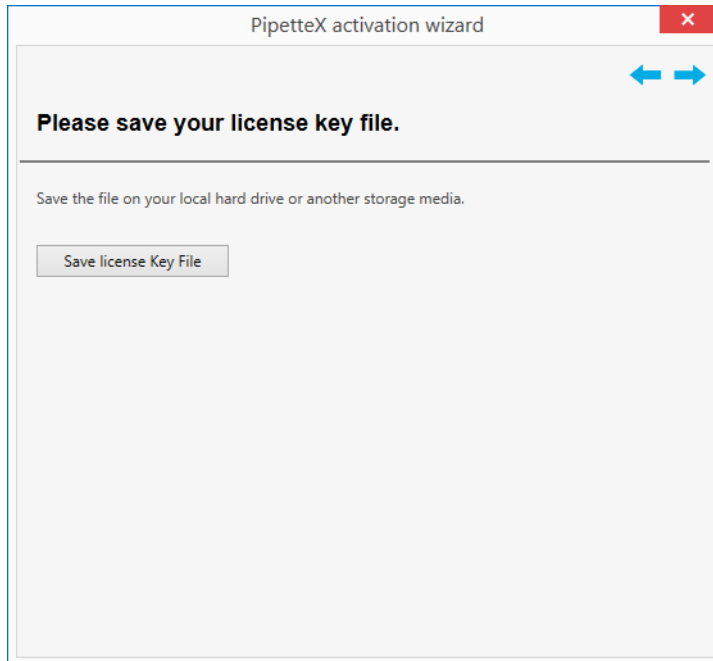
- 1 Add a new license by clicking on the  icon. You can remove an existing license by clicking on the  icon.




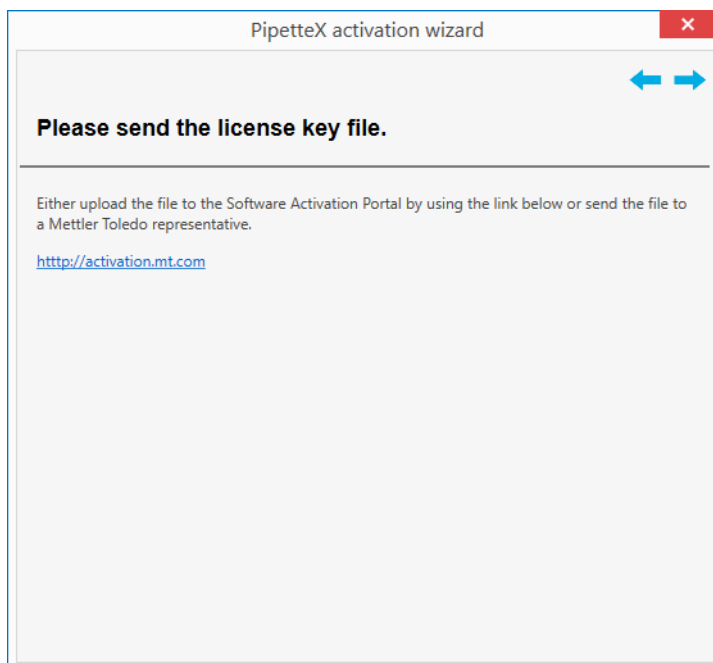
- 2 You can renew the license by clicking on the  icon from the toolbar.



- 3 Select the **Manual (using activation key and license file)** option and click on the  icon. This wizard will move to the next step as follows:

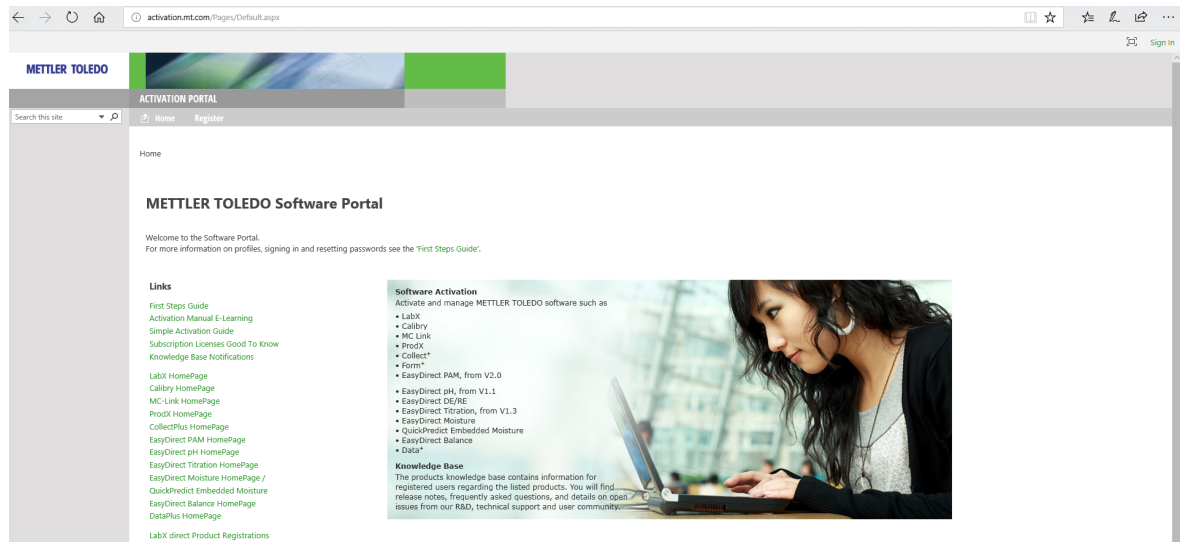


- 4 Click on the **Save License Key File** button and save the generated license key file.
- 5 Click the  icon to upload the saved license key file to the activation portal.



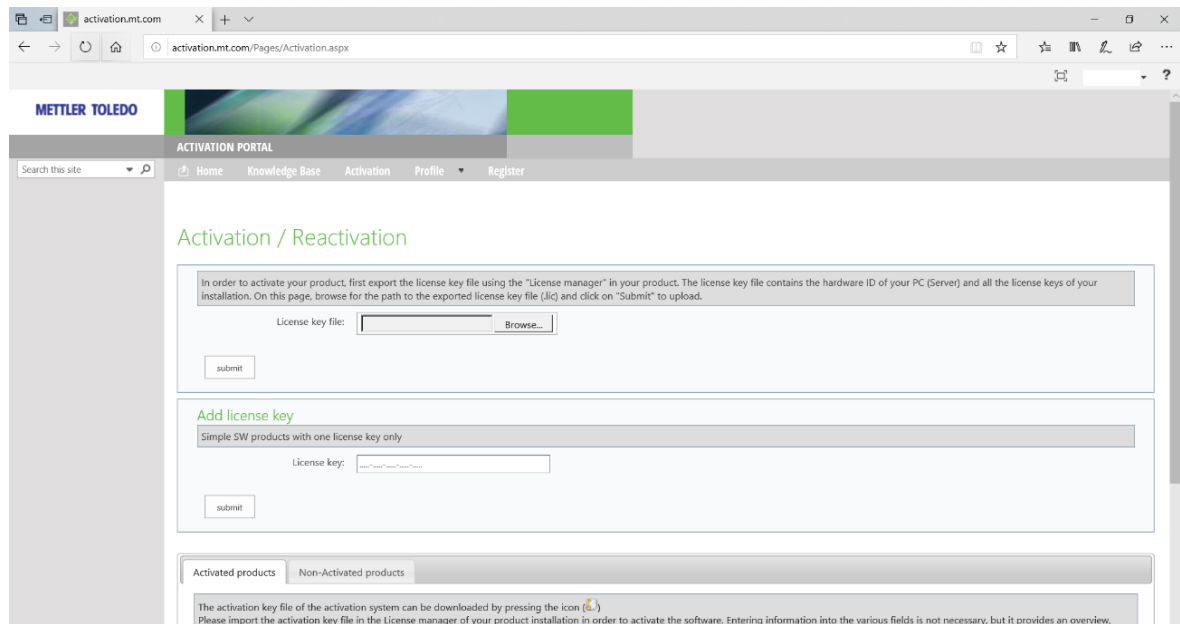
- 6 Copy license key file to a computer with internet access.
- 7 Enter <https://activation.mt.com> into a browser.

8 Sign in with the credentials of your user account by clicking **Sign in** in the top right corner or register a new user account by clicking **Register** in the menu ribbon.

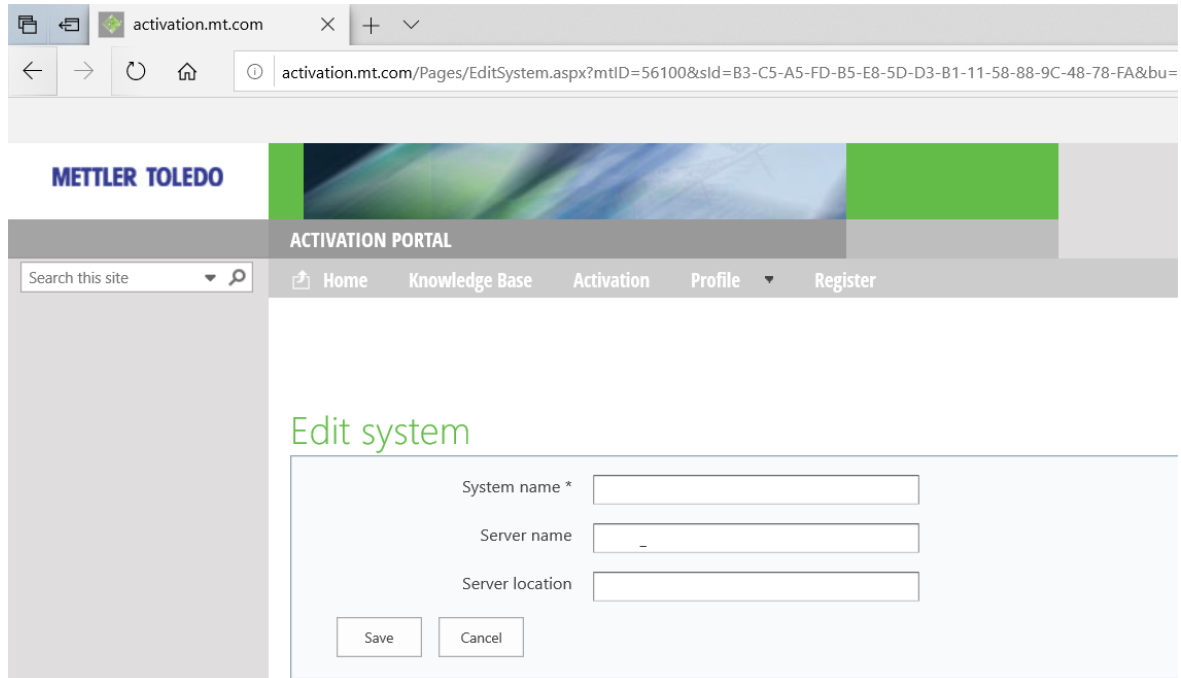


9 Once you have signed in, refer to **Activation**.

10 Browse to your license key file and upload it.

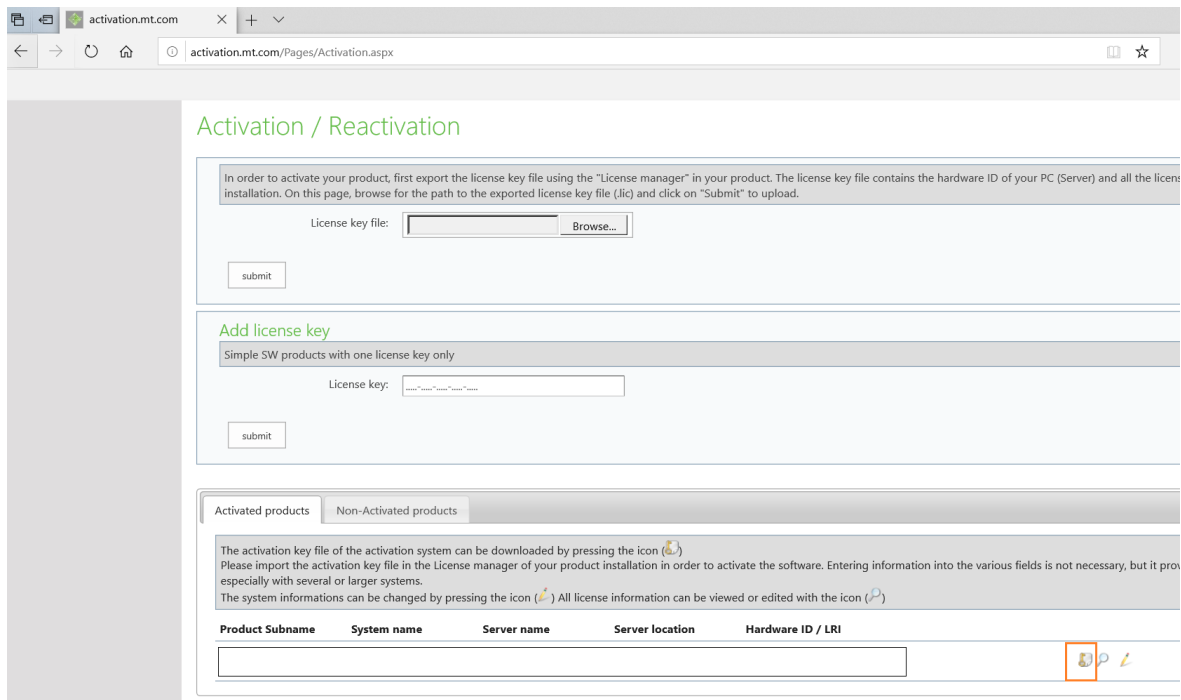


11 Add a system name. The system name is an internal reference to know which system you have activated the license. You can optionally also fill out the other fields.



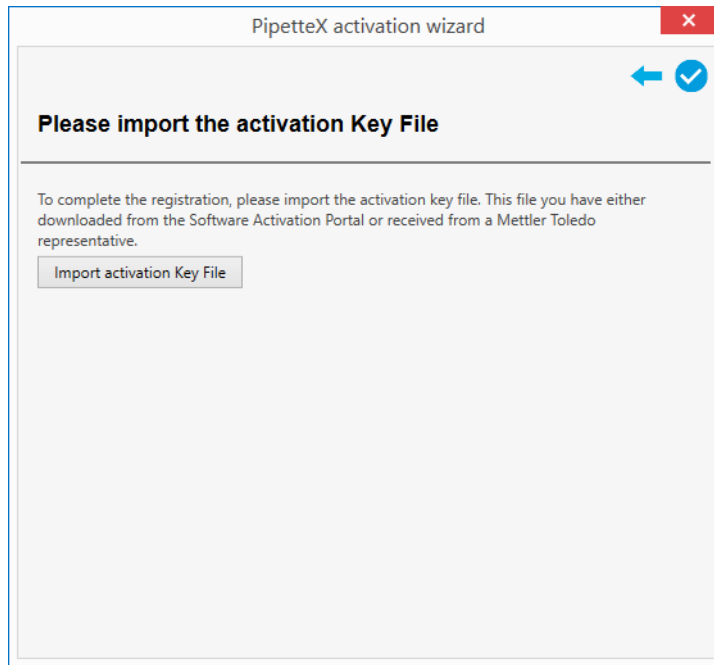
12 Select **Save**, then **Cancel**.

13 After successful activation, download the activation key file (📎) and save it.

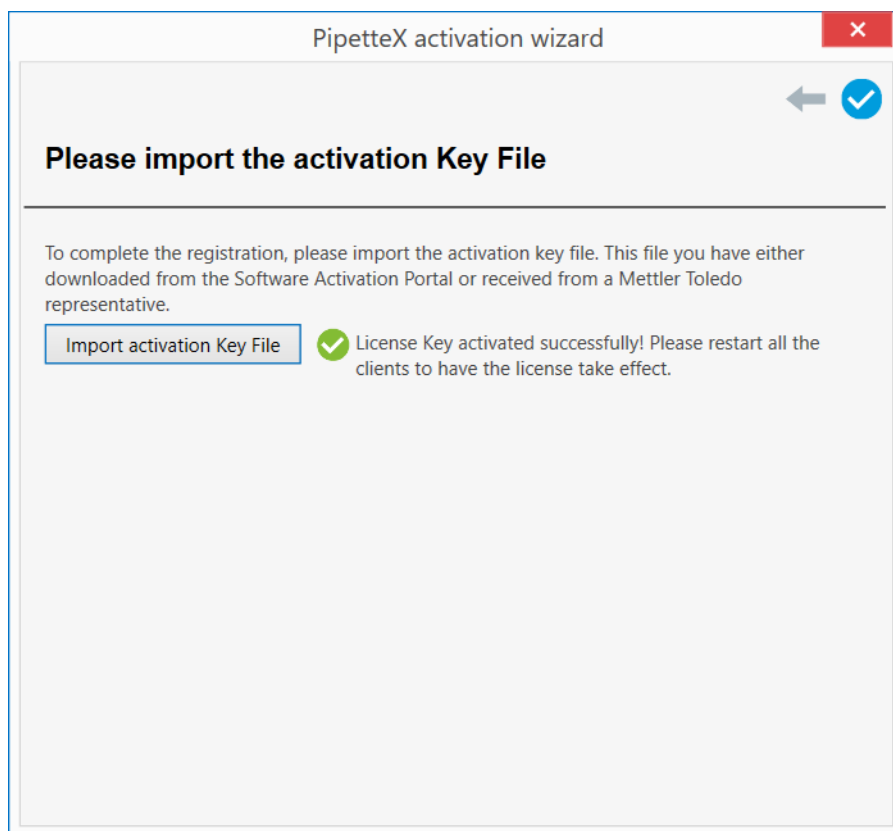




14 Copy the activation key file to the computer with your PipetteX installation.



15 Click the **Import Activation Key File** button and select the file.



➔ Your license is now activated.

## 6.6 Errors and solutions

The errors below are primarily related to errors in the license activation process. If you experience errors during setup, know that most errors are SQL related. Your first resource in this case is the Microsoft SQL support site (<http://support.microsoft.com/kb/920730/en>). If you continue to have issues, reach out to METTLER TOLEDO support. For further error messages information, consult the "Error Messages" section in the PipetteX Reference Manual <http://www.mt.com/rainin-sstanddocs>.

Error message	Reason	Solution
Activation not possible because the hardware has been changed too many times.	This happens when a license key has been activated on different PCs more than twice.	Buy a new license key and activate it.
Ambiguous system.	This happens when activating a license key that does not comply with PipetteX.	Ensure the license key is entered correctly.
An error occurred on the Activation Portal. Contact your administrator.	An error occurred on the Activation Portal. Contact your administrator.	Contact your METTLER TOLEDO representative.
At least one quantity key is missing.	The entered license key does not match with PipetteX.	Ensure the license key is entered correctly.
Attempted to register backup system but no main system registered.	This happens when the license key is already activated and reactivated on another PC that does not have main system hardware ID in the license activation portal.	Ensure the license key is activated properly in the existing system before changing the hardware.
Demo key submitted.	This happens because a demo license key is used for activation.	Ensure the entered license key is not a demo key.
PipetteX license expired. Please activate now.	To continue using PipetteX you need a valid license.	Please contact METTLER TOLEDO to obtain a valid license key.
Hardware id could not be obtained.	The Business server does not have rights to retrieve the hardware ID from the PC.	Ensure the business server has sufficient access rights.
Invalid activation key.	The license key is invalid.	Contact METTLER TOLEDO.
Invalid license file.	The license file is invalid.	Try to recreate the license file and upload again.
Invalid hardware ID.	The license key has been activated on another PC.	Contact your administrator.
Invalid product code.	A wrong product code has been used.	Contact METTLER TOLEDO.
Invalid System ID.	This happens when trying to reactivate a license key on the same PC, but the hardware does not match.	Please check if the hardware ID is correctly displayed in the License Manager Window of PipetteX.
Invalid Type ID.	License type ID is invalid	Contact METTLER TOLEDO.
Invalid username or password.	This happens when the username or password for the license activation portal is wrong.	Ensure the username and password is entered correctly.
Key does not designate a valid license level.	An invalid license level is used.	Contact METTLER TOLEDO.
Key does not designate a valid license.	An invalid license is used.	Contact METTLER TOLEDO.
Key is for a different product.	You can only activate PipetteX license keys.	Ensure you have the correct key. Otherwise contact METTLER TOLEDO.

<b>Error message</b>	<b>Reason</b>	<b>Solution</b>
Level of at least one option key is too high.	The entered license key does not match with PipetteX.	Ensure the license key is entered correctly.
Level of at least one quantity key is too low.	The entered license key does not match with PipetteX.	Ensure the license key is entered correctly.
License key already used by another profile.	A license key can only be assigned to one user profile.	Contact your administrator or METTLER TOLEDO.
License key could not be validated.	License key could not be validated.	Retry the validation process. If not successful, contact METTLER TOLEDO.
License key was not issued by METTLER TOLEDO.	An invalid license key was used.	Contact METTLER TOLEDO.
Login name already exists.	Login names must be unique.	Use a different login name.
More than one edition license keys has been submitted.	You can only submit one edition of license keys, not several	Choose the license key edition you need and submit that one.
Multiple keys found that share the same product option.	You should only have one license key with the same type of license activated	Remove license keys with the same type of license and only activate one license key.
No edition license key has been submitted.	No edition license key has been submitted.	Submit an edition license key.
Not authorized to register.	This happens when the activation portal user account is not authorized to activate.	Check whether the user account has been created correctly in the activation portal ( <a href="https://activation.mt.com">https://activation.mt.com</a> ).
One or more keys do not have a valid version.	One or more keys do not have a valid version.	Contact METTLER TOLEDO.
Password strength too weak.	Strong passwords are required.	Password length minimum: 7 characters, including minimum 1 character out of this selection of special characters: !\$%()=?*+,-
Same license key has been submitted twice.	A license key should only be submitted once.	If the issue persists, contact METTLER TOLEDO.
Software configuration is invalid.	This happens because the license key activation is not matching the PipetteX configuration in the activation portal.	Check if the license key is entered correctly. Otherwise contact METTLER TOLEDO.
Start edition does not allow server connectivity. Please upgrade if needed.	If you want the calibration certificates to be loaded into PipetteX, you need a paid subscription.	Contact METTLER TOLEDO.
The account is already used by another profile.	The username is already used by another account in activation portal.	Ensure the entered username is unique.
The license key is not valid.	The entered license key does not belong to PipetteX.	Ensure the license key is entered correctly.
Unable to connect activation server.	The activation portal could not be contacted.	Ensure the internet connection is active and your firewall allows a connection to activation portal.
User profile does not exist.	No user profile exists on the activation portal.	Read the manual or installation guide on how to setup an activation portal account.

Error message	Reason	Solution
<p>Unable to install SX Virtual Link Lite because the server is currently connected.</p> <p>Restart your computer and try running installation again.</p>	<p>This warning is shown after the software update if the Silex gateways are connected with devices during software upgrade.</p>	<p>This message can be ignored.</p> <p>In future, recommended to disconnect the Silex gateways from PipetteX before initiating a software update.</p>

## 7 Known Issues

### 7.1 RFID reader not detected

This occurs, when both LabX Direct Pipette Scan and PipetteX are used simultaneously and LabX Direct Pipette Scan is trying to force close the RFID Reader.

Close the LabX Direct Pipette Scan and unplug the RFID reader, wait for 10 seconds and then plug the RFID reader back into the PC. PipetteX should then be able to communicate with the RFID reader.

This is true of any other applications which may attempt to communicate with the RFID readers.

### 7.2 EasyScan Flex reader not detected

If you are using the serial COM port on a docking station, PipetteX might not be able to establish a connection.

Try to avoid using a docking station or use a USB serial cable instead, which creates a virtual COM on the computer.

### 7.3 SQL server installation issues

Refer to Microsoft support for various SQL installation issues and their resolutions.

### 7.4 Font style for non-English manual

The font style **Arial Unicode MS** is used for displaying all of the characters present in the certificate. If Arial Unicode MS font style is not installed, then **#MS San Serif** will be used to display the characters in the certificate.





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