

PROFINET Master Simulator / EtherNet/IP Master Simulator
INSTALLATION GUIDE

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Important User Information

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1. Preparation

About this Document

**NOTE**

The Master Simulator software is developed and maintained by Bihl+Wiedemann.

**NOTE**

Bihl+Wiedemann provides two variants of the Master Simulator. This document covers usage of both the basic variant and the plus-variant. Virtual machine installation is only possible in the more advanced plus-variant.

Choosing the Installation Option

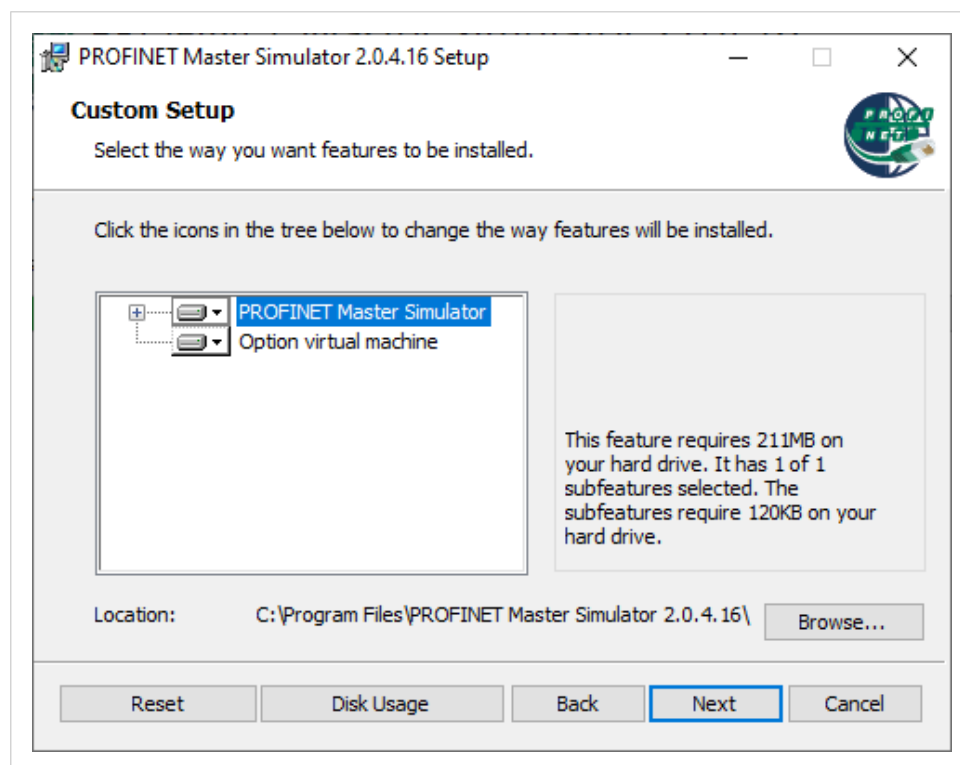
There are two installation options to choose between:

- [Standard installation \(page 1\)](#) - single user license
- [Virtual machine installation \(page 2\)](#) - floating license

Standard Installation

Choose this option when you want to install the software on one computer.

The Standard Installation option installs the software on a single PC and registers it with a single-user license. In this version you are able to use the software without restriction and without an internet connection in offline mode.



Virtual Machine Installation

Choose this option when you want to install the software on several computers or virtual machines.

A floating license authorizes the license holder to install the software on an unlimited number of workspaces (local computers or virtual machines). However, simultaneous use is restricted to the number of acquired licenses.

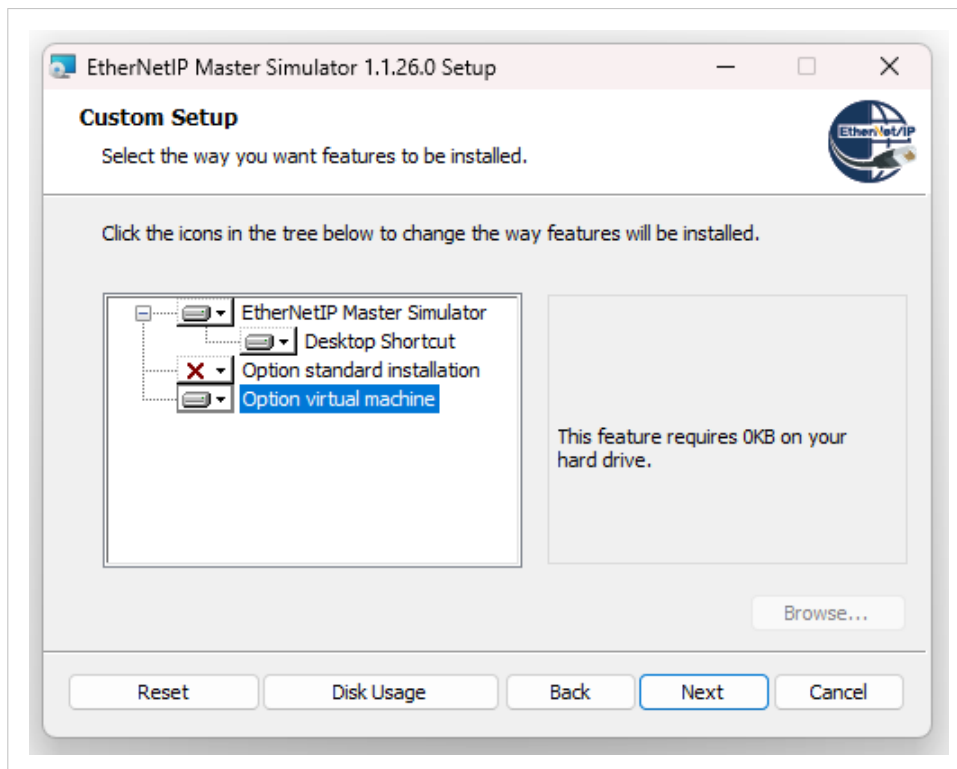
A server of the licensor registers the number of currently granted floating licenses and authorizes a corresponding number of users.

See [Floating License - Increasing the License Pool \(page 17\)](#) for more information.



NOTE

A floating license can not be used by multiple users at the same time. If all floating licenses are in use, each additional user has to wait until another user terminates a session and a floating license is released.



NOTE

Under normal operating conditions, permanent internet access to the license server is required in order to use the software on a virtual machine (Floating License).

Where there is limited internet access a so-called Borrow License can be generated for a period of max. 30 days, for operation in offline mode.

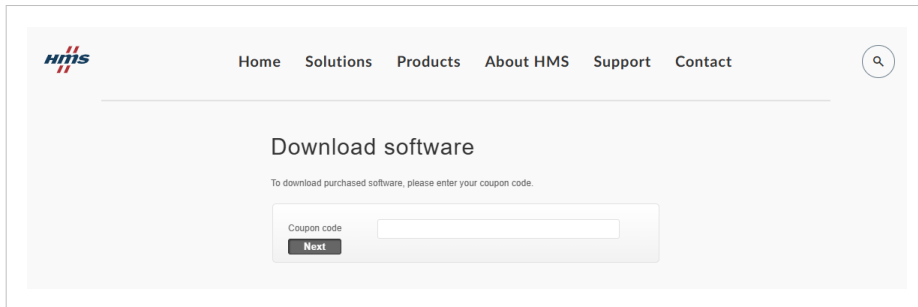
2. Installation

You can install the Master Simulator software with or without internet access.

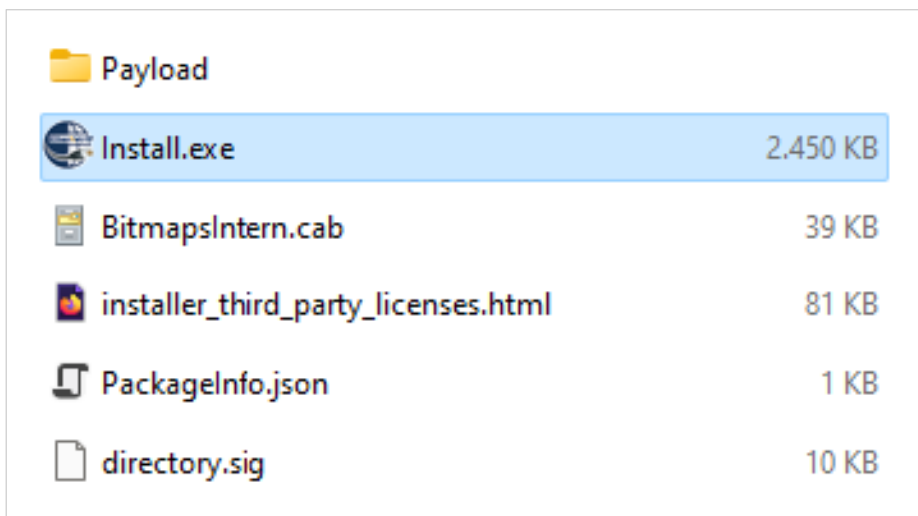
2.1. Installation with Internet Access

Follow these steps to download and install a single-user license on a computer with internet access.

1. Click on the download link in the license document to go to the Master Simulator download page.
2. On the download page, enter the **Coupon code** and click **Next**.

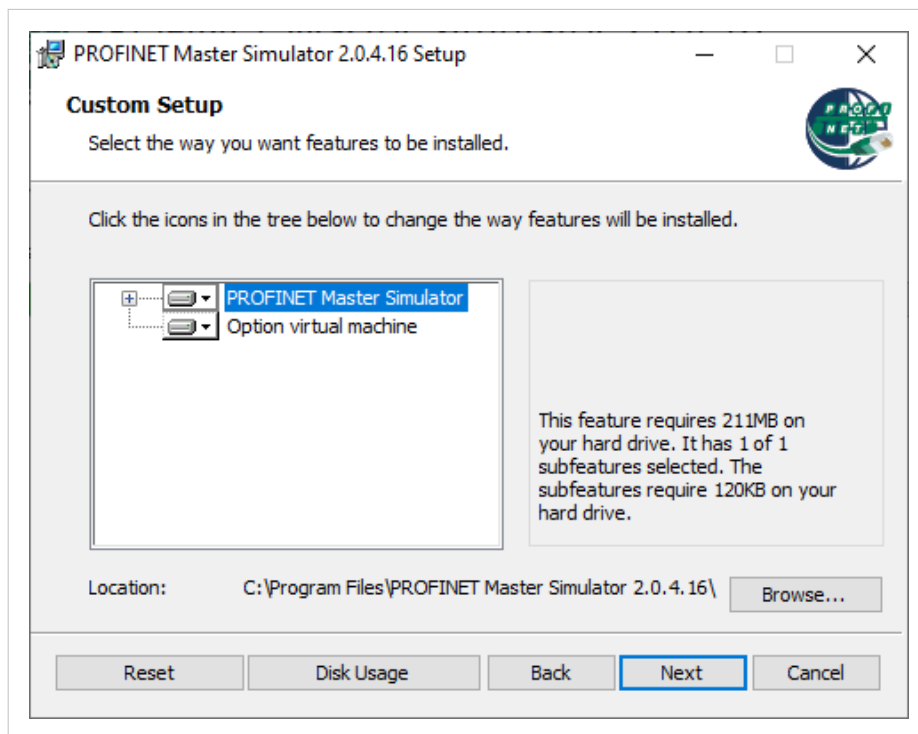


3. Click on the download link to save the installation file to your computer.
4. Extract the zip file and double-click on the *Install.exe* file to start the setup wizard.



 Payload	
 Install.exe	2.450 KB
 BitmapsIntern.cab	39 KB
 installer_third_party_licenses.html	81 KB
 PackageInfo.json	1 KB
 directory.sig	10 KB

5. Select the option **Standard Installation** and click Next.



6. Follow the instructions in the setup wizard to finish the installation procedure.

Activate the Software License

Add license

← Add new license

Please enter your license data

Name: Max Mustermann

Company: Bihl+Wiedemann GmbH

E-mail: mmustermann@bihl-wiedemann.de

Repeat e-mail: mmustermann@bihl-wiedemann.de

Please choose whether you want to redeem a coupon code online or already have a license key:

☒ Coupon code: *****

Note: This requires Internet access. If you do not have Internet access on this computer you can visit our activation website on another computer to redeem your coupon code and receive a license key. You may need the following hardware ID.

Web registration: <https://licensing.bihl-wiedemann.de>

Your hardware ID: 1234 5678 1234 5678 1234 5678

☒ Yes, I agree to receive e-mails from Bihl+Wiedemann informing me about upcoming expiration of licenses after purchasing time-limited software licenses. I have the right to opt out of these reminder e-mails at any time.

☐ License key:

[Lost your license data?](#)

Next > Cancel Help

1. Start the software.
The first time the software is started after installation you are prompted: No valid license was found. To add a new license, click **OK**.
2. Enter your license data in the form and click **Next** to confirm.

2.2. Installation without Internet Access

Follow these steps to download and install the software.

Use a computer with internet access:

1. Click on the download link in the license document to go to the download page.
2. On the download page, enter the **Coupon code** and click **Next**.
3. Click on the download link to save the installation zip file to a removable storage device.

On the computer without internet access:

1. Copy the zip file to the computer without internet access.
2. Extract the zip file and double-click on the *Install.exe* file to start the setup wizard.
3. Select the option **Standard Installation** and click **Next**.
4. Follow the instructions in the setup wizard to finish the installation procedure.

Activate the Software License

1. Start the software.

The license data form that opens will contain the hardware ID of the computer where the software is installed.

Add license

Add new license

Please enter your license data

Name:

Company:

E-mail:

Repeat e-mail:

Please choose whether you want to redeem a coupon code online or already have a license key:

☒ Coupon code:

Note: This requires Internet access. If you do not have Internet access on this computer you can visit our activation website on another computer to redeem your coupon code and receive a license key. You may need the following hardware ID.

Web registration: <https://licensing.bihl-wiedemann.de>

Your hardware ID:

☒ Yes, I agree to receive e-mails from Bihl+Wiedemann informing me about upcoming expiration of licenses after purchasing time-limited software licenses. I have the right to opt out of these reminder e-mails at any time.

☐ License key:

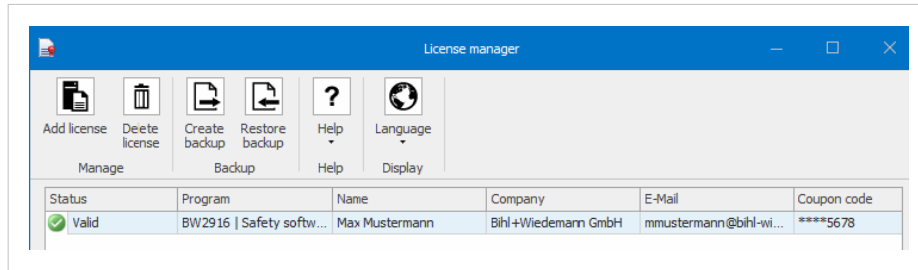
[Lost your license data?](#)

Next > Cancel Help

2. Access the license server from a computer with internet access:
[HMS Networks Software download for Master Simulator](#)
3. Enter your license data and the Hardware ID.
4. Use the link to download the generated license file containing the license key.
Save the license file on a removable storage device.
5. Copy the license file to the computer without internet access.

6. Start the license manager.

To restore the backup of the license file with the license key, click **Restore backup**.
To confirm, click **OK**.

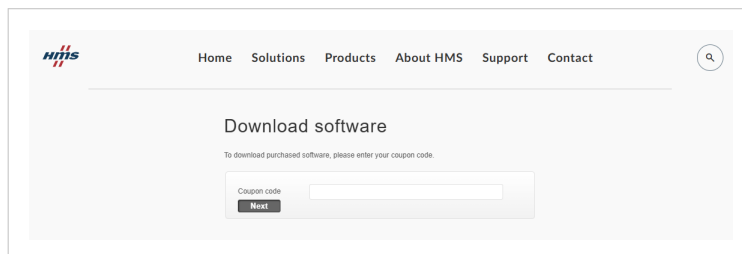


7. Enter your license data in the form and click **Next**.

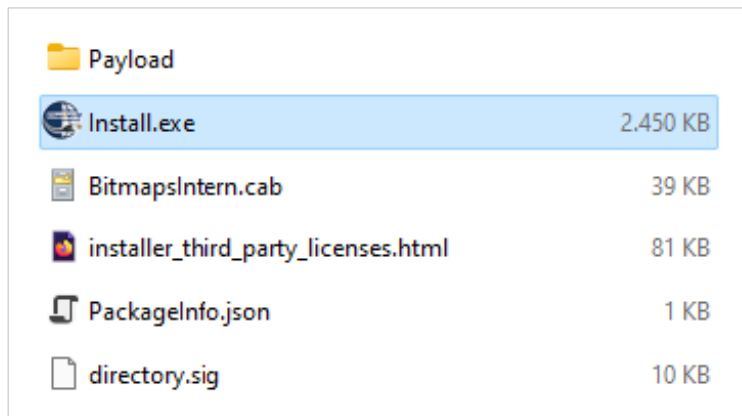
2.3. Virtual Machine Installation with Floating License

Follow these steps to download and install the software.

1. Click on the download link in the license document to go to the Master Simulator download page.
2. On the download page, enter the coupon code and click **Next**.

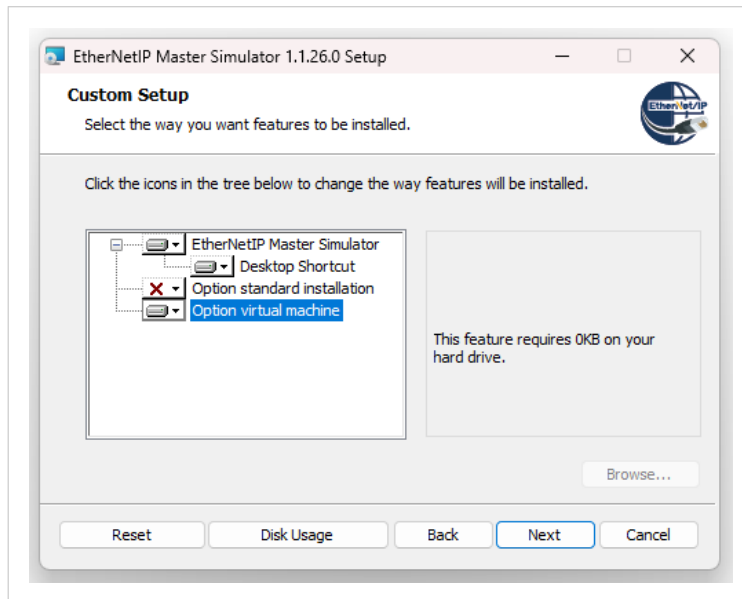


3. Click on the download link to save the installation file to your computer.



4. Extract the zip file and double-click on the *Install.exe* file to start the **Setup Wizard**.

5. In **Custom Setup**:
 - a. Disable **Option standard installation**.
 - b. Enable **Option virtual machine**.
 - c. Click **Next**.



6. Follow the instructions in the setup wizard to finish the installation procedure.

Activate the Software License

1. Start the software.

The first time the software is started after installation you are prompted: No valid license was found. To add a new license, click **OK**.
2. Enter your license data in the form and click **Next** to confirm.

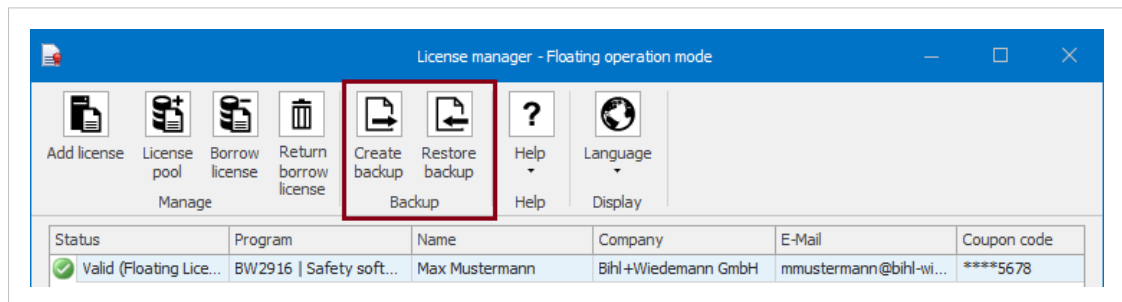
Creating a License Pool for Installation on Multiple Workstations

A floating license allows you to install the software on any number of computers (local PCs or virtual machines). It serves as a source for increasing the license pool with additional floating licenses (incrementals).

For more information, see [Floating License - Increasing the License Pool \(page 17\)](#).

How to Create a License Pool on Several Computers

1. Install and activate the software on the first computer (the source) with "Option Virtual Machine (Floating License)".
2. Save and unzip the original zip file of the source license on any number of computers (local PCs or virtual machines).
3. Install and activate the software on all computers which shall be part of the intended license pool. The license registration data of the source license must be entered on all computers.
 - a. Export/Import of the license data is recommended.



Open the license manager on the computer that has the source license. Click **Export** and save the .licstor file containing the registration data.

Save the .licstor file on all computers in the intended license pool.

Open the license manager on every computer in the intended license pool and Import the .licstor file containing the registration data.

- b. Manually insert the registration data. Take care to use the exact same data on all computers.
4. If desired, the license pool can be increased with additional licenses at any time.
The number of available licenses will be adjusted automatically.
You do not have to install and register the license data on all computers as described in steps 3.a and 3.b above.

Personal Data Registration

After you have installed the software and registered the license, a message will be sent to the e-mail address connected to the license. The e-mail message contains your registration data. This information is needed when:

- Installing the software at additional workstations (floating licenses)
- Registering additional licenses (floating licenses, borrow license)
- Contacting support

2.4. Borrow License

A floating license provides the possibility to the user to install the software on an unlimited number of workplaces (local computer or virtual machines). Simultaneous use, however, is restricted to the number of acquired licenses.

A license server keeps track of the number of currently granted floating licenses and authorizes a respective number of users until the maximum amount of users is reached.

If all floating licenses are being used, each additional user has to wait until another user terminates his session and a floating license is released.

Under normal operating conditions, permanent internet access to the license server is required to use the software on a virtual machine (floating license).

Where there is limited internet access a so-called borrow license can be generated, for a period of max. 30 days, for operation in offline mode.



NOTE

Time limited licenses which are valid only for a specified number of days, e.g. for testing and training purposes, can not be used to generate a borrow license.

It is recommended to generate the borrow license using a computer with local internet access. See [Generating the Borrow License with Internet Access \(page 11\)](#).

If local internet access is not available, it is possible to enter an activation key using another device with local internet access. See [Generating the Borrow License without Internet Access. \(page 12\)](#)



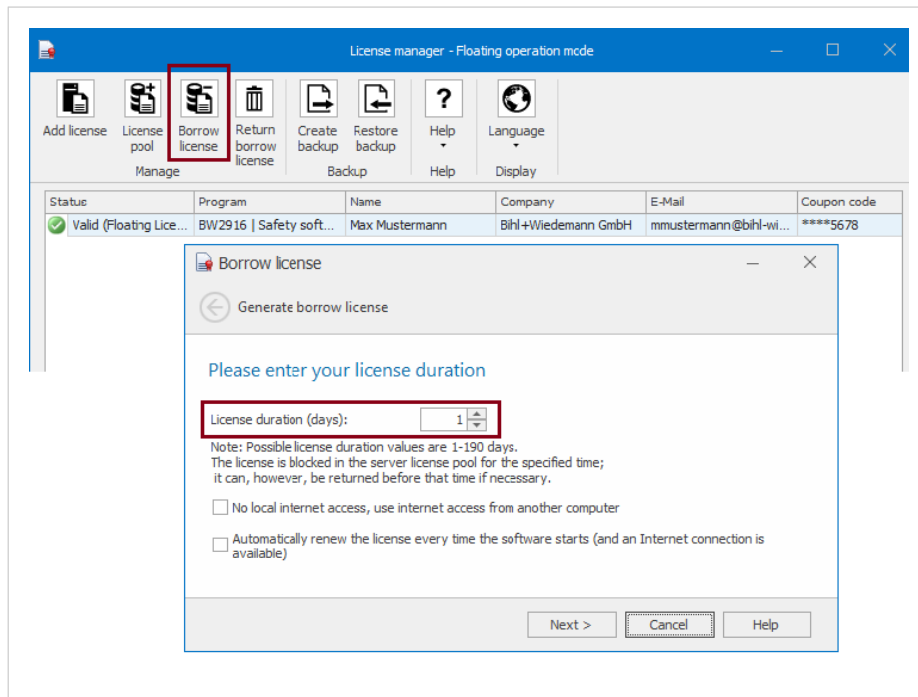
NOTE

Your floating license or a license from the license pool of the floating license is assigned for the duration of the borrow license.

To delete a borrow license before its expiration date, see [Deleting a Borrow License \(page 15\)](#).

2.4.1. Generating the Borrow License with Internet Access

1. Start the license manager.
2. Choose **Borrow license** > Add local borrow license.

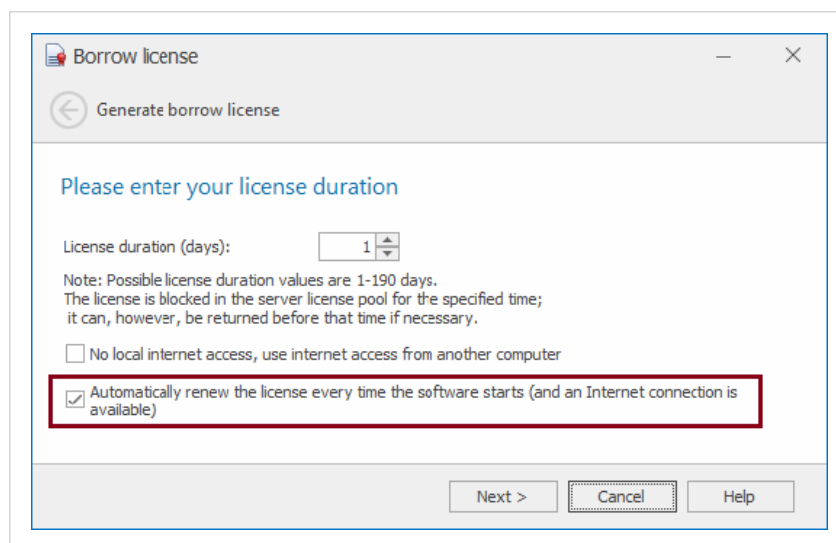


3. Enter the duration of the borrow license (1 ... 190 days).
To confirm, click **Next**.
4. The software is now usable without restrictions in offline mode for the chosen duration.
The duration can be viewed at any time in the license manager.
5. To complete the activation, click **Finish**.

Automatic Renewal of License at Program Start

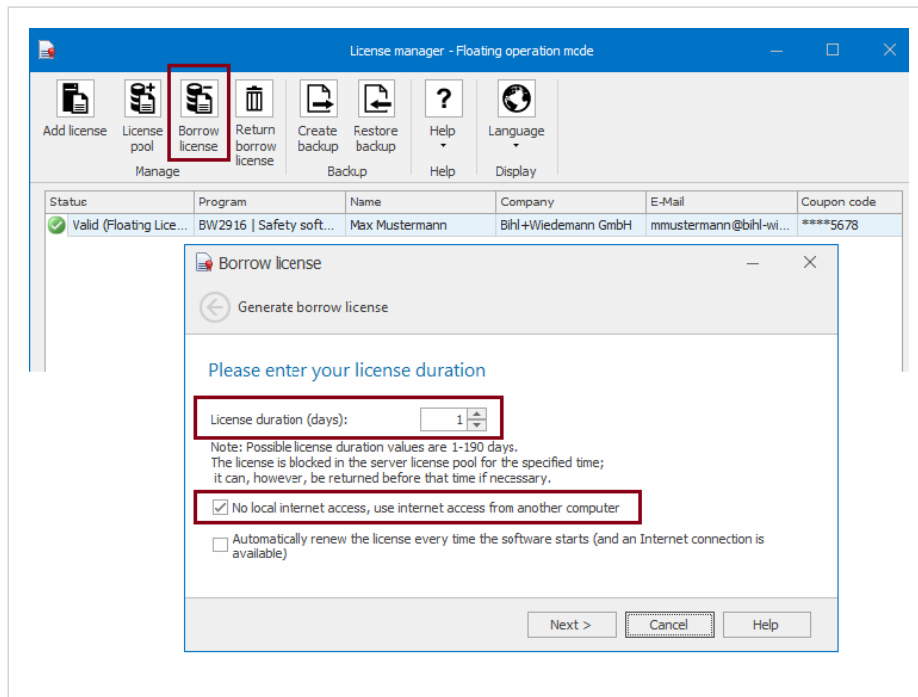
If this option is checked, and there is local internet access, the license is automatically renewed each time the software starts up.

The license is automatically returned to the start of the specified duration and borrowed again.

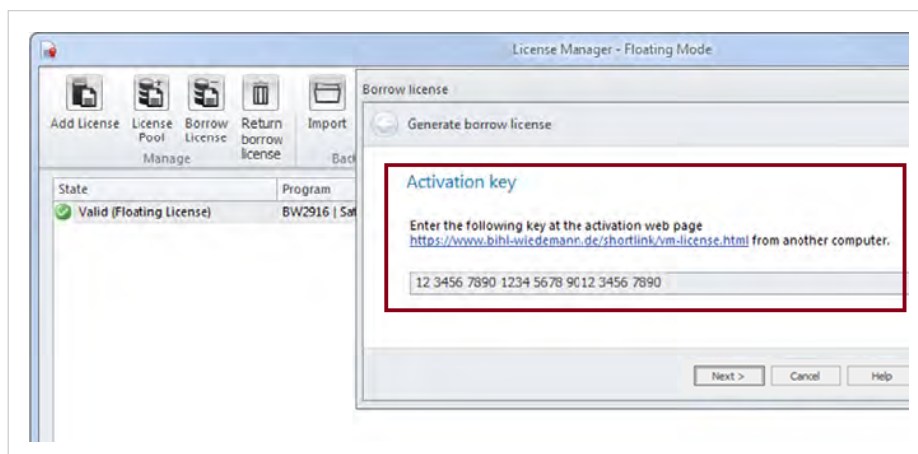


2.4.2. Generating the Borrow License without Internet Access

1. Start the license manager.
2. Choose **Borrow license** > Add local borrow license.

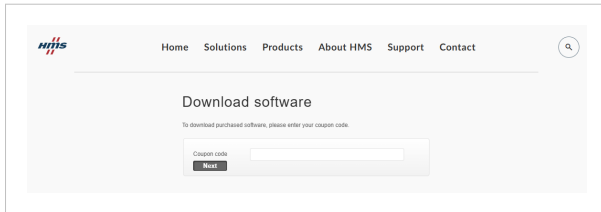


3. Enter the **License duration** of the borrow license (1 ... 190 days).
Select the **No local internet access, use internet access from another computer** checkbox.
To confirm, click **Next**.
4. Note and save the activation key presented to you,

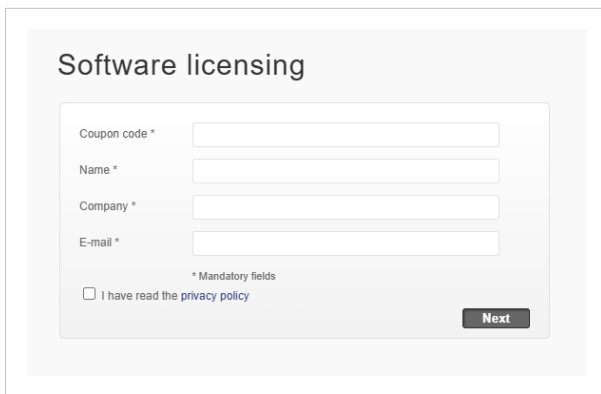


5. Access the license server from a computer with internet access, e.g. a smart phone:
<https://www.hms-networks.com/software-and-tools/download-master-simulator>.

6. On the **Software download for Master Simulator** page:
- a. To **Download software**: Enter the **Coupon code** and click **Next** to confirm.



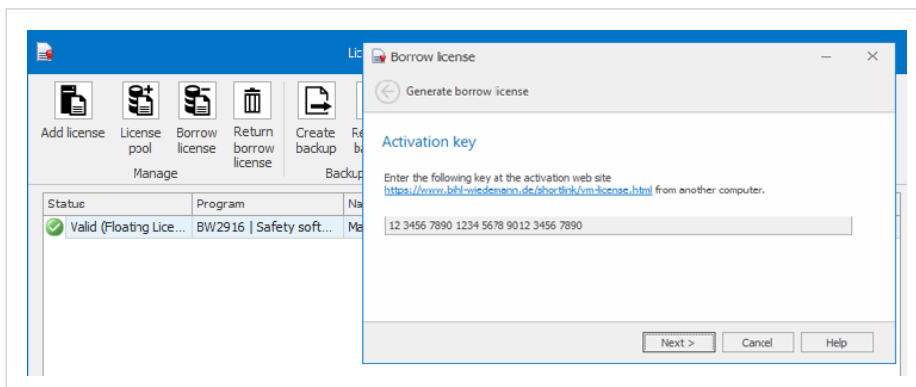
- b. To register **Software licensing**: Enter the **Coupon code** again and fill out your contact information. Click **Next** to confirm.



7. A license key is generated automatically.
Note and save the license key.



8. Enter the license key (provided to you in the previous step) in the license manager. To confirm, click **Next**.



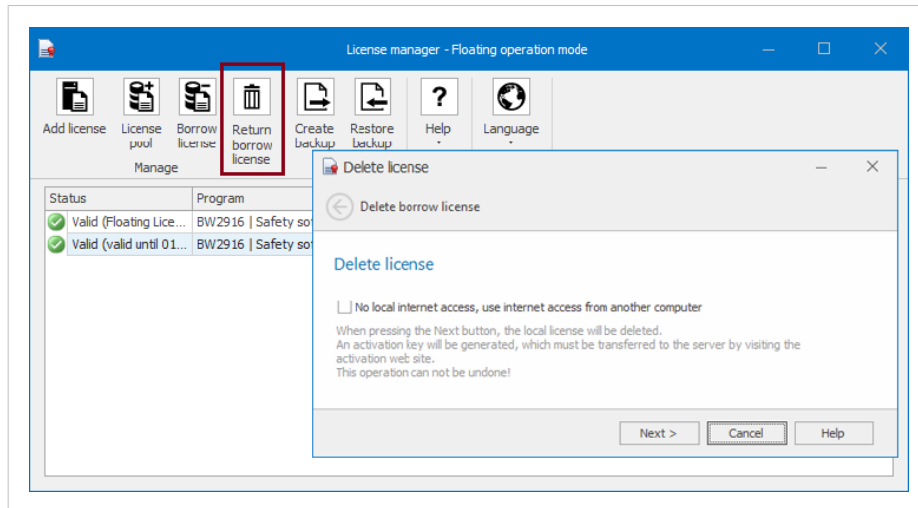
9. The software is now usable without restrictions in offline mode for the chosen duration.
The duration can be viewed at any time in the license manager.
10. To complete the activation, click on **Finish**.

2.4.3. Deleting a Borrow License

If a borrow license is no longer needed for offline use, before the end of the duration, it can be deleted using the license manager and will be available again as a floating license.

Deleting a Borrow License with Internet Access

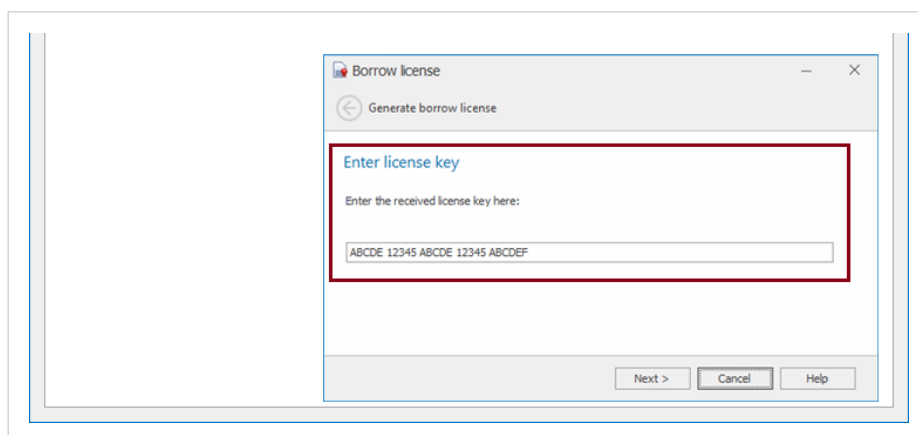
1. Start the license manager.
The valid floating license and the valid borrow license are displayed.
2. Select the borrow license you wish to delete.
3. Click **Return borrow license**.
in the popup window, click **Next** to confirm the return.



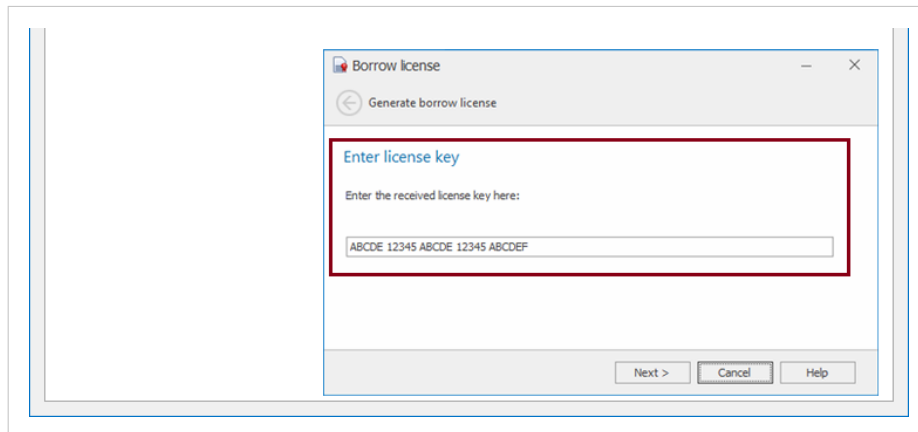
4. If the borrow license was successfully deleted, the floating license will be available again.
To complete the return procedure, click **Finish**.

Deleting a Borrow License without Internet Access

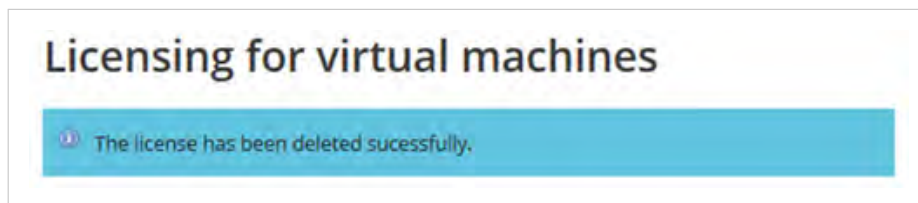
1. Start the license manager. The valid floating license and the valid borrow license are displayed.
2. Select the borrow license you wish to delete.
3. Click **Return borrow license**.
Select the **No local internet access** checkbox.
Use internet access from another computer.
In the popup window, click **Next** to confirm the return.



4. Note and save the **Activation key** that appears in the **Return borrow license** popup window. Click **Next**.



5. Access the license server from a computer with internet access, e.g. a smart phone: <https://www.bihl-wiedemann.de/shortlink/vm-license.html>.
6. Enter the **Activation key**.
To confirm, click **Next**.
7. Returning the borrow license makes the floating license available again.



3. Operation

3.1. License Management

Floating License - Creating a License Pool

By installing the software with a floating license as a "source" on multiple workstations, it is possible to combine them into a license pool.

The software offers the possibility to increase the number of floating licenses in your license pool at any time to meet your requirements.

Floating License - Increasing the License Pool

After acquiring an additional floating license (incremental) you do not have to install and register it on all workstations (local PC or virtual machine).

To increase the number of (simultaneous) users/floating licenses (incrementals) in the license pool of your already registered floating license (source), simply enter the new coupon code for the additionally acquired floating license (incremental) on any workstation in the respective license pool.

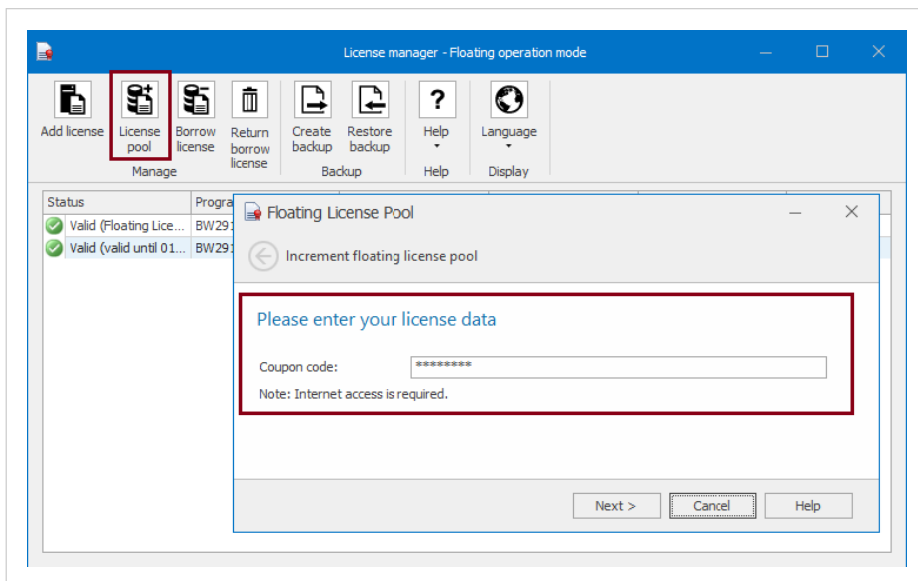
A floating license used to increase a license pool (incremental), may not be used for any other purpose anymore (e.g. installing as "source" on another workstation not belonging to the respective license pool).



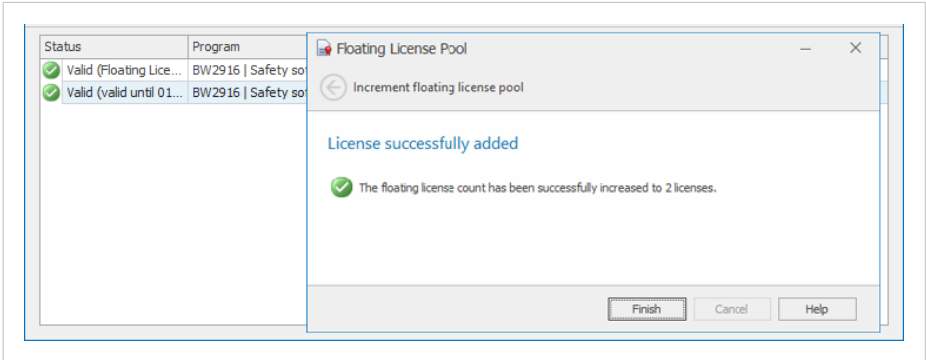
NOTE

Increasing the number of licenses in your license pool requires internet access.

1. Open the license manager. Your currently valid floating licenses are displayed.
2. Select the floating license whose license pool should be increased.
3. Click **License pool** > **Increment Floating License Pool** on the server.
4. Enter the coupon code. Click **Next**.



5. A message confirms that the number of floating licenses has been successfully increased. To complete the procedure, click **Finish**.

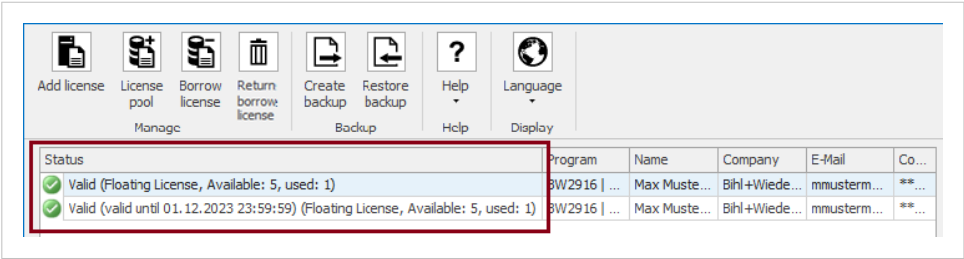


License Information

License Manager

In the State column the license manager provides you with information about:

- type (floating license, borrow license) and duration of your currently used licenses.
- the number of licenses in your license pool currently available and being used.



About

Alternatively, the information is available in the About section of your software.

4. Troubleshooting

What to do if the license server can not be reached:

Check whether certain sites and/or certain contents and objects are filtered out in the firewall settings of your company network and/or your personal firewall settings.

- The requests are sent as JSON objects per HTTPS POST via TCP Port 80 and 443
- The requests are sent to licensing.bihl-wiedemann.de
- Check whether additional personal filter settings for objects are set



NOTE

If these settings can not be changed by the IT department of your company or are not permitted to be enabled, for a single user license (standard installation) the software can be activated as described in [Installation without Internet Access \(page 6\)](#).

5. Application Examples

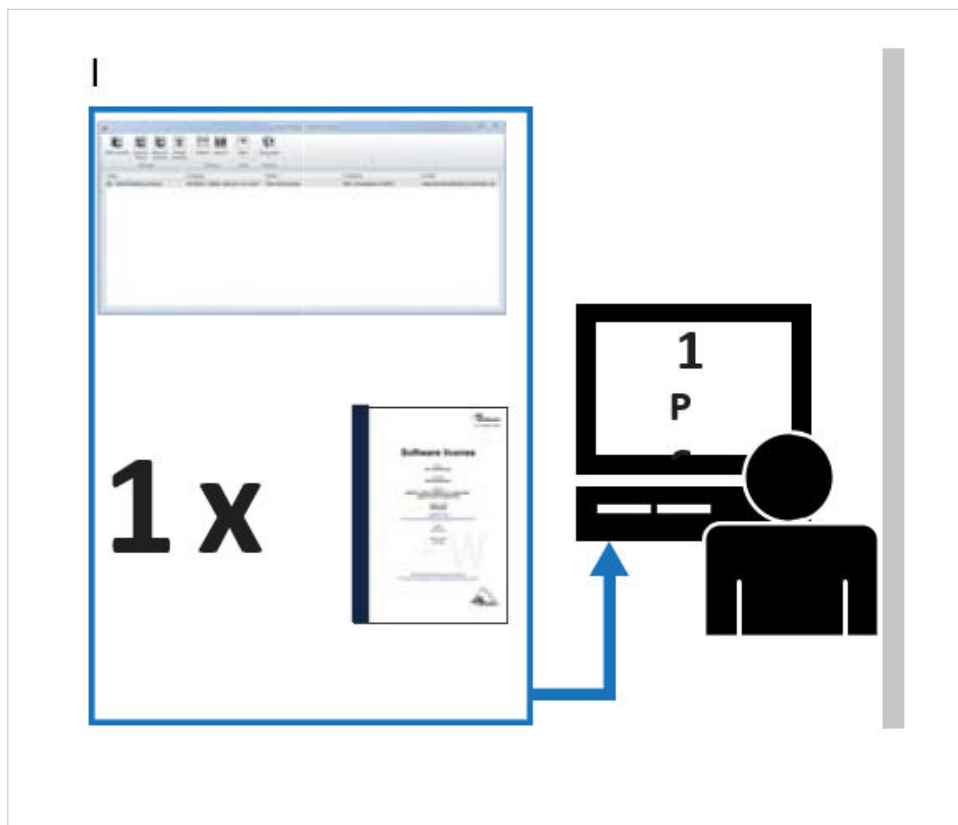
Single User License

One license of licensed software for a single a single computer or computer workstation, which may only be used on one (1) system at any one time.

Installing a Single User License



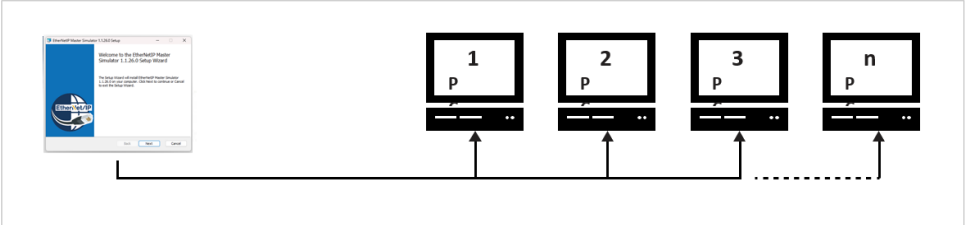
Using a Single User License



Floating License

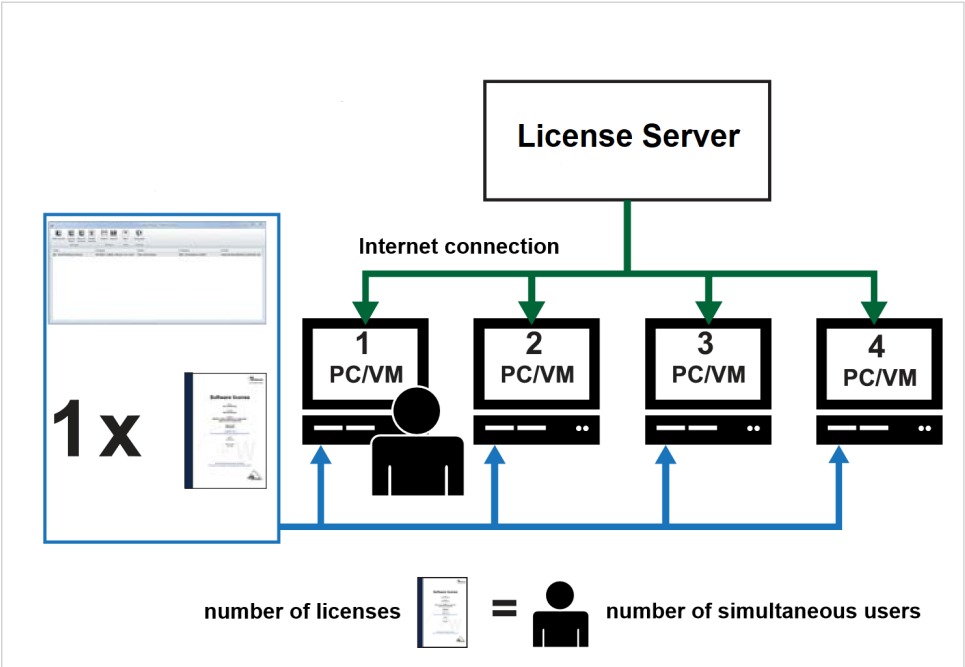
A Floating License (source) entitles the licensee to install the software on an unlimited number of workstations (local PC or virtual machine).

Installing a Floating License (Source) on Multiple Workstations

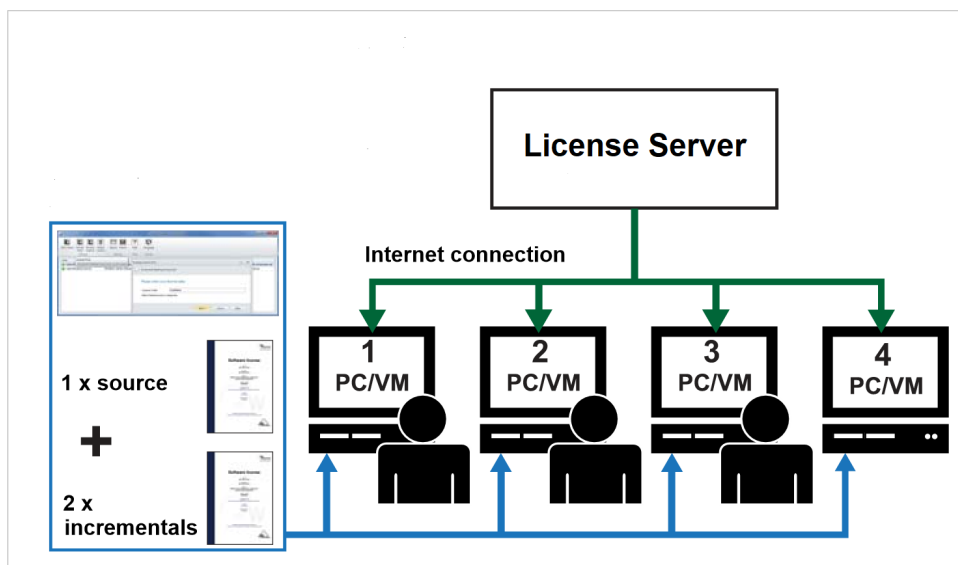


Authorizing Current Users

A server of the licensor registers the number of currently assigned floating licenses and grants every authorized user the right of use.

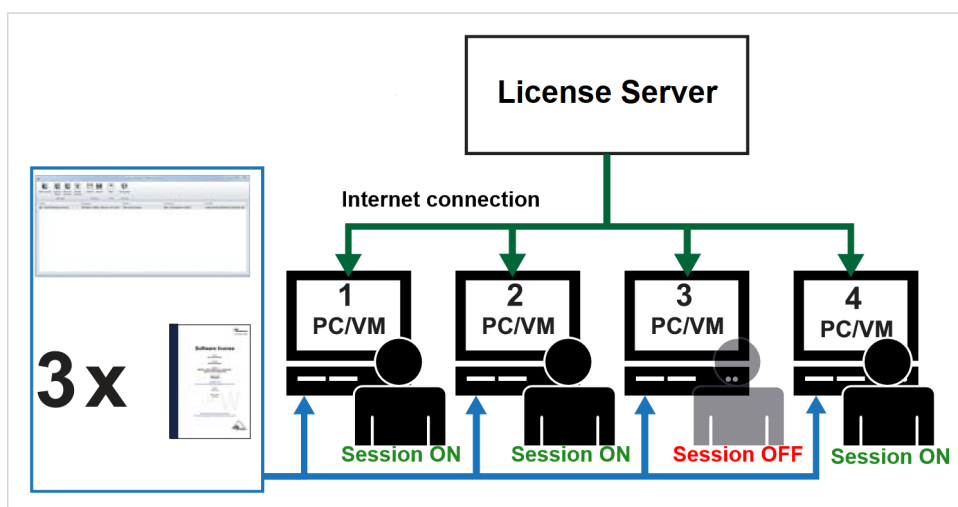


Increasing the License Pool



To increase the number of floating licenses in the license pool no additional software must be installed.

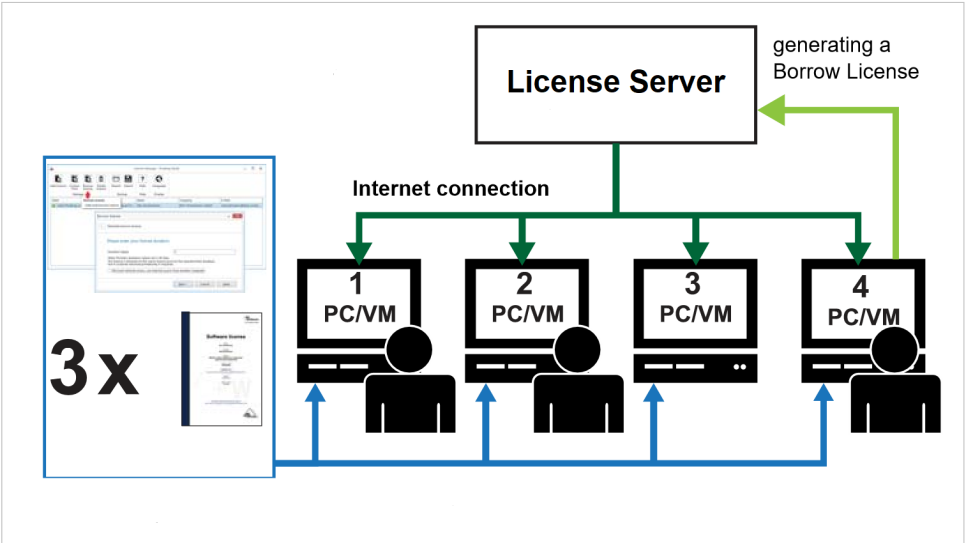
Simply enter the new coupon code for the additionally acquired floating license (incremental) on any computer with an installed floating license (source) in the license manager and the new floating license (incremental) is automatically available on all computers/virtual machines having the already installed floating license (source).



If all floating licenses are assigned, an additional user must wait until another user ends his session and makes a floating license available again.

Borrow License

Generating a Borrow License



Using a Borrow License Offline

