VisuNet RM Shell 6 LTSC 2021

Upgrade-Package

Manual

Your automation, our passion.

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With regard to the supply of products, the current issue of the following document is applicable:
The General Terms of Delivery for Products and Services of the Electrical Industry, published
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"Expanded reservation of proprietorship"

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1 History of the Manual

The following editions of the manual have been released:

Version	Comments
07/2023	First edition
08//2023	Second edition: Update of contact information

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2 Upgrade Instructions

Thank you for choosing the Pepperl+Fuchs upgrade kit to VisuNet RM Shell 6 LTSC 2021. With this upgrade package you receive the right to upgrade your Pepperl+Fuchs HMI devices from VisuNet RM Shell 5 LTSB 2016 or VisuNet RM Shell 5 (based on Microsoft® Windows® 10 IoT Enterprise LTSC 2019) to VisuNet RM Shell 6 (based on Microsoft® Windows® 10 IoT Enterprise LTSC 2021).

Attached to this Quick install guide you received a "Certificate of Authenticity" (CoA). This CoA grants you the right to install the VisuNet RM Shell 6 image on as much VisuNet Remote Monitors and BTCs as you have received Microsoft® License adhesive labels.

To ensure a proper assignment of licenses to devices, document to which device a license is assigned by writing the devices serial number on the CoA sheet in the respective field.

DISCLAIMER

This software is subject to the terms and conditions of the accompanying End-User License Terms. This software is provided only for use with, and for licensed End User of, the Pepperl+Fuchs VisuNet Remote Monitors and Box Thin Clients. Any other use of this software is strictly prohibited and may subject you to legal action. You are only eligible to install the images on Pepperl+Fuchs devices for which you have bought a corresponding upgrade license from Pepperl+Fuchs.

The software upgrade is non-returnable and non-refundable. Contact your local Pepperl+Fuchs sales representative if you have open questions.

3 Pre-Conditions

Compatible Device and Image List

The Pepperl+Fuchs VisuNet RM Shell 6 (based on Microsoft® Windows® 10 IoT Enterprise LTSC 2021) upgrade package is qualified and compatible with following devices that come with preinstalled **VisuNet RM Shell 5**:

Image Mapping

Device Family	Type code	Source Image	Target Image
VisuNet RM Shell 5 (based on Windows® 10 LTSB 2016)			
BTC12	BTC12-*-TS2	18-33582	18-34755
BTC14	BTC14-*-TS2	18-33834	18-34756

Image Mapping

Device Family	Type code	Source Image	Target Image
VisuNet RM Shell 5 (based on Windows® 10 LTSC 2019)			
BTC12	BTC12-*-TS3	18-34076	18-34755
BTC14	BTC14-*-TS3	18-34191	18-34756
BPC3200	BPC3200-*-*-*-2NN-*	18-34093	18-34757
VisuNet FLX	RM-320-*-2-*-* RM-EDGE-*-2-*-*	18-34093	18-34757
VisuNet GXP AL	RM-GXP1100-*-T3-* RM-GXP1200-*-T3-* TCU1100-*-TS3-* TCU1200-*-TS3-*	18-34023	18-34754

Note

If you have a device or image that is not listed, contact your local Pepperl+Fuchs sales representative to check for individual device compatibility.

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4   Factory Reset 6 (and newer)

The provided images are packaged in an encrypted container format that can be read out with Pepperl+Fuchs Factory Reset 6 and newer.

Warning!

Please check if you have Factory Reset 6.x installed on your device (See either Software Information in "About App" (1) or "Device Info" in your factory reset menu (2)).
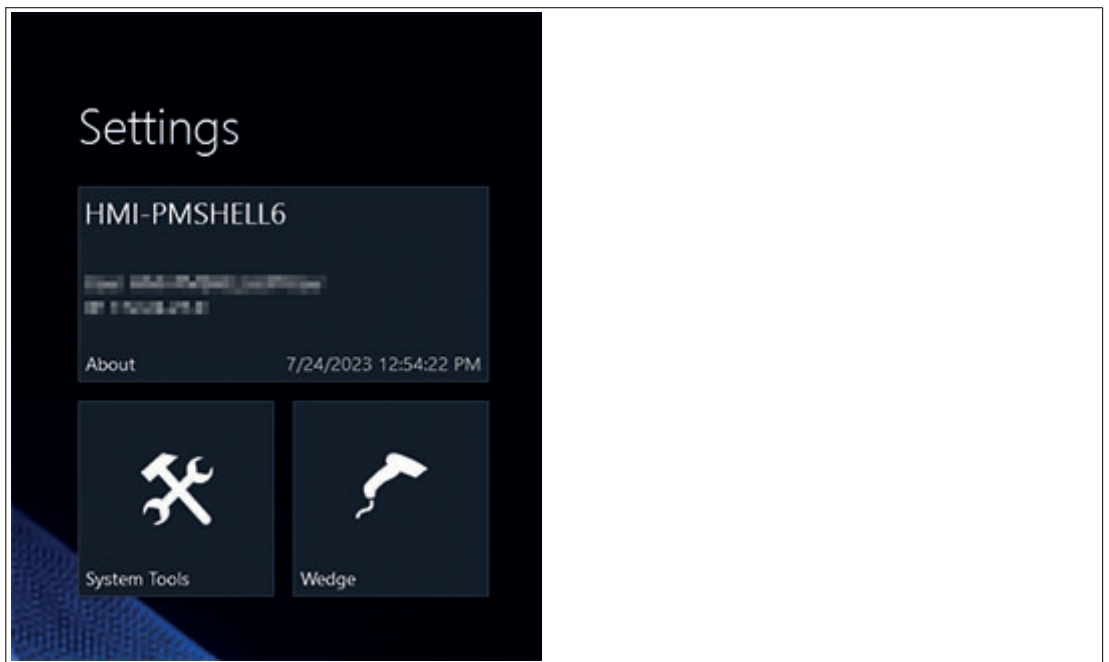
Procedure

1.   Click "About App".

Figure 4.1   Open the About App.

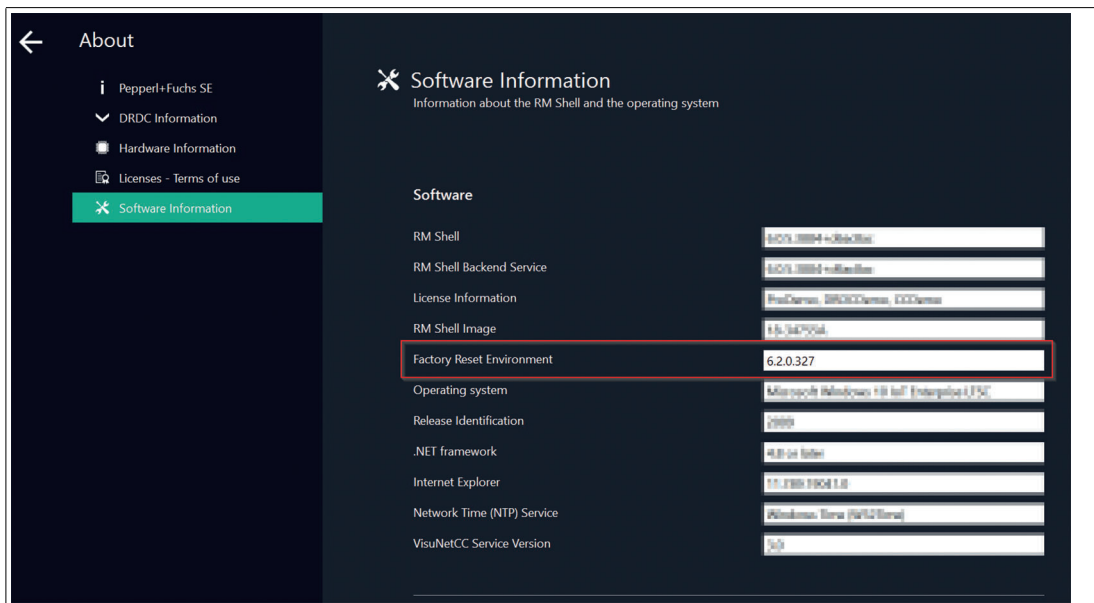↳ In the Software Information you find the installed Factory Reset version.

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Figure 4.2   In the Software Information you find the installed Factory Reset version.

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5 Device Info

This submenu provides information on the Factory Reset Version, Device Description, Installed Image, Compatible Images, the Partitions and the Licenses.

The information is useful when updating the firmware or may be necessary for technical support.
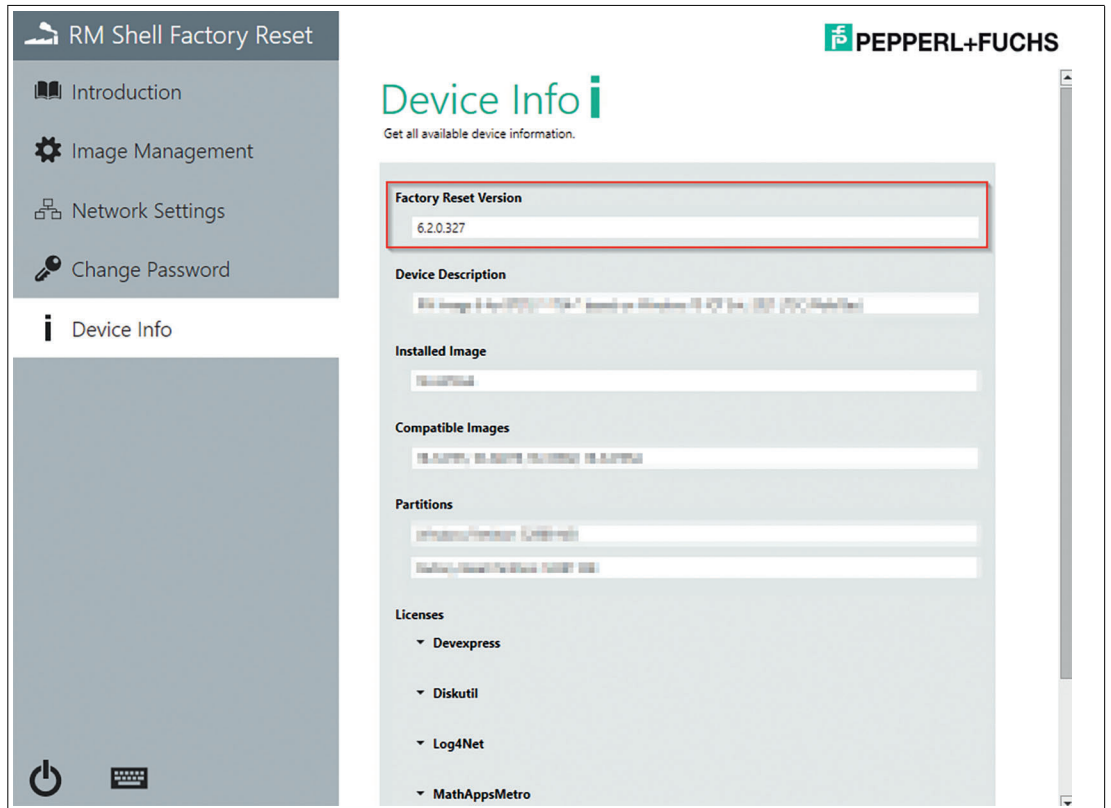

Figure 5.1   In the Device Info tab you can also find information regarding the installed Factory Reset version.

Note

If you must update your Factory Reset, refer to the Pepperl+Fuchs website .

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6 Access RM Shell 6 Upgrade Images

The VisuNet RM Shell 6 upgrade images are provided as download via the Pepperl+Fuchs file sharing platform "pffiler". This platform can be accessed under the URL: https://pffiler.pepperl-fuchs.com/

To access the platform, you need a user account.

Create User Account (Optional)

If you do not have a user account for Pepperl+Fuchs pffiler service, request a new user account.

Visit following website and enter your contact details: https://pffiler.pepperl-fuchs.com/page/register

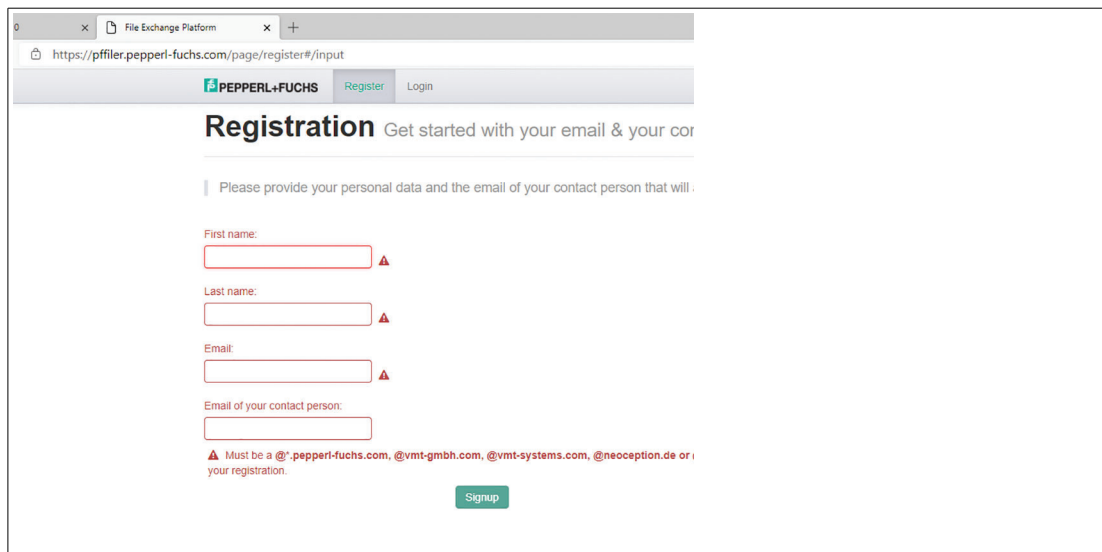| Following details are needed: |
| --- |
| **First Name:** e.g. John |
| **Last Name:** e.g. Doe |
| **Email Address:** e.g. john@doe.com |
| **Email of your contact person:** (See below) |
| Depending on your region, choose:
North / South America: asevera@us.pepperl-fuchs.com
Europe: gts_pa@de.pepperl-fuchs.com
Asia / Pacific: kwai@sg.pepperl-fuchs.com |

Figure 6.1   Provide your personal data on the registration page.

You are automatically informed via email, when your user account is created and you have the permissions to access the files. When you log in for the first time, change your personal account password.

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Get Access to Images

If you already have a Pepperl+Fuchs pffiler account, you can request access to the images.

Use the contact form online and provide the following information to receive access to the pffiler and images:

Figure 6.2

The contact form is forwarded to the sales support depending on your region.

1. Europe: gts_pa@de.pepperl-fuchs.com
2. North & South America: asevera@us.pepperl-fuchs.com
3. Asia Pacific: kwai@sg.pepperl-fuchs.com

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Note

If you want to execute multiple upgrades on different type of devices (e.g. BTC12 and VisuNet GXP), provide the device information of each device type to get access to the compatible images.

Use the "Add Entry" function to add further devices.

Figure 6.3

Where to Find the Relevant Data:

Product Type Code:

Either check your order of your device or get the product type code from the product label.

Figure 6.4   Label sample

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Current Device Image:

Refer to the Introduction VisuNet RM Shell Factory Reset to get all your relevant information:
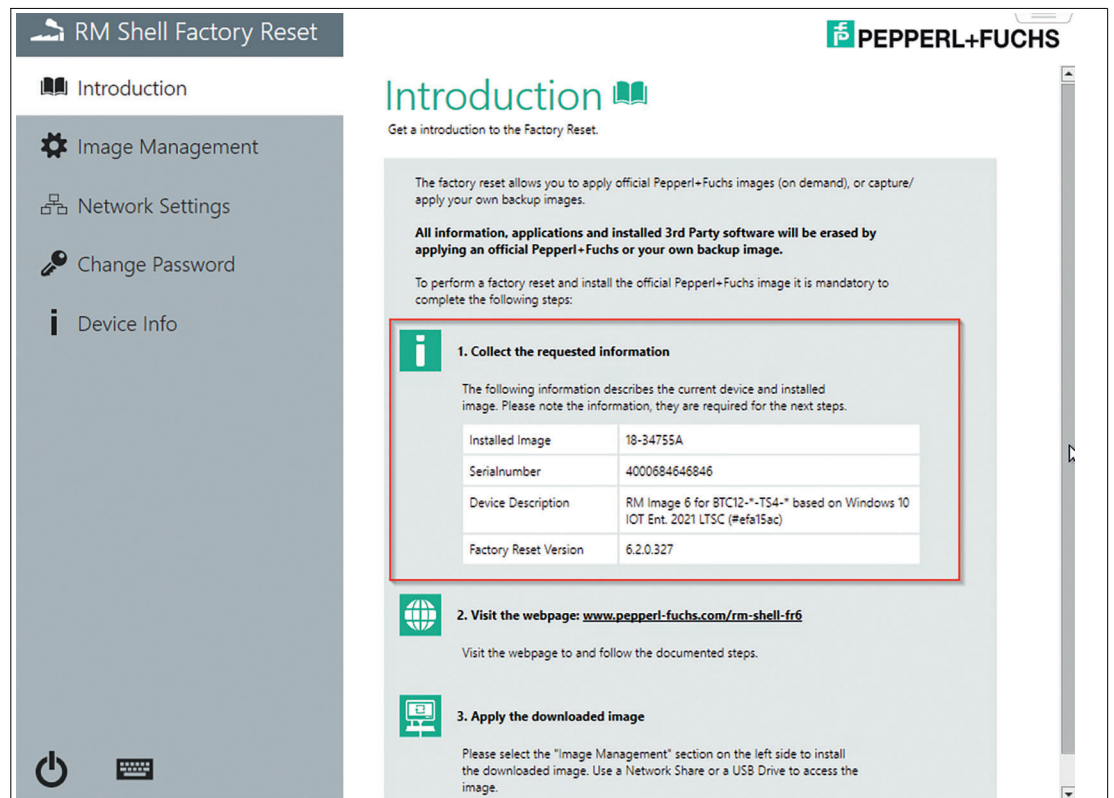

Figure 6.5

Order Number 2021 LTSC Upgrade-Package:

Add your Pepperl+Fuchs order number of the purchased VisuNet RM Shell 6 2021 LTSC Upgrade-Packages you have bought. You find the order number on your invoice. It is mandatory to enter your order number to get access to the Pepperl+Fuchs images.

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7 Downloading and Unpackaging the RM Shell Image

Download

1. Log in with your user account credentials into your pffiler account.

Figure 7.1   Log in to file exchange platform

2. After you are logged into your user account you find under the "My File Collections" page the folder with the **VisuNet RM Shell 6 2021 LTSC Upgrade-Package** image which you requested for your Pepperl+Fuchs hardware (e.g. BTC12, VisuNet GXP). Enter the folder.

3. If you have requested images for multiple hardware devices, you will find sub folders within the folder for each individual hardware platform. Enter the respective subfolder to access the split image files.

4. When you have entered the sub folder, you find a list of files. Those files represent a self-extracting split ZIP file that comprises the RM image (*.pfimage) for the individual device.

5. Find detailed information on the individual images by opening the Readme txt data.

6. Download all files by clicking on "Download" for each file.

Note

Due to large file size of the image (~4-6 GB), the files are split in smaller files for the download process. The exe re-assembles individual packages then into one image again.

Note

By downloading the images, you accept the Pepperl+Fuchs and Microsoft® license agreement that you find in the appendix of this document.

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Unpacking Files

1. When all files are downloaded, start the Pepperl+Fuchs Image Merger by clicking the .exe file. Make sure that the names of the saved files are identical to the individual file names within the pffiler.

2. The Pepperl+Fuchs Imager Merger extracts the correct image file (*.pfimage) and verifies that the files are not corrupted.

3. This file can now be installed onto a VisuNet Remote Monitor / Box Thin Client by using a USB memory stick or via shared network folder. The respective steps are described in the next chapter.

Note

Download from pffiler/Intranet can quickly lead to corrupted files, in this case a corresponding message would pop up. Then download the corrupted file again.
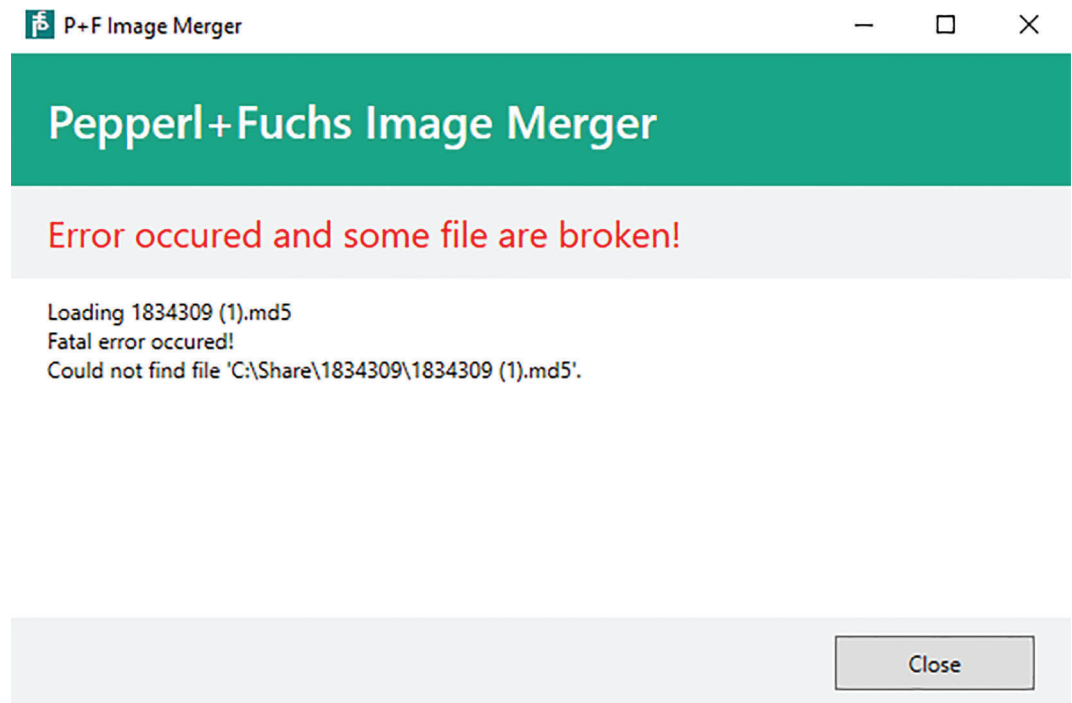

Figure 7.2   Sample Pepperl+Fuchs Image Merger Error Message.

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8 Installing the Update

Note

It is mandatory that Factory Reset 6 is installed on your device to be able to perform the Upgrade to VisuNet RM Shell 6 based on Microsoft® Windows® LTSC 2021. Refer to chapter **Factory Reset 6** for detailed information on how to figure out which Factory Reset is installed on your device.

With Factory Reset Version No. 6.0 and newer, the image is no longer available locally on Partition D which increases the storage and speed.

Caution!

After applying the Pepperl+Fuchs image, the setup of the device must be performed locally!

The VisuNet RM Shell first start wizard guides you through the most important initial configuration steps. Refer to the First Start Wizard Chapter in the VisuNet RM Shell manual for further information.

Entering Factory Reset

Enter the Factory Reset via VisuNet RM Shell.

1. From the main screen, change from the Operator View to the Configuration View by authenticating as an administrator.

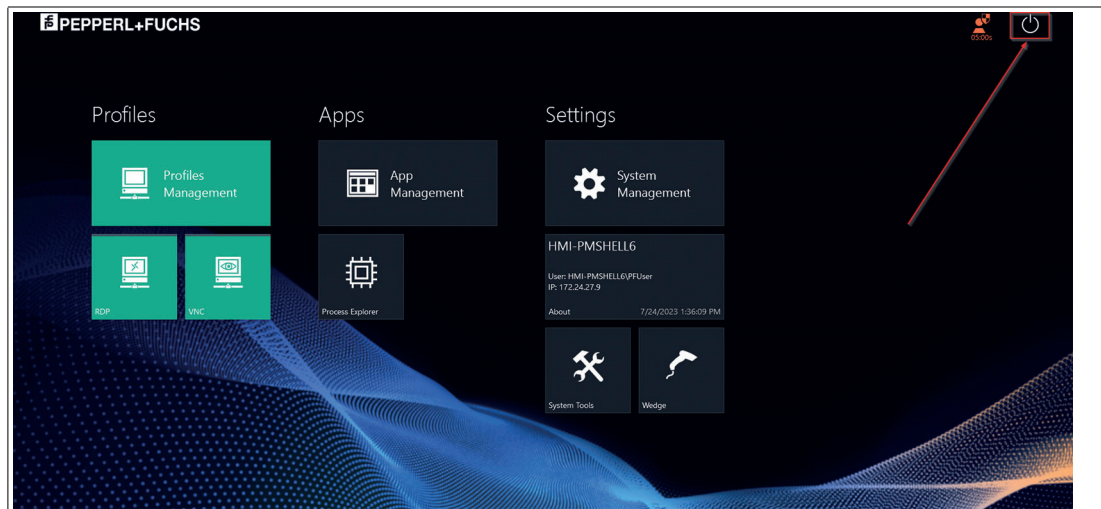2. Click on the power icon in the upper right corner.
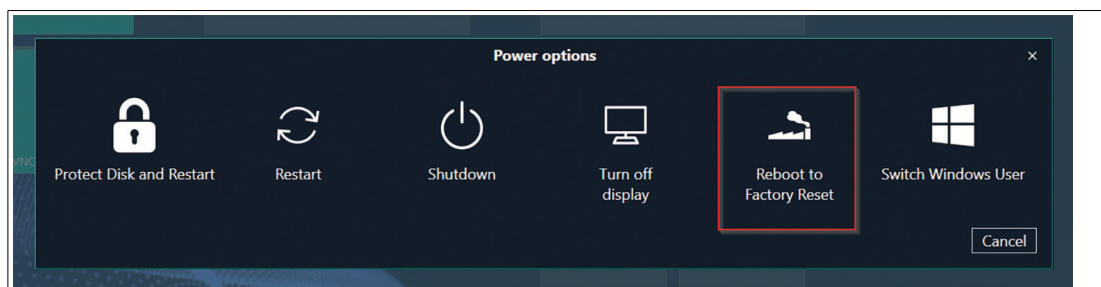

Figure 8.1

3. Click on Factory Reset.

Figure 8.2

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4. Click on Yes to continue. After a restart, the system will now boot into the Factory Reset.
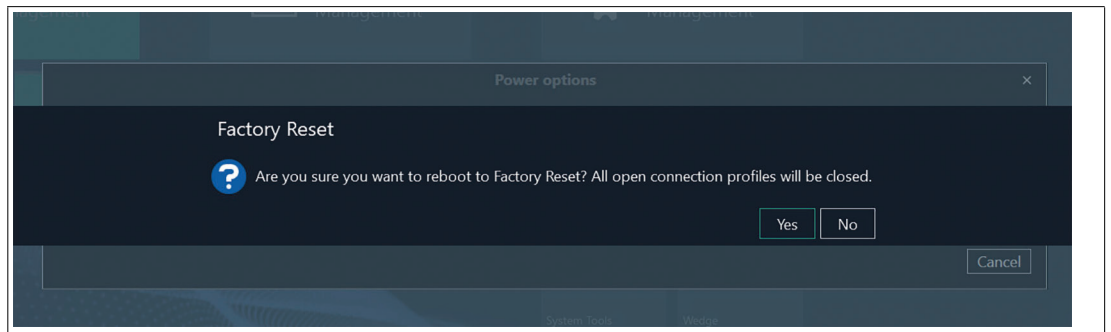

Figure 8.3   Factory Reset warning

↳ After a restart, the system will now boot into the Factory Reset.

Note

When you boot into the factory reset, all open profiles are closed.

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9 Image Management

In this submenu you can manage the available upgrade packages for the VisuNet RM Shell 6.

Option 1: USB Memory Stick

Note

If you want to use a USB memory stick for the update procedure, ensure that the USB stick is formatted with "NTFS" file system and has a minimum size of 16 GB.

Procedure

1. Rescan for new drives to search for connected USB flash drives. USB flash-drives can directly be used to transfer images.
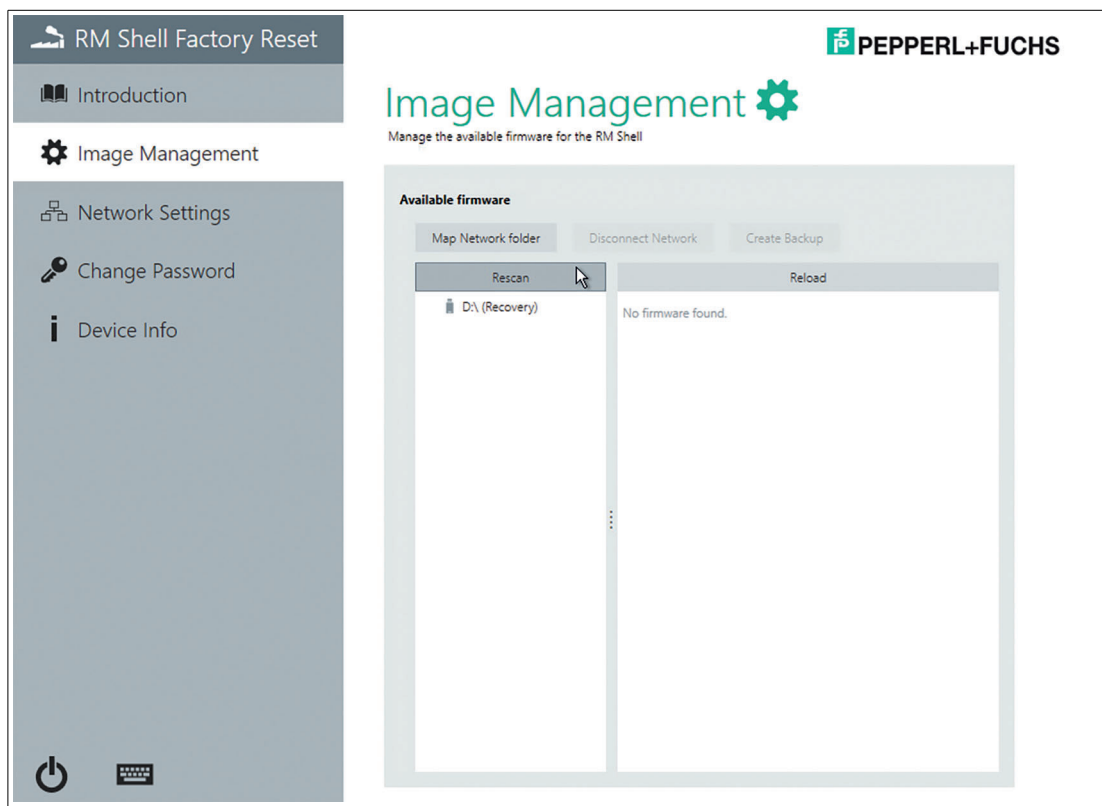

Figure 9.1   Manage the available Images in the "Image Management" tab.

2. Now you can import the VisuNet RM Shell 6 "*pfimage"-file from your USB-device.

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Option 2: Network Shared Folder

To apply an image, select the network folder first. The image is applied on the RM/BTC from which the network is connected to.

Create a Network Shared Folder

1. For updating via Network you need a shared folder on a local PC from which you can then download the image. To do so, create a new folder on your PC. Then right click the folder and go to "Properties". In the "Properties" go to "Sharing" and click "Advanced Sharing".
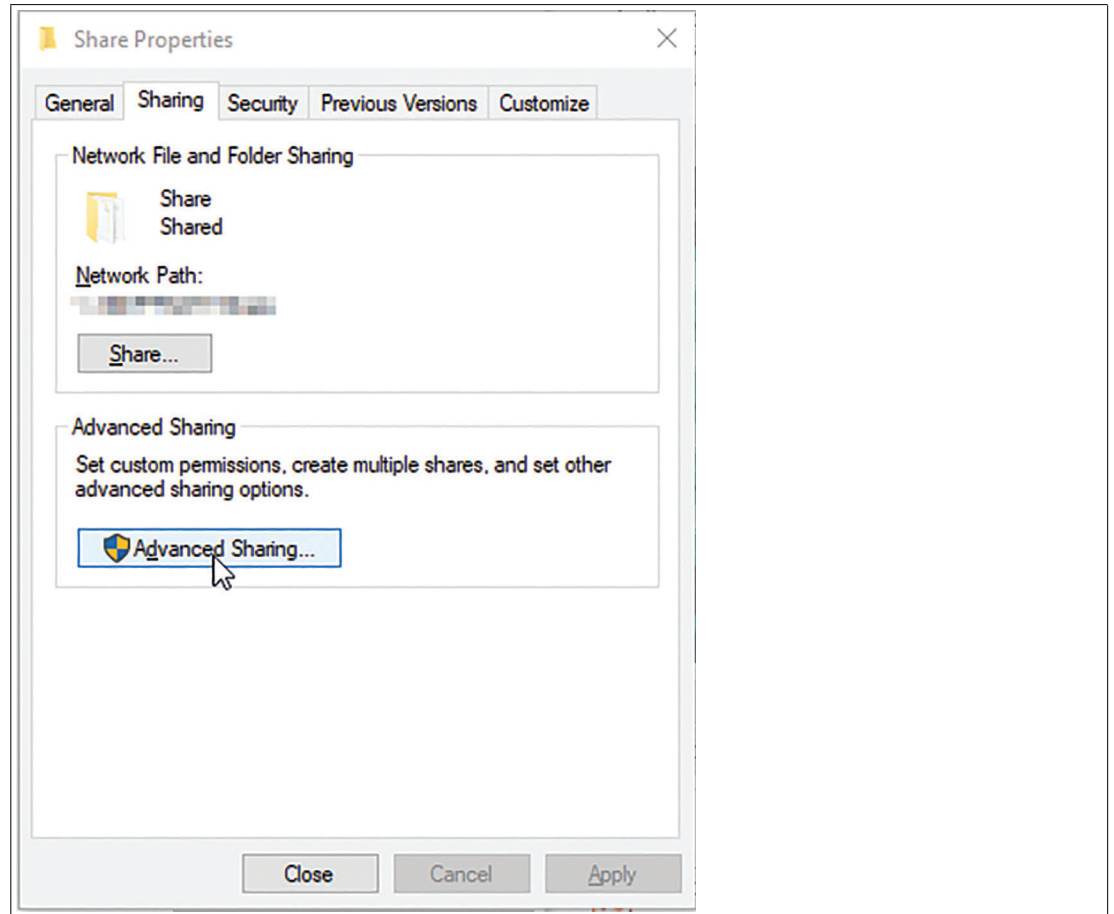

Figure 9.2   Share Properties

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2. In the "Advanced Sharing" options activate the "Share this folder" checkbox. You can select another name if you want to. Then click "Permissions" and select all checkboxes in the "Allow cloumn".
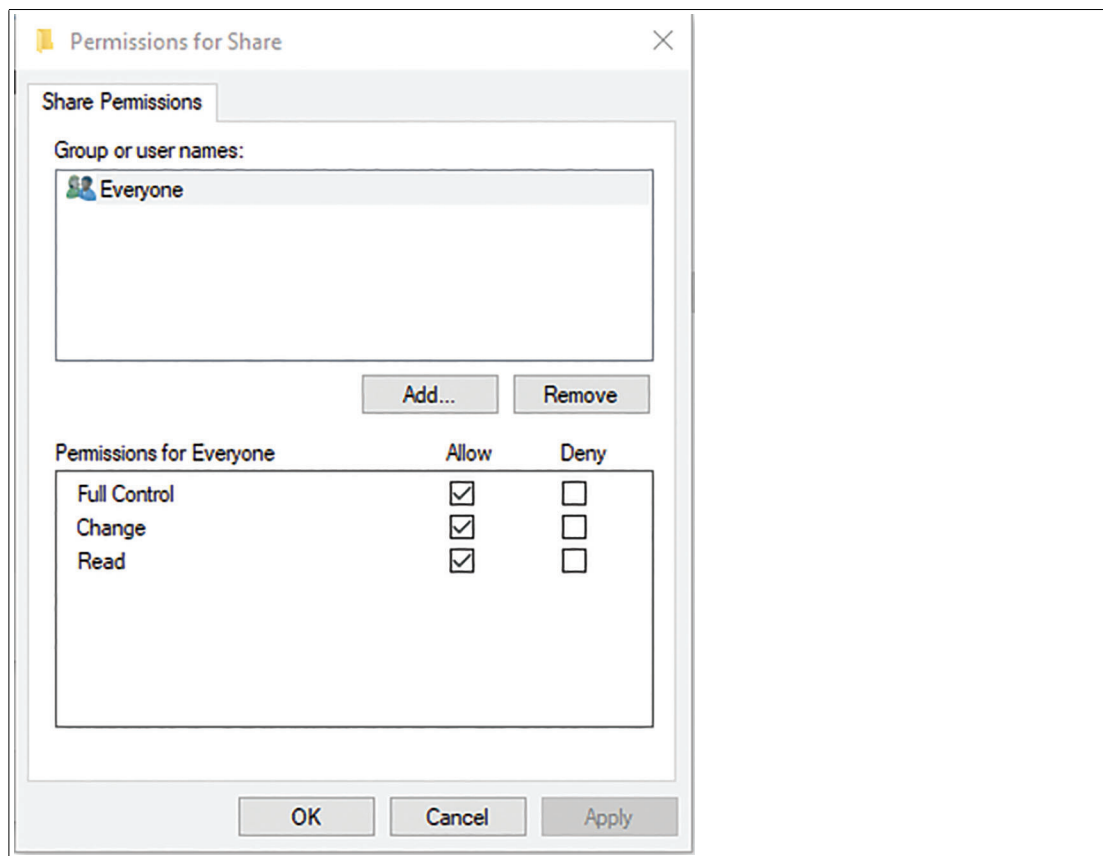

Figure 9.3   Allow permission

3. As last step copy the ".*pfimage" image into the shared folder.

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Apply the Image via Network

1. To apply the ".*pfimage" image via network to a Pepperl+Fuchs Remote Monitor or BTC, boot into the factory reset and open the Image Management.

2. Select the Network Share, which will be used to transfer the Images.
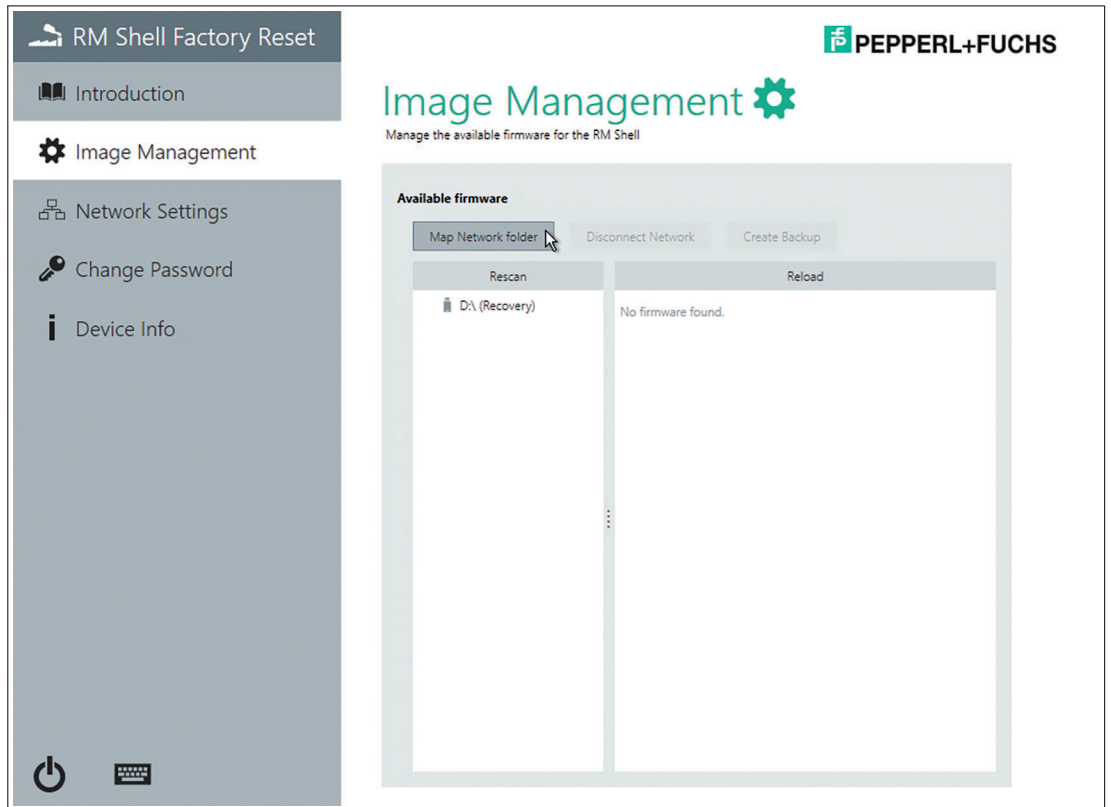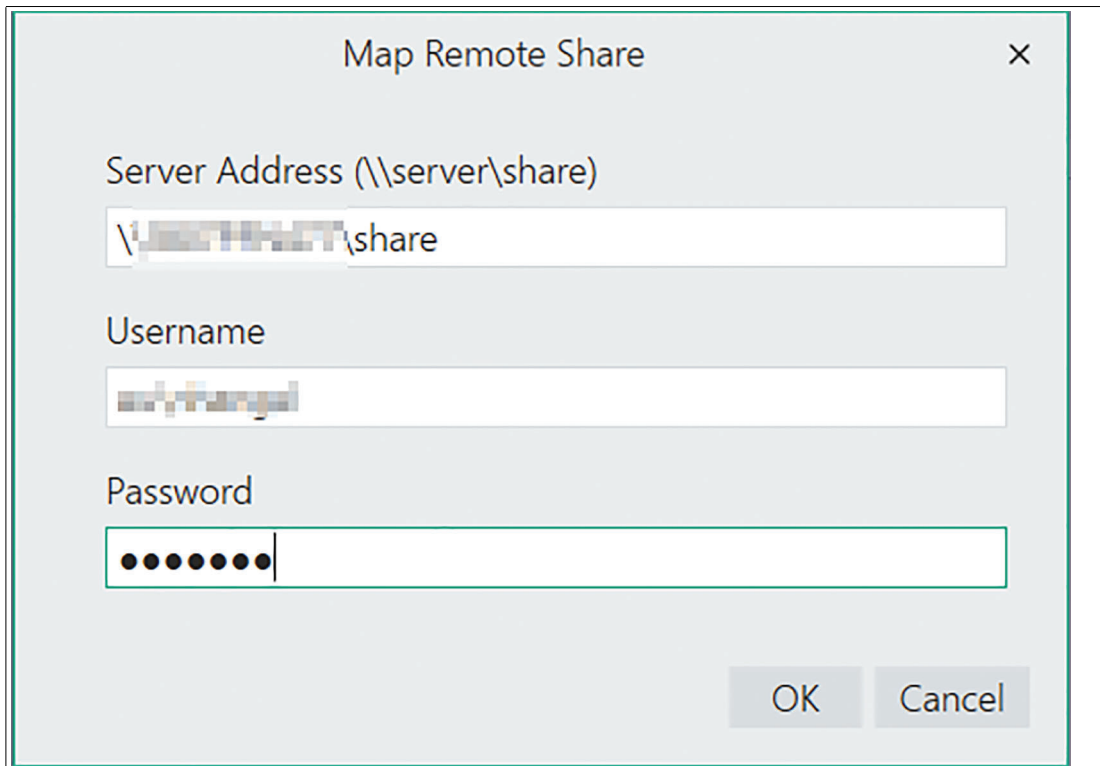
Figure 9.4   Map your network folder here

3. Now enter the network path to your PC with the shared folder. The Path consists of the server address of the device you created the shared folder on and the name of the shared folder. You may must enter the local Username and Password that you use for login on the PC as well.

Figure 9.5

4. After pressing "OK", the VisuNet RM Shell 5 Upgrade file will be displayed.

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5. If you have multiple images listed, choose the official Upgrade package image provided by your local Pepperl+Fuchs sales support.
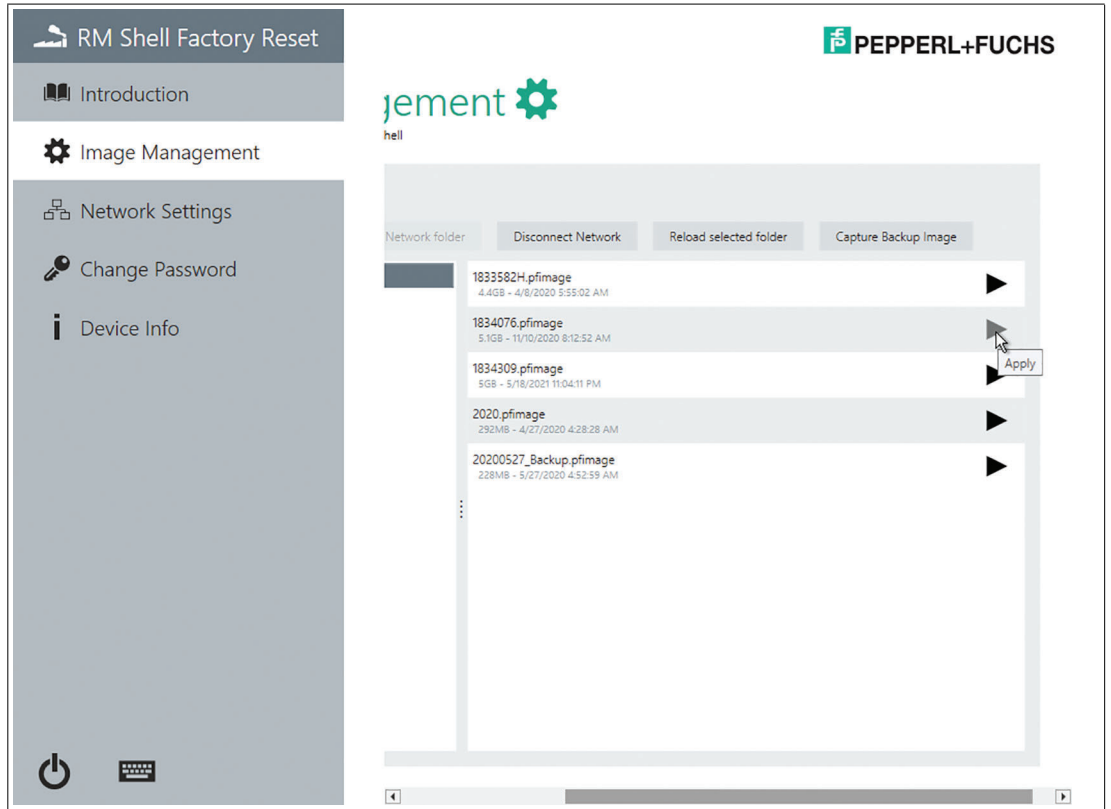
Figure 9.6   Select the right image and click "apply"

6. Click "Apply" to apply the selected firmware.
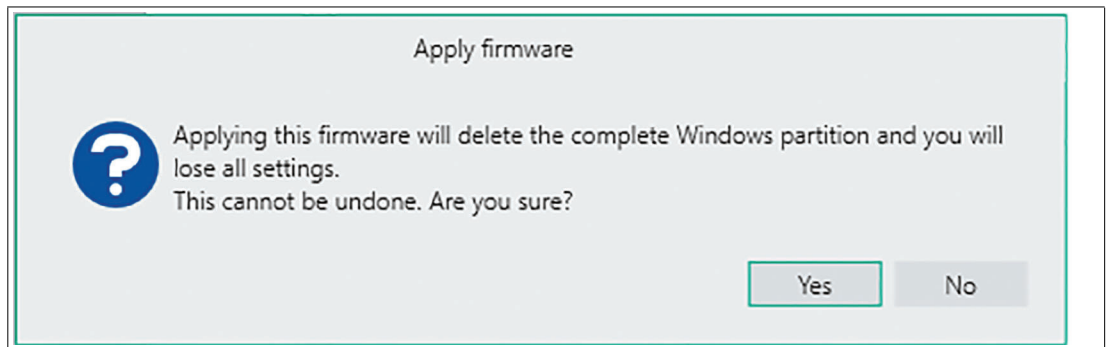
Figure 9.7   Apply firmware
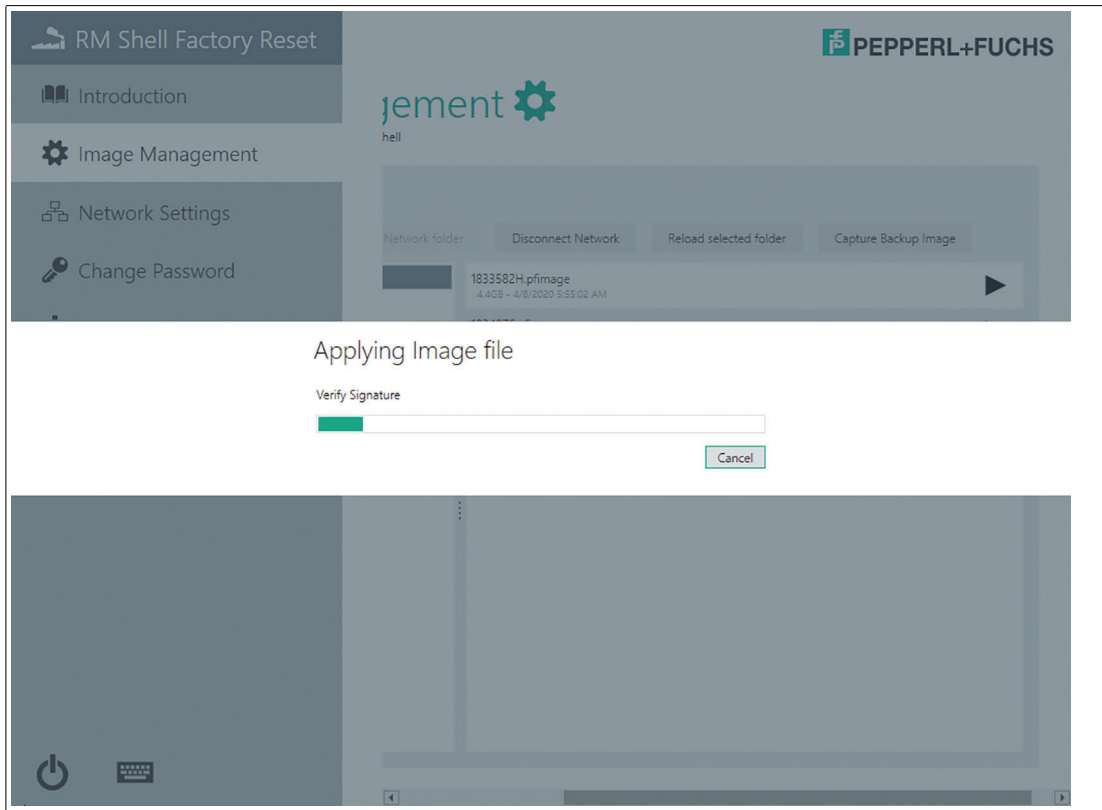
Figure 9.8   Applying Image file

7. The Signature checks if file was really issued by Pepperl+Fuchs.

8. Furthermore the meta-information of the encrypted .*pfimage include descriptions and provide information about compatibility regarding the hardware devices.
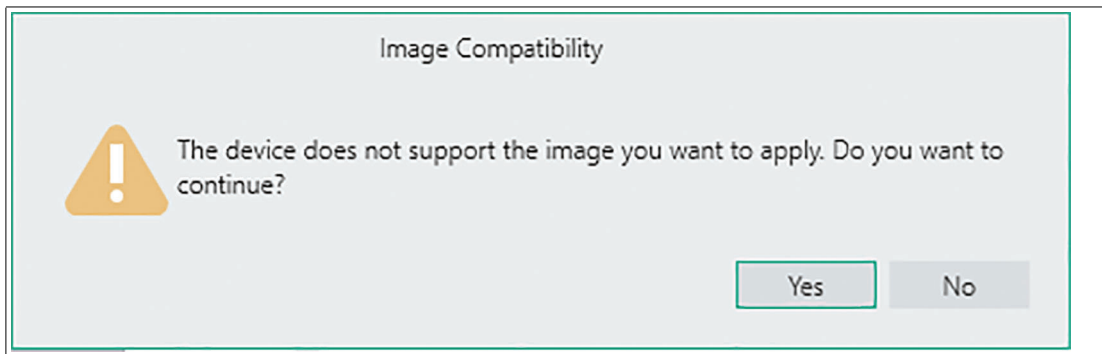
Figure 9.9   Image Compatibility

Note

If the warning Image Compatibility appears, it is most likely that the wrong image is chosen. Double check your image selection. Refer to the Compatible device & image list.

The installation of the Upgrade can take up to 30 minutes.

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Option 3: Install upgrade image via Control Center

Note

To upgrade the image via Control Center, please make sure that a valid Control Center license is assigned to the RM Shell 5 device. Please make sure to use the current Control Center version.

1. Create a Network Shared Folder

2. For updating via Network you need a shared folder on a local PC from which you can then download the image. To do so, create a new folder on your PC. Then right click the folder and go to "Properties". In the "Properties" go to "Sharing" and click "Advanced Sharing".
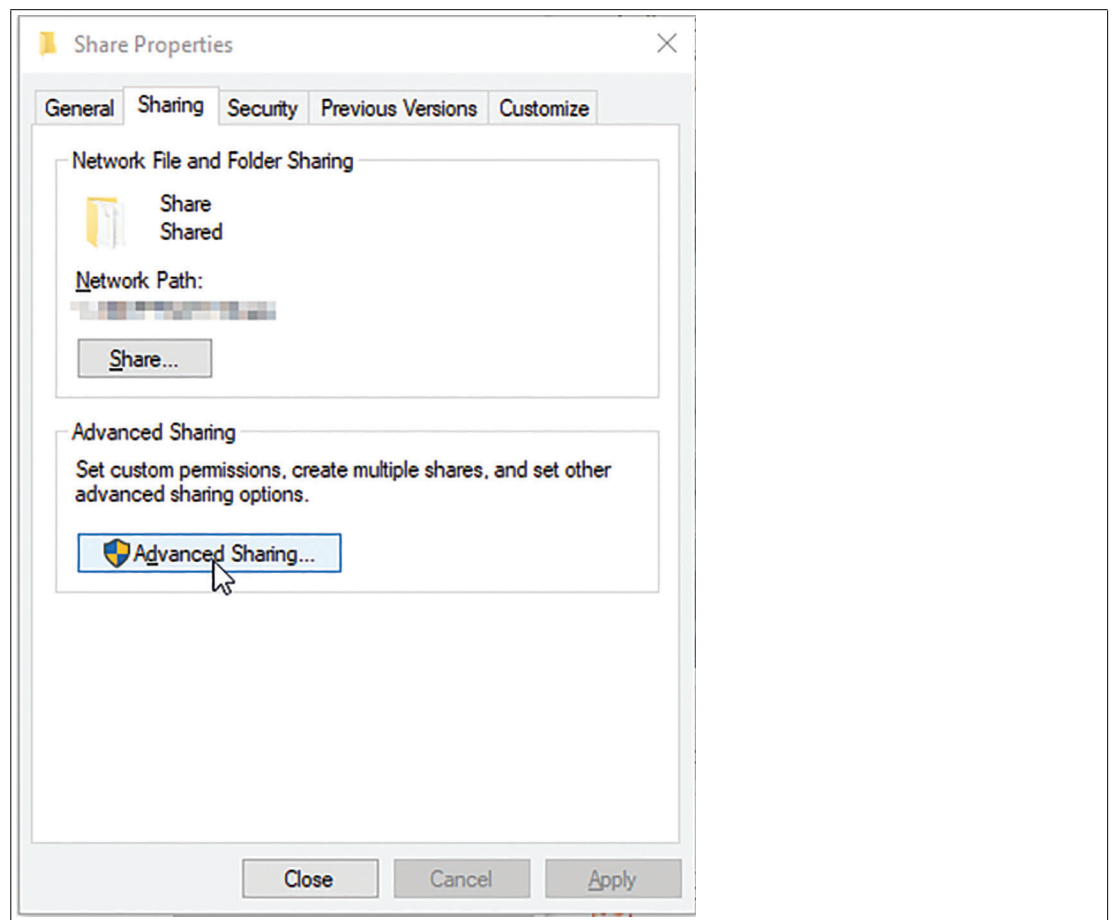
Figure 9.10   Share Properties

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3.   In the "Advanced Sharing" options activate the "Share this folder" checkbox. You can select another name if you want to. Then click "Permissions" and select all checkboxes in the "Allow cloumn".
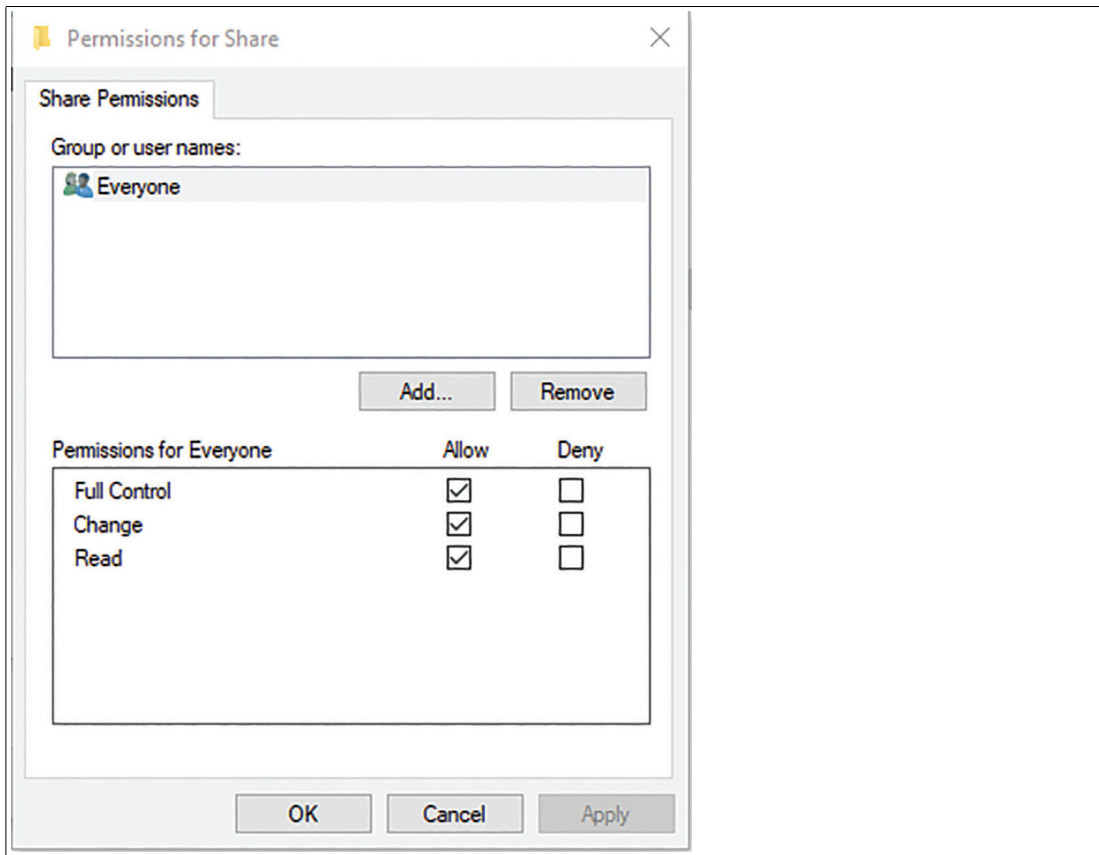
Figure 9.11   Allow permission

4.   As last step copy the ".*pfimage" image into the shared folder.

5.   Copy the upgrade Image to Network Shared folder.

6.   Open Control Center and open the "Apply image" wizard.

Figure 9.12

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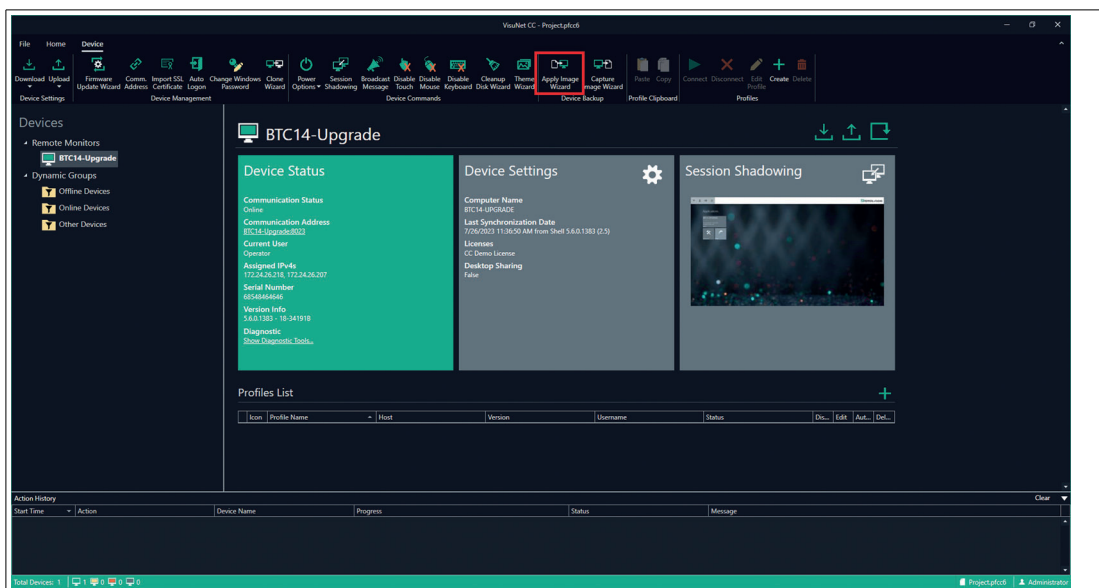
7. Follow the steps in the "Apply image" wizards.
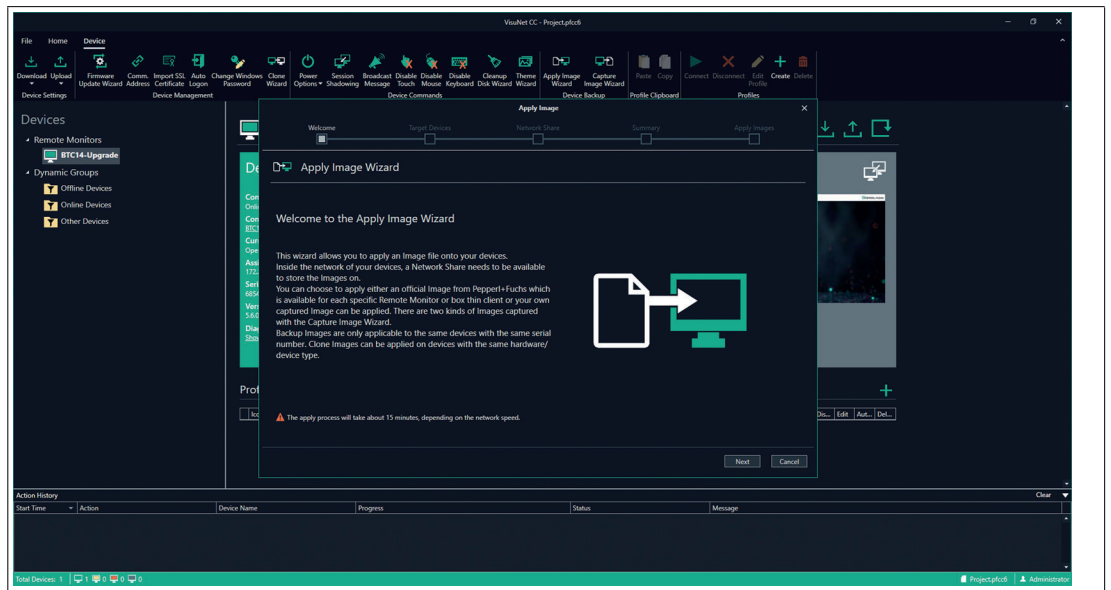
Figure 9.13
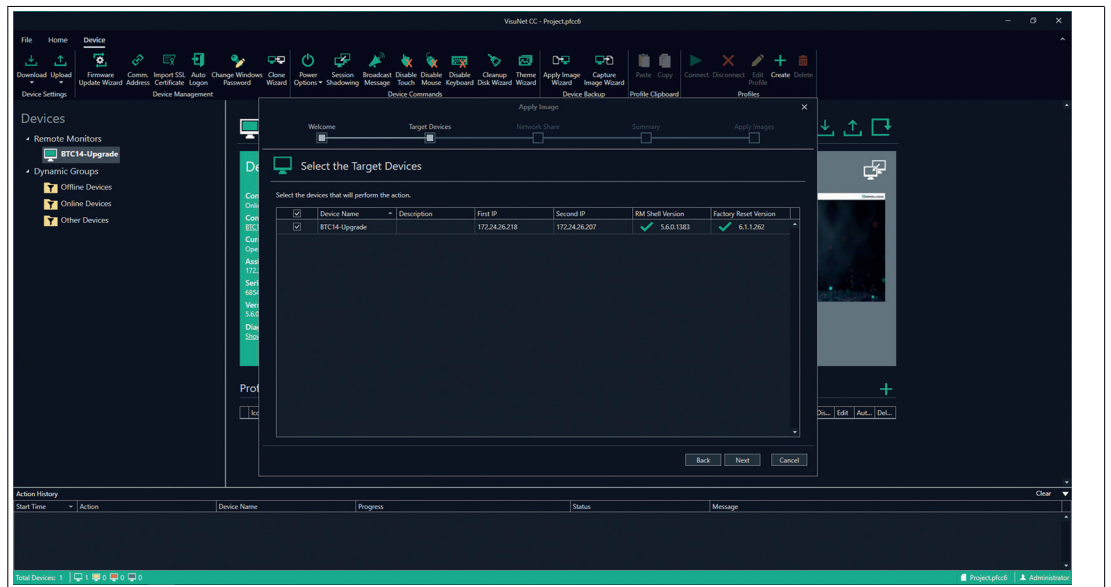
Figure 9.14   Select target devices

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8. Enter the user name and the corresponding password. Then chose the previously created folder as server path. In this case, the folder was named "share". Make sure to click on "Check Connection" to continue.
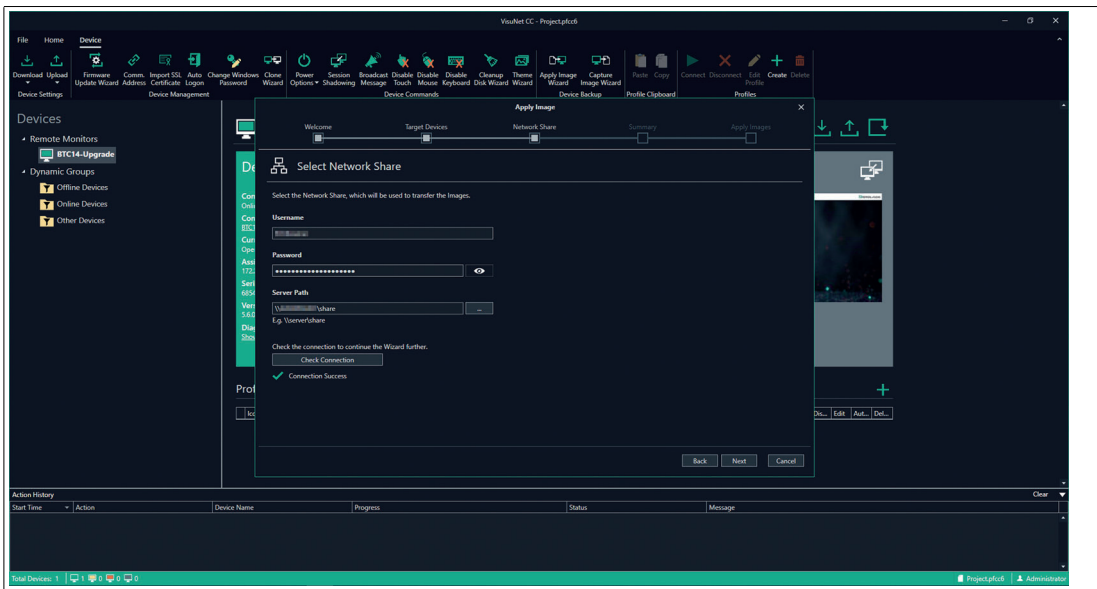
Figure 9.15

9. Click on "Autocomplete" to automatically select the image.

Figure 9.16

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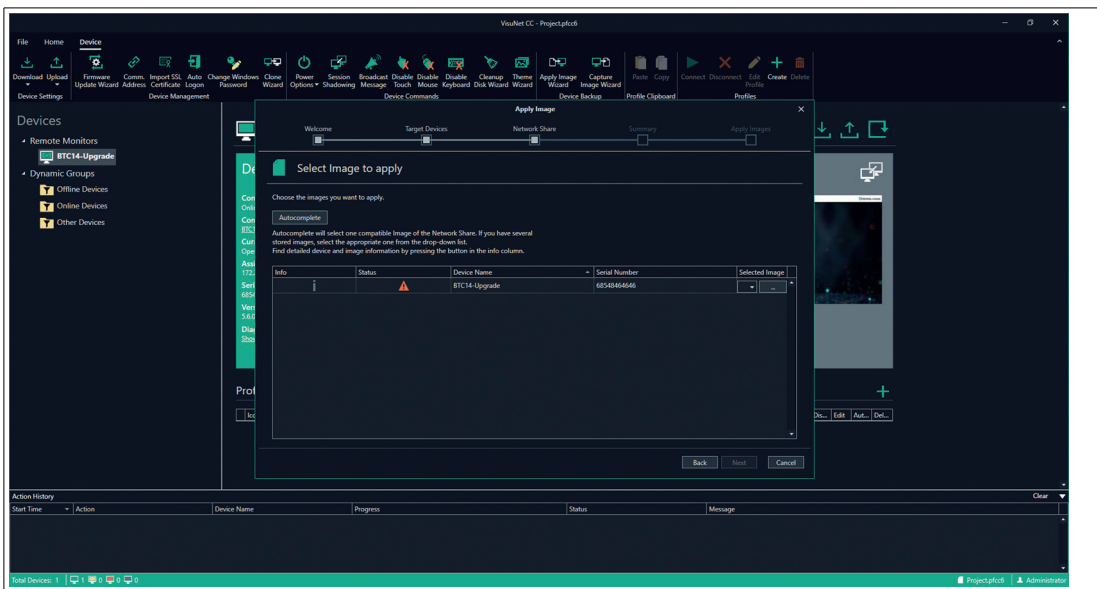
10. When clicking on the (i) under the info tab, more information can be displayed regarding (among other information) image type and compatible versions.
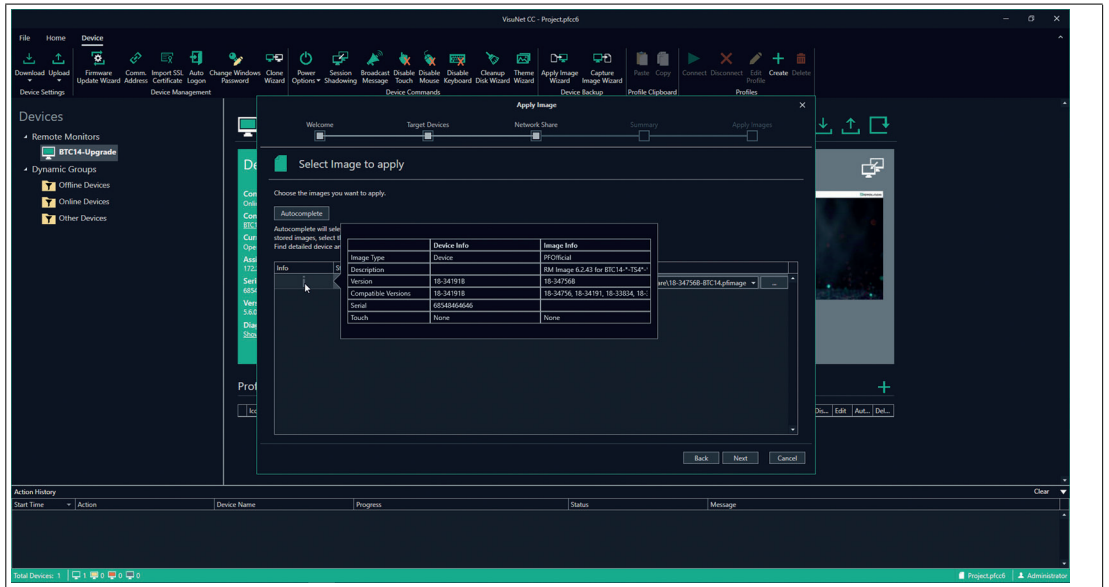
Figure 9.17

11. The "Summary" section provides an overview of the image and server path that will be applied.

12. Click on "Execute" to perform the upgrade.
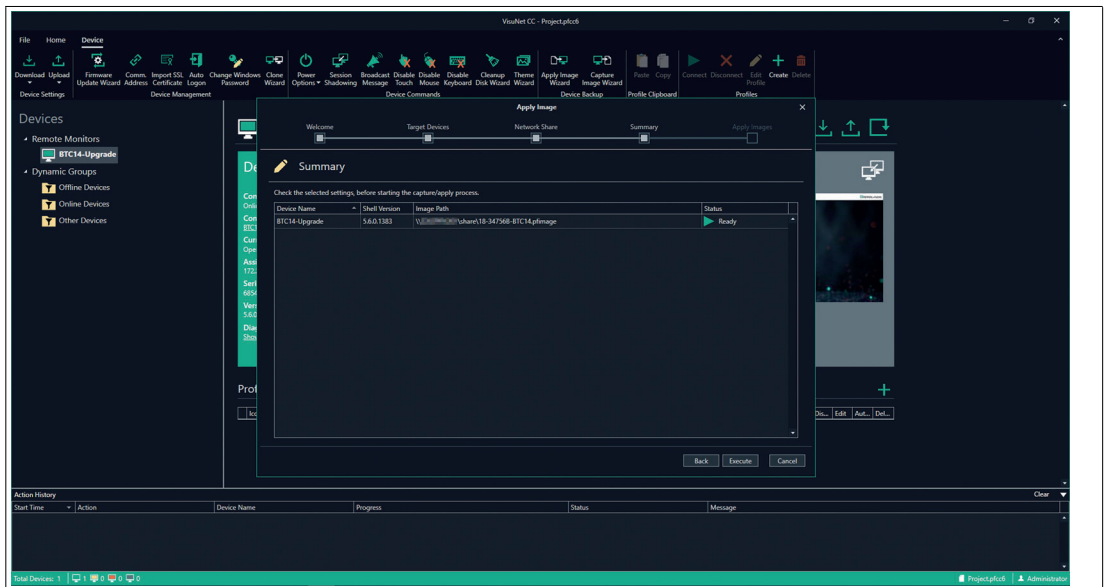
Figure 9.18   Summary

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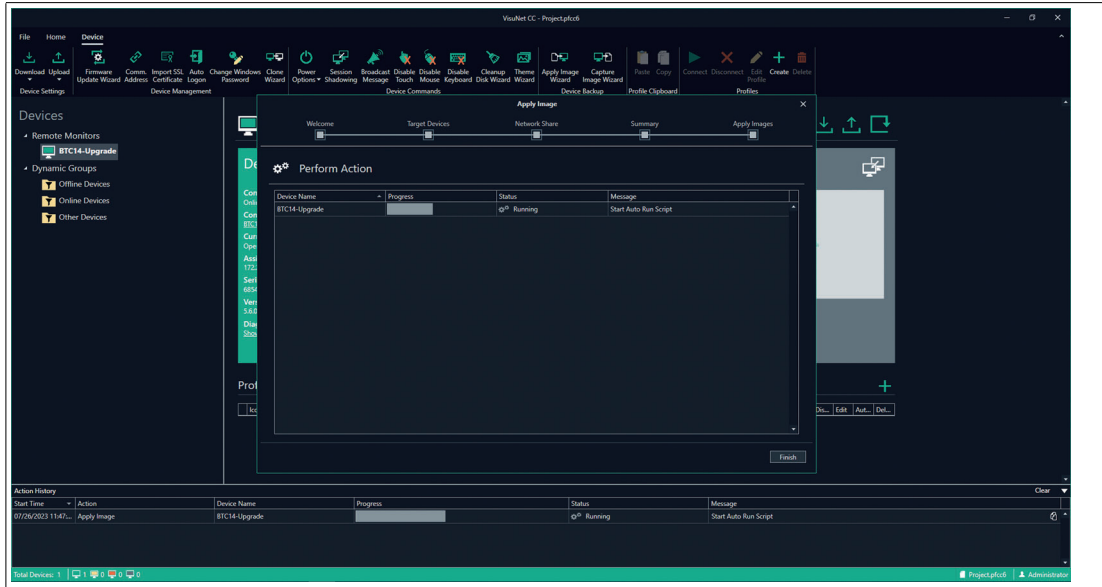
Figure 9.19   Running upgrade process
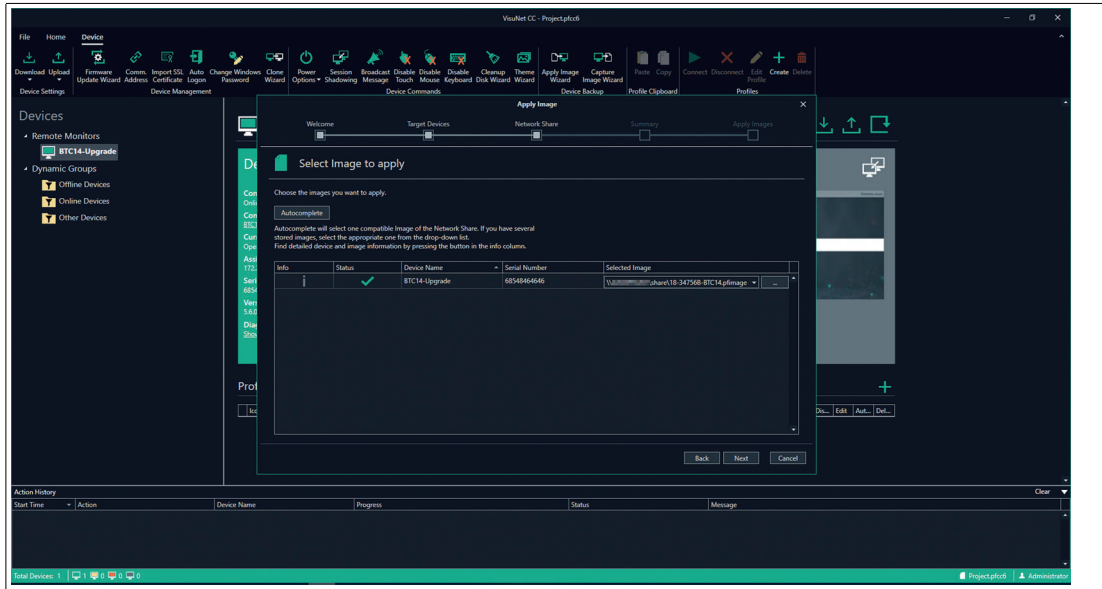
Figure 9.20   The process has been successful

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13. Wait until the image has been applied to the device.
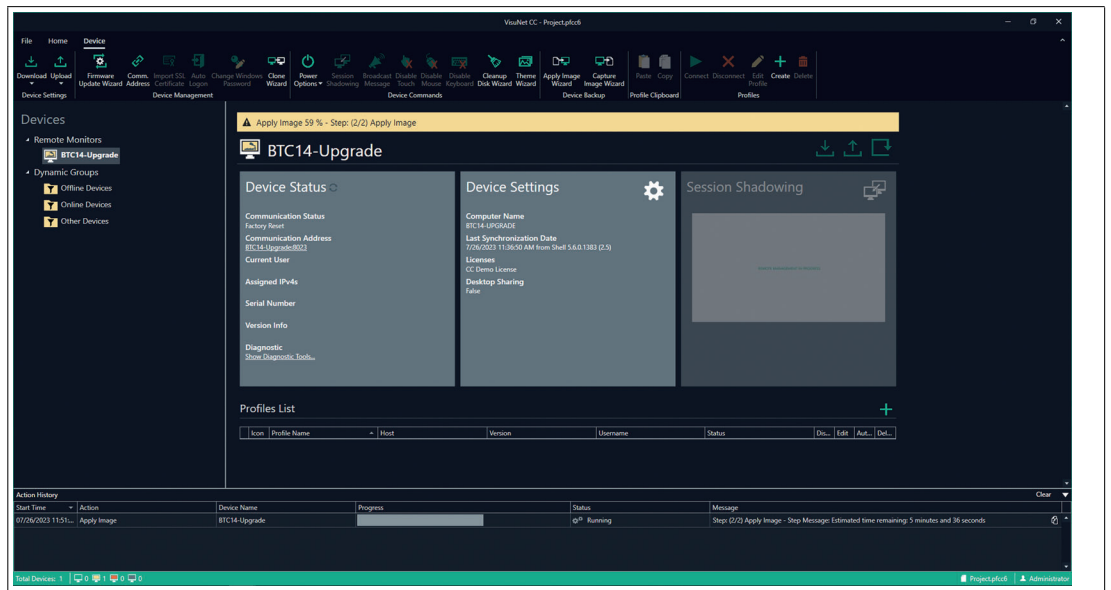
Figure 9.21

14. In the "Action History" below, you can see that the upgrade has been executed successfully.

Figure 9.22

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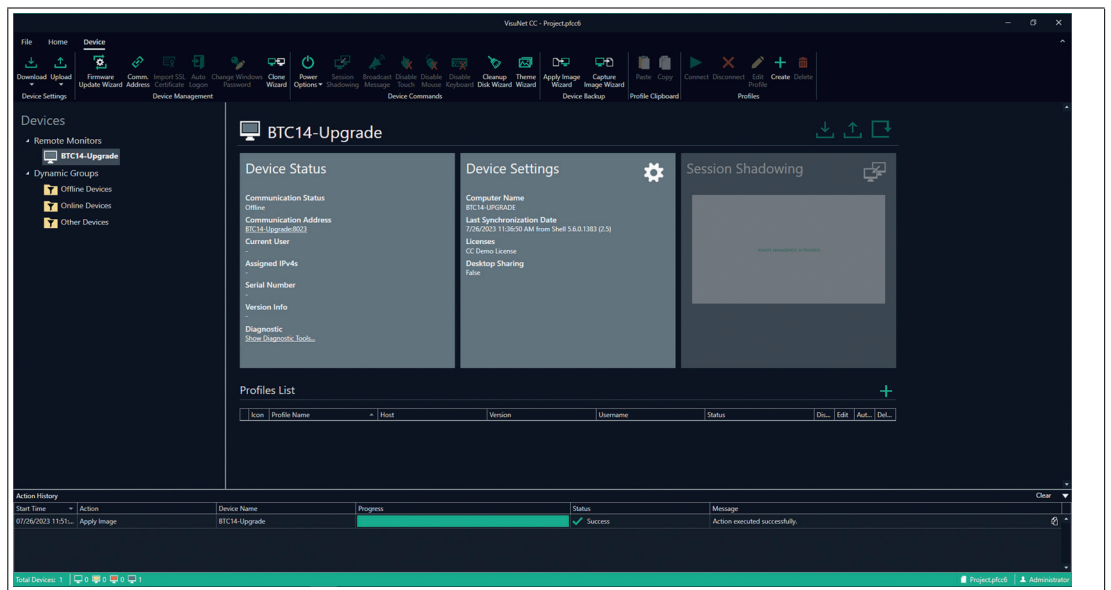
10   Appendix

10.1   END-USER SOFTWARE LICENSE AGREEMENT (CALLED IN THE FOLLOWING "EULA")

IMPORTANT NOTE - READ CAREFULLY:

THIS END-USER SOFTWARE LICENSE AGREEMENT IS A LEGALLY BINDING AGREE-MENT BETWEEN YOU, AS A DESIGNATED USER OR AS A REPRESENTATIVE IN THE NAME OF A COMPANY OR AN ORGANIZATION, CALLED IN THE FOLLOWING THE "LICENSEE" AND THE PEPPERL+FUCHS SE, MANNHEIM, GERMANY CALLED IN THE FOLLOWING THE "LICENSER".

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IN CASE THE LICENSEE DOES NOT AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT, THE LICENSEE SHALL NOT USE THE SOFTWARE AND SHALL RETURN THE DEVICE AT HIS OWN EXPENSE TO THE LICENSER.

1. Definitions

Licenser: Pepperl+Fuchs SE, Lilienthalstr.200, 68307 Mannheim, Germany

Software: Means the Licenser software program(-s) including Microsoft Software, in each case, supplied by Licenser herewith, and the related information called "VisuNet RM Shell 6" which are delivered by Licenser together with and already installed on one Device.Any updates to such Software which the Licensee is entitled to receive and that has been provided to him by the Licenser shall also mean Software for purposes of this Agreement.

Microsoft Software: Means the MICROSOFT SOFTWARE LICENSE TERMS - WINDOWS 10 IOT which is subject to additional terms and conditions referenced in the About screen of the "VisuNet RM Shell 6". By using the Software, the Licensee is also bound by the additional terms and conditions of the Microsoft Software.

Device: Means each product of the Licenser incorporating the Software.

License: By granting a License the Licenser grants to the Licensee the right to use the Soft-ware under the terms and conditions defined in this EULA

2. Subject matter of the EULA

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2.2 A Service Contract for the Software is not available.

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11.1 The validity, interpretation and legal effect of this EULA shall be governed by, and construed in accordance with, the laws of the Federal Republic of Germany under the exclusion of German conflict law.

11.2 The courts of Landgericht Mannheim, Germany, shall have sole jurisdiction of any controversies regarding this EULA. Any action or other proceeding which involves such a controversy shall be brought in those courts in Mannheim and not elsewhere.

12. Severability and inconsistencies

12.1 Should any provision of this EULA be determined to be overly broad, ambiguous or otherwise unenforceable, such provision shall be redrafted in order to narrow its scope to the extent necessary to make the provision reasonable and enforceable. If the scope of the provision cannot be narrowed to such an extent that the provision will become enforceable, such provision shall be severed from this EULA.

12.2 In all cases the remainder of the EULA shall continue in full force and effect.

12.3 In case the terms of this EULA are in conflict with the terms of Microsoft Software License terms, the terms of the latter shall prevail with regard to the Microsoft Software.

13. Alterations

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- HART Interface Solutions
- Surge Protection
- Wireless Solutions
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- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
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