

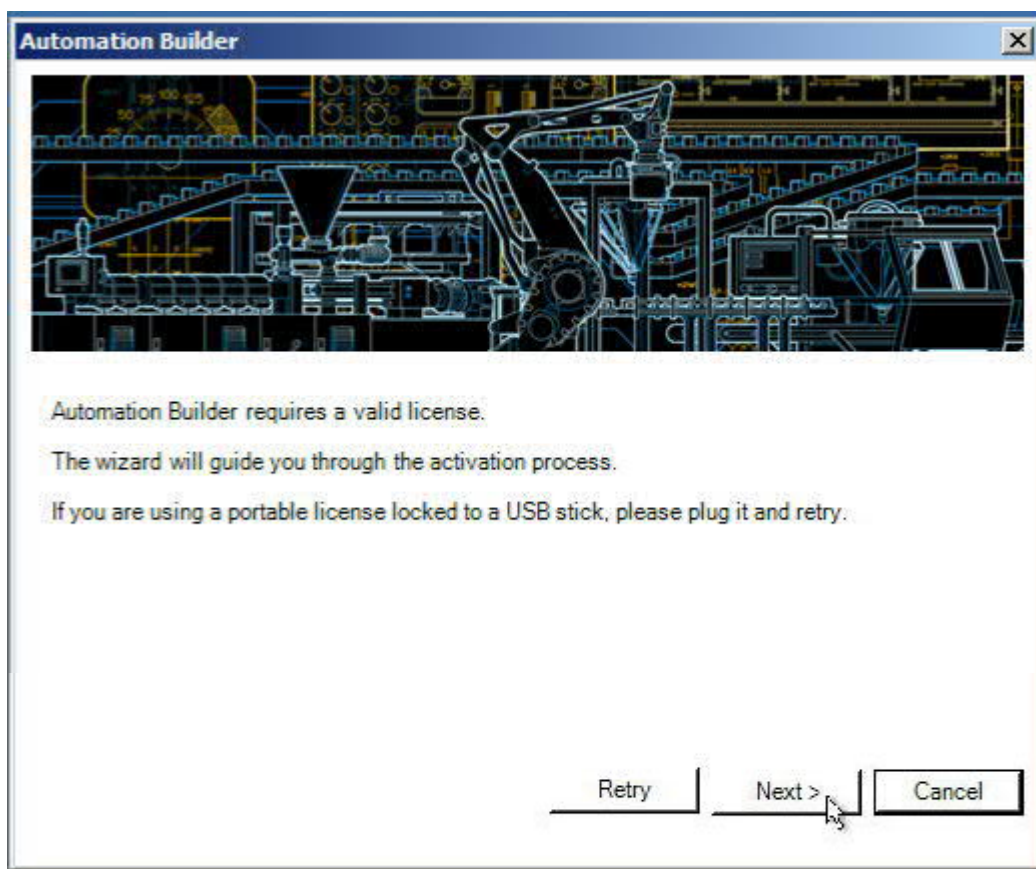
# Automation Builder

## Installation and Activation

# Automation Builder

## Engineering Suite

### Download, Installation and Activation



# Contents

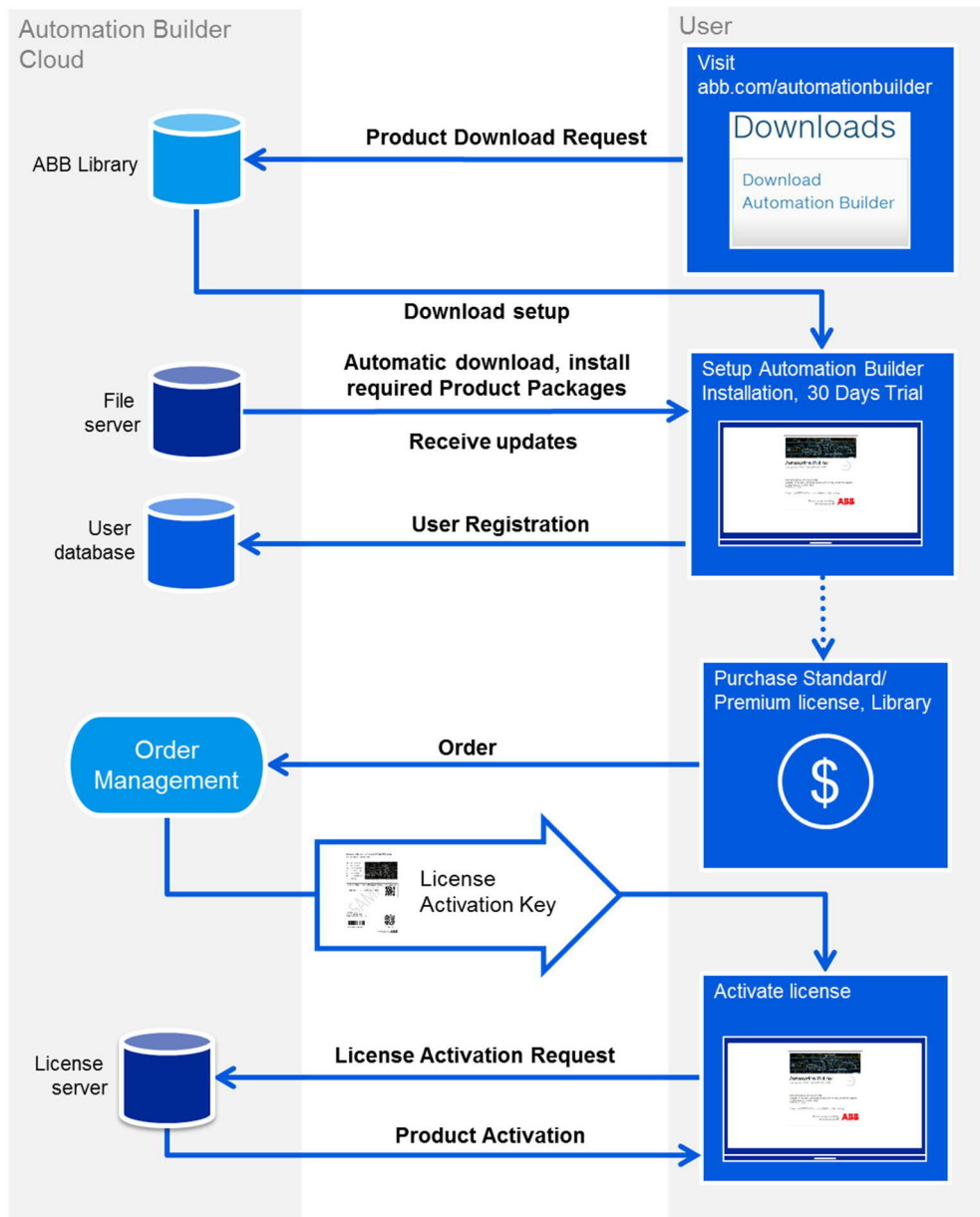
|            |  |           |
|------------|--|-----------|
| <b>1</b>   | <b>Overview .....</b>  | <b>3</b>  |
| <b>1.1</b> | <b>Installation and licensing workflows .....</b>                      | <b>3</b>  |
| 1.1.1      | Online installation and licensing.....                                 | 4         |
| 1.1.2      | Offline installation and licensing.....                                | 4         |
| <b>1.2</b> | <b>Licenses overview.....</b>  | <b>8</b>  |
| 1.2.1      | License model .....  | 8         |
| 1.2.1      | Activation keys and licenses.....                                      | 10        |
| 1.2.2      | Included features per Edition .....                                    | 11        |
| 1.2.3      | Order codes for Automation Builder Engineering Suite.....              | 11        |
| 1.2.4      | Order code for Safety PLC programming.....                             | 11        |
| 1.2.5      | Order code for Panel Builder 600 (PB610) Standalone.....               | 11        |
| 1.2.6      | Libraries .....  | 11        |
| <b>2</b>   | <b>Installation .....</b>  | <b>13</b> |
| <b>2.1</b> | <b>Automation Builder installation on an online PC.....</b>            | <b>13</b> |
| 2.1.1      | Preconditions.....   | 13        |
| 2.1.2      | Installation .....   | 15        |
| <b>2.2</b> | <b>Automation Builder installation on an offline PC.....</b>           | <b>18</b> |
| 2.2.1      | Create Project Archives before installation .....                      | 18        |
| 2.2.2      | Create an offline installation package on the Online PC .....          | 19        |
| 2.2.3      | Copy offline installation package to the Offline PC.....               | 23        |
| <b>2.3</b> | <b>Migration of third party devices .....</b>                          | <b>26</b> |
| <b>2.4</b> | <b>Additional tools and libraries installation.....</b>                | <b>27</b> |
| 2.4.1      | Select the Additional Tools in the installation menu .....             | 27        |
| 2.4.2      | Installation of the additional tools.....                              | 28        |
| <b>2.5</b> | <b>Updates.....</b>  | <b>29</b> |
| 2.5.1      | Online Updates.....  | 29        |
| 2.5.2      | Offline Update packages .....  | 29        |
| 2.5.3      | Update Automation Builder minor/major versions (to 1.2, to 2.0) .....  | 29        |
| <b>3</b>   | <b>Licensing.....</b>  | <b>31</b> |
| <b>3.1</b> | <b>Start licensing process.....</b>                                    | <b>31</b> |
| <b>3.2</b> | <b>Registration (only on first startup of Automation Builder).....</b> | <b>32</b> |

|            |   |           |
|------------|---|-----------|
| <b>3.3</b> | <b>Automation Builder license activation (online, offline)</b>          | <b>33</b> |
| 3.3.1      | License activation on an offline PC                                     | 36        |
| 3.3.3      | Setup of a Network license  | 42        |
| <b>3.4</b> | <b>Additional tools and libraries license activation</b>                | <b>44</b> |
| 3.4.1      | License activation of the Panel Builder 600 and PC-Runtime              | 44        |
| 3.4.2      | License activation of Solution Libraries                                | 45        |
| <b>3.5</b> | <b>Managing your licenses</b>   | <b>48</b> |
| 3.5.1      | Identify installed license via the Automation Builder title bar         | 48        |
| 3.5.2      | Use CodeMeter Control Center to check licenses                          | 48        |
| 3.5.3      | Set license check to local mode or add dedicated servers in search list | 50        |
| 3.5.4      | Restart license check (CodeMeter service)                               | 51        |
| 3.5.5      | Remove trial license to get rid of expiring message                     | 52        |
| 3.5.6      | Managing Network licenses   | 53        |
| 3.5.7      | Generate License info file for Support                                  | 55        |
| 3.5.8      | Transfer an Automation Builder license                                  | 57        |
| <b>4</b>   | <b>Frequently asked questions and support</b>                           | <b>66</b> |
| <b>4.1</b> | <b>Frequently asked questions</b>                                       | <b>66</b> |
| <b>4.2</b> | <b>Special Settings for Internet Security Software “F-Secure”</b>       | <b>69</b> |
| 4.2.1      | Compatibility mode  | 69        |
| 4.2.2      | Add CodeMeter to WhiteList  | 69        |
| <b>4.3</b> | <b>Support</b>  | <b>69</b> |
| 4.3.1      | Main information  | 69        |
| 4.3.2      | Installation log file   | 69        |
| 4.3.3      | License activation support information (CmDust-Result.log)              | 70        |
| 4.3.4      | Automation Builder Log files  | 70        |

# 1 Overview

## 1.1 Installation and licensing workflows

The following overview describes how to get and activate an Automation Builder edition, library or add-on.



Download Automation Builder from [www.abb.com/automationbuilder](http://www.abb.com/automationbuilder). The setup is a couple of Megabytes.

Start the setup on your PC, read the end user license agreement and select the options you want to install. According to your selection more software packages will be downloaded.

After successful installation start Automation Builder. You will be asked to enter your user data. For details on the data we are storing please refer to the privacy statement as part of the end user license agreement.

After registration you can activate different kinds of licenses, e.g. a free Premium trial to get familiar with the powerful features of Automation Builder.

Contact your ABB sales contact to purchase a commercial license of Automation Builder, libraries and add-ons. You will receive a letter containing the activation code. Enter this code in Automation Builder to activate an Automation Builder license.

## 1.1.1 Online installation and licensing

To install and activate Automation Builder on a PC with internet connection ("online PC"), the following steps are necessary:

1. Create project archives (File --> Project Archive --> Save/Send Archive ...) of your old projects BEFORE installing the new Automation Builder to upgrade them easily. This is especially recommended, if your projects contain third party devices.
2. Online PC: Download Automation Builder setup from <http://www.abb.com/automationbuilder>
3. Online PC: Install Automation Builder
4. Online PC: Start Automation Builder
5. Online PC: Do online activation to retrieve license

## 1.1.2 Offline installation and licensing

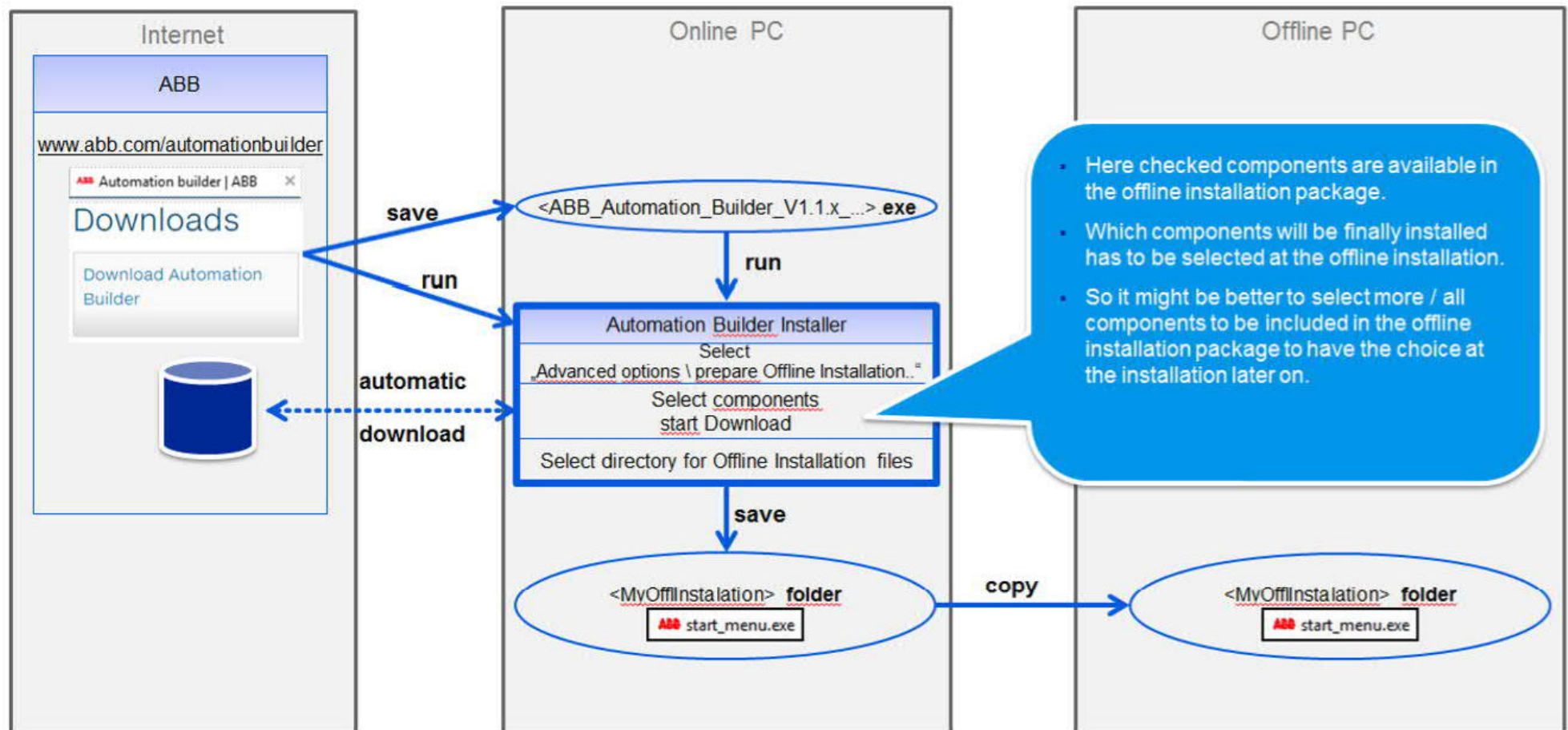
To install and activate Automation Builder on a PC without internet connection ("offline PC"), the following steps in combination with a PC with internet connection ("online PC") are necessary:

1. Create project archives (File --> Project Archive --> Save/Send Archive ...) of your old projects BEFORE installing the new Automation Builder to upgrade them easily. This is especially recommended, if your projects contain third party devices.
2. Online PC: Create an offline installation package from <http://www.abb.com/automationbuilder>
3. Copy offline installation package to Offline PC
4. Offline PC: Install Automation Builder
5. Offline PC: Create Activation Request file
6. Copy the Activation Request file to the Online PC
7. Online PC: Upload the Activation Request file to <http://lc.codemeter.com/32838/depot/>
8. Online PC: Download and save the License Activation Response file
9. Copy the License Activation Response file to the Offline PC
10. Offline PC: Continue an offline activation and import the Activation Response file
11. Offline PC: Finish and save Activation Receipt file
12. Copy the Activation Receipt file to the Online PC
13. Online PC: Upload the Activation Receipt file to <http://lc.codemeter.com/32838/depot/> in the dialog after download of the Activation Response file

On the next pages overview charts can be found for

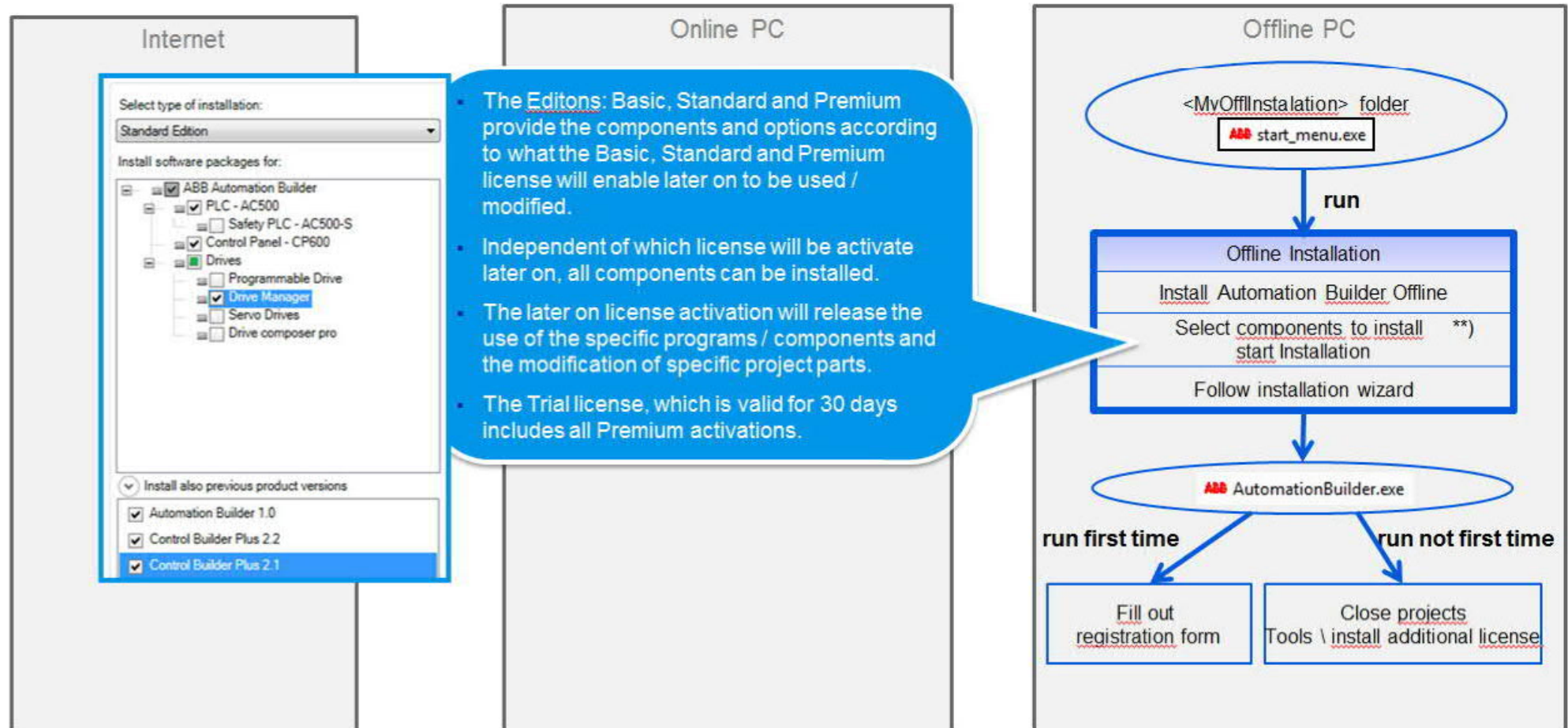
- Offline Installation package download
- Offline Installation
- Offline License Activation

# Download Offline Installation package

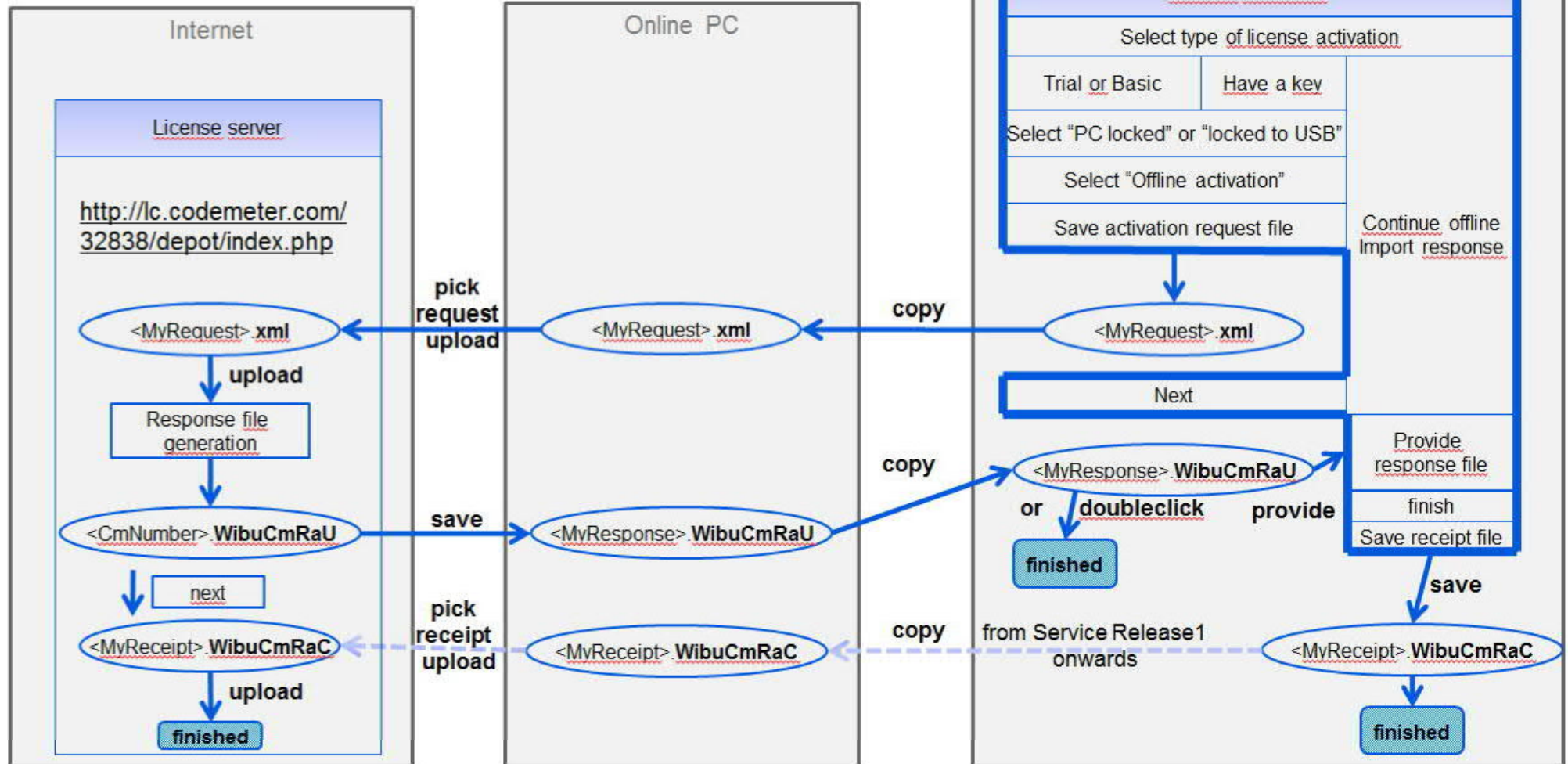




# Installation on Offline PC



# Offline License Activation





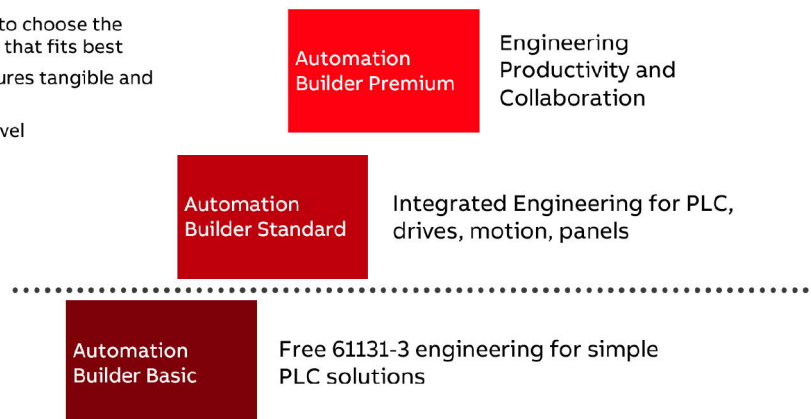
## 1.2 Licenses overview

### 1.2.1 License model

From **Automation Builder 1.1** onwards a Freemium License model is used.

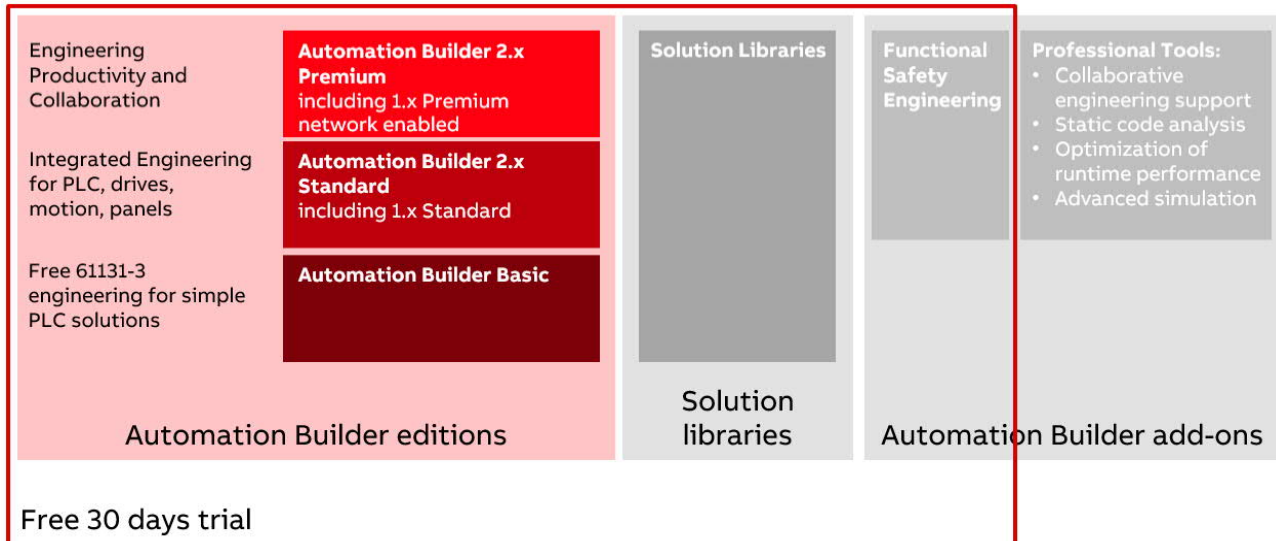
A **Basic** license enables a free IEC61131-3 programming of simple PLC systems  
The **Standard** license includes integrated engineering for PLC, Drives, Panels, Motion, and Robotics.  
The **Premium** license includes engineering Productivity and Collaboration enhancements.

- Allow the customer to choose the package of features that fits best
- Make premium features tangible and visible
- Provide free entry level



In **Automation Builder 1.2** the licensing is extended in scope and license types. Selected libraries are now included to the general Automation Builder licensing mechanism. Project Version Control is available as an additional license to Automation Builder Standard and Premium edition

In **Automation Builder 2.0** the licensing model with three editions is kept. It was also simplified: Now Premium edition has floating license enabled and Standard has only non-floating.



Automation Builder 1.x licenses can be used for Automation Builder 1.x version profiles that are delivered within Automation Builder 2.x releases. Automation Builder 2.x licenses include licenses for Automation Builder 1.x version profiles. This means: when purchasing the latest license, all preceding versions are included:

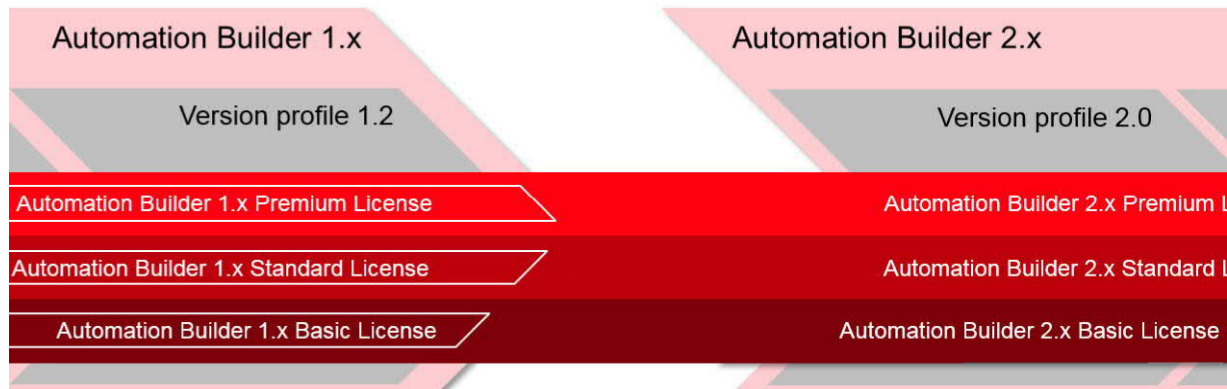


ABB is committed to support our customers' installed system base. Following a Software Product Life cycle we want to maximize the useable life of our customers' system investment and provide our customers with the confidence that there is a well-defined support for, and a path forward for existing ABB systems. ABB's product life cycle policy provides advanced notification of planned changes in product availability and support.

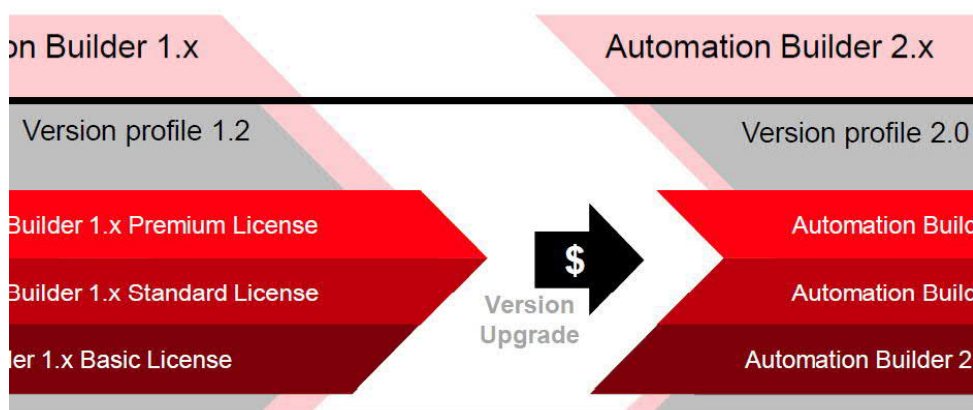
In the ABB Library you can find the lifecycle document for Automation Builder describing the current life cycle status for Automation Builder versions, service packs and licenses:

<http://www.abb.com/abblibrary/DownloadCenter/?CategoryID=Root&View=Result&QueryText=Automation+Builder+%22Life+cycle%22&SortBy=Score&CountryCode=DE&AdditionalLanguage=en>

To ensure a smooth transition from Automation Builder 1.x to Automation Builder 2.x licenses, we provide upgrade paths and an attractive campaign for switching to a premium edition.

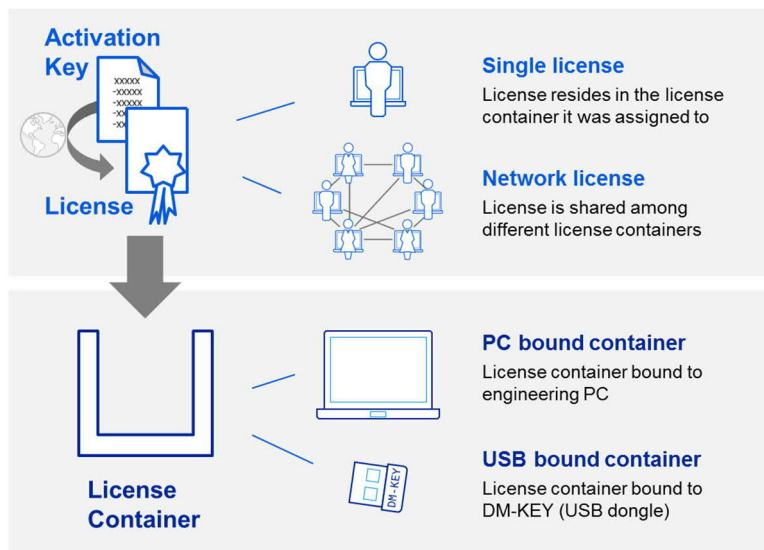
| From                   | To                     | Upgrade         |
|------------------------|------------------------|-----------------|
| Automation Builder 1.x | Automation Builder 2.x | License type    |
| Standard               | Standard               | DM201-TOOL-UPGR |
| Premium                | Premium                | DM203-PREM-UPGR |

DM201-TOOL-UPGR: Upgrade Automation Builder 1.x Standard to Automation Builder 2.x Standard  
DM203-PREM-UPGR: Upgrade Automation Builder 1.x Premium to Automation Builder 2.x Premium



## 1.2.1 Activation keys and licenses

There is difference between the activation key and a license.



Activating means getting a license from our systems and placing it into a license container. During activation a so-called license container will be created in the background. This container can be placed on a PC or on a DM-KEY (USB dongle) – depending on your selections during activation. The license type defines whether a license can be shared in a network or not. Single licenses reside in the license container it was assigned during activation. Network licenses are shared among different license containers – automatically and fully managed by Automation Builder.

You have to make the following decisions

1. During ordering you need to decide whether you want to have a Single license or Network license. This cannot be changed afterwards.
2. During activation and independent from the license type you need to decide whether the license container shall be PC bound or USB bound

Automation Builder supports all combinations

- Single license placed into a PC container: „Personal tool“, this is presently the most common variant. Both, the trial and basic licenses are Single licenses bound to your PC.
- Single license placed into a USB container: „Dongle based“, this is also very common to share a license among a group of people or between different computers where Automation Builder shall be used. As the license is bound to a portable USB device it can be carried around.
- Network license placed into a PC container: „office only“, this variant is a good choice for system administrators wanting to centralize their license management. As the Network license can float between different computers, you don't have to bother with the license when your PC is broken down or a complete image is deployed in case of training setups.
- Network license placed into a USB container: „office and on-site“, this variant allows both, sharing a license when you are in the office as well as taking it with you to use Automation Builder outside the office, e.g. on-site during commissioning.

You can even have combinations of the above. Some licenses as „Single“ and bound to a PC for your personal use only, others floating around placed on DM-KEYs so that you can share them and take them away.



TIP

- For better transparency we recommend to have only one Automation Builder edition as Network licenses. As the sharing is happening automatically and the licensing mechanism tends to be greedy it could happen that Premium editions are blocked by „Standard users“ first and are not available to those who really require Premium features.

## 1.2.2 Included features per Edition

An overview to features contained per edition can be found on the Automation Builder download page:  
<http://new.abb.com/plc/automationbuilder/platform/software>

## 1.2.3 Order codes for Automation Builder Engineering Suite

To purchase a license please contact your local ABB sales representative.

An overview of the Order codes can be found here, as in the main catalog "PLC Automation".

<https://search.abb.com/library/Download.aspx?DocumentID=3ADR020077C0204&LanguageCode=en&DocumentPartId=&Action=Launch>

## 1.2.4 Order code for Safety PLC programming

Automation Builder 1.1 / 1.2: To enable the AC500-S Safety PLC programming Automation Builder with Standard license or higher must be installed and the safety license package must be purchased and installed separately. For order data please see the catalog

[https://library.e.abb.com/public/7da5d4b81ec343569576d0aefd905bee/3ADR020077C0203\\_PLC%20Automation\\_12-2015.pdf](https://library.e.abb.com/public/7da5d4b81ec343569576d0aefd905bee/3ADR020077C0203_PLC%20Automation_12-2015.pdf)

Starting with Automation Builder 2.0: To enable the AC500-S Safety PLC programming Automation Builder with Standard license or higher must be installed and the functional safety engineering feature must be activated as add-on with the regular Automation Builder licensing mechanism.

For order data please see the catalog:

<https://search.abb.com/library/Download.aspx?DocumentID=3ADR020077C0204&LanguageCode=en&DocumentPartId=&Action=Launch>

For details on lifecycle change of safety enabling package see the announcement:

<http://search.abb.com/library/Download.aspx?DocumentID=3ADR023075M0201&LanguageCode=en&DocumentPartId=&Action=Launch>

## 1.2.5 Order code for Panel Builder 600 (PB610) Standalone

The Panel Builder 600 (PB610) license is included in a Standard or Premium license of the Automation Builder.

Starting with Automation Builder 1.1 it is possible to install Panel Builder 600 PB610 as a stand alone version without installation of Automation Builder. The software package can be obtained from the "Additional tools" section in the Automation Builder setup.

For order information please see the catalog:

<https://search.abb.com/library/Download.aspx?DocumentID=3ADR020077C0204&LanguageCode=en&DocumentPartId=&Action=Launch>

## 1.2.6 Libraries

System Libraries are already included in the Basic installation of Automation Builder.

### 1.2.6.1 Solution Libraries

Additional Solution Libraries have to be purchased separately.

Install the licenses via the Automation Builder installation manager.

Activate the library licenses via the existing "Install additional License" feature – available 24/7. The license itself will be checked during compilation of your IEC61131 application. That means you can use the library in engineering but compilation will only work when a valid license was activated using the "Install additional License" feature.

### 1.2.6.2 *Application Libraries and examples*

Please check and download further libraries and examples from: <http://new.abb.com/plc/application-examples>

Use English language setting, then click on "Applications Libraries" or "Applications Examples".

- **Applications Libraries** add further functionality to AC500 PLC's.  
They are well tested larger library packages with application example(s) and documentation, have limited support and are free of charge.
- **Applications Examples** explain functionality by using e.g. standard Automation Builder libraries and functions in simple examples.  
They are tested in the described example configuration and functionality only and also come with documentation and are free of charge.

Applications Libraries and Examples help to minimize valuable programming and testing time for specific applications.

After installation of Automation Builder, most of the examples for Solution libraries are available from <C:\Users\Public\Documents\AutomationBuilder\Examples>



## 2 Installation

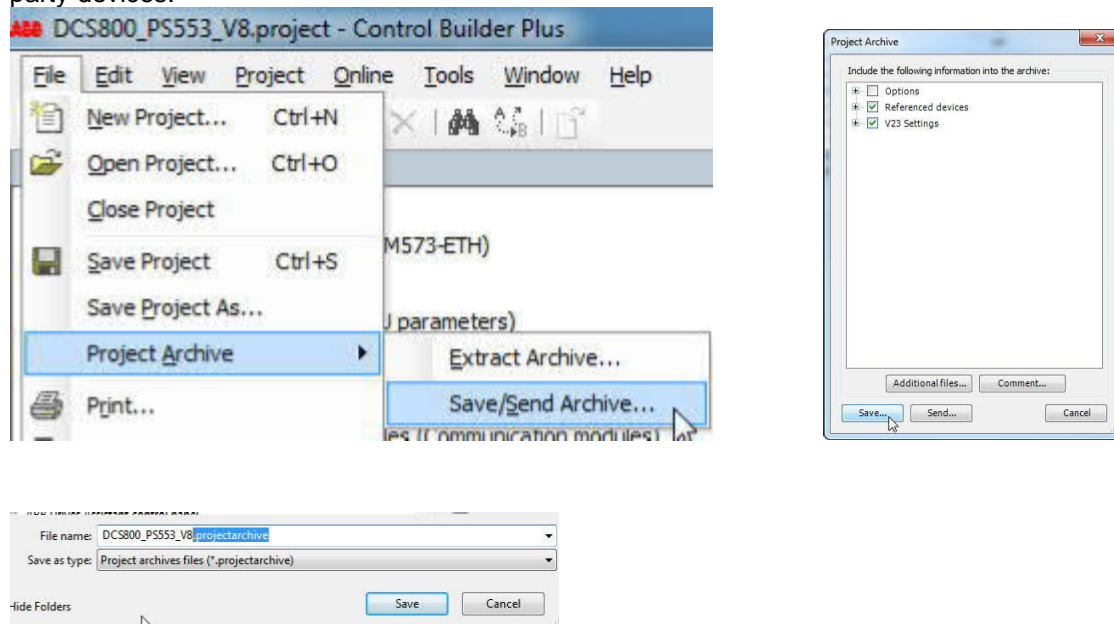
### 2.1 Automation Builder installation on an online PC

#### 2.1.1 Preconditions

##### 2.1.1.1 Create Project archives before installation

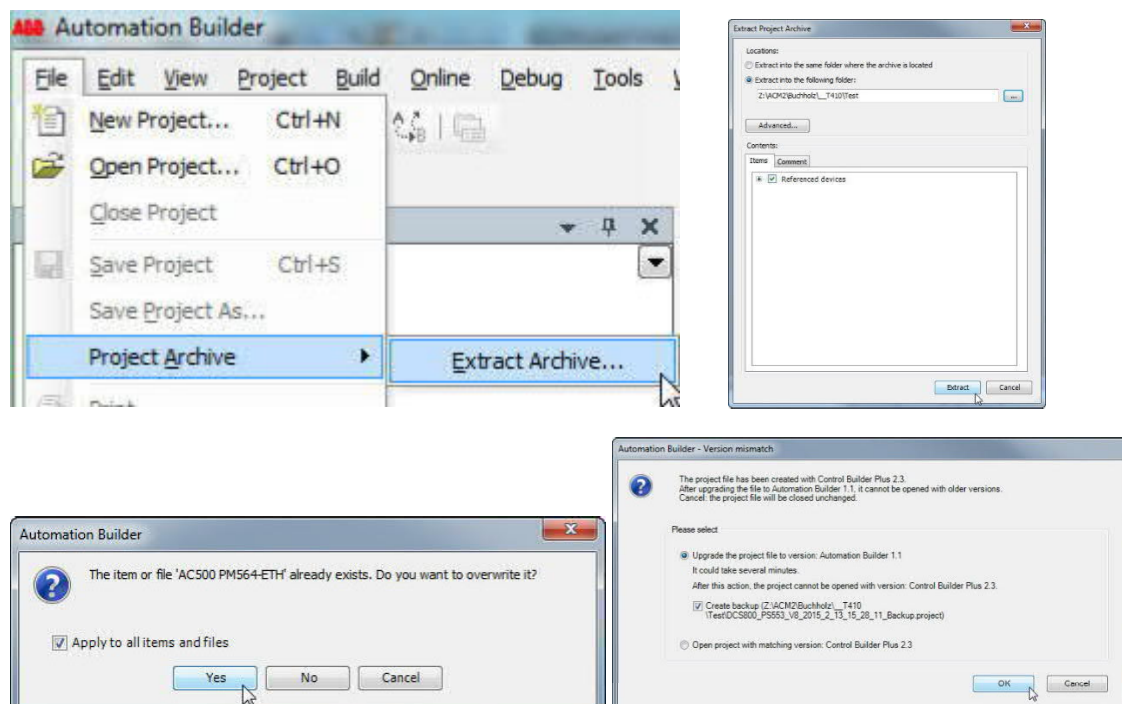
To ensure a smooth upgrade of your projects created with former Automation Builder versions please create project archives of these projects.

Use **File \ Project Archive \ Save/Send Archive...** to create an archive which includes all ABB and third party devices.



In the latest Automation Builder these projects should be opened via

**File \ Project Archive \ Extract Archive...**



Otherwise, by just opening the \*.project files some devices (e.g. CS31 Bus) might be missing.

Also this will provide the third party device description to Automation Builder automatically.

So it's not necessary to install all these third party device description manually.

### 2.1.1.2 Check internet connection and firewall settings

Please check that you have a working internet connection to sites outside your company.

Best practice is to open an internet site in parallel and leave that open during download or licensing process.

This is especially important for ABB internal users.

In case of errors please check if your firewall has maybe blocked Automation Builder and adapt the firewall settings.



TIP

- If you have any problems with your internet connection or proxy authentication or firewall settings, then choose the offline installation and licensing, described in chapter 2.2

### 2.1.1.3 System Requirements

For latest system requirement please refer to the release notes issued with each release of Automation Builder. These can be found in the ABB Library:

[http://www.abb.com/abblibrary/DownloadCenter/?CategoryID=Root&View=Result&DocumentKind=Release+Note&QueryText=Automation+Builder&SortBy=Score&CountryCode=\\*&AdditionalLanguage=en](http://www.abb.com/abblibrary/DownloadCenter/?CategoryID=Root&View=Result&DocumentKind=Release+Note&QueryText=Automation+Builder&SortBy=Score&CountryCode=*&AdditionalLanguage=en)

For Automation Builder 2.x the system requirements are:

- 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
- 3 GB RAM
- 1-18 GB available hard disk space depending on the selected feature set (in addition to Operating System (OS) and other applications)
- SVGA graphics adaptor 256 colors, resolution of 1024x768 pixels
- Supported operating systems:
  - Windows 10 (32/64 Bit) Professional / Enterprise
  - Windows Server 2012 R2 64 bit (all devices have to be directly accessible by the server; requires enabled .Net Framework 3.5)
  - Windows Server 2019 (all devices have to be directly accessible by the server; requires enabled .Net Framework 3.5)

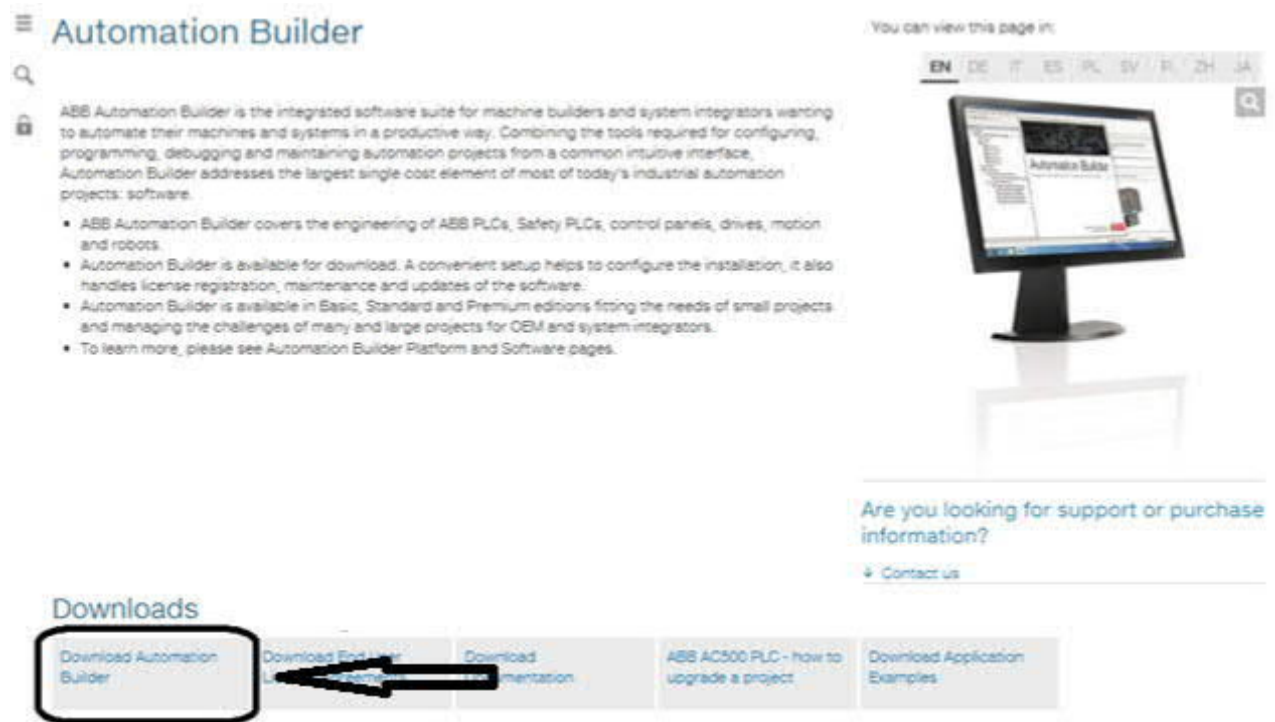
Note: Windows 7 is no longer supported.

- Network licenses are required for use of Automation Builder on Windows Server operating systems.

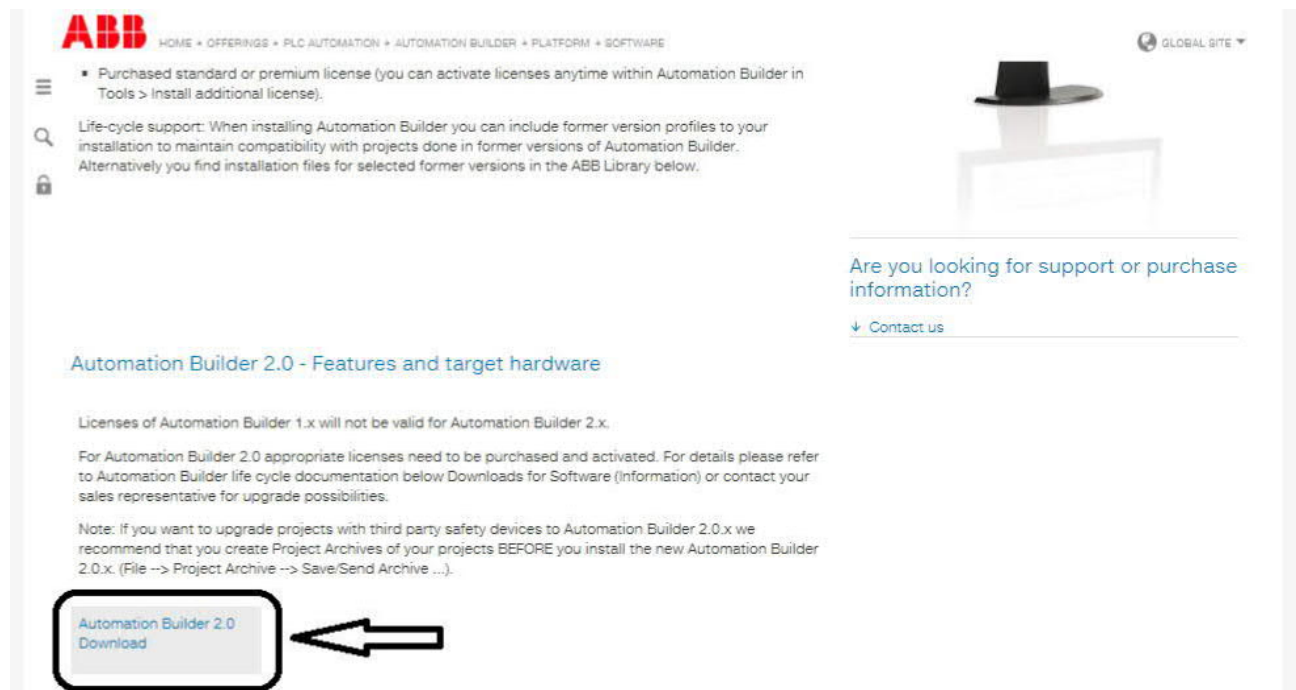
## 2.1.2 Installation

To start installation: click on “Download Automation Builder” button on the ABB PLC website.

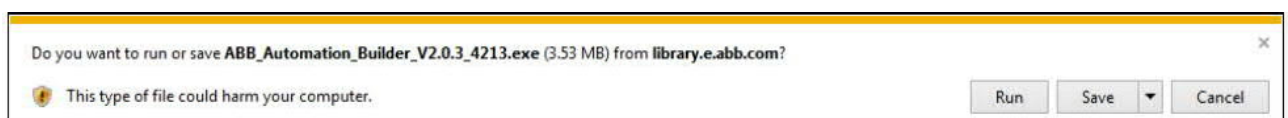
<http://www.abb.com/automationbuilder>



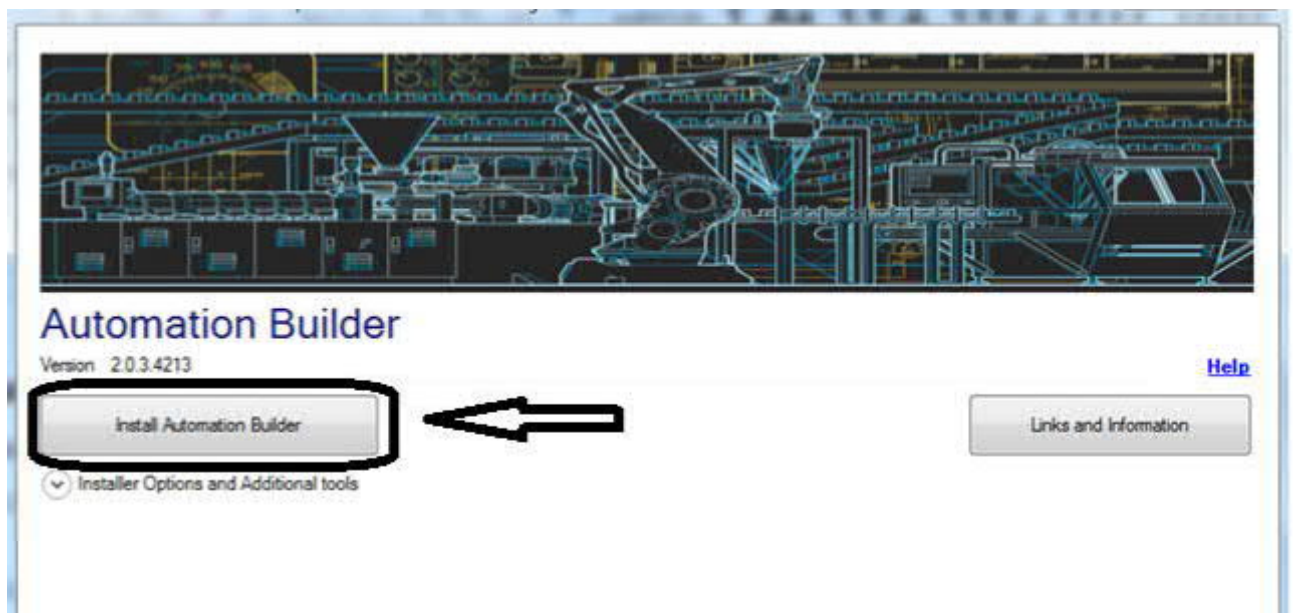
Once you click above button following screen appears. In this screen click Automation Builder 2.0 Download.



Run Installation directly



Select the installation language and click the “Install Automation Builder” button



### 2.1.2.1 *Select the components you want to install via the check-boxes*

Choose the type of installation with the topmost “Edition” pull-down menu and check the components to be installed.



notice

The Editions: Basic, Standard and Premium provide the components options according to what the Basic, Standard and Premium license will enable later on to be used / modified.

Independent of what license you want to activate all components can be installed.

The later on license activation will enable you to work with these specific programs/components or to modify the specific project parts of an Automation Builder project.

The Trial license, which is valid for 30 days includes all Premium features.

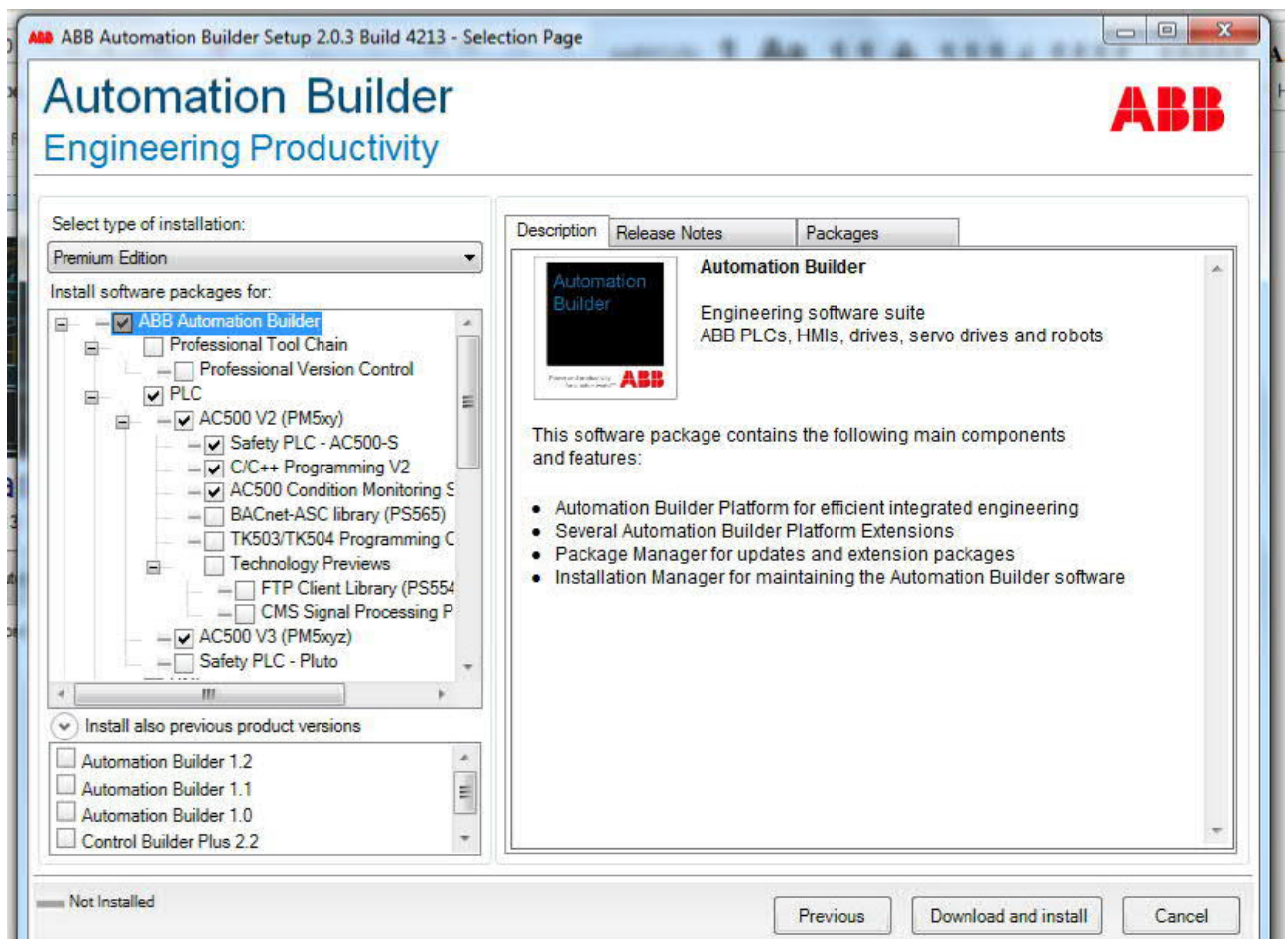


notice

If you want to use the Basic version and you have purchased and installed the Panel Builder 600 before, then do not select the Control Panel 600 in the installation. Even if you first want to test the Trial (Premium) version.

Installation of Control Panel 600 always requires Standard or Premium license activation. Otherwise the Panel Builder will not open any more.

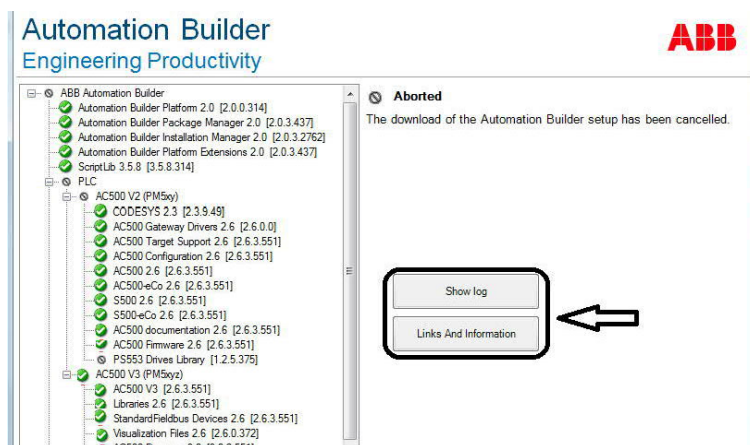




### 2.1.2.2 Follow the installation wizard instructions

The time and number of dialog interactions depends on the selected components.

Result of installation will be shown in a last screen, where the installation log file could be opened.



If however you get red icons in the last installation screen, use the “Show Log” button to open and store the log file of the installation. This installation log file is automatically stored under “C:\Users\<user>\AppData\Roaming\AutomationBuilderInstaller\Log\AutomationBuilderInstaller.log”

This can be used for later analyses by ABB support. See chapter 4.3.2

After installation, Automation Builder can be opened. On first start you will be asked for registration and for a license. For details please refer to chapter 3.



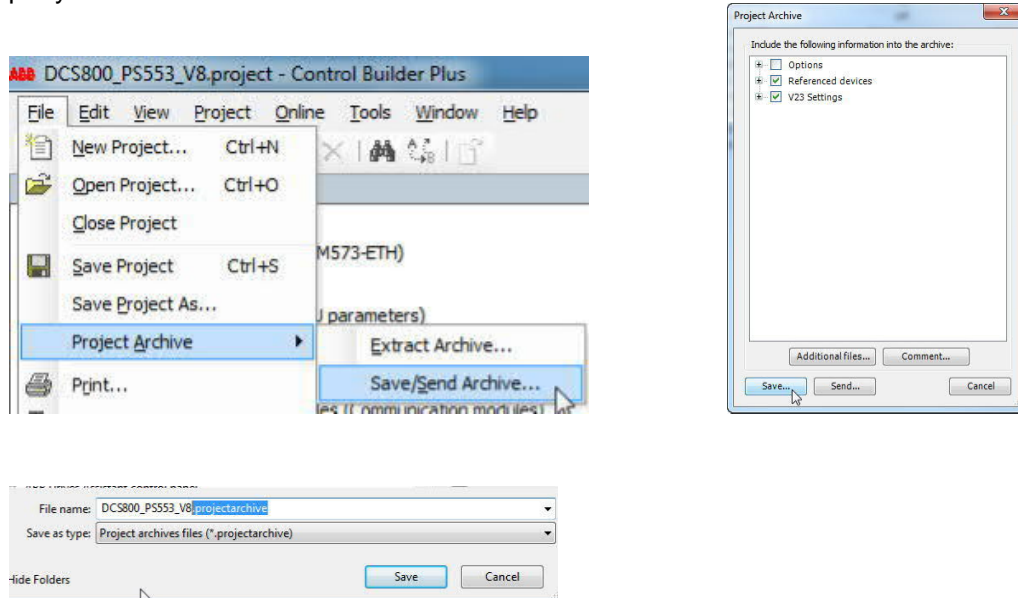
## 2.2 Automation Builder installation on an offline PC

**System requirements** are listed in chapter 2.1.1.3. These are the same for online as for offline installation.

### 2.2.1 Create Project Archives before installation

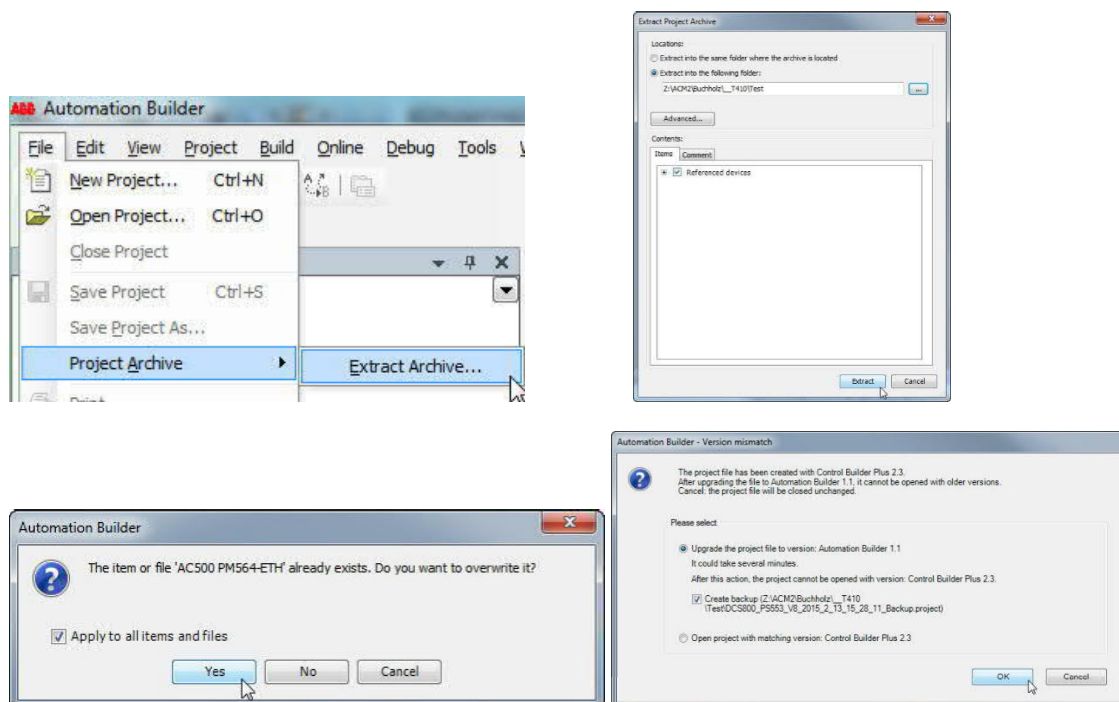
To ensure a smooth upgrade of your projects created with former Automation Builder versions please create project archives of these projects.

Use **File \ Project Archive \ Save/Send Archive...** to create an archive which includes all ABB and third party devices.



In the latest Automation Builder these projects should be opened via

**File \ Project Archive \ Extract Archive...**



Otherwise, by just opening the \*.project files some devices (e.g. CS31 Bus) might be missing.

Also this will provide the third party device description to the latest Automation Builder automatically.  
So it's not necessary to install all these third party device description manually.

## 2.2.2 Create an offline installation package on the Online PC

### 1. Check internet connection and firewall settings

Please check that you have a working internet connection to sites outside your company.

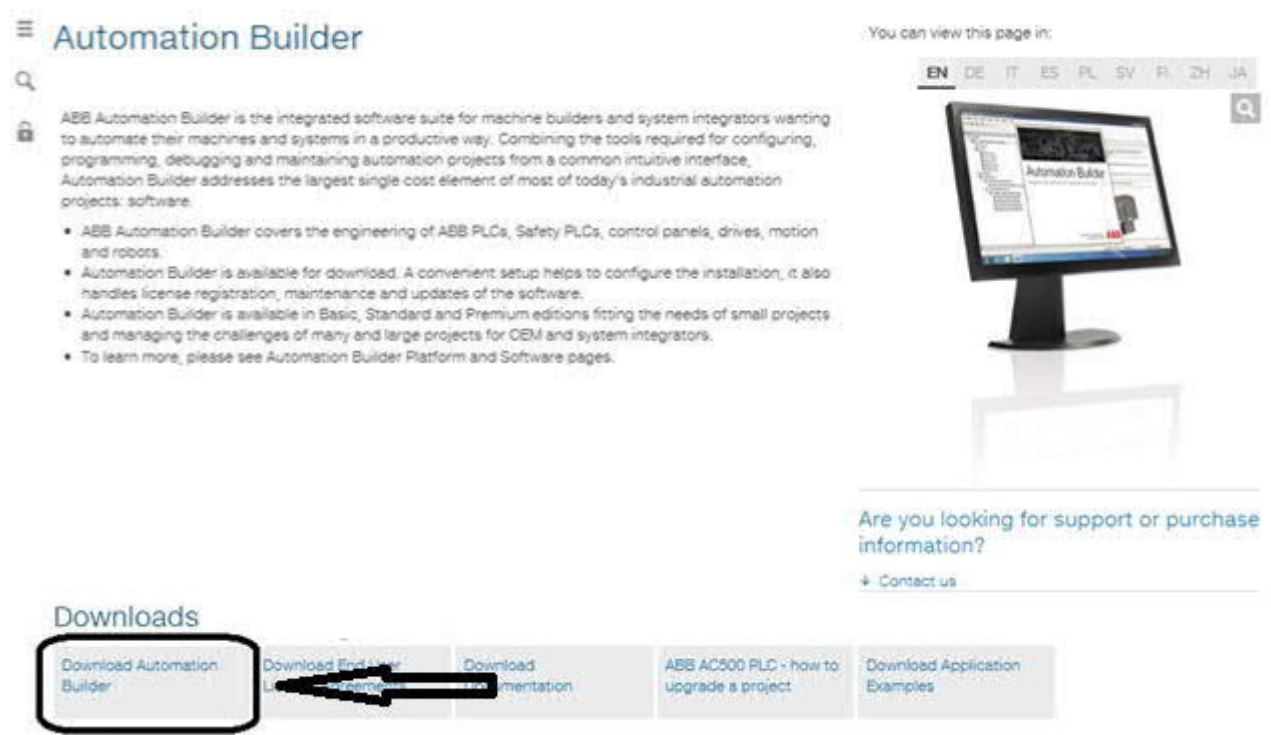
Best practice is to open an internet site in parallel and leave that open during download or licensing process.

This is especially important for ABB internal users.

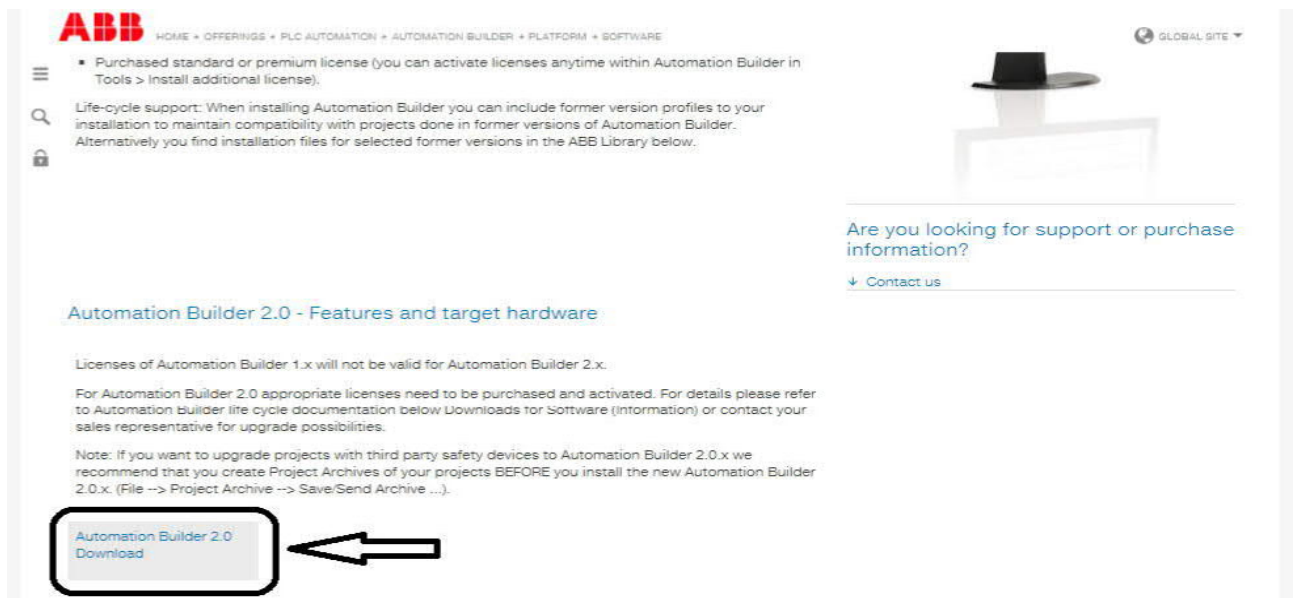
In case of errors please check if your firewall has maybe blocked Automation Builder and adapt the firewall settings.

### 2. Click on "Download Automation Builder" button on the ABB website.

<http://www.abb.com/automationbuilder>



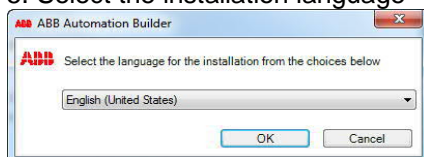
### 3. Once you click above button following screen appears. In this screen click Automation Builder 2.0 Download.



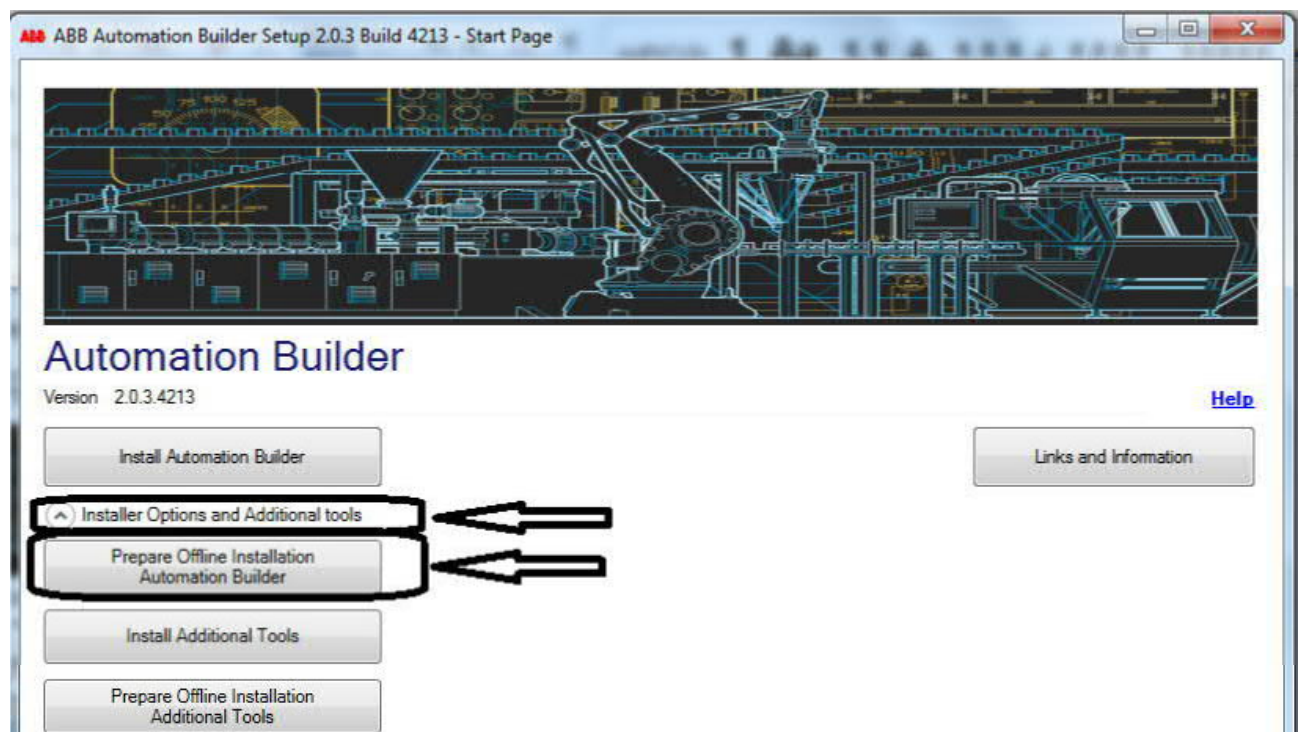
#### 4. Run Installation directly



#### 5. Select the installation language



#### 5. Open the Advanced Installer options and Click on "Prepare Offline Installation Automation Builder"

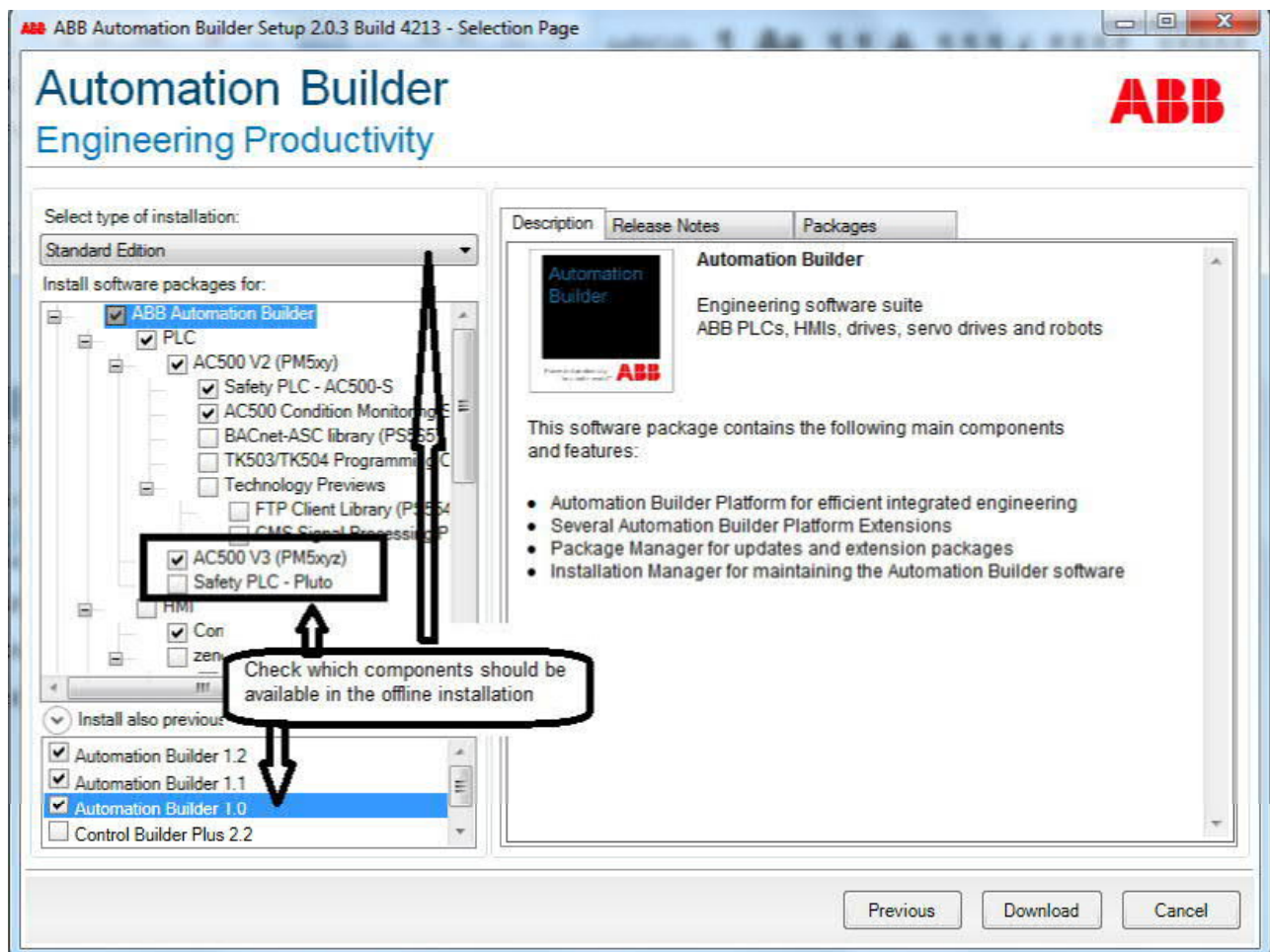


#### 6. Choose the type of installation with the topmost "Edition" pull-down menu and check the components to be installed.

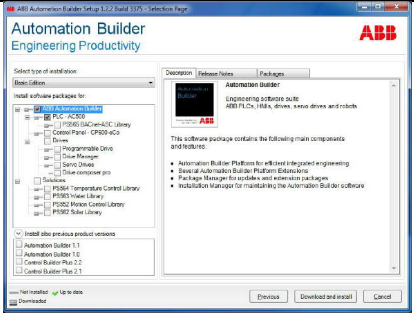


#### TIP

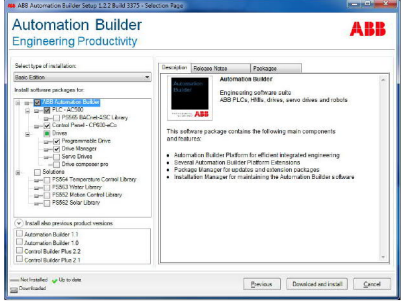
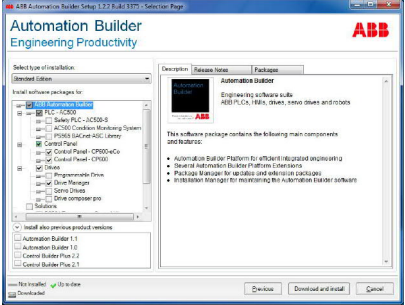
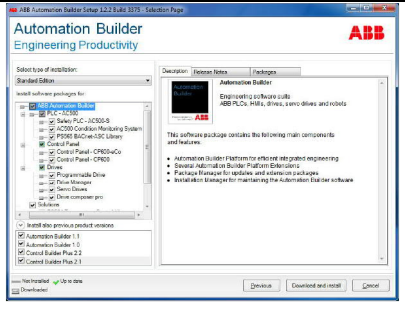
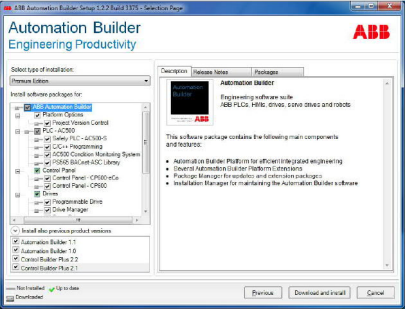
- The here checked components are available in the offline installation package.
- Which components will be finally installed needs to be selected when performing the offline installation on the offline PC itself.
- So it might be better to select more / all components for this offline installation package to have the choice at the installation later on.



The following table indicates download package size for different editions. Starting from Automation Builder 1.1 the setup checks whether the available disk space is sufficient to perform the installation.

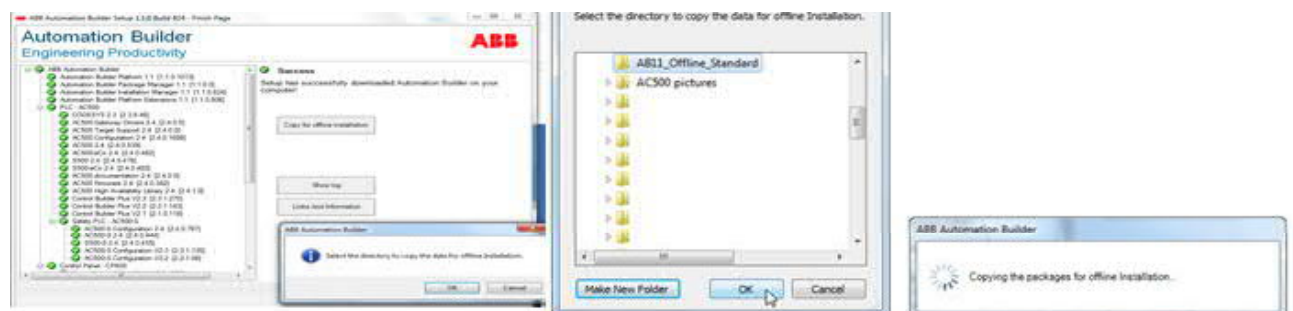
| Edition  | Selected components  | Download package size |
|--|--|-----------------------|
| Basic minimum - only AC500 <ul style="list-style-type: none"> <li>• without Safety</li> <li>• without CP600</li> <li>• without Drives</li> </ul> |  | ~2.5 GB               |



|   |  |                 |
|---|--|-----------------|
| <p>Basic default</p> <ul style="list-style-type: none"> <li>• CP600</li> <li>• Drives</li> <li>• no Profiles</li> </ul>   |     | <p>~4 GB</p>    |
| <p>Standard</p> <ul style="list-style-type: none"> <li>• no Safety</li> <li>• CP600</li> <li>• Drive Manager</li> <li>• no solutions</li> <li>• all profiles</li> </ul>                   |    | <p>~9 GB</p>    |
| <p>Standard maximum</p> <ul style="list-style-type: none"> <li>• Drives</li> <li>• Servo drives</li> <li>• Drive Composer Pro</li> <li>• all Solutions</li> <li>• all Profiles</li> </ul> |   | <p>~13.5 GB</p> |
| <p>Premium</p> <ul style="list-style-type: none"> <li>• Standard</li> <li>• C++</li> <li>• Robot Studio</li> <li>• all Solutions</li> <li>• all Profiles</li> </ul>                       |  | <p>~15 GB</p>   |

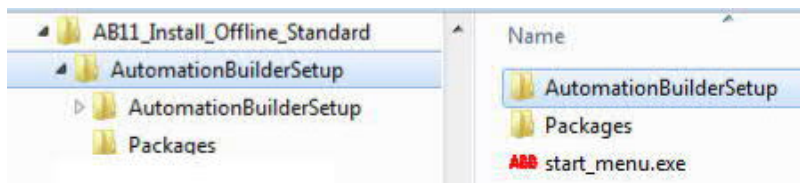
Note:- Recommended to have 20 – 25 GB free hard disk space in general for Automation Builder installation.

- After download select a directory to where the offline installation package will be saved



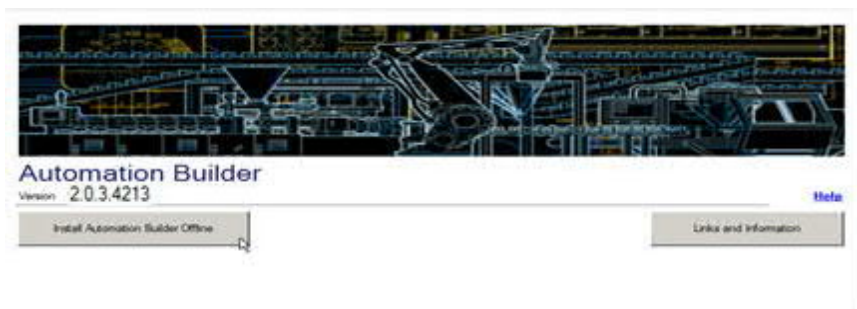
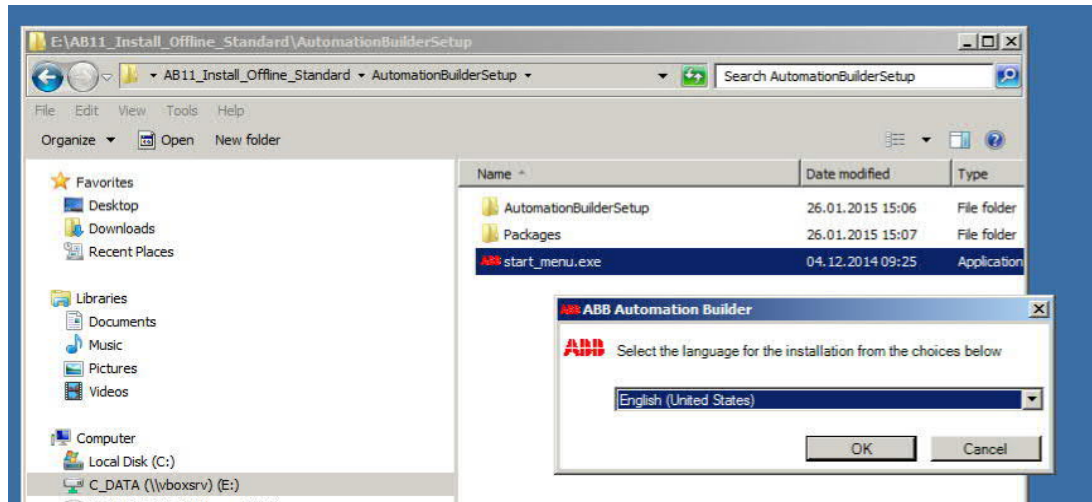


## 2.2.3 Copy offline installation package to the Offline PC



Install Automation Builder on the Offline PC

1. Double click “start\_menu.exe” from offline installation folder



2. Accept the license terms
3. Choose the type of installation with the topmost “Edition” pull-down menu and check the components to be installed.



notice

The Editions: Basic, Standard and Premium provide the components options according to what the Basic, Standard and Premium license will enable later on to be used / modified.

Independent of what license you want to activate all components can be installed.

The later on license activation will enable you to use these specific programs/components or to modify the specific project parts of an Automation Builder project.

The Trial license, which is valid for 30 days includes all Premium features.

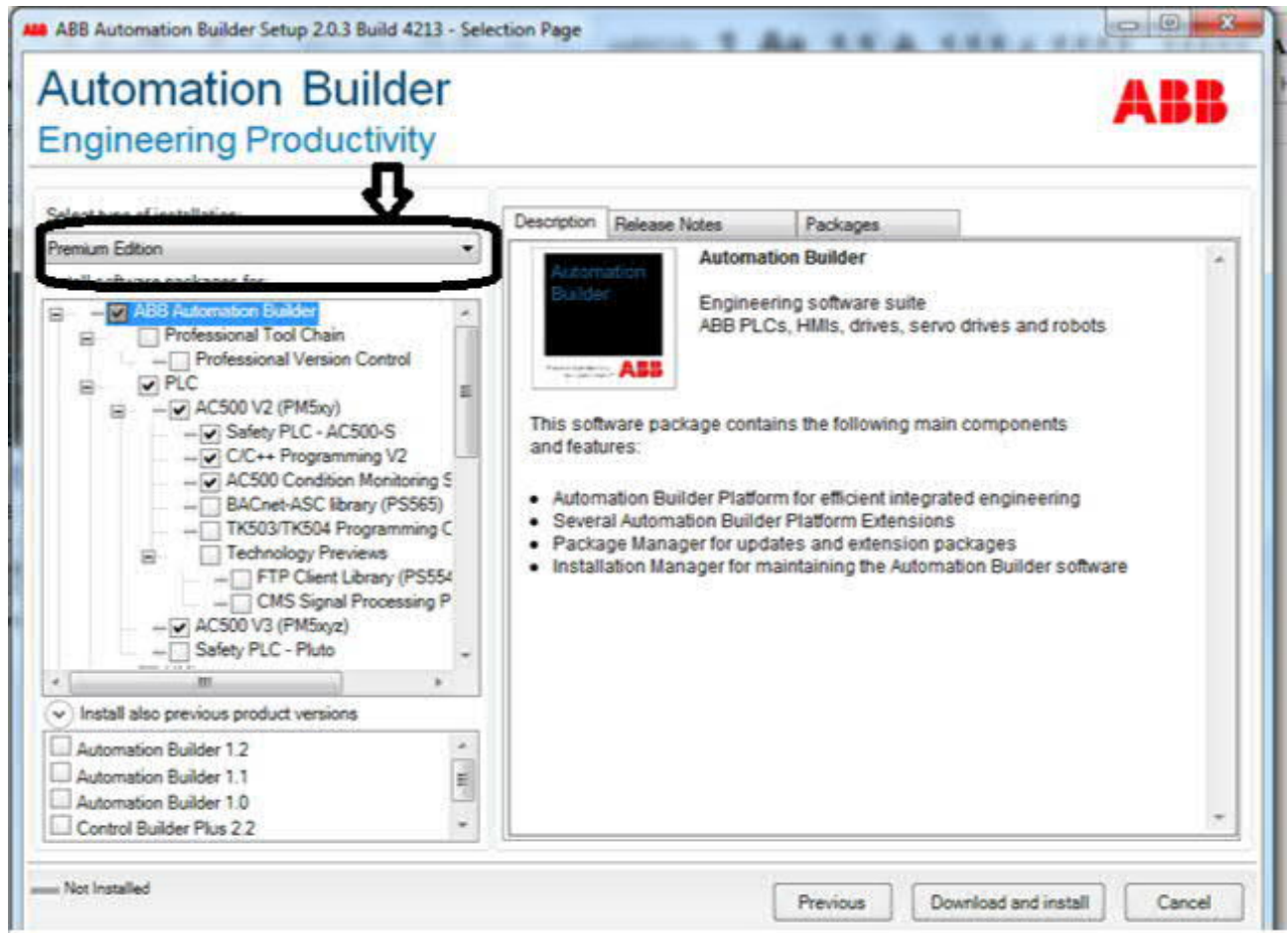


notice

If you want to use the Basic version and you have purchased and installed the Panel Builder 600 before, then do not select the Control Panel 600 in the installation.

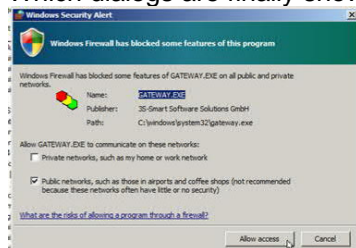
Even if you first want to test the Trial (Premium) version.

Installation of Control Panel 600 always requires Standard or Premium license activation. Otherwise the Panel Builder will not open any more.



4. Follow the installation wizard dialog instructions.

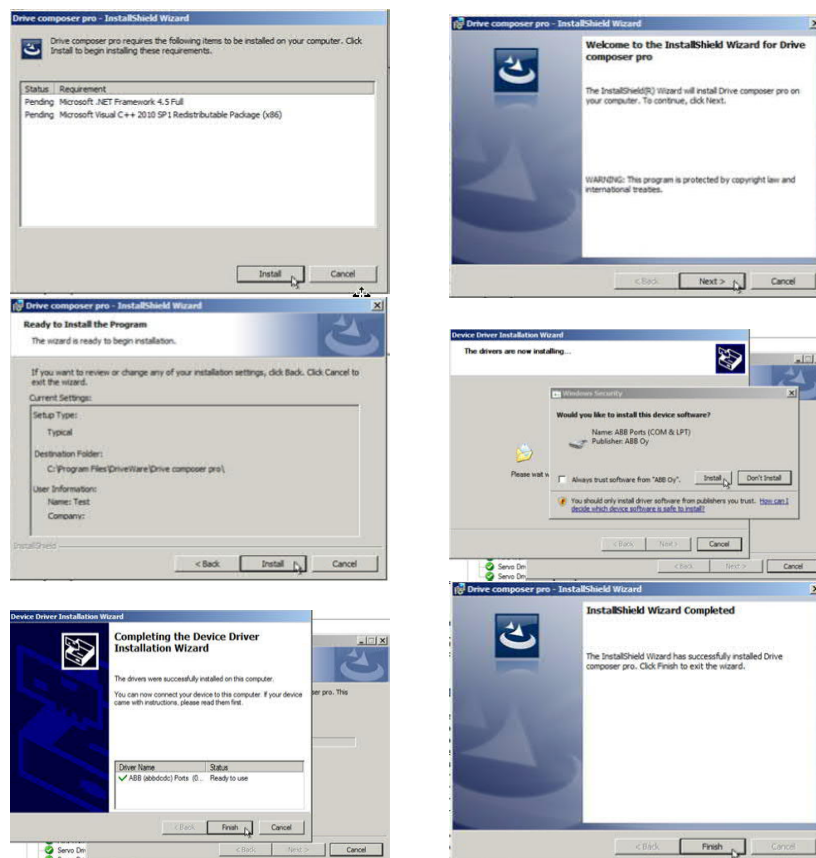
See here some screenshots of dialog pages which might pop up to be confirmed. Which dialogs are finally shown depends on the selected components.



For Servo Drives:

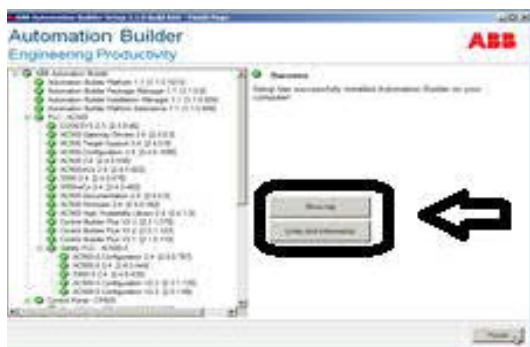


for Drive composer pro:



## 5. Finish installation

Result of installation will be shown in a last screen, where the installation log file could be opened.



If however you get red icons in the last installation screen, use the “Show Log” button to open and store the log file of the installation. This log file is also automatically stored under the installation log file is automatically stored under

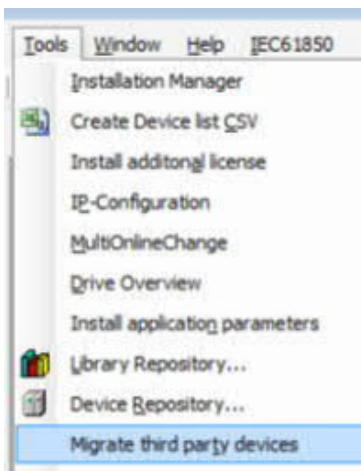
“C:\Users\<user>\AppData\Roaming\AutomationBuilderInstaller\Log\AutomationBuilderInstaller.log”

This can be used for later analyses by ABB support. See chapter 4.3.2

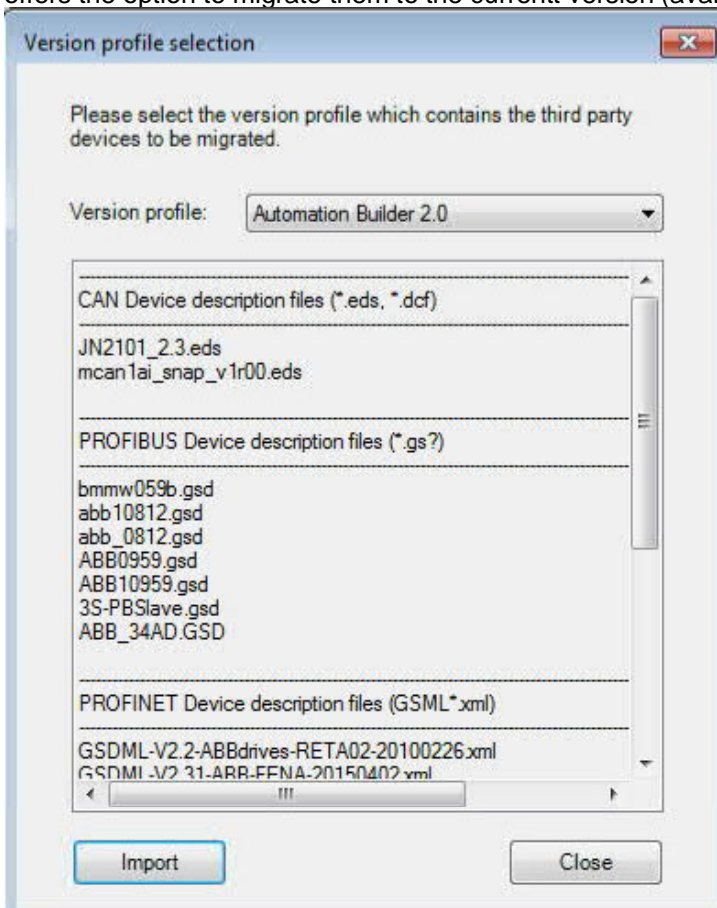
After installation, Automation Builder can be opened. On first start you will be asked for registration and for a license. For details please refer to chapter 3.

## 2.3 Migration of third party devices

After installing a new version of Automation Builder, third party devices that have been added to former installations can be migrated anytime via “Tools” → “Migrate third party devices”:



After selecting an old version profile, Automation Builder shows a list of all installed third party devices and offers the option to migrate them to the current version (available from Automation Builder 2.1.1):





## 2.4 Additional tools and libraries installation

Sometimes the installation and activation of additional tools, e.g. OPC Server, Panel Builder 600 is needed without the whole installation of the Automation Builder Suite.

Various additional tools are available, e.g.

- ABB License Manager
- CoDeSys OPC Server 3.5
- CoDeSys OPC Server 2.3
- IP Configuration Tool
- MultiOnlineChange Tool
- Control Panel – CP600
- Virtual Drives
- Safety PLC Pluto

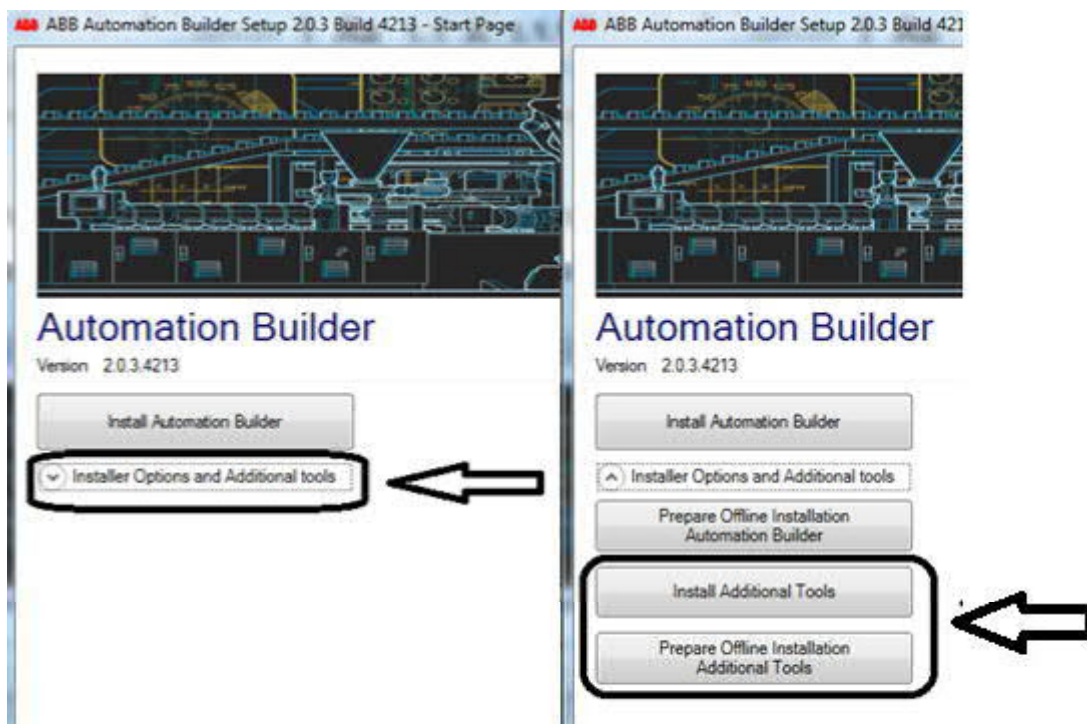
They can be installed separately and independent of the Automation Builder.

If additional Solution Libraries are installed, e.g. Water Pumping Library or Temperatur Control Library, their license needs to be activated using an activation key.

The following chapter explains the specialities of installation and / or activation compared to the Automation Builder installation. See chapter 3 for details on license activation of additional tools and libraries.

### 2.4.1 Select the Additional Tools in the installation menu

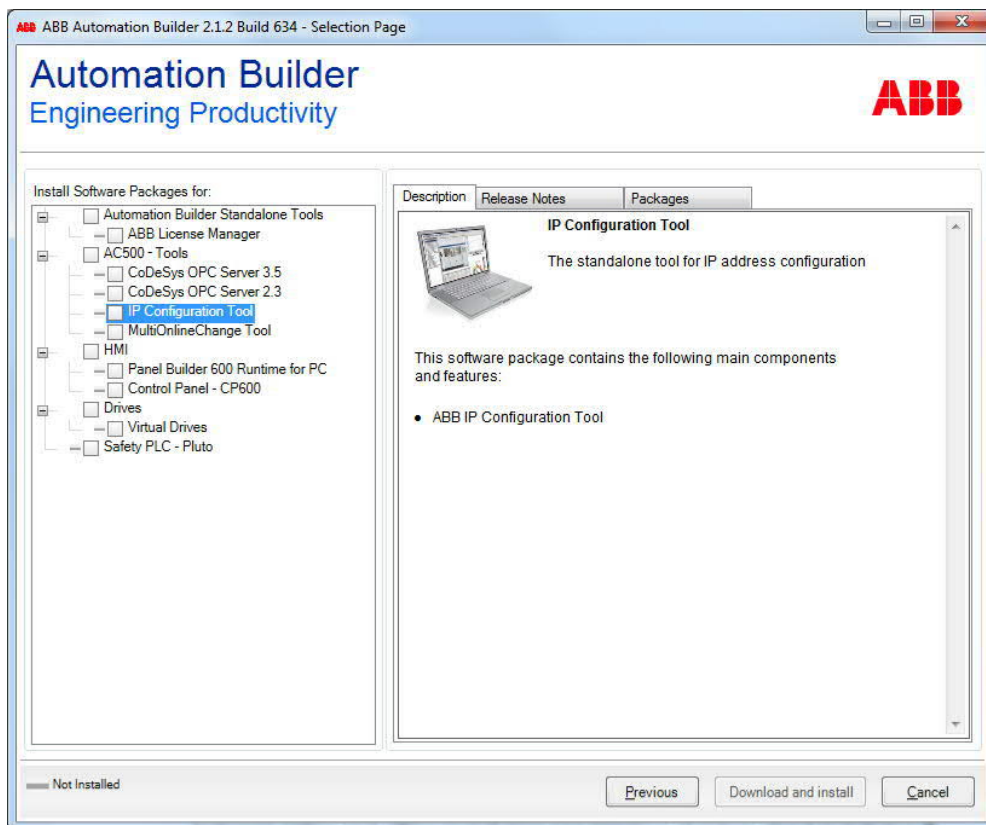
In the Automation Builder Setup menu choose the additional tools by opening the “Advanced Installer options”



Check the tool you want to download and install in the following menu.

In the tab “Packages” you can see which components will be installed. E.g. for the panel Builder 600 also the ABB Automation Builder License Manager will be needed to activate the license.

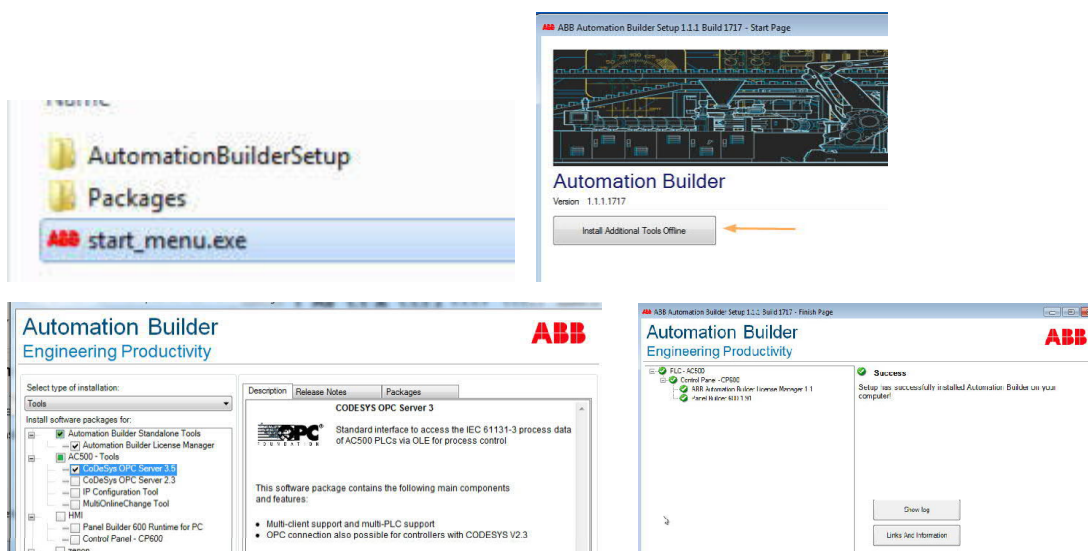




## 2.4.2 Installation of the additional tools

The additional tools have to be installed in the same way, as the Automation Builder. For the differences between online and offline installation see previous chapters about installation.

See also following screenshot about offline installation of Panel Builder 600 V1.91



Also the Automation Builder License Manager will be installed.

## 2.5 Updates

### 2.5.1 Online Updates

To check for available updates start the "Download" of Automation Builder as described in chapter 2.1 (Online installation).

The installer will detect which components are already installed on your PC and for which an update is available.

All available updates will be installed.

It is not possible to deselect single components. This is due to keep consistency of your Automation Builder installation.

### 2.5.2 Offline Update packages

To create an Offline Update package follow the instructions to create an offline installation package as described in chapter 2.2.

Be aware that you include ALL components in the offline installation package, which are already installed on the PC.



caution!

- The Update will only be installed, if ALL components that are already installed can be updated!
- Therefore all installed components must be part of the offline installation package.

### 2.5.3 Update Automation Builder minor/major versions (to 1.2, to 2.0)

The installation of Automation Builder minor/major versions require to uninstall previous Automation Builder version via the **Automation Builder Installation Manager**.

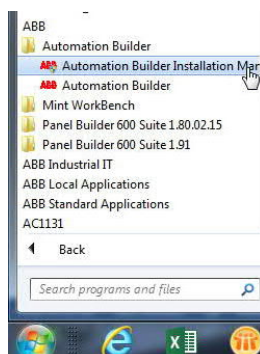
For description of minor/major versions please see the website:

<http://new.abb.com/plc/automationbuilder/platform/software>

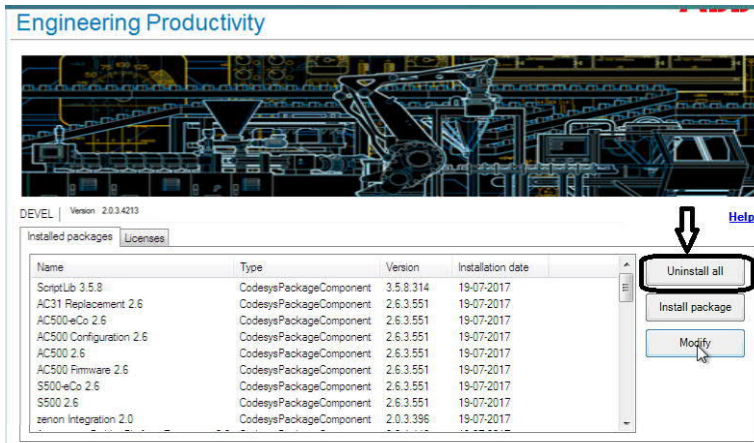
The lifecycle document describing the current life cycle status for Automation Builder versions, service packs and licenses can be found here:

<http://www.abb.com/abblibrary/DownloadCenter/?CategoryID=Root&View=Result&QueryText=Automation+Builder+%22Life+cycle%22&SortBy=Score&CountryCode=DE&AdditionalLanguage=en>

1. Open Automation Builder Installation Manager from Windows start menu



2. Choose 'Uninstall All' to remove the old software installation



If CoDeSys Versions higher than V2.3.9.48 are installed on the PC, please uninstall them before using the Automation Builder Installation Manager to uninstall.

After the installation the PC must be rebooted to make the installed licenses available.

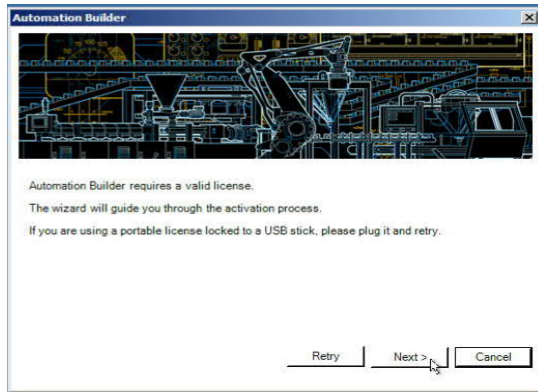
If however the uninstallation was not made with the Automation Builder Installation Manager, please be sure to also uninstall this Installation Manager if indicated via an error dialog message.

## 3 Licensing

### 3.1 Start licensing process

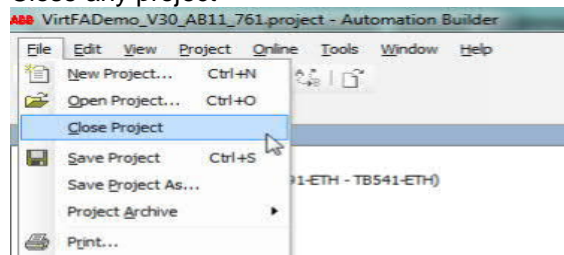
There are three starting points to activate a license

- A. On start up of Automation Builder it is checked whether a valid license is available. If not the license activation wizard is started:

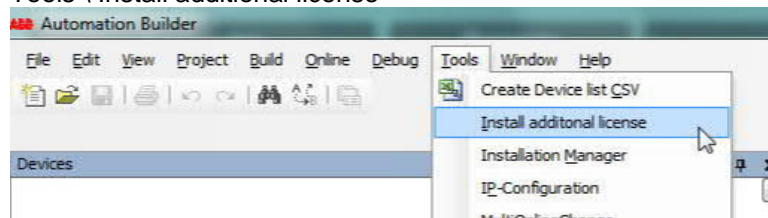


- B. From the Automation Builder menu: Tools > Install additional license:

1. Close any project



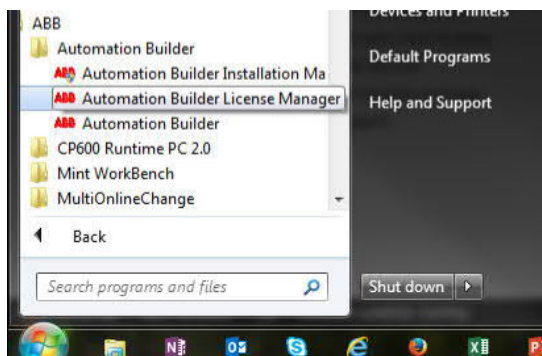
2. Tools \ Install additional license



- C. From the windows start menu:

Start > ABB > Automation Builder.

Precondition: Automation Builder License Manager was installed via the “additional tools” option of the Automation Builder installer (see chapter 2.3).

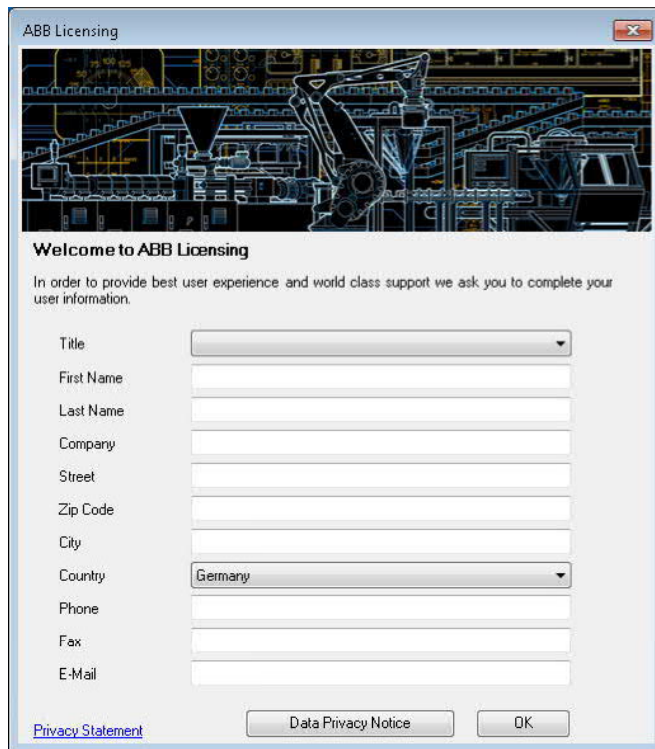


## 3.2 Registration (only on first startup of Automation Builder)

On first startup of Automation Builder you are asked to register. The registration information is stored on your PC and shared with ABB.

For details please refer to the Privacy Statement of the Automation Builder End User License Agreement: [http://www.abb.com/abblibrary/DownloadCenter/?CategoryID=Root&View=Result&QueryText=Automation+Builder+License+Terms+&SortBy=Score&CountryCode=\\*&AdditionalLanguage=en](http://www.abb.com/abblibrary/DownloadCenter/?CategoryID=Root&View=Result&QueryText=Automation+Builder+License+Terms+&SortBy=Score&CountryCode=*&AdditionalLanguage=en)

1. Start Automation Builder for the first time
2. Optionally fill out the registration form. By making use of entering your contact data during the registration, you provide ABB with your personal data and state that you are interested in receiving notifications in case of severe vulnerabilities or other security issues. Your data may therefore be used for establishing contact with you.

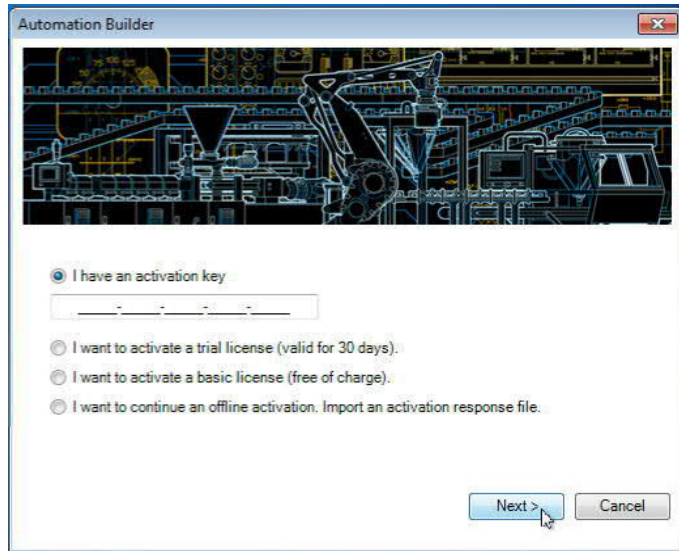


3. Continue the license activation see next chapter



### 3.3 Automation Builder license activation (online, offline)

1. Start licensing process as in chapter 3.1
2. Register as in chapter 3.2 (only on first startup)
3. Choose from one of the alternatives:



- A. "I have an activation key" if you have a license activation key of the format xxxxx-xxxxx-xxxxx-xxxxx-xxxxx. Type in your activation key. Continue with next step.
- B. "I want to activate a trial license" if you want to activate a 30 day trial license. Continue with next step.

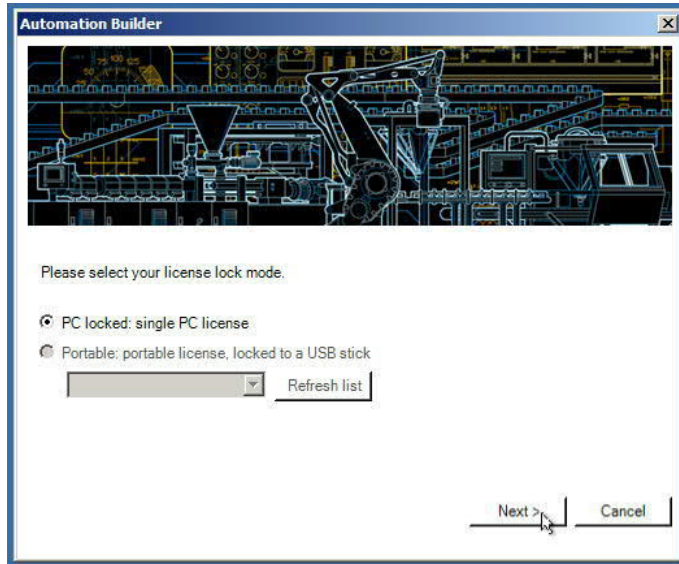


notice

- This is optional. If you already have a valid license activation key don't choose this option.
- A trial license enables to use all features for the period of 30 days. It corresponds to a premium license with time limitation.
- An activated trial license will void after 30 days. Normally within this time an unlimited license should be activated. If this was not done Automation Builder will start the License Activation Wizard automatically. At this point either a basic license (free of charge) or purchased license (with an activation key) should be selected.
- If a trial license was already installed on this PC, then do not choose this option another time!
- Even if the wizard allows to choose this option it might block the start of Automation Builder afterwards!

- C. "I want to activate a basic license" (free of charge) – same procedure as for unlimited license. Continue with next step.
- D. "I want to continue an offline activation" – this option is only relevant for the offline activation workflow, see chapter 3.3.1)

4. Select the the license lock mode:



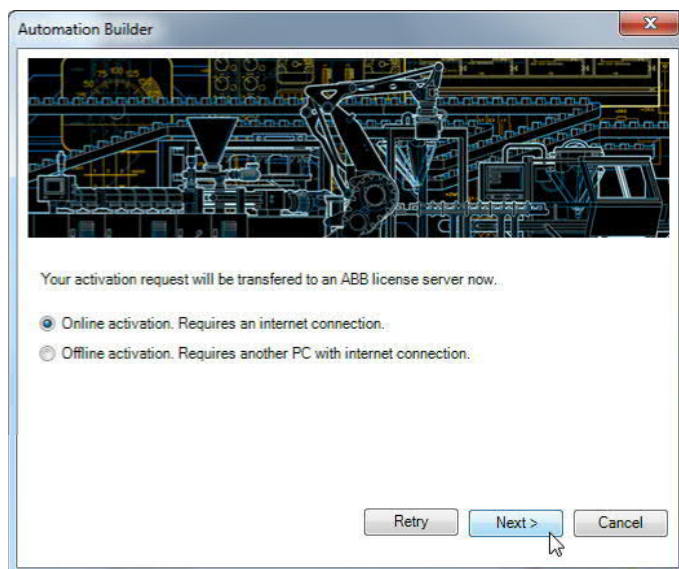
- A. PC locked: if you want to place the activated license on this PC. Continue with next step.
- B. Portable: if you want to place the activated license on the USB stick (DM-KEY). Continue with next step.



notice

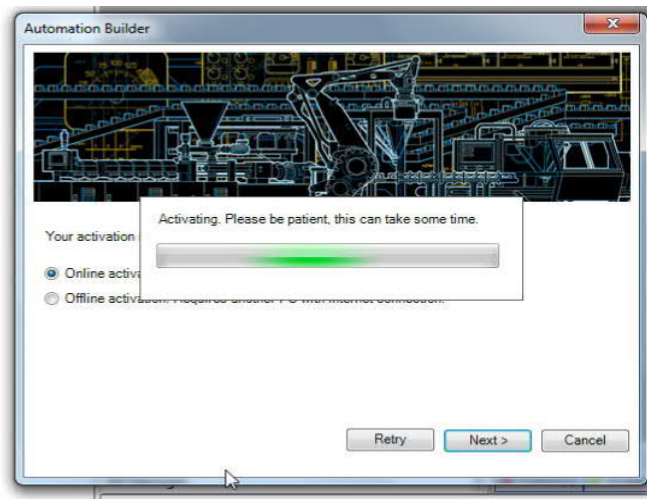
- Plug in your DM-KEY (USB dongle), which you have purchased before starting this wizard.
- All licenses can be either be placed on the PC or DM-KEY, independent from their type (e.g. single or network licenses). Exception: special license types, e.g. ABB internal licenses.
- It is possible to activate a license to the PC and add a dongle to it at the same time. Both licenses are used to cover the needed features. (E.g. if a standard license is bound to the PC and a premium is bound to the dongle)

5. Select online or offline activation

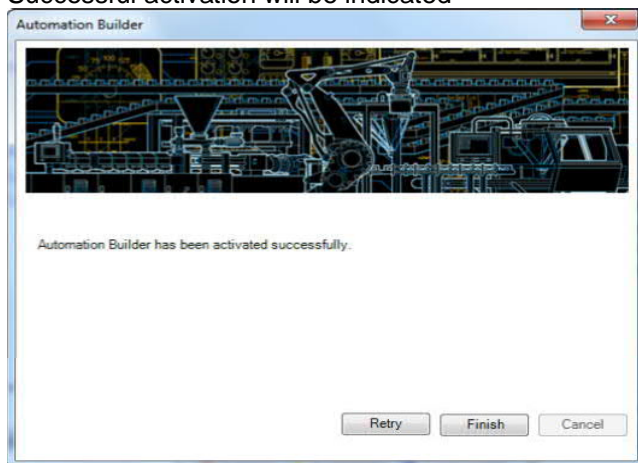


- A. Online activation: continue with next step.
- B. Offline activation: continue as described in chapter 3.3.1

6. If you get an error message, that you are offline, please “Retry” as the server might not have responded within time.



7. If the activation server responds with an error, please retry a second time.
8. Successful activation will be indicated



notice

- If you had activated a Trial license, the expiration time will be still indicated at the startup of Automation Builder, even if you have activated an unlimited license.



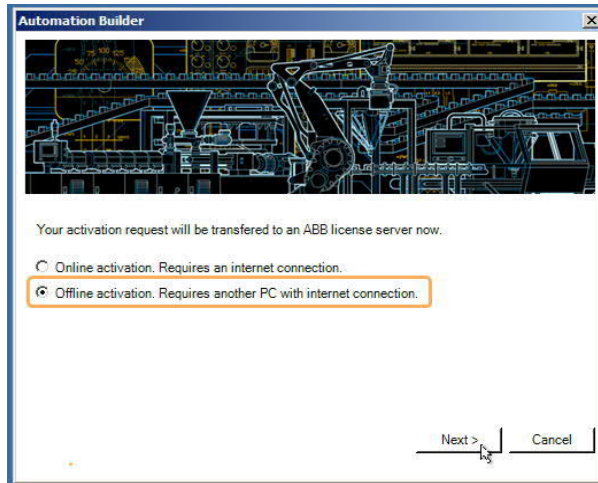
- See chapter 3.5.5 how to remove the trial license to get rid of this message.

9. You are done. For Network licenses: please do some more configurations as described in chapter: 3.3.2

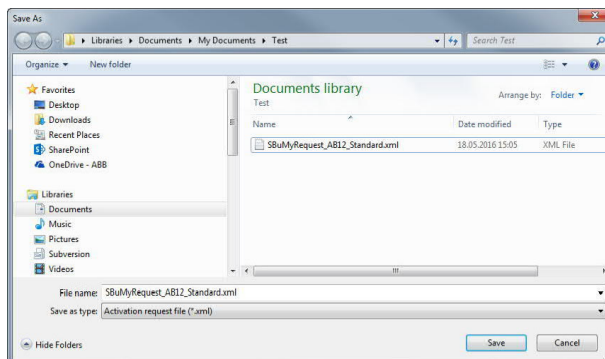
## 3.3.1 License activation on an offline PC

### 3.3.1.1 Create Activation Request file on Offline PC

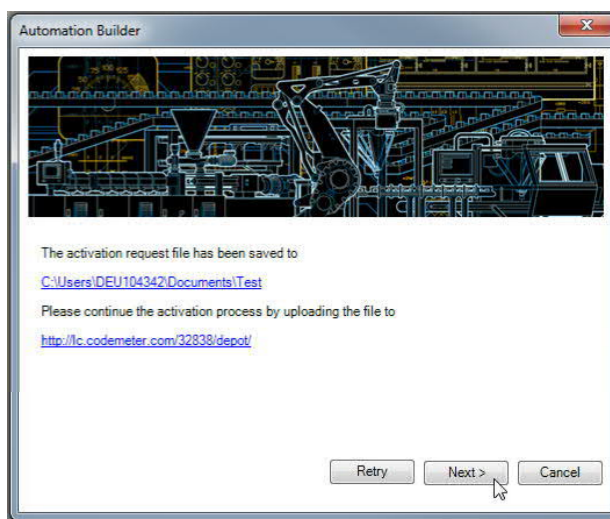
1. Start licensing process as in chapter 3.1
2. Register as in chapter 3.2 (only on first startup)
3. Start license activation as described in chapter 3.3
4. Select Offline activation



5. Save the Activation request file with a name of your choice as type of \*.xml



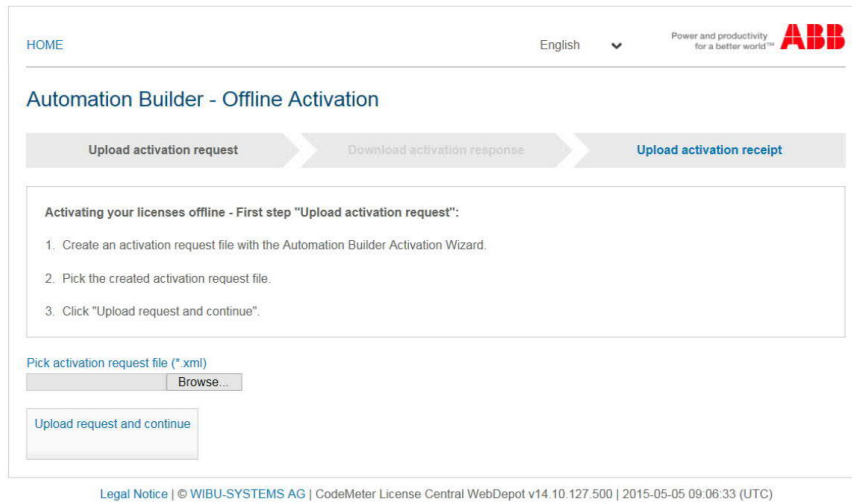
6. Remember the location of your request file from the next info screen, or use the link to it.



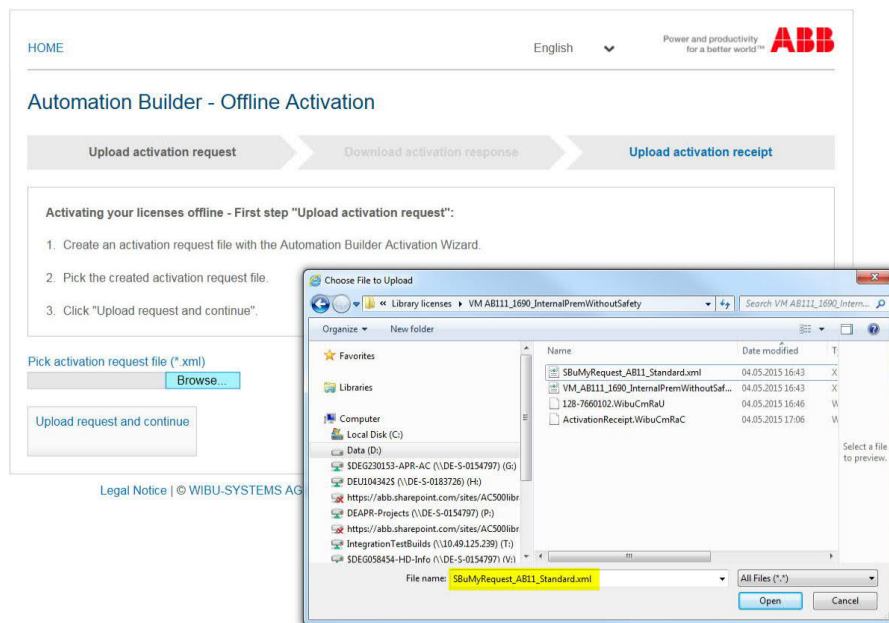
### 3.3.1.2 Copy the Activation request file to the Online PC

### 3.3.1.3 Upload the Activation request file to the License server

1. Follow the link: <http://lc.codemeter.com/32838/depot/>



2. Browse to the Activation request file



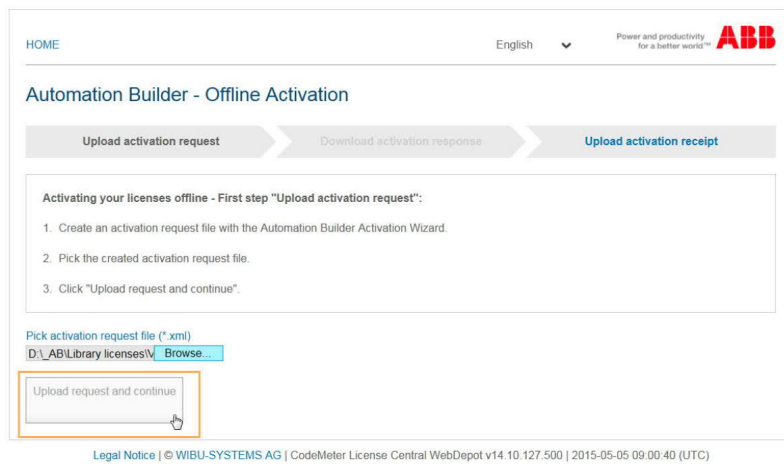
3. Upload Request and continue



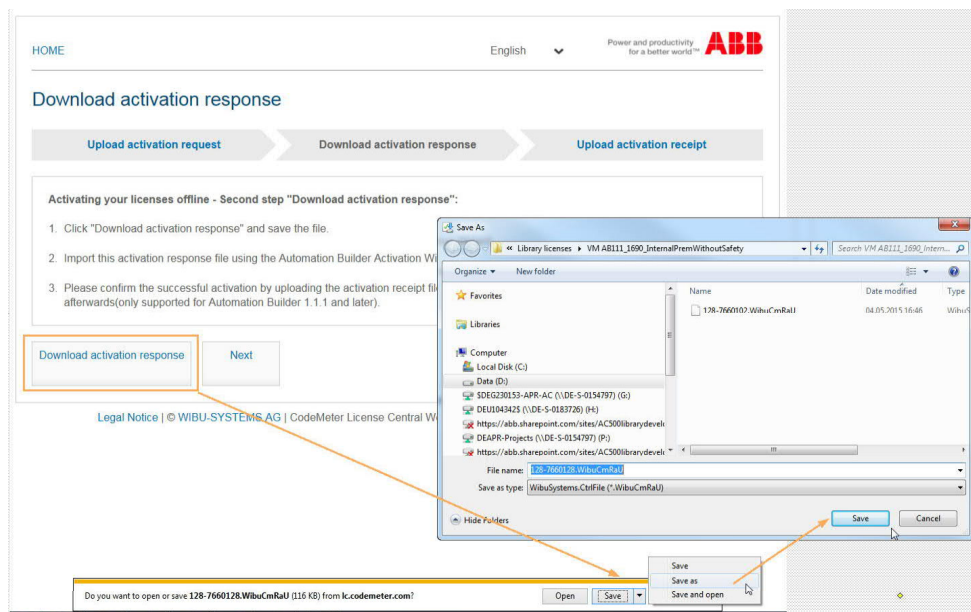
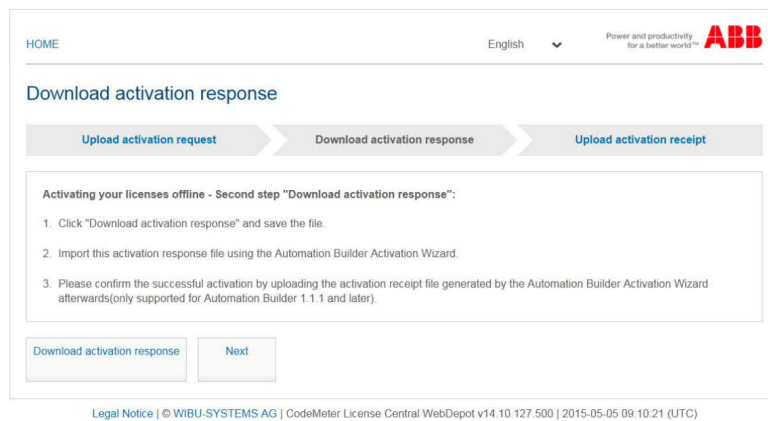
notice

- Do ONLY press the button „Upload Request.And Continue Now” ONCE!
- Be patient and wait a while until the next step is activated.
- If however you get an error message “0x18080001” “internal error” then please send your activation request file (\*.xml) to [plc.support@de.abb.com](mailto:plc.support@de.abb.com)





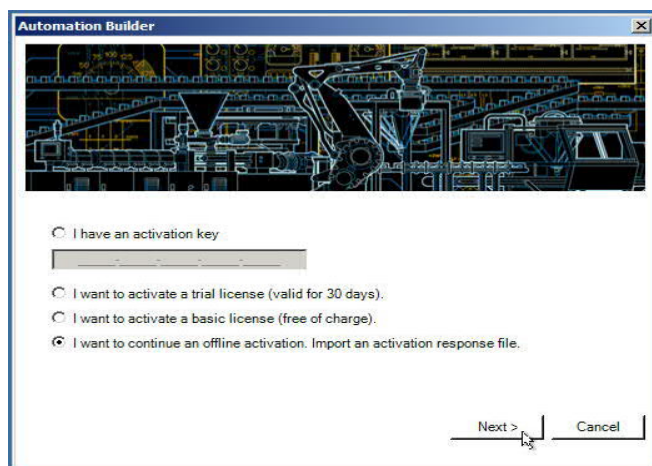
#### 4. Download Activation Response file (License Update file)



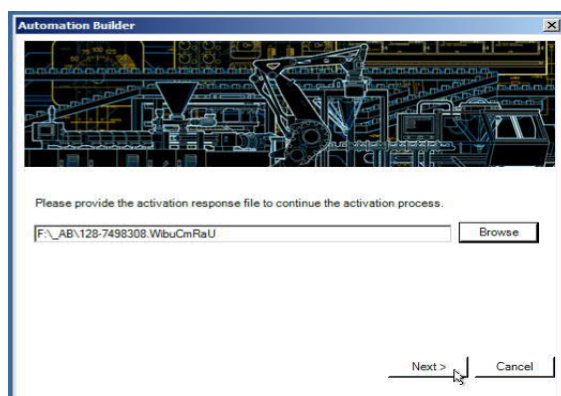
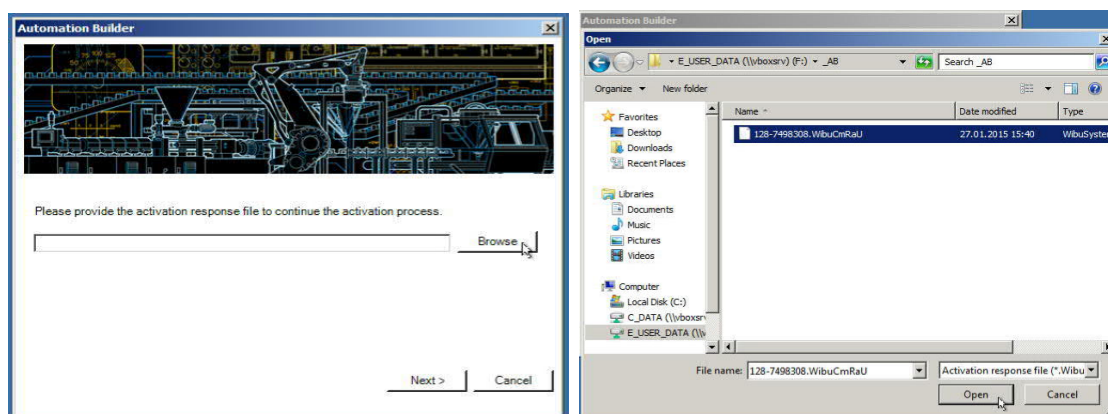
#### 3.3.1.4 Copy the Activation response file to the Offline PC

#### 3.3.1.5 Continue offline activation and import the Activation Response on the Offline PC

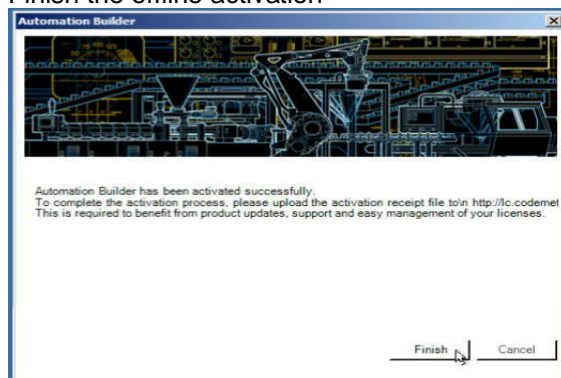
If you have closed the Activation Process before, start Automation Builder again and select "I want to continue an offline activation. ..."



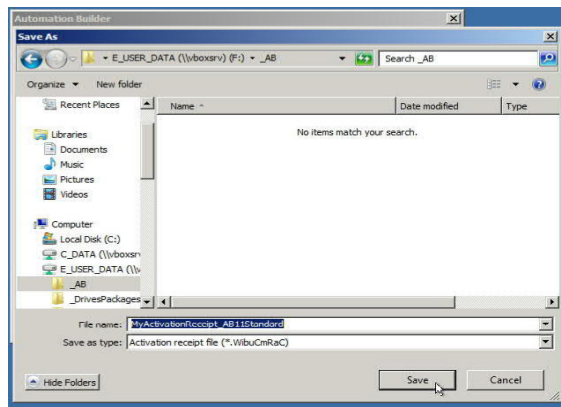
1. Provide the Activation response file via the Browse button



2. Finish the offline activation



3. After click on Finish a dialog opens to save the Activation receipt file  
Save the file to a location on your Offline PC

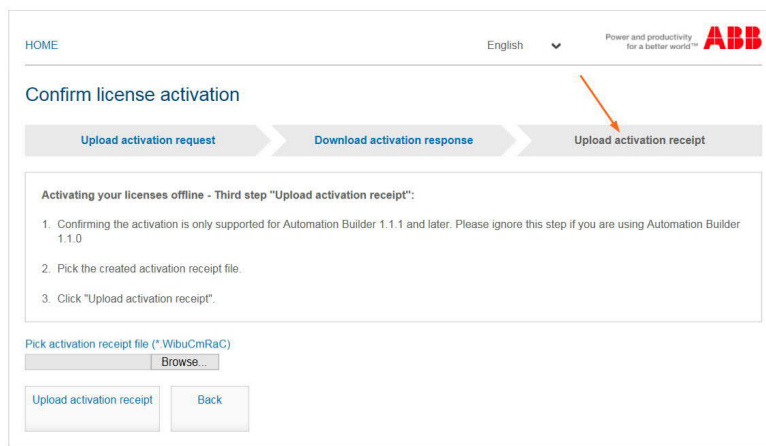


### 3.3.1.6 Copy the Activation receipt file to the Online PC

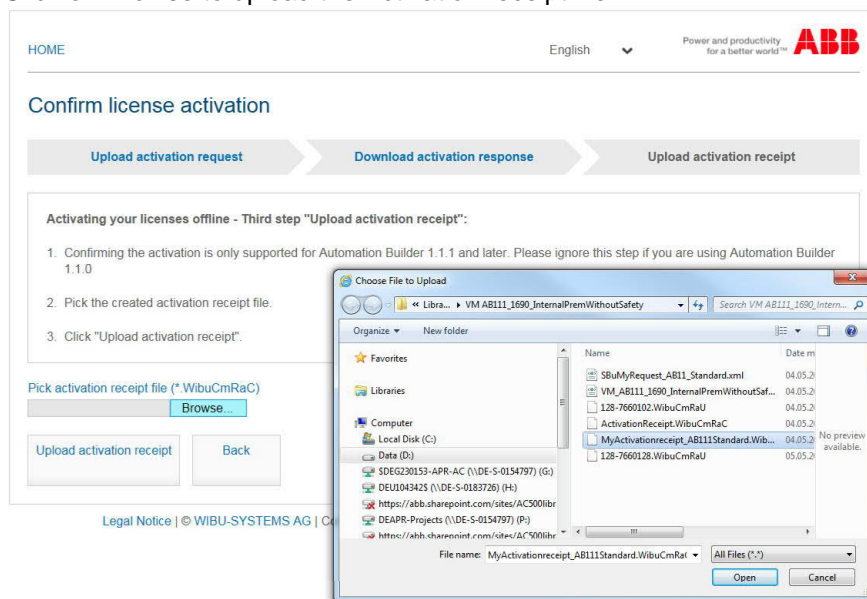
### 3.3.1.7 Upload the Activation receipt file to the License server


Go to <http://lc.codemeter.com/32838/depot/>

Click on the upper right arrow "Upload activation receipt"



Click on Browse to upload the Activation receipt file.



HOME English  Power and productivity for a better world™

## Confirm license activation

Upload activation request → Download activation response → Upload activation receipt


Activating your licenses offline - Third step "Upload activation receipt":

1. Confirming the activation is only supported for Automation Builder 1.1.1 and later. Please ignore this step if you are using Automation Builder 1.1.0
2. Pick the created activation receipt file.
3. Click "Upload activation receipt".

Pick activation receipt file (\*.WibuCmRaC)  
D:\\_AB\Library licenses\ Browse...

Upload activation receipt Back

Legal Notice | © WIBU-SYSTEMS AG | CodeMeter License Central WebDepot v14.10.127.500 | 2015-05-05 09:21:55 (UTC)

HOME English  Power and productivity for a better world™

## License Activation Successfully Completed

You have successfully completed the license activation.

OK

Legal Notice | © WIBU-SYSTEMS AG | CodeMeter License Central WebDepot v14.10.127.500 | 2015-05-05 09:26:51 (UTC)

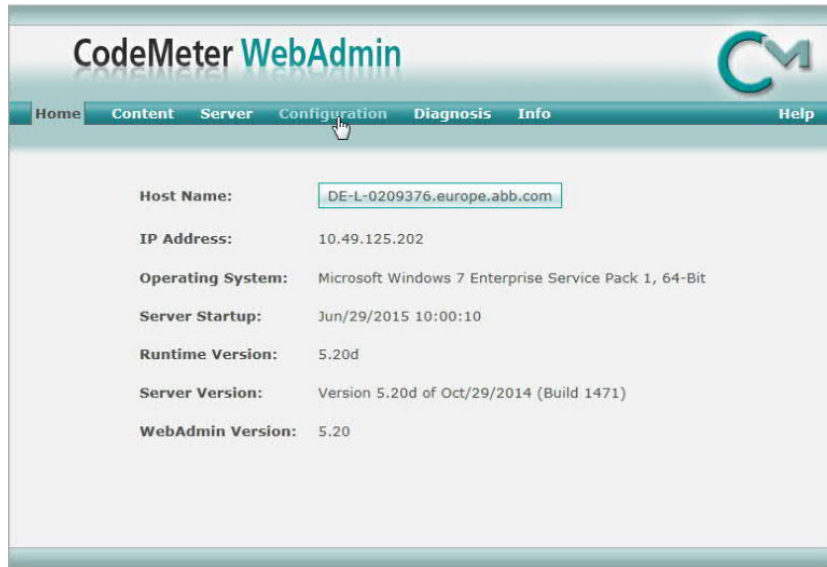
The offline Activation receipt file will be not accepted before Automation Builder 1.1.1  
So ignore a possible error message at the end and enjoy working with Automation Builder 1.1

### 3.3.3 Setup of a Network license

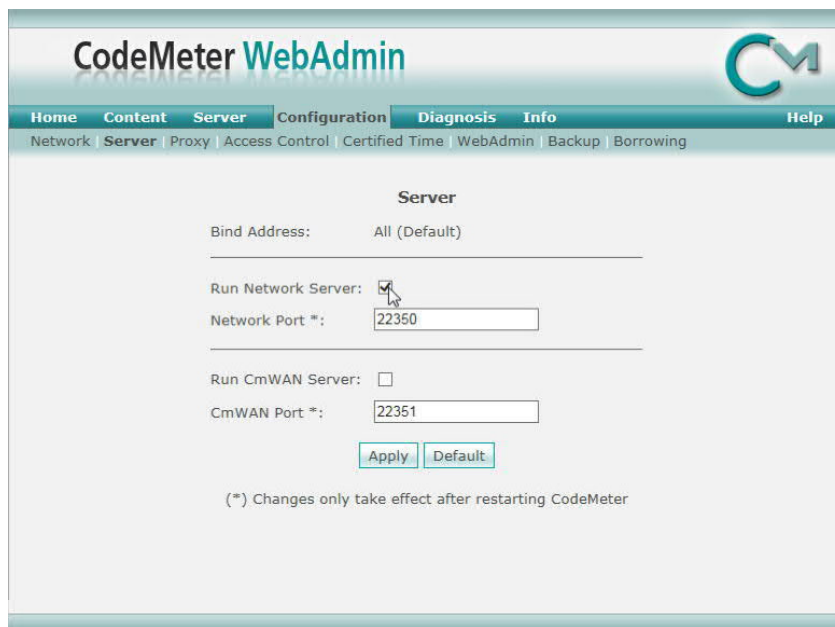
The following setup works in typical environments. For advanced options see 3.5.6

#### 3.3.3.1 Configure network license server

1. Start licensing process as described in chapter 3.1 – Option C should work in all cases.
2. Only on first startup: Register your Network license as described in chapter 3.2 – Option A
3. Activate the Network license as described in chapter 3.3 – you can either place it on the PC (“PC bound”) or onto a DM-KEY USB dongle (“portable”)
4. Launch CodeMeter WebAdmin as described in chapter 3.5.2
5. Go to Tab Configuration:



6. Go to sub-tab server



7. Tick “Run Network Server” and press Apply

Keep default settings. These should work in most cases.

In some cases a restart of CodeMeter Service is required to take over the changes (see chapter 3.5.3 for details on restarting CodeMeter Service)



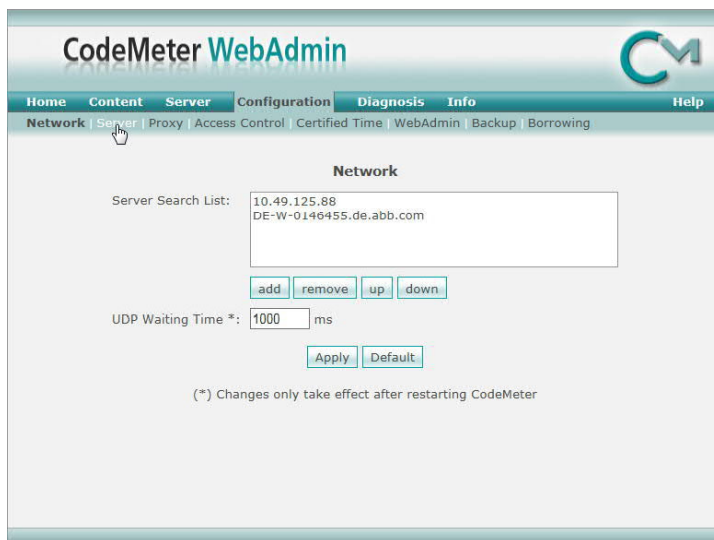


notice

- In case you want to control usage of Network licenses please refer to chapter 3.5.6.3
- Activation keys for Network licenses are valid for one Network license each. This one license can be shared among many people but only one Automation Builder instance at the same time. If you want to run more than one Automation Builder instance at the same time you have to activate more than one Network license. This means you have to purchase and enter more than one activation key (one per license).

### 3.3.3.2 Configure client side

The default settings of Automation Builder and the CodeMeter (on client side) should be sufficient in most cases to get the network licenses working. In case of problems accessing the network license, please set the server search list on the client side:



## 3.4 Additional tools and libraries license activation

Sometimes the installation and activation of additional tools, e.g. OPC Server, Panel Builder 600 is needed without the whole installation of the Automation Builder Suite.

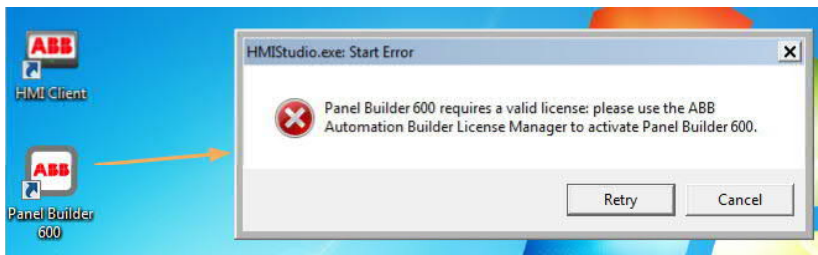
They can be installed separately and independent of the Automation Builder.

If additional Solution Libraries are installed, e.g. Water Pumping Library or Temperatur Control Library, their license needs to be activated using an activation key.

The following chapter explains the specialities of installation and / or activation compared to the Automation Builder installation and activation explained already in the previous chapters.

### 3.4.1 License activation of the Panel Builder 600 and PC-Runtime

At the first start of Panel Builder 600 an error message will appear if the Panel Builder 600 license was not activated before.



To activate the license please start

<C:\Program Files\ABB\Automation Builder License Manager\ABB Automation Builder License Manager.exe>

Fill in the registration form (optional):

In the next step fill in your purchased license key:

Then follow the next steps according to your needs. (PC or dongle bound, offline or online activation).  
See previous chapters about license activation process.



notice

➤ For the additional tools there is no extra trial license available.

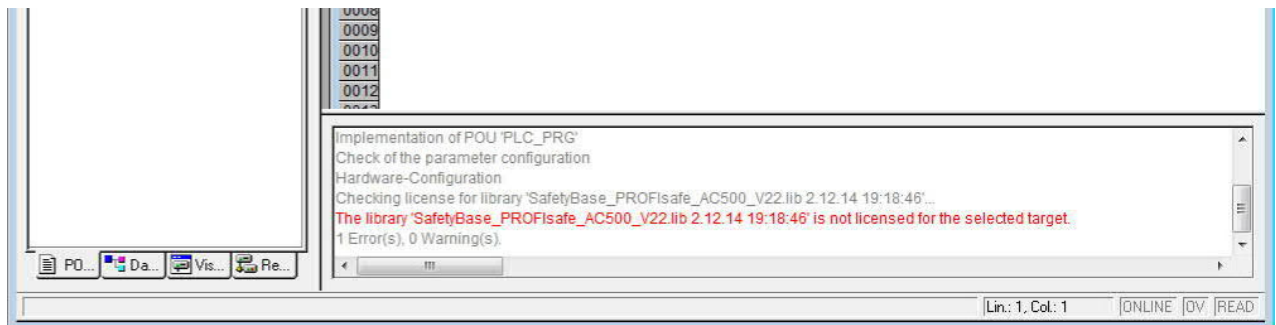
## 3.4.2 License activation of Solution Libraries

### 3.4.2.1 *Activate your Solution Libray License*

To activate the purchased license of a solution libraries, e.g. Water Pumping library or Temperature Control, please follow the below explained steps:

1. Activate your Automation Builder license as described in chapter 3.3
2. Open Automation Builder
3. Close any open projects
4. Select "Tools \ Install additional license"
5. Follow the license wizard and activate your purchased license code in online or offline mode.  
The principle is the same as described in the chapter 3.3

If you do not have the right license for your library you will receive an error during compilation of your IEC 61131 application.

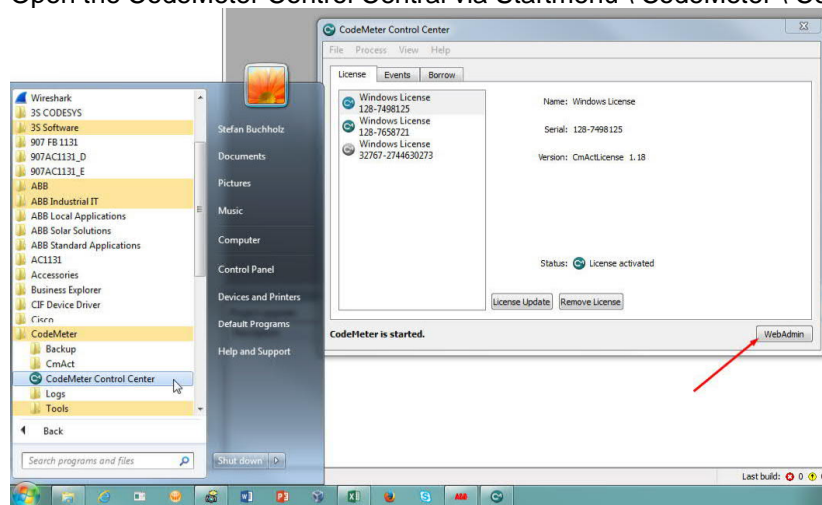


### 3.4.2.2 Check your activated Solution Library License

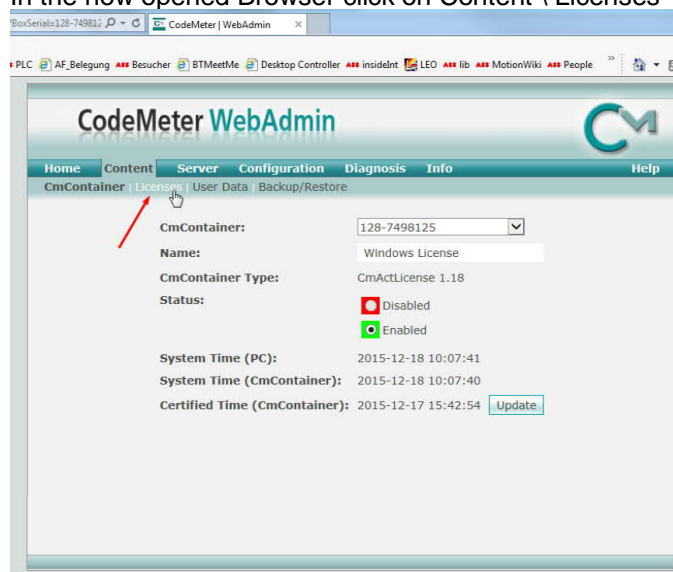
To check whether or which solution library licenses you have activated it's necessary to use the CodeMeter Control Center as described below.

The solution library licenses have separate product codes, that will be added into an already existing Automation Builder license. So there will be no separate CmContainer in the CodeMeter for them.

1. Open the CodeMeter Control Central via Startmenu \ CodeMeter \ CodeMeter Control Centre



2. Click on the button "WebAdmin"
3. In the now opened Browser click on Content \ Licenses



4. Select the CmContainer and browse down searching for the library / product code

The screenshot shows the CodeMeter WebAdmin interface. The browser address bar displays 'BoxSerial=128-7498125' and the page title is 'CodeMeter | WebAdmin'. The navigation menu includes 'Home', 'Content', 'Server', 'Configuration', 'Diagnosis', 'Info', and 'Help'. Below the menu, the breadcrumb trail shows 'CmContainer | Licenses | User Data | Backup/Restore'. A dropdown menu for 'CmContainer:' is set to '128-7498125', with a red arrow pointing to it. Below this, a table titled '5000460 | ABB Automation Products GmbH' lists licenses. The table has columns for 'Product Code', 'Name', 'Unit Counter', 'Expiration Time', 'Activation Time', and 'License Quantity'. The license '11000' with the name 'Water Library' is highlighted with a red rectangle.

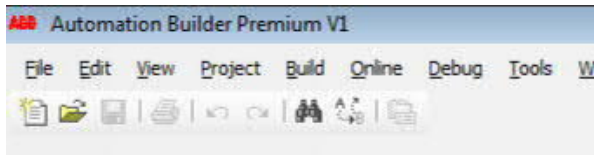
| Product Code          | Name                     | Unit Counter | Expiration Time | Activation Time | License Quantity |
|-----------------------|--------------------------|--------------|-----------------|-----------------|------------------|
| <a href="#">999</a>   | -                        | n/a          | n/a             | n/a             | 1                |
| <a href="#">999</a>   | -                        | n/a          | n/a             | n/a             | 1                |
| <a href="#">1000</a>  | CSV Device Import Export | n/a          | n/a             | n/a             | 1                |
| <a href="#">1000</a>  | CSV Device Import Export | n/a          | n/a             | n/a             | 1                |
| <a href="#">10004</a> | -                        | n/a          | n/a             | n/a             | 1                |
| <a href="#">10005</a> | -                        | n/a          | n/a             | n/a             | 1                |
| <a href="#">10005</a> | -                        | n/a          | n/a             | n/a             | 1                |
| <a href="#">11000</a> | Water Library            | n/a          | n/a             | n/a             | local            |



## 3.5 Managing your licenses

### 3.5.1 Identify installed license via the Automation Builder title bar

Since Automation Builder Version 1.1.1 the title bar or Automation Builder shows a license information:



Be aware of the following rule for this information:

The info in the menubar is taken from the first found license

1. local licenses (on PC)
2. on dongle (USB key)
3. network licenses (since AB1.2)

So if a local license is only Basic and a dongle with Premium is inserted:

the information is Basic

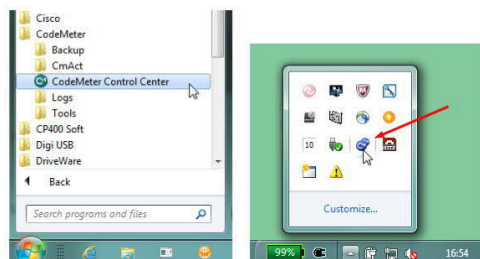
the functionality is Premium (the highest available)

To check your installed licenses the CodeMeter Control Center tool can be used.

This was installed together with Automation Builder 1.1

### 3.5.2 Use CodeMeter Control Center to check licenses

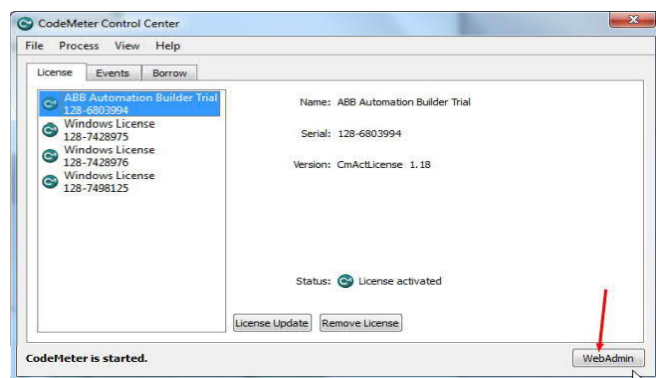
1. Open the CodeMeter Control Center via the Start Menu \ CodeMeter \ CodeMeter Control Center  
or  
the icon in the task bar



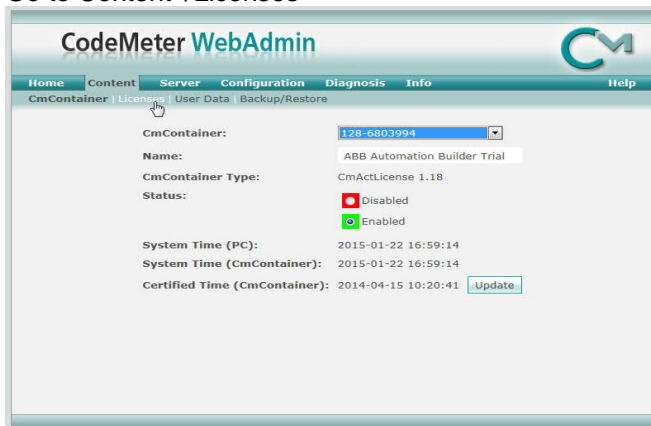
2. In the CodeMeter Control Center window you can see the different license “tickets” / “CmContainers” that are installed on your PC.

To see more details open the “WebAdmin” Webserver by clicking on “WebAdmin”

or using following link: <http://localhost:22350/Content.html>

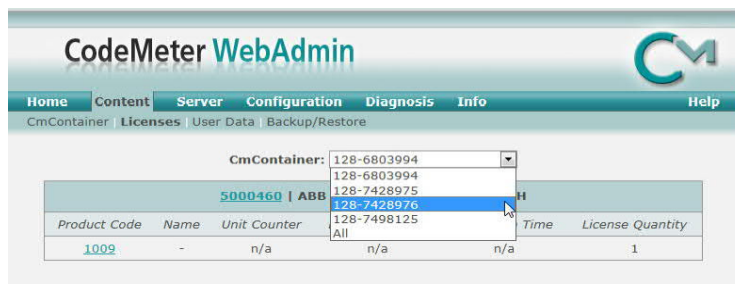


### 3. Go to Content \ Licenses

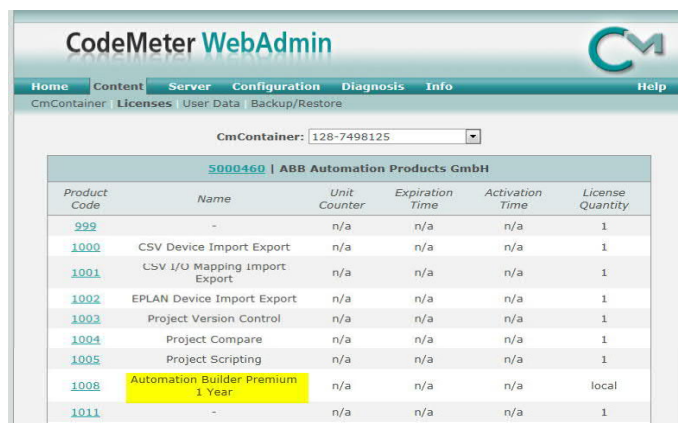
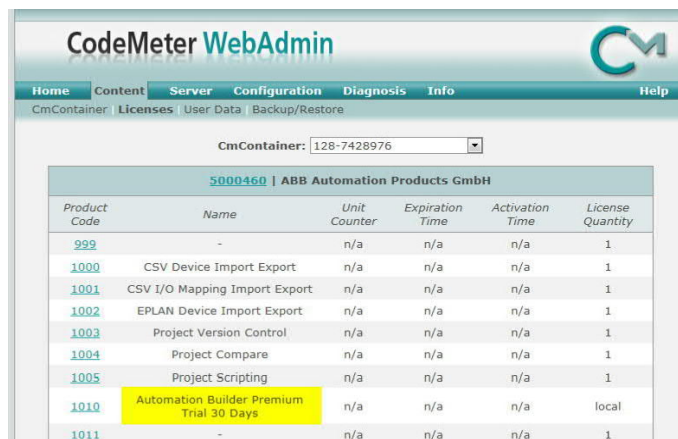


or direct: <http://localhost:22350/Licenses.html>

### 4. Use Pull-down menu to find content of different CmContainers



Here the details of the license container can be checked.

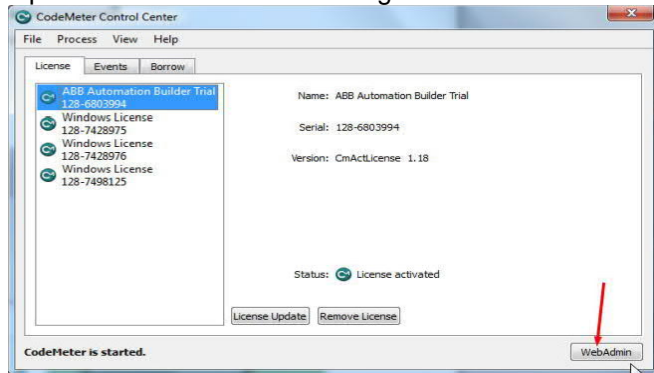


### 3.5.3 Set license check to local mode or add dedicated servers in search list

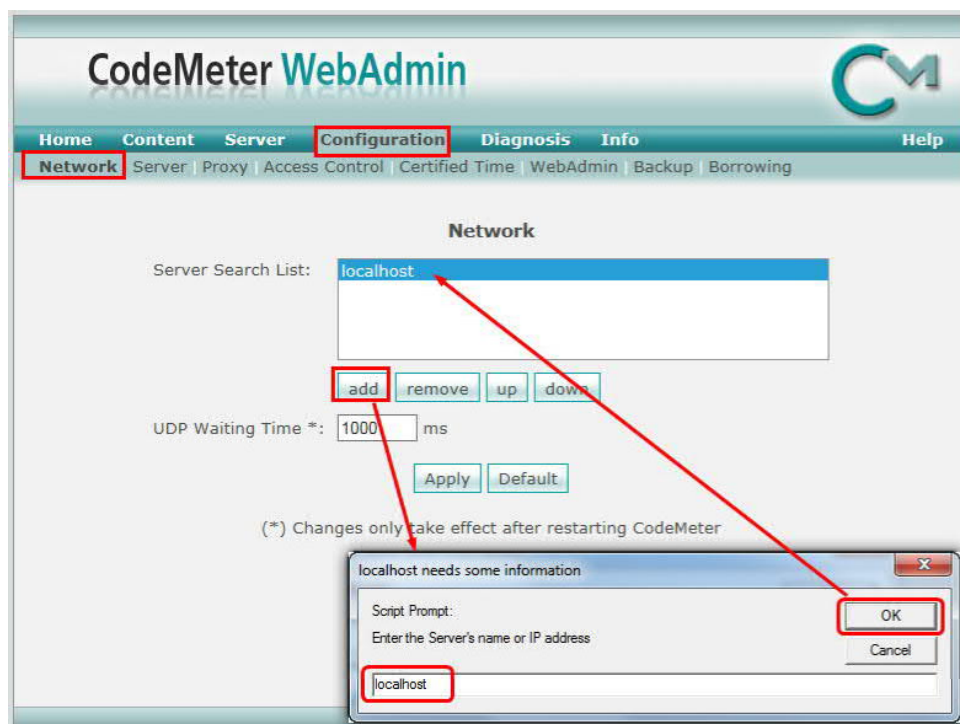
In case of a new installation CodeMeter will check for licenses also in the network.  
If there is a run-out or wrongly installed license found, the service is closed without any further hint.  
This looks like Automation Builder starts and closes after a few moments.

To set the search for licenses to your local machine only follow these steps:

1. Open the CodeMeter tool. See chapter 3.5.2
2. Open the WebAdmin in lower right corner



3. Goto to tab Configuration > Network and then > “add” and insert “localhost” in the Server’s names field.



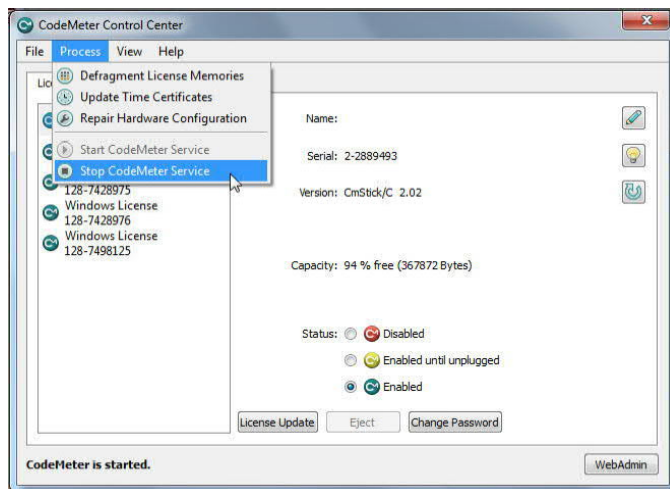
After confirmation with OK the “localhost” is added to the Server Search List.

4. Add more servers to the search list, if you want to search for networkwork license servers you know.
5. Restart the licnese check – see chapter below: 0

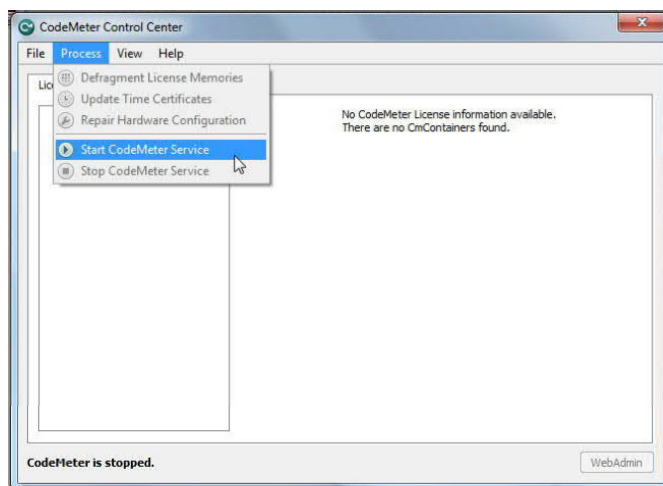
### 3.5.4 Restart license check (CodeMeter service)

In case of using a dongle bound license it might be necessary to restart the check for license on the PC, e.g. if the dongle was removed and reinserted.

1. Open the CodeMeter tool. See chapter 3.5.2
2. Process \ Stop CodeMeter Service



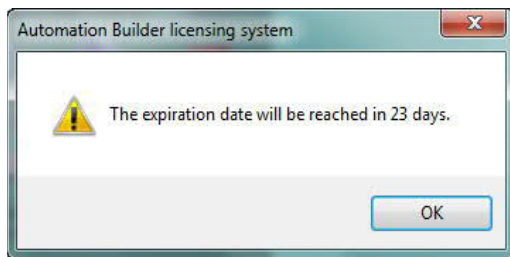
3. Restart via  
Process \ Start CodeMeter Service.



It takes a while until the CodeMeter Service is restarted.

### 3.5.5 Remove trial license to get rid of expiring message

If an unlimited license is installed after having a trial license activated, still the warning message of expiring date for the trial license pops up at Startup of the Automation Builder.



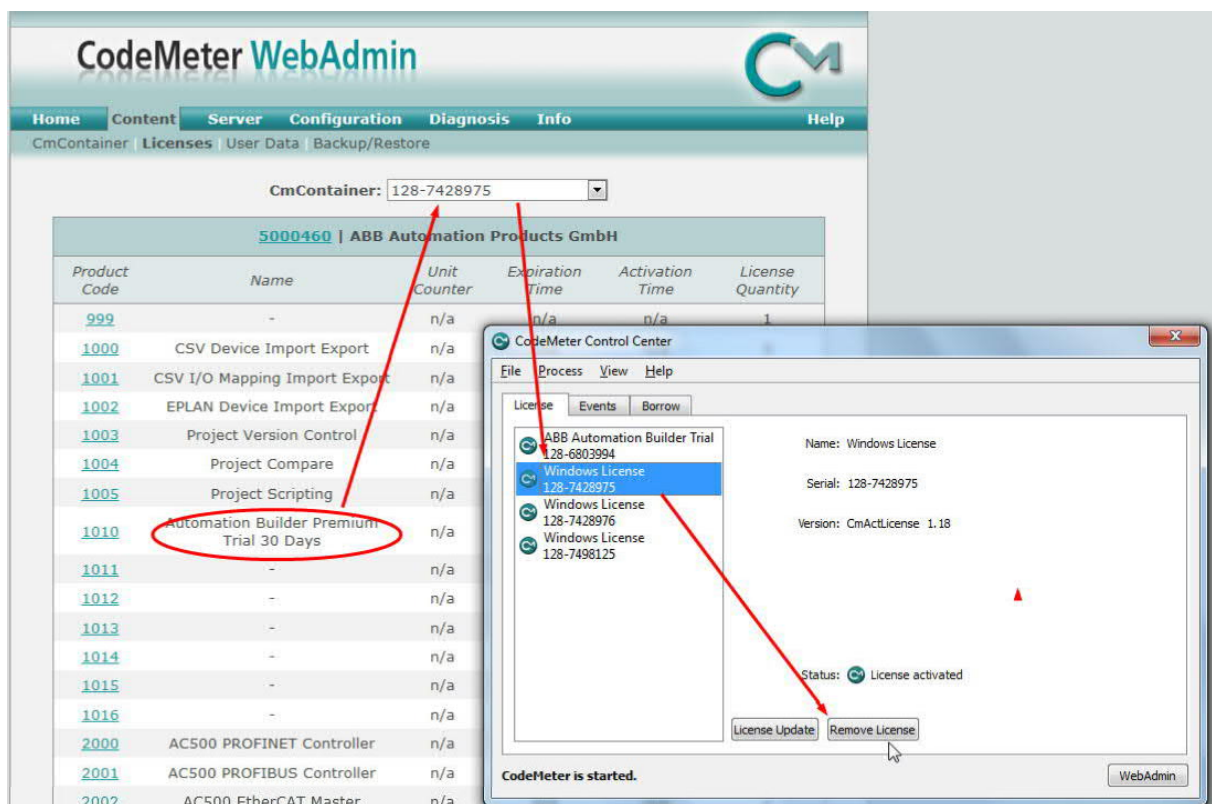
To avoid this message the trial license can be removed.



Caution  
!

- If you remove a license from your PC it will be permanently lost.
- Be aware that the trial license includes all Premium functionalities, which will not be available any more if your unlimited license is not a Premium license, e.g. Standard.

1. Check for the Trial CmContainer number in CodeMeter WebAdmin Interface
2. Search CmContainer number in CodeMeter Control Center
3. Remove this selected license in CodeMeter Control Center



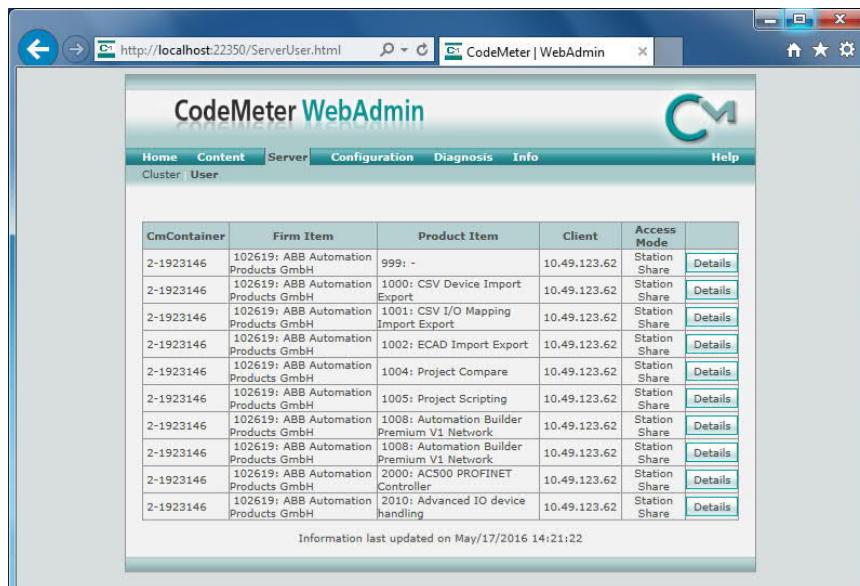




### 3.5.6.2 View Network Server license usage

On the Network Server side you can find all existing network licenses ordered by users actually logged on (clients).

1. Launch CodeMeter WebAdmin as described in chapter 3.5.2
2. Go to tab Server > Subtab User



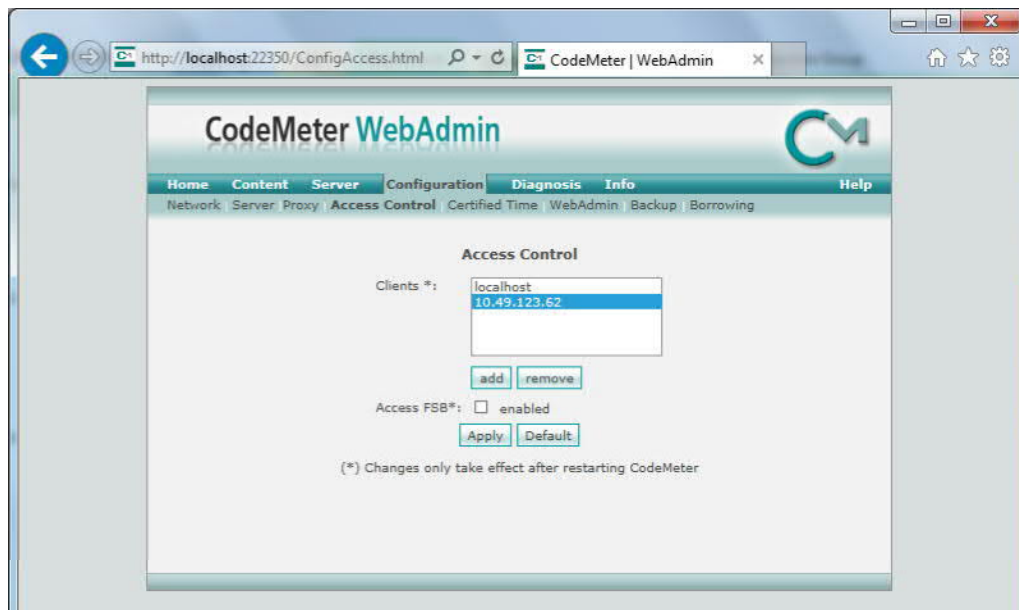
| CmContainer | Firm Item                            | Product Item                                | Client       | Access Mode   |                         |
|-------------|--------------------------------------|---|--------------|---------------|-------------------------|
| 2-1923146   | 102619: ABB Automation Products GmbH | 999: -                                      | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1000: CSV Device Import Export              | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1001: CSV I/O Mapping Import Export         | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1002: ECAD Import Export                    | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1004: Project Compare                       | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1005: Project Scripting                     | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1008: Automation Builder Premium V1 Network | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 1008: Automation Builder Premium V1 Network | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 2000: ACS500 PROFINET Controller            | 10.49.123.62 | Station Share | <a href="#">Details</a> |
| 2-1923146   | 102619: ABB Automation Products GmbH | 2010: Advanced IO device handling           | 10.49.123.62 | Station Share | <a href="#">Details</a> |

Information last updated on May/17/2016 14:21:22

### 3.5.6.3 Control Network Server license usage

On the Network Server side you can define settings managing the client access to CodeMeter License Server on a network.

1. Launch CodeMeter WebAdmin as described in chapter 3.5.2
2. Go to tab Configuration > Access Control
3. Add entries of PCs you want to share licenses with by adding client computer and IP addressed for accessing CodeMeter License Server on a network.



**Access Control**

Clients \*:

|              |
|--------------|
| localhost    |
| 10.49.123.62 |

[add](#) [remove](#)

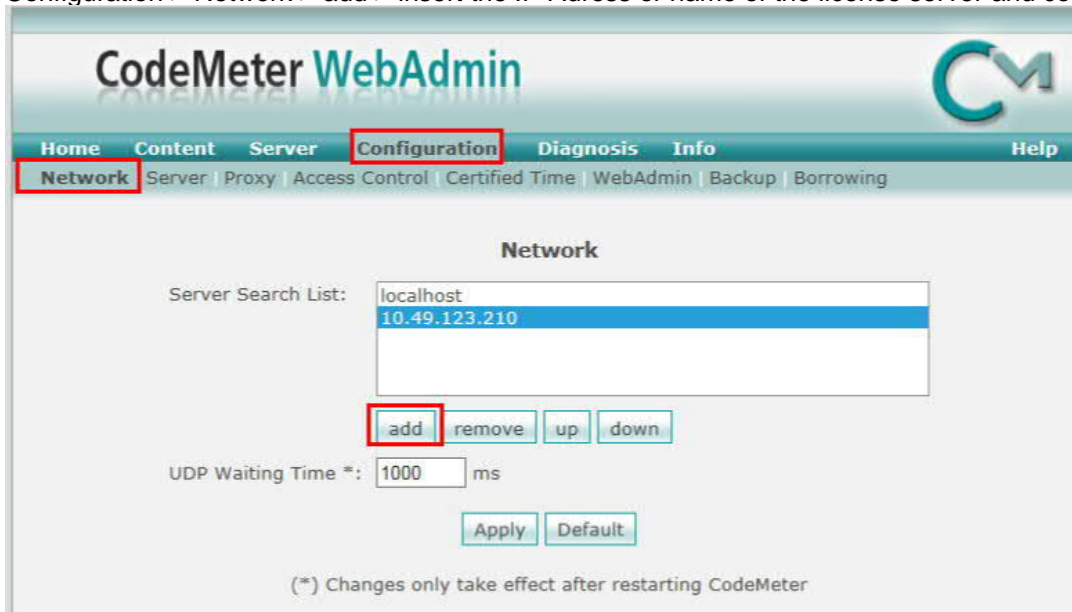
Access FSB\*: ☐ enabled

[Apply](#) [Default](#)

(\*) Changes only take effect after restarting CodeMeter

### 3.5.6.4 Set dedicated network servers in search list

To configure a list of network license servers where the client should search for a valid license goto tap Configuration > Network > add > insert the IP-Address or name of the license server and confirm with OK.



See also chapter 3.5.3

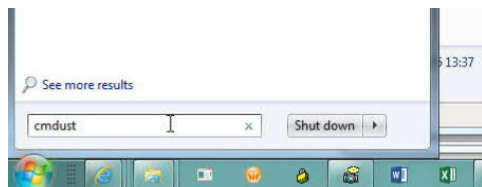
## 3.5.7 Generate License info file for Support

### 3.5.7.1 CmDust-Result.log

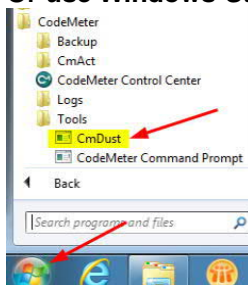
To create a support file which includes all license information:

1. Click on the Windows Start button and use the command entry to type in

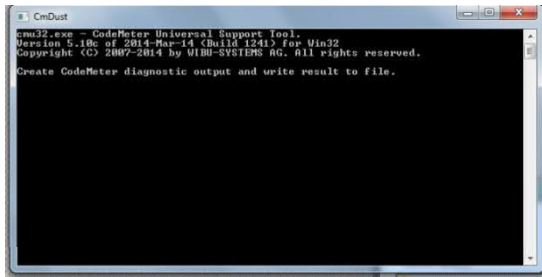
**cmdust**



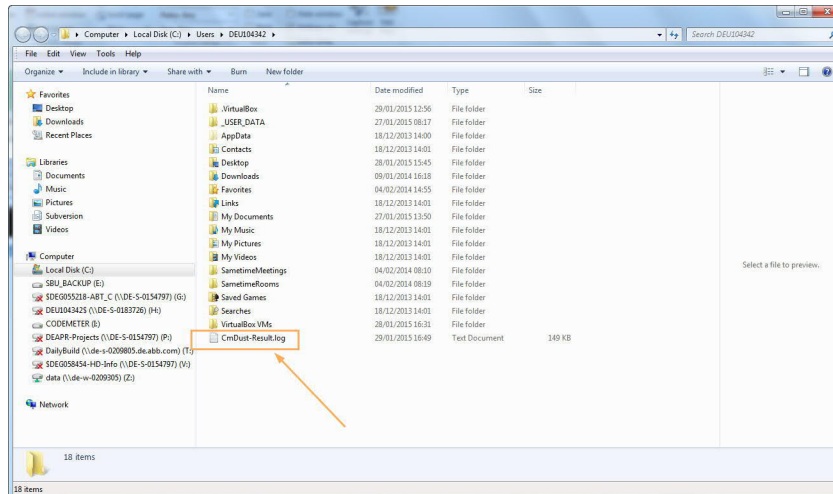
Or use Windows-Start button \ All Programs \ CodeMeter \ Tools \ DmDust



A black window opens for a while



finally the explorer window opens and shows the folder where the created log file “**CmDust-Result.log**” is stored.



2. Please attach this file to any support request regarding your licenses.

### 3.5.7.2 Other Log files

Sometimes more detailed log files are needed to analyse a situation.

Then please also zip the following folder and attach it to your support request.

**C:\ProgramData\CodeMeter\Logs**

This folder includes

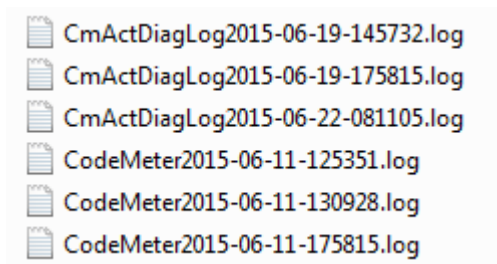
CmActDiagLogyyyy-mm-dd-hhmmss.log

CodeMeteryyyy-mm-dd-hhmmsslog

files with

yyyy – year, mm- month, hh – hour; mm – minutes, ss – seconds.

e.g.



## 3.5.8 Transfer an Automation Builder license

### 3.5.8.1 General

It is possible to transfer normal licenses from a PC to another PC or dongel (DM-Key).

This is not possible for ABB internal or temporary licenses, e.g. the 30day Trial license.

The process consists of two main steps:

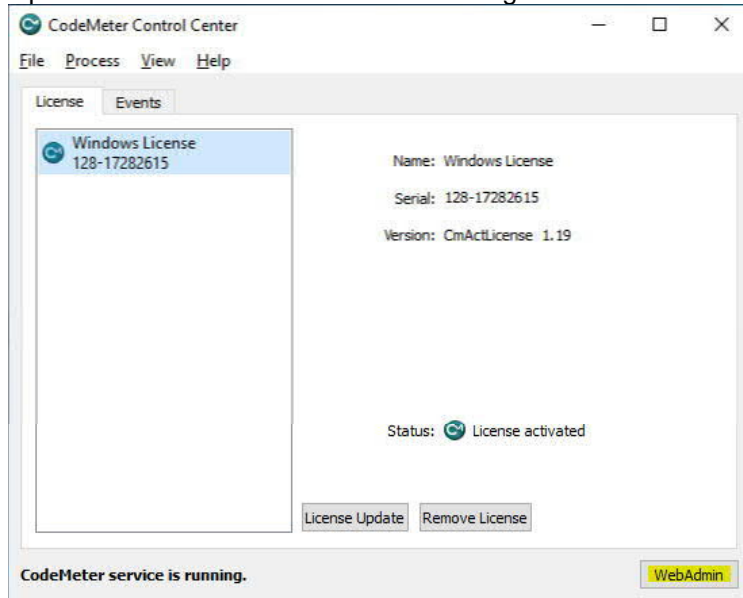
1. Return the actual license from the actual PC
2. Reactivate the license on the new PC
  - Start Automation Builder, with no project open
  - *Tools \ Add additional license...*

### 3.5.8.2 Getting activation code

For all license transfer processes the activation code is required. It is available from the license paper from purchasing the license.

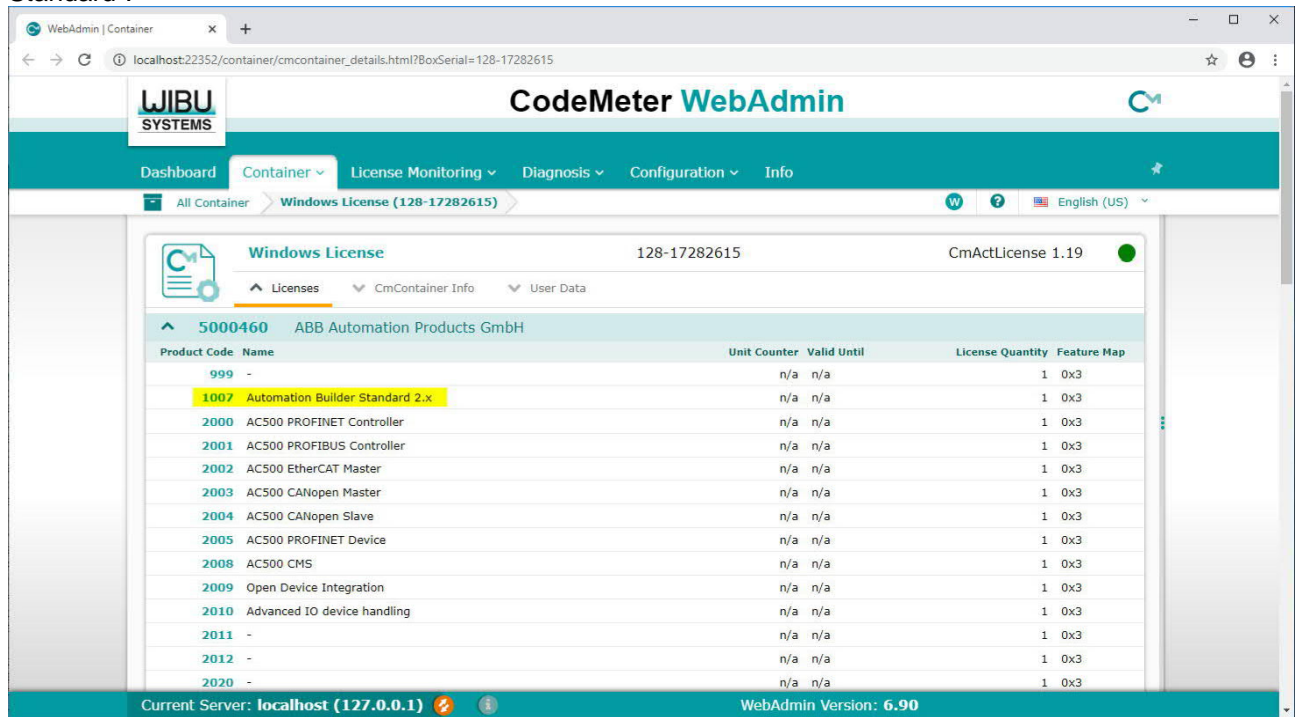
For Automation Builder licenses purchased April 2020 or later, the activation code is available from the activated license:

1. Open CodeMeter Control Center and navigate to the WebAdmin:'





- Identify the right product code. Automation Builder editions consist of multiple product codes. The activation id is available from the product code containing the edition name, e.g. "Automation Builder Standard":



CodeMeter WebAdmin

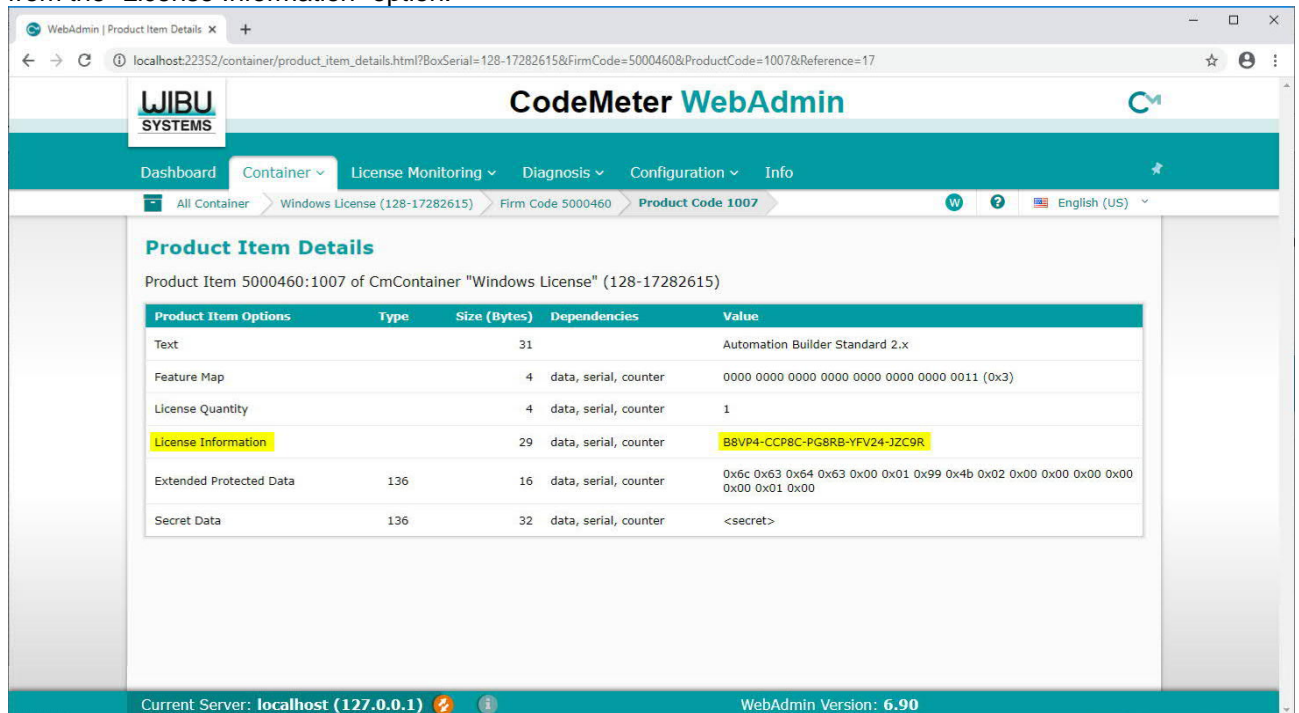
Windows License 128-17282615 CmActLicense 1.19

5000460 ABB Automation Products GmbH

| Product Code | Name                            | Unit Counter | Valid Until | License Quantity | Feature Map |
|--------------|---------------------------------|--------------|-------------|------------------|-------------|
| 999          | -                               | n/a          | n/a         | 1                | 0x3         |
| 1007         | Automation Builder Standard 2.x | n/a          | n/a         | 1                | 0x3         |
| 2000         | AC500 PROFINET Controller       | n/a          | n/a         | 1                | 0x3         |
| 2001         | AC500 PROFIBUS Controller       | n/a          | n/a         | 1                | 0x3         |
| 2002         | AC500 EtherCAT Master           | n/a          | n/a         | 1                | 0x3         |
| 2003         | AC500 CANopen Master            | n/a          | n/a         | 1                | 0x3         |
| 2004         | AC500 CANopen Slave             | n/a          | n/a         | 1                | 0x3         |
| 2005         | AC500 PROFINET Device           | n/a          | n/a         | 1                | 0x3         |
| 2008         | AC500 CMS                       | n/a          | n/a         | 1                | 0x3         |
| 2009         | Open Device Integration         | n/a          | n/a         | 1                | 0x3         |
| 2010         | Advanced IO device handling     | n/a          | n/a         | 1                | 0x3         |
| 2011         | -                               | n/a          | n/a         | 1                | 0x3         |
| 2012         | -                               | n/a          | n/a         | 1                | 0x3         |
| 2020         | -                               | n/a          | n/a         | 1                | 0x3         |

Current Server: localhost (127.0.0.1) WebAdmin Version: 6.90

- Access the product code details by clicking on the product code. The activation code is available from the "License Information" option:



CodeMeter WebAdmin

Product Item Details

Product Item 5000460:1007 of CmContainer "Windows License" (128-17282615)

| Product Item Options    | Type | Size (Bytes) | Dependencies          | Value  |
|-------------------------|------|--------------|-----------------------|--|
| Text                    |      | 31           |                       | Automation Builder Standard 2.x                                  |
| Feature Map             |      | 4            | data, serial, counter | 0000 0000 0000 0000 0000 0000 0011 (0x3)                         |
| License Quantity        |      | 4            | data, serial, counter | 1  |
| License Information     |      | 29           | data, serial, counter | B8VP4-CCP8C-PG8RB-YFV24-JZC9R                                    |
| Extended Protected Data | 136  | 16           | data, serial, counter | 0x6c 0x63 0x64 0x63 0x00 0x01 0x99 0x4b 0x02 0x00 0x00 0x00 0x00 |
| Secret Data             | 136  | 32           | data, serial, counter | <secret>   |

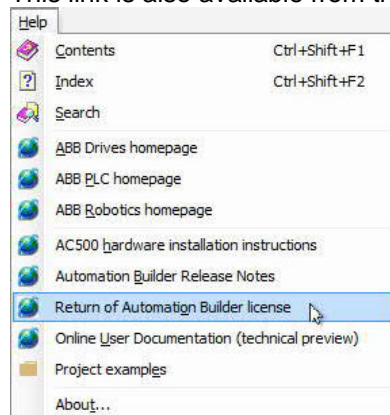
Current Server: localhost (127.0.0.1) WebAdmin Version: 6.90

### 3.5.8.3 Return of an Automation Builder license

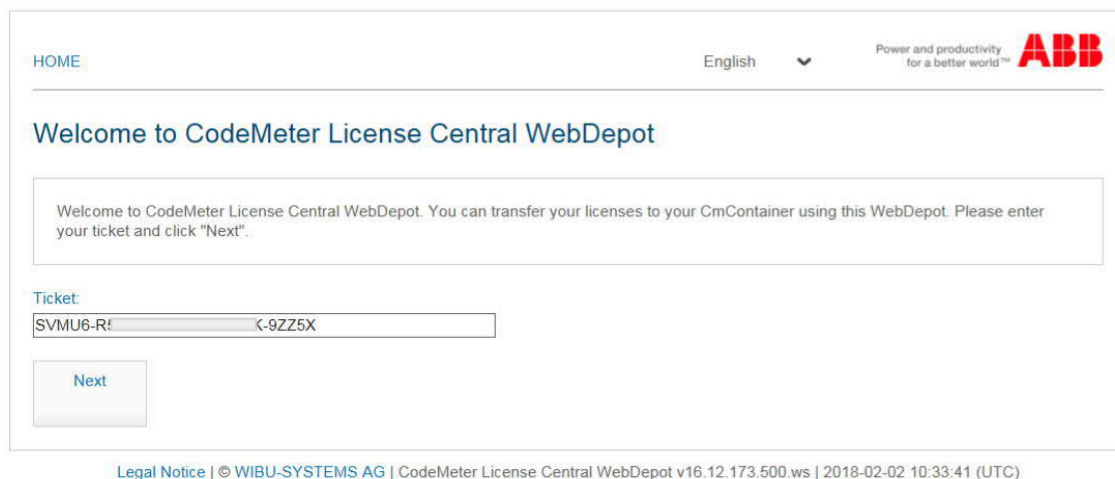
1. You need your License Activation code that you want to move.  
e.g. 47STU-XXXXX-XXXXX-F7BMW-D6A2W
2. Goto the following website:

<http://lc.codemeter.com/32838/depot-return/index.php>

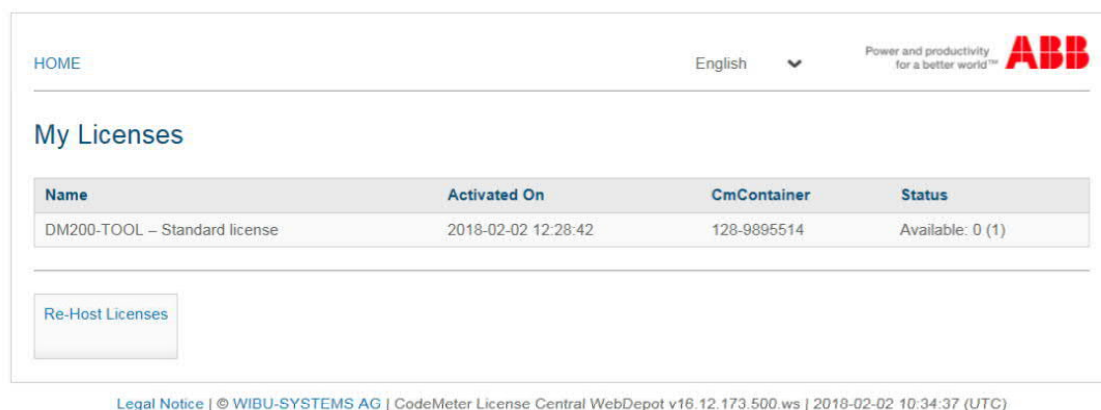
This link is also available from the Automation Builder “Help” menu:



3. Insert your Activation code in the field “Ticket” \ then **Next**

A screenshot of the 'Welcome to CodeMeter License Central WebDepot' page. The page has a header with 'HOME', 'English', and the ABB logo. The main content area says 'Welcome to CodeMeter License Central WebDepot. You can transfer your licenses to your CmContainer using this WebDepot. Please enter your ticket and click "Next".' Below this, there is a 'Ticket:' label and a text input field containing 'SVMU6-R!' and 'K-9ZZ5X'. A 'Next' button is located below the input field. At the bottom, there is a footer with 'Legal Notice | © WIBU-SYSTEMS AG | CodeMeter License Central WebDepot v16.12.173.500.ws | 2018-02-02 10:33:41 (UTC)'.

4. Click on **Re-Host License**

A screenshot of the 'My Licenses' page in the CodeMeter License Central WebDepot. The page has a header with 'HOME', 'English', and the ABB logo. The main content area is titled 'My Licenses' and contains a table with the following data:

| Name                          | Activated On        | CmContainer | Status           |
|-------------------------------|---------------------|-------------|------------------|
| DM200-TOOL – Standard license | 2018-02-02 12:28:42 | 128-9895514 | Available: 0 (1) |

Below the table, there is a 'Re-Host Licenses' button. At the bottom, there is a footer with 'Legal Notice | © WIBU-SYSTEMS AG | CodeMeter License Central WebDepot v16.12.173.500.ws | 2018-02-02 10:34:37 (UTC)'.


If the CmContainer is found, continue with 0

Online licenses transfer

If the CmContainer is not found, continue with 3.5.8.3.3 Offline license transfer

### 3.5.8.3.2 Online licenses transfer

1. Wait till the CmContainer is found, then **Deactivate Selected License Now**

[HOME](#)EnglishPower and productivity for a better world™

## Re-Hostable Licenses

To re-host licenses from one CmContainer to another CmContainer:

1. Make sure that the CmContainer with **Serial 128-9895514** is connected to this computer. If this CmContainer is not connected to this computer, connect it now and click "Rescan for CmContainer".
2. Select the licenses you want to re-host.
3. Click "Deactivate Selected Licenses Now".
4. After the successful deactivation of the selected licenses, you can activate them again in another CmContainer.

| <input checked="" type="checkbox"/> | Name                          | Activated On        | CmContainer | Status    |
|-------------------------------------|-------------------------------|---------------------|-------------|-----------|
| <input checked="" type="checkbox"/> | DM200-TOOL – Standard license | 2018-02-02 12:28:42 | 128-9895514 | Activated |

[Deactivate Selected Licenses Now](#)[Offline license transfer](#)

[My Licenses](#)

[Legal Notice](#) | © WIBU-SYSTEMS AG | CodeMeter License Central WebDepot v16.12.173.500.ax | 2018-02-02 10:42:37 (UTC)

### Online License Transfer

Starting license transfer.  
Creating license request.  
Downloading license update.  
Importing license update to CmContainer.  
Creating receipt.  
Uploading receipt.

☒ License transfer completed successfully!

OK

### 3.5.8.3.3 Offline license transfer

If the CmContainer is not on this PC, then select "**Offline license transfer**" and follow the instructions. – Do finish all steps, including the upload of receipt file to deactivate your license.


1. Choose file-based license transfer workflow:

#### Re-Hostable Licenses

To re-host licenses from one CmContainer to another CmContainer:

1. Make sure that the CmContainer with **Serial 128-17283880** is connected to this computer. If this CmContainer is not connected to this computer, connect it now and click "Rescan for CmContainer".
2. Select the licenses you want to re-host.
3. Click "Deactivate Selected Licenses Now".
4. After the successful deactivation of the selected licenses, you can activate them again in another CmContainer.

| <input checked="" type="checkbox"/> | Name                          | Activated On        | CmContainer  | Status    |
|-------------------------------------|-------------------------------|---------------------|--------------|-----------|
| <input checked="" type="checkbox"/> | DM200-TOOL – Standard license | 2020-07-15 14:26:28 | 128-17283880 | Activated |

 **Error**  
The CmContainer with serial 128-17283880 was not found. Please connect it to your PC or use **file-based license transfer**.  
0x1808810E  
CodeMeter License Central WebDepot v19.05.205.500.ws  
2020-07-15 12:28:25 (UTC)

Rescan for CmContainer

2. Create license request file on Offline-PC.

#### Re-Hostable Licenses

Upload Request Download Update Upload Receipt

When re-hosting licenses, they will be deactivated first. Then they can be activated in another CmContainer. This page guides you through the deactivation process. Only after successfully deactivating the licenses, can you activate these licenses again.

To re-host licenses from one CmContainer to another CmContainer via file transfer: - First step "Upload Request":

1. Create a license request file from the CmContainer with **Serial 128-17283880** and **Firm Code 5000460**. This file can for example be created with CodeMeter Control Center. [How it works](#) +
2. Select the licenses you want to re-host.
3. Select the created license request file.
4. Click "Upload Request And Continue Now".

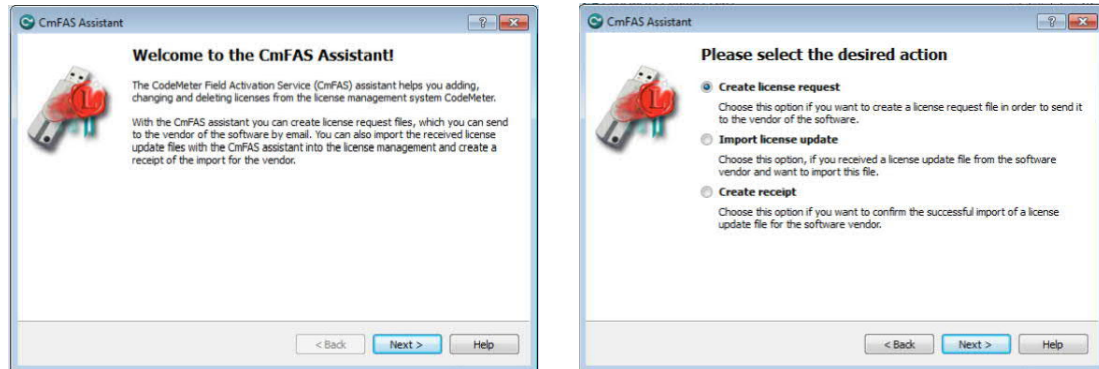
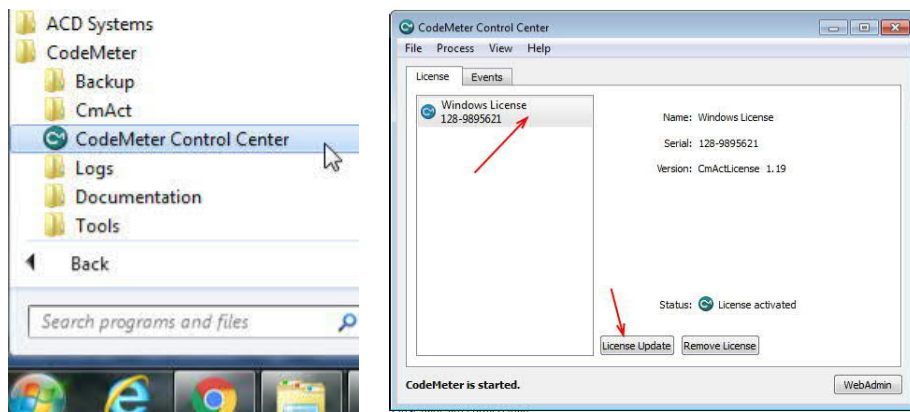
| <input checked="" type="checkbox"/> | Name                          | Activated On        | CmContainer  | Status    |
|-------------------------------------|-------------------------------|---------------------|--------------|-----------|
| <input checked="" type="checkbox"/> | DM200-TOOL – Standard license | 2020-07-15 14:26:28 | 128-17283880 | Activated |

Pick license request file (\*.WibuCmRaC)

Upload Request And Continue Now

Direct license transfer





3. Upload the request file on an Online-PC and press "Upload Request and Continue Now"
4. Download the License Update File

#### Download License Update File

Upload Request ✓
Download Update
Upload Receipt

**To transfer your licenses via file - Second step "Download Update":**

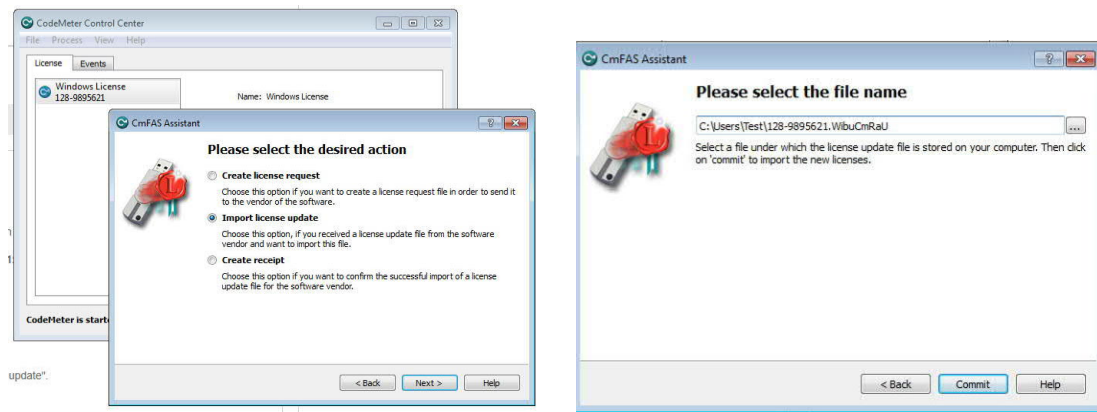
1. Click "Download License Update File Now" and save the file on your computer.
2. Import this license update file to the CmContainer with **Serial 128-17283880**. This file can for example be imported with CodeMeter Control Center.  
[How it works](#)
  - a. Transfer the license update file to the computer where the CmContainer with **Serial 128-17283880** is.
  - b. Start CodeMeter Control Center on the computer where this CmContainer is.
  - c. Select this CmContainer.
  - d. Click "License Update".
  - e. Follow the instructions of the "CmFAS Assistant". Choose the option "Import license update".
  - f. Select the filename of the license update file.
  - g. Click "Commit" to complete this operation.
3. After you have successfully transferred the license update file to the CmContainer, click "Next" to confirm the license transfer.

Download License Update File Now

Next

[Direct license transfer](#)

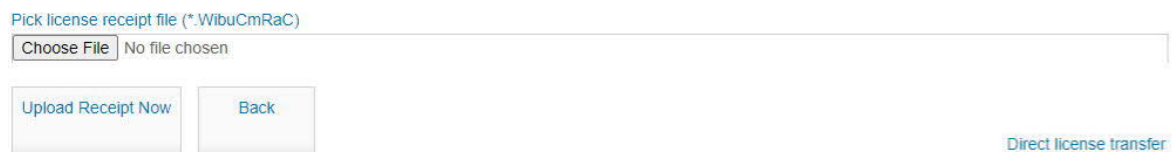
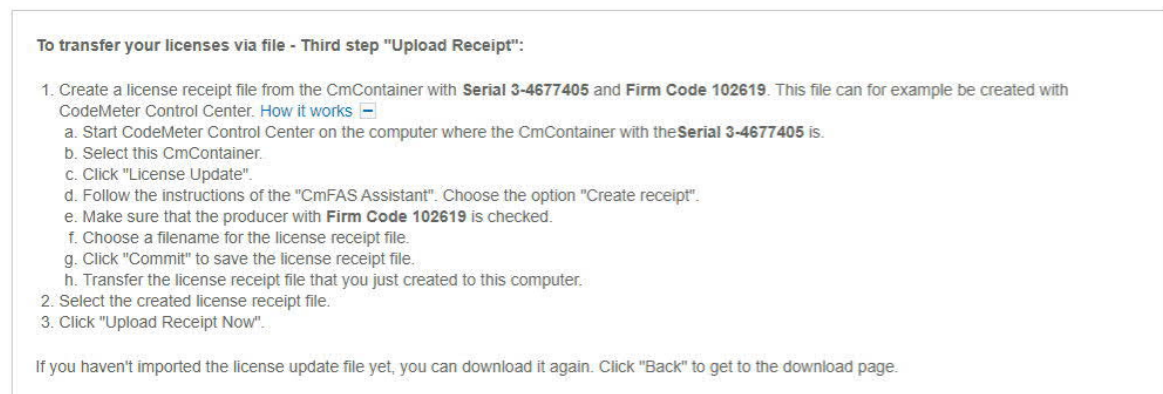
5. Transfer License Update File to Offline-PC
6. Import License Update File into CmFAS Assistant

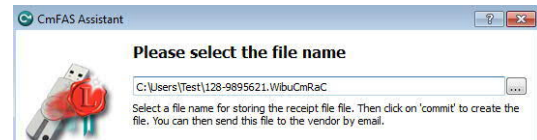
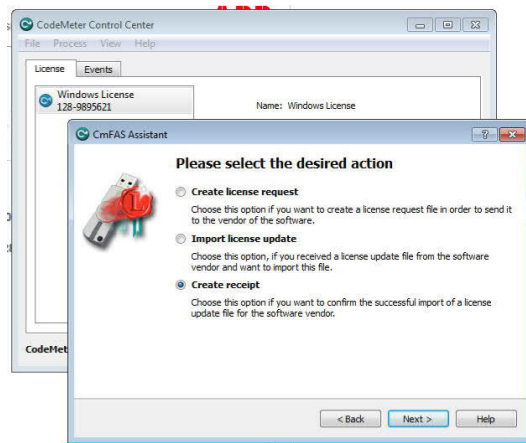


## 7. Create License receipt file and transfer it to the Offline-PC

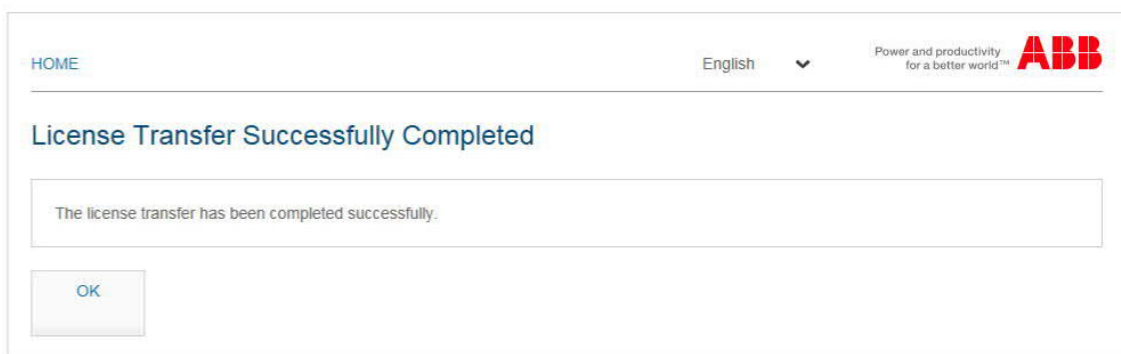


### Confirm License Transfer





## 8. Upload License receipt file



Legal Notice | © WIBU-SYSTEMS AG | CodeMeter License Central WebDepot v16.12.173.500.ax | 2018-02-02 15:29:38 (UTC)

## 4 Frequently asked questions and support

### 4.1 Frequently asked questions

Q = Question

A = Answer / Explanation

H = Help / Hint how to solve

|            |   |
|------------|---|
| <b>Q1:</b> | <b>The installation or download failed. I see red icons on all selected components</b>  |
| A:         | The internet connection to the download server was not established.   |
| H:         | <ul style="list-style-type: none"><li>• Open an internet connection to a site outside your company. (to establish proxy authentication)</li><li>• Check the firewall settings to see if Automation Builder was blocked to download files. If so adapt the firewall settings.</li><li>• Do an offline installation</li><li>• Save the install log file and send it to ABB support. See chapter 4.2</li></ul> |

|            |  |
|------------|--|
| <b>Q2:</b> | <b>Which Components or which Editions should I install?<br/>Can I add special components later on?</b>   |
| A:         | It is possible to add components later on, independent of the activated license.   |
| H:         | <ul style="list-style-type: none"><li>• If you choose to download an offline installation package, it might be better to select all / more components for the download.<br/>The choice, which components will be installed is made at the installation process.</li><li>• See also Q6 if you want to use Basic and your previous purchased Panel Builder</li></ul> |

|            |   |
|------------|---|
| <b>Q3:</b> | <b>How big is the installation package?</b>   |
| A:         | The amount of downloaded data depends on the selected components.<br>See table in chapter <a href="#">Create an offline installation package on the Online PC</a>   |
| H:         | <ul style="list-style-type: none"><li>• A Basic minimum package is around 1.2 GByte</li><li>• A Standard package is around 1.8 Gbyte</li><li>• A full Premium package, including Robot Studio is around 5 Gbyte</li></ul> |

|            |   |
|------------|---|
| <b>Q4:</b> | <b>Activation wizard tells me that I have no internet connection.<br/>But the PC is connected to the internet</b>   |
| A:         | The license server maybe did not answer within a certain time (5s).   |
| H:         | <ul style="list-style-type: none"><li>• Choose the "Retry" option</li><li>• Open an internet connection to a site outside your company. (to establish proxy authentication)</li><li>• If the wizard asks to save a *.xml file, do so and continue the offline licensing described in chapter 3.3.1 → 3.3.1.2.</li><li>• Try to do a complete offline activation – see chapter 3.3.1</li></ul> |

|            |   |
|------------|---|
| <b>Q5:</b> | <b>Activation wizard tells me that the activation is not possible.<br/>But the PC is connected to the internet and the connection works with external websites</b>  |
| A:         | Probably some IT security components block the online communication to our license server. The root cause typically is very specific with respect to the (company) IT landscape. Further investigations can be done based on the following information:<br><br>The license manger uses HTTP requests on Windows HTTP standard port to the URL <a href="http://lc.codemeter.com/32838">http://lc.codemeter.com/32838</a> . It uses the proxy settings as defined in the internet explorer. |

|   |  |
|---|--|
| H | Try to do a complete offline activation – see chapter 3.3.1. This typically always works |
|---|--|

|            |  |
|------------|--|
| <b>Q6:</b> | <b>I have activated my purchased or basic license, but still I get the message that the license will expire in some days</b>                                 |
| A:         | If a trial license is activated on the PC, the expiring message will be given even if an unlimited license was activated.                                    |
| H:         | <ul style="list-style-type: none"> <li>To avoid the expiring message the trial license must be removed via the CodeMeter tool. See chapter 3.5.5.</li> </ul> |

|            |   |
|------------|---|
| <b>Q7:</b> | <b>After the installation of AB1.1 I cannot open the Panel Builder 600 anymore.</b><br>I have activated a basic license.  |
| A:         | If the Panel Builder was installed with Automation Builder1.1 it requires a valid license higher than basic.  |
| H:         | <ul style="list-style-type: none"> <li>Upgrade the license to “Standard” or higher.</li> <li>If you had a purchased stand-alone Panel Builder 600 version earlier:<br/>Install this one again. An Update installation file to version 1.90.0.975 can be downloaded from the ABB website.<br/>Link: <a href="http://new.abb.com/plc/control-panels/cp600/software">http://new.abb.com/plc/control-panels/cp600/software</a> and check for “Software” in the “Download related documents for Software” section.<br/>After this installation Panel Builder can be opened stand-alone again.</li> </ul> |

|            |   |
|------------|---|
| <b>Q8:</b> | <b>The activation of the USB-key (dongle) does not work</b>   |
| A:         | <p>If you try to activate an ABB internal license key to a dongle: this is not foreseen and does not work.</p> <p>If you try an offline activation: the wizard will not give a success message.(Fixed in AB Version 1.1.1)</p>                          |
| H:         | <ul style="list-style-type: none"> <li>The offline activation of normal licenses must be exit by “cancel” or the “x”.<br/>Activation will nevertheless be done. Check with by CodeMeter.<br/>This will be fixed with Service Release AB1.1.1</li> </ul> |

|            |   |
|------------|---|
| <b>Q9:</b> | <b>How can I check, which license is activated?</b>   |
| H:         | <ul style="list-style-type: none"> <li>Open the CodeMeter tool – see chapter 3.5.2</li> </ul> |

|             |   |
|-------------|---|
| <b>Q10:</b> | <b>The Automation Builder does not open any more.</b><br><b>How can I activate my purchased or a basic license?</b><br>I get an error message: “The trial period has elapsed. Reactivating the license is not allowed.” |
| A:          | After the trial period the trial license was activated another time. This prevents Automation Builder to startup.   |
| H:          | <ul style="list-style-type: none"> <li>Open the CodeMeter tool – see chapter 3.5.2 and delete all licenses.<br/>Then Automation Builder will start up with the License Activation Wizard again.</li> </ul>              |

|             |   |
|-------------|---|
| <b>Q11:</b> | <b>Is a separate license needed for a virtual machine?</b>  |
| A:          | <p>The license is bound to a PC.<br/>As each virtual machine is like an own PC, all different virtual machines need a separate license.</p> <p>Some information to the use of virtual machines.</p> <ul style="list-style-type: none"> <li>Each virtual machine is like an own PC system and needs an own license.</li> <li>One way to use several virtual machines with one license key is to bind the license to a dongle.</li> <li>It is possible to activate a license to the PC and add a dongle to it at the same time. Both licenses are used to cover the needed features. (E.g. if a standard license is bound to the PC and a premium is bound to the dongle.)</li> </ul> |



|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• Before you start the Automation Builder in the virtual machine, check if the dongle is available.</li> <li>• This can be done in the explorer window or in the CodeMeter tool. (see chapter 3.5.2)</li> <li>• If the dongle is not available try to plug off and in again, while the virtual machine is running.</li> <li>• If the license is bound to a virtual machine on a PC directly it is NOT possible to move this virtual machine to another PC using the same activation key.</li> <li>• If you want to copy or move the virtual machines with an Automation Builder Installation to another PC, do this before you license this AB installation.</li> <li>• However if you had it already licensed, then delete the license in CodeMeter and restart Automation Builder again to activate another license key. How to do this see chapter 3.5.5</li> </ul> |
|--|---|

|             |   |
|-------------|---|
| <b>Q12:</b> | <b>I want to upload the activation request file (*.xml) but get an error message “internal error” “0x18080001”</b>  |
| A / H       | <p>a) you might have pressed the upload button another time while delivery process was still ongoing:<br/>→ then the license must be activated manually.<br/>→ Please send the activation request file (*.xml) file to <a href="mailto:plc.support@de.abb.com">plc.support@de.abb.com</a></p> <p>b) you try to upload the activation file of internal additional safety license key<br/>“QQW64-...-B644E”<br/>→ this can not be activated offline.<br/>→ Please send the activation request file (*.xml) file to <a href="mailto:plc.support@de.abb.com">plc.support@de.abb.com</a></p> <p>c) you might had test or development licenses on your PC<br/>→ Please delete all those licenses from CodeMeter (see chapter 3.5.5) and retry</p> |

|             |  |
|-------------|--|
| <b>Q13:</b> | <b>I have installed Drive Composer Pro with AB1.1 and now I can not update it to next version</b>  |
| A:          | <p>Automation Installation and Updates will offer the latest version of Drive Composer Pro from the time of release.<br/>For AB1.1 this was Drive Composer Pro V1.6.3<br/>The service pack 1 – AB1.1.1 will include Drive Composer Pro V1.8.1<br/>For AB1.2.2 this was Drive Composer Pro V1.11.2.5<br/>Remark: the integration will only work, if you also select the Drive Composer Pro at the moment of installation.</p> |
| H:          | To update the Drive Composer Pro independently of the actual used Automation Builder version, please uninstall Drive Composer Pro via Windows Control Panel and then install it again stand alone. The Drive Composer Pro plugin for Automation Builder will still be available.   |

|             |   |
|-------------|---|
| <b>Q14:</b> | <b>I have installed and activated Automation Builder on a Windows Server but can not open it via Remote Desktop session</b> |
| A:          | Automation Builder requires a network license for execution on Windows Server operating systems.                            |

|             |   |
|-------------|---|
| <b>Q15:</b> | <b>How can I move my Automation Builder license to another PC?</b>  |
| A:          | Licenses can be returned (and thus moved to another PC) via <a href="http://lc.codemeter.com/32838/depot-return/index.php">http://lc.codemeter.com/32838/depot-return/index.php</a> |
| H           | For returning a license, entering of the activation key is required.  |

## 4.2 Special Settings for Internet Security Software “F-Secure”

“F-Secure” software can lead to a complete CodeMeter service interruption, which leads to the situation that an activation can not be finished successfully or the installed licenses are not recognized any more.

Please try this guide as indicated below, whereas the second alternative seems to be the most trustfully solution, since ultimately what has to be done is to do exclude CodeMeter.exe from the scanning process instead of reducing the general security level.

### 4.2.1 Compatibility mode

F-Secure has a so called “DeepGuard” function, which seems to trigger an advanced process monitoring. To avoid this, activate the compatibility mode within the DeePGuard configuration. The CodeMeter.exe should work without issues afterwards.

### 4.2.2 Add CodeMeter to WhiteList

Other possibility, and in our opinion the best alternative is to include the CodeMeter.exe into the so called WhiteList for F-Secure. After this no more problems should appear at all. To add the CodeMeter.exe in the WhiteList please do the following:

F-Secure configuration > Virus- and Spyware Scanning > Exclude files from scanning (or similar) (this should be an entry with blue letters down in the middle of the app.) > Objects > checkmark on “exclude objects” and select CodeMeter.exe from the directory:  
„C:\Program Files (86)\CodeMeter\Runtime\bin“.

## 4.3 Support

If the installation or license activation does not succeed and however the Help and Hints in the “Frequently asked question” section does not solve the problem, contact your local ABB support.

Please always provide the following main information and add the support packages described below.

### 4.3.1 Main information

- Your name, company name, and contact data
- Operating system of your PC
- Time and your location (time zone) when the problem occurred.  
So support can check log files on server.
- Was this the first installation or did you had a previous installation of Automation Builder (Control Builder Plus) on your PC installed?

### 4.3.2 Installation log file

If your installation failed and hints in Q1 did not help:

- Open the “Show Log” via the button at the end of the installation screen.
- Save the log file and send it with a description and main information to local ABB PLC support.

The installation log file is also automatically stored under

**C:\Users\<user>\AppData\Roaming\AutomationBuilderInstaller\Log\AutomationBuilderInstaller.log**

Other Installation log about the beginning of platform installation can be found under

**C:\Program Files\ABB\AutomationBuilder\ABB\_Setup.log**

or

**C:\Program Files (x86)\ABB\AutomationBuilder\ABB\_Setup.log**

### 4.3.3 License activation support information (CmDust-Result.log)

If your license activation did not succeed and hints in the frequently asked questions section did not help:

- Generate a license information file for support like described in chapter 3.5.7.1
- If you use a USB-key (dongle) be sure to have it plugged in.
- Very important: add your time zone and the time at which you tried to active the license to the E-Mail, so that ABB support can check the server logs for that UTC time.

### 4.3.4 Automation Builder Log files

Can be found here: C:\Users\<user>\Documents\AutomationBuilder\Logs

