APPLICATION NOTE

WINDOWS SERVER 2016
REMOTE ACCESS

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1 Introduction

1.1 Scope of the document

This document describes, how to create a new user in Windows Server 2016. Give permissions to allow Remote Desktop Connection, Handle sessions and using the correct licenses for Automation Builder (AB).
Since AB V2.3 is released, we are supporting Windows Server 2019. This Application Note is based on Windows Server 2016.

1.2 Compatibility

The application example explained in this document have been used with the below engineering system versions. They should also work with other versions, nevertheless some small adaptations may be necessary, for future versions.

- Automation Builder V2.3.0 or newer
- Windows Server 2016

2 Installation of Automation Builder as a server administrator

2.1 Installation guide

To install Automation Builder on a Windows Server operating system, please make sure, you are logged in as **Administrator**.

Please run the Automation Builder setup and select your features you want to install.

No special settings are required for installing Automation Builder on a Windows Server operating system.

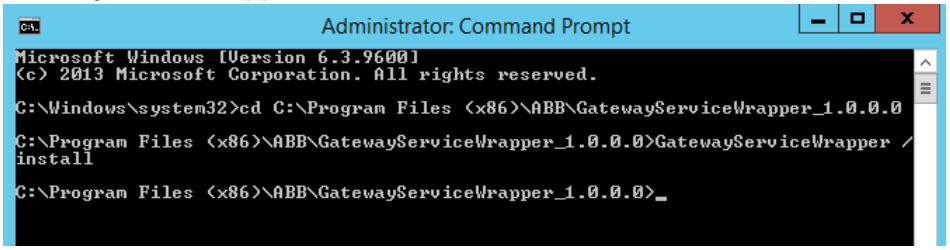
2.2 Services installation

There are two different Services required for the different PLC types.
For V2 CPUs some additional work is to do.
For V3 CPUs, the service should be installed during Automation Builder installation. Be sure, you have **rebooted** the computer, **after successful installation** of Automation Builder.

2.2.1 Install Gateway as a service for V2 CPU

- Open Command Window with Admin rights and change to folder
  C:\Program Files (x86)\ABB\GatewayServiceWrapper_1.0.0.0
  If the folder not exists, choose the file from the attached *.zip file, extract it somewhere and navigate to this folder.

- **GatewayServiceWrapper /install**



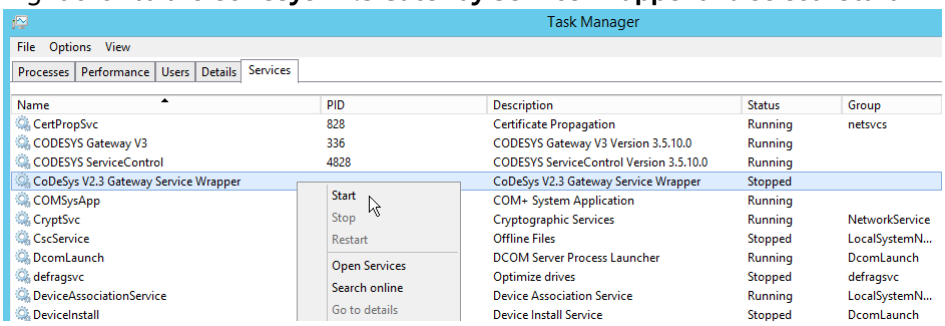
- Two new files will be created in install folder:

  GatewayServiceWrapper.InstallLog
  GatewayServiceWrapper.InstallState

- Reboot your computer

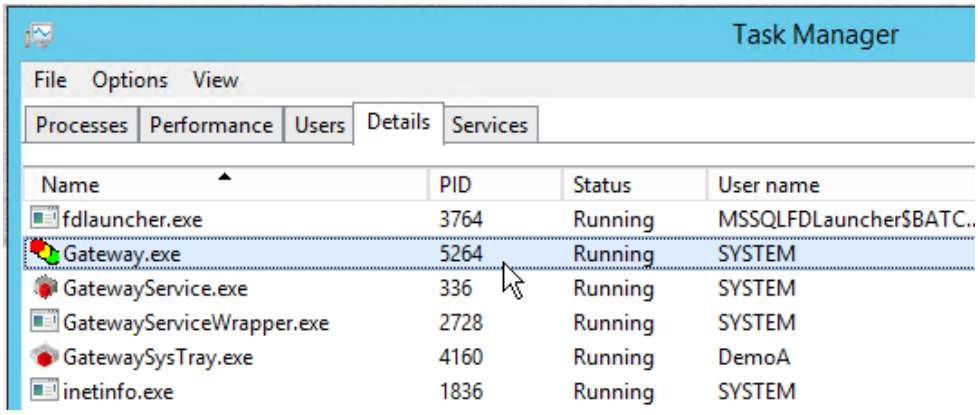
2.2.2 Start the Gateway Service Wrapper Service for V2 CPU

- Open the task manager
- Go to Services
- Right click to the **CoDeSys V2.3 Gateway Service Wrapper** and select “Start”



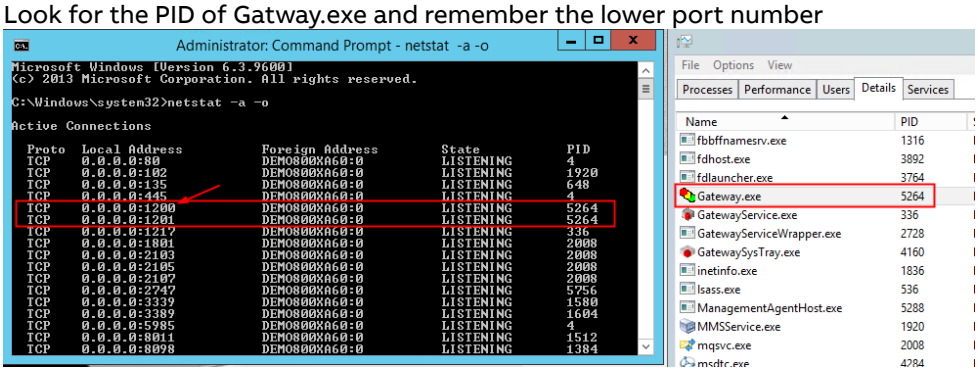
2.2.3 Optional: Find correct port address for CoDeSys Gateway V2 CPU

- Open the task manager, go to Details (**Processes**) and select Gateway.exe
- Look for the PID and remember that.



in the pic: **5264**

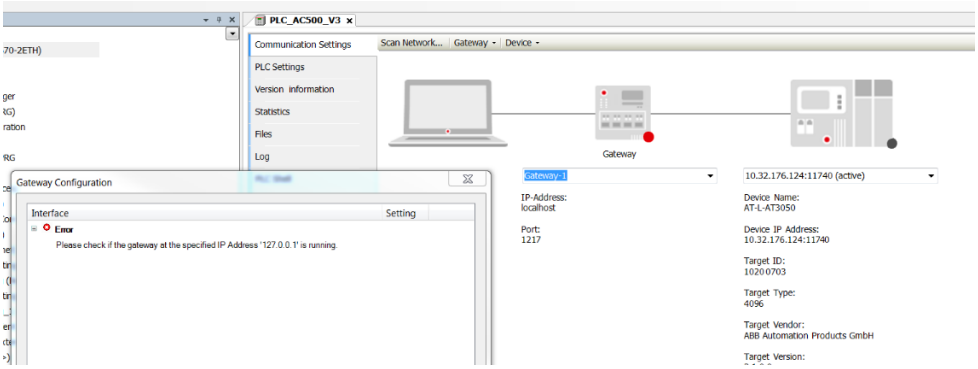
- Open the command prompt with admin rights
- Type:
  netstat -a -o
- Look for the PID of Gatway.exe and remember the lower port number



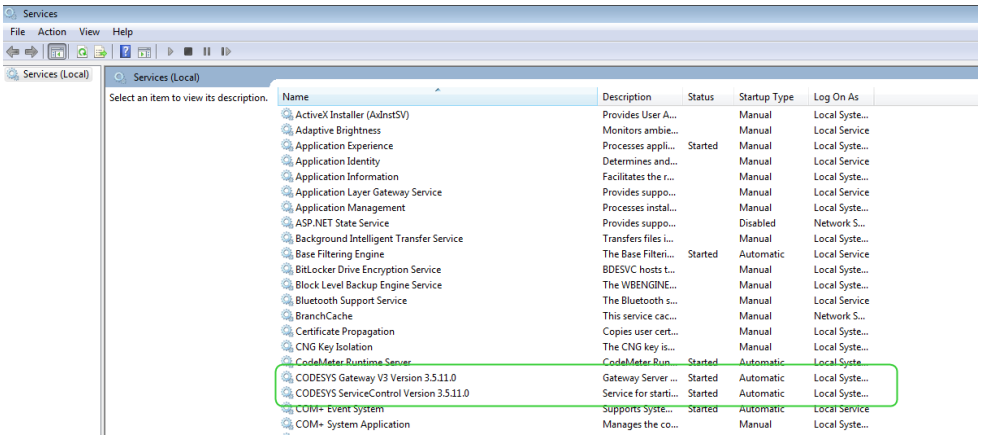
mostly it is Port 1200

2.2.4 Optional: Install Gateway as a service for V3 CPU

- If you get this screen and the Gateway stays red inside Automation Builder, then it could happen that no Gateway is installed, or the service is not registered.

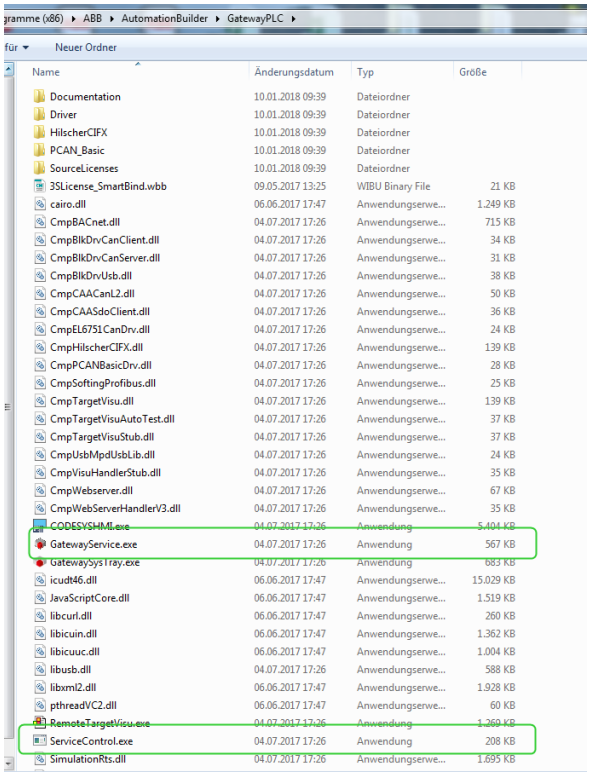


- Please check first if you have "**CODESYS Gateway V3**" as service running. For that navigate to:
  Start- > Control Panel -> Administrative Tools -> Services

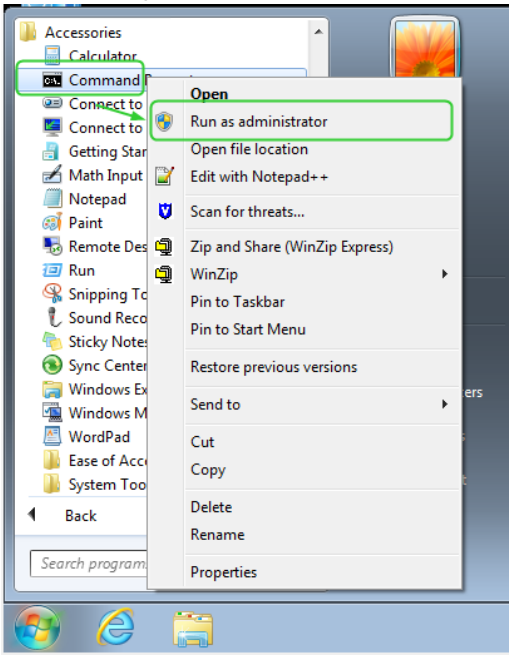


- If this both entries are not available, we need to install them.
  Please navigate to:
  C:\Program Files (x86)\ABB\AutomationBuilder\GatewayPLC

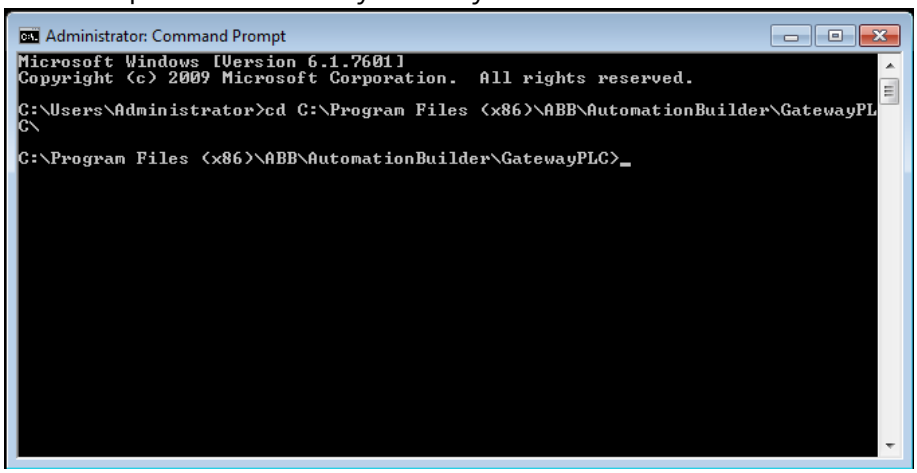
  Here this both files should be available:
  - ***ServiceControl.exe***
  - ***GatewayService.exe***



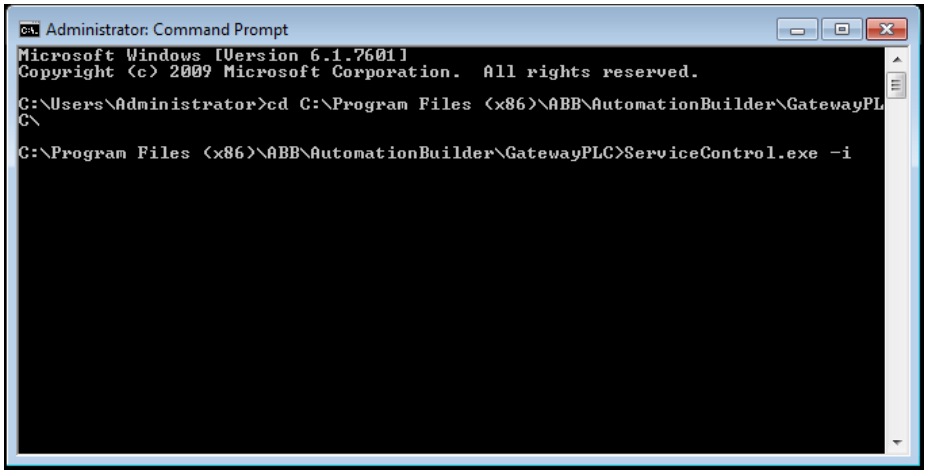
- If these files are there, please open the command prompt with admin rights. For that navigate to Start- > All Programs -> Accessories, right click to “Command Prompt” and select “**Run as administrator**”.



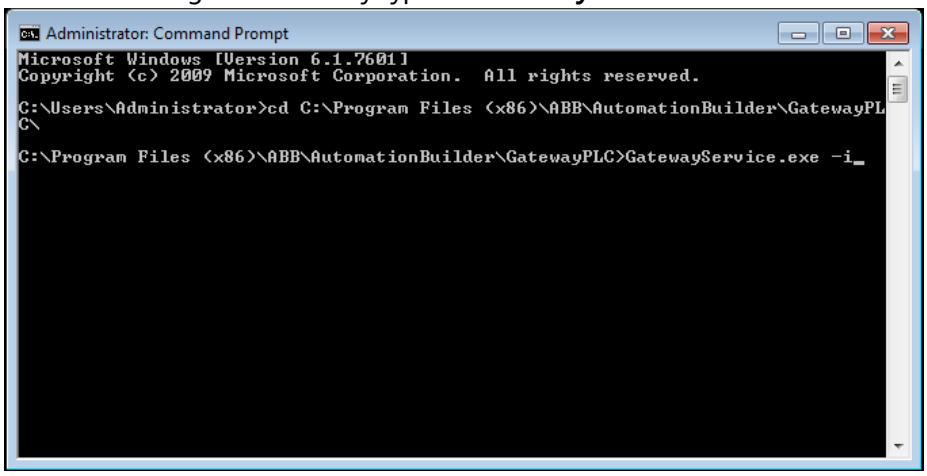
- Insert the path to the Gateway directory:



- We are installing the service by type in:
“ServiceControl.exe -i”



- We are installing the service by type in: “**GatewayService.exe -i**“

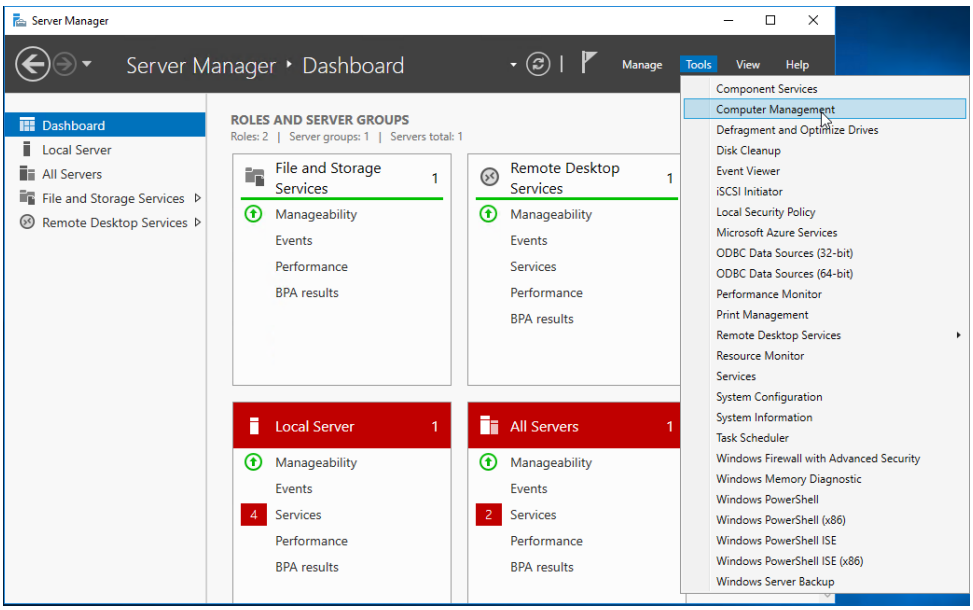


- After reboot of the computer, you can check again if the service was successfully installed. The services should be available and you can login to the V3 PLC.

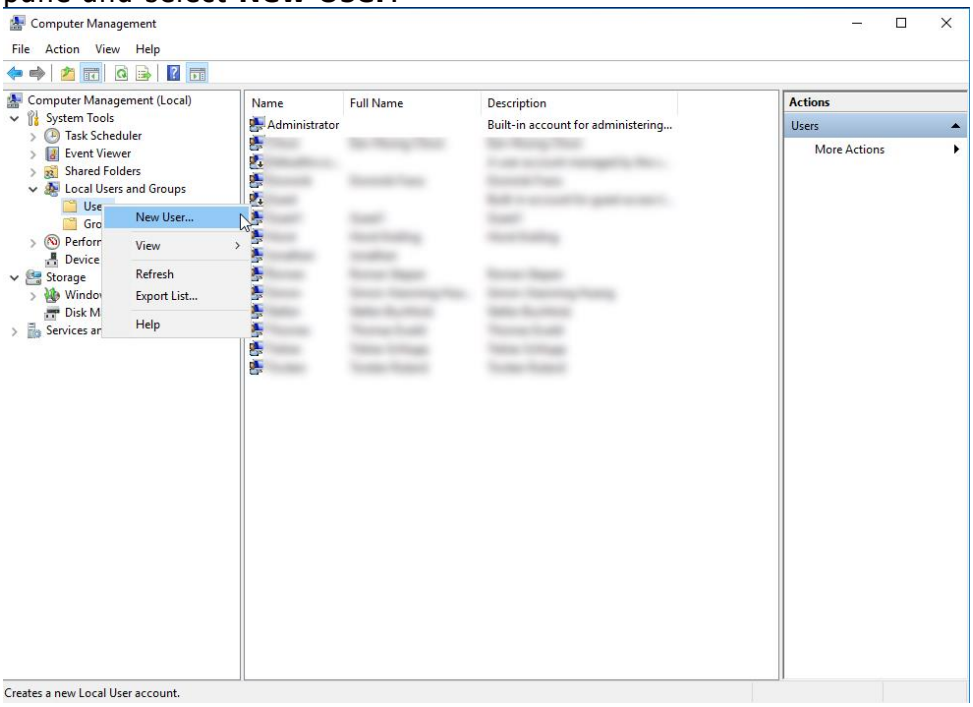
3 Setup of Terminal Server clients

3.1 User setup functionalities (Create a new user)

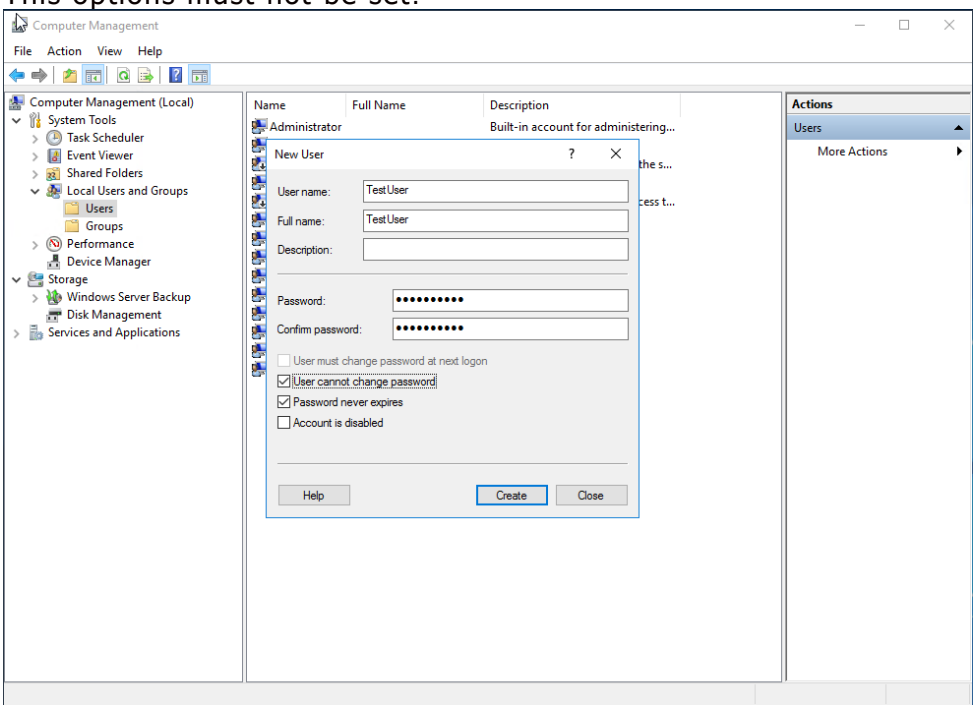
- Run **Server Manager** and Open **Tools** - **Computer Management**



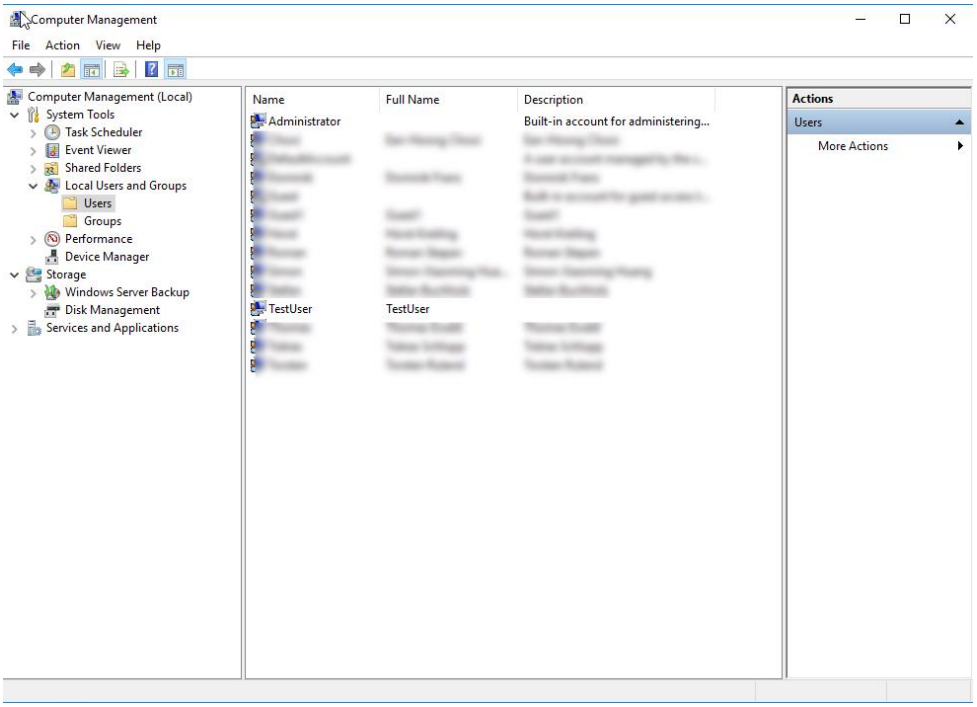
- Right-Click **Users** under the **Local Users and Groups** on the left pane and select **New User**.



- Input User name and Password for a new user and click **Create** button. We set also some extra options. **User can not change password** is enabled and also **Password never expires**.
This options must not be set!

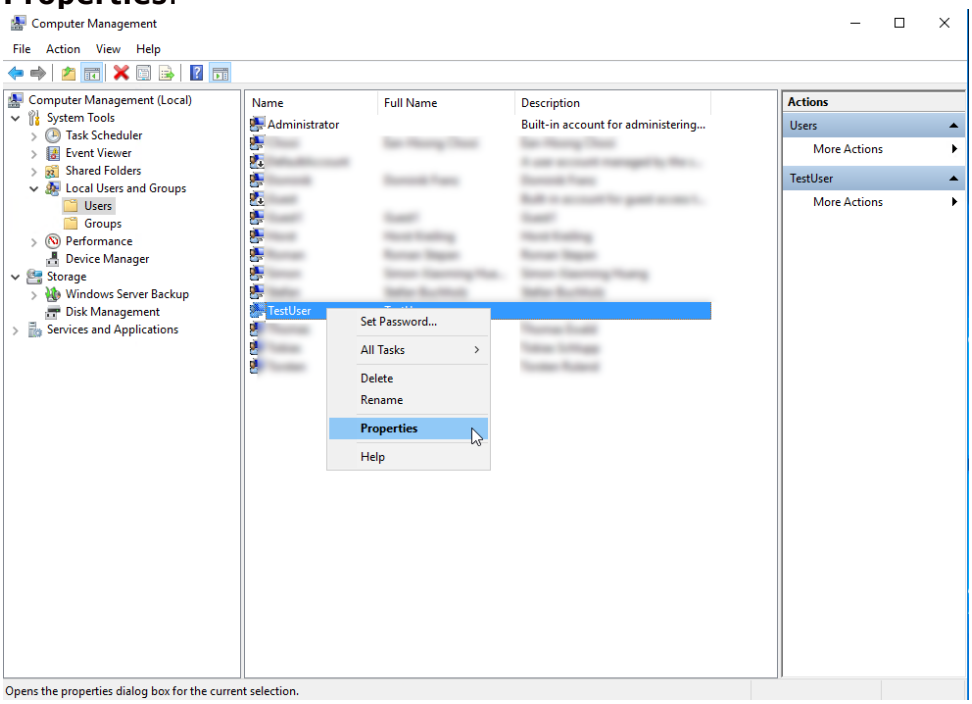


- After creating normally, New user (**TestUser**) is shown on the list like follows.

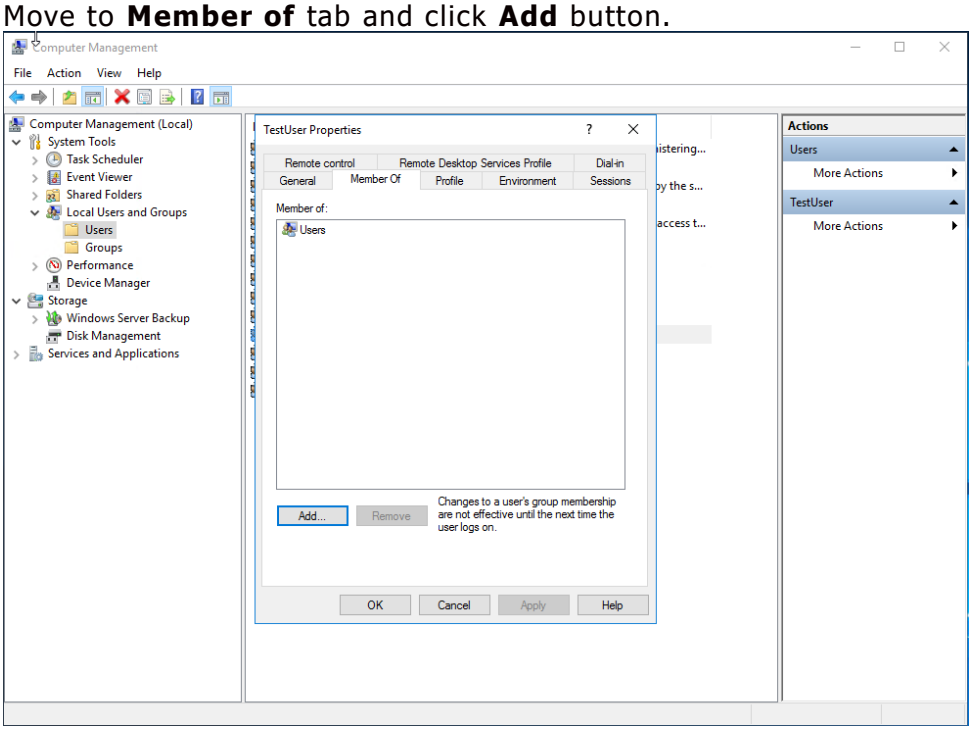


3.2 User rights functionalities (Create RDM permissions)

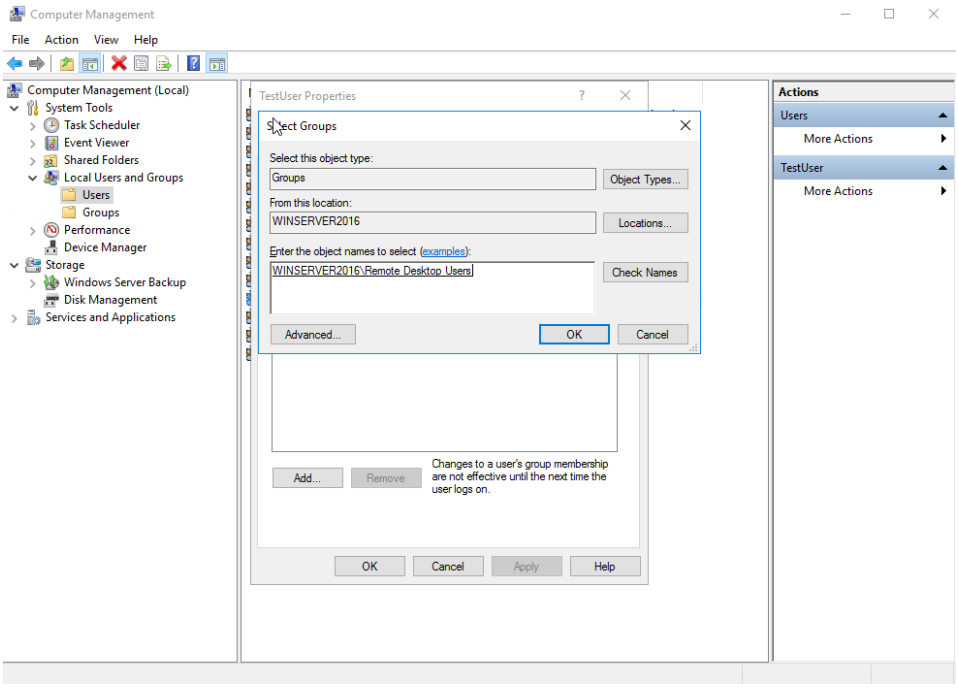
- If the new user should receive the permissions to use **Remote Desktop Management** (RDM), Right-click the user and open **Properties**.



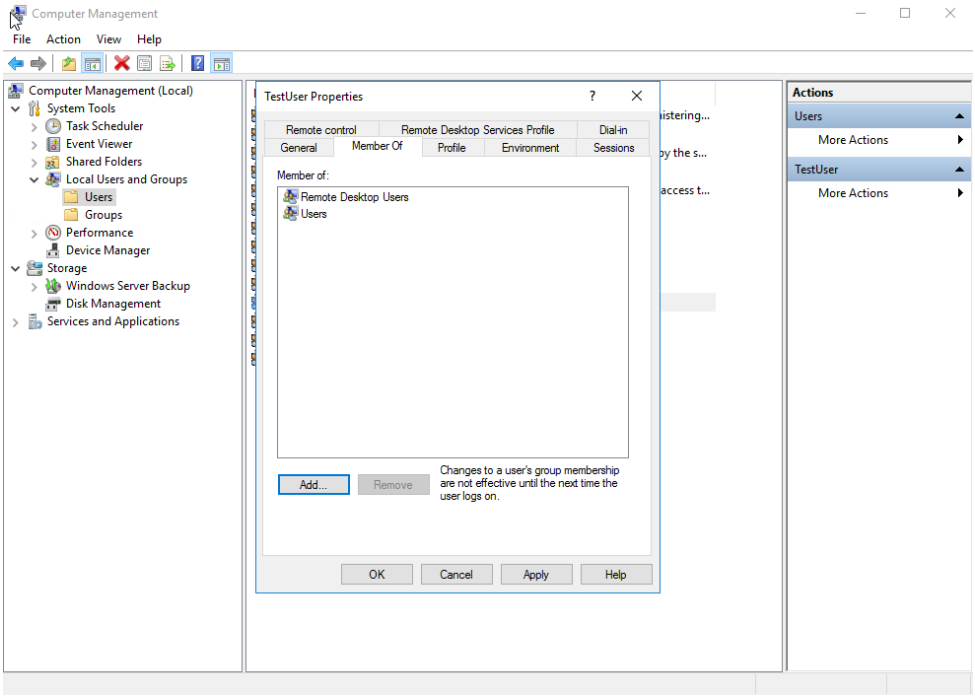
- Move to **Member of** tab and click **Add** button.



- Specify **Remote Desktop Users** group like follows.



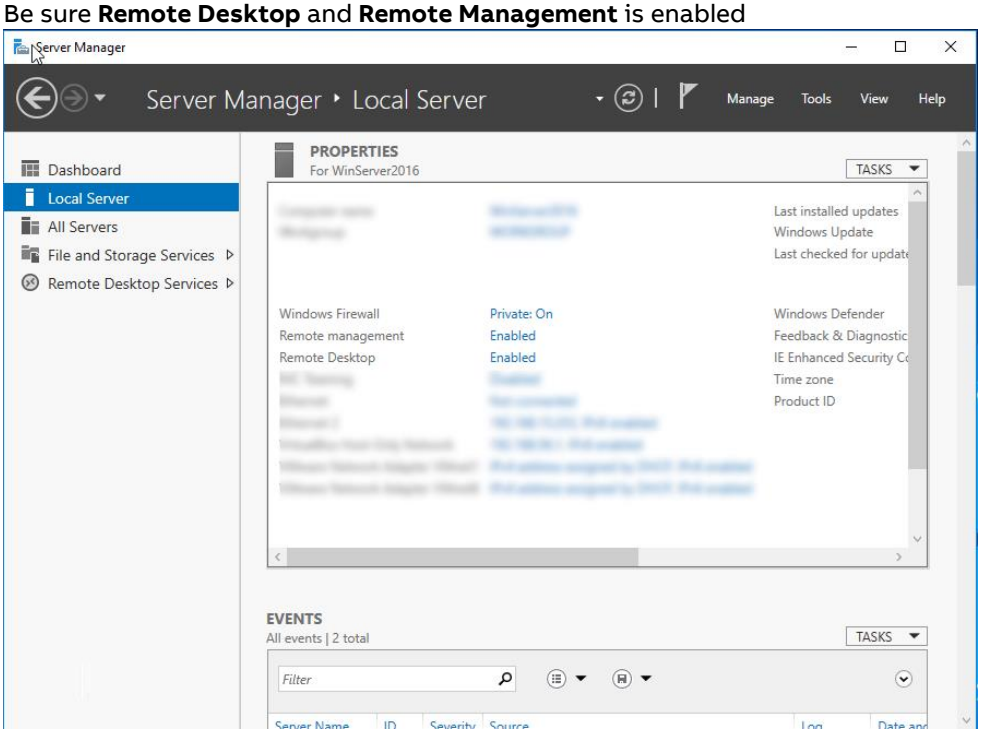
- Make sure **Remote Desktop Users** group is added on the list and click **OK** button to finish settings.



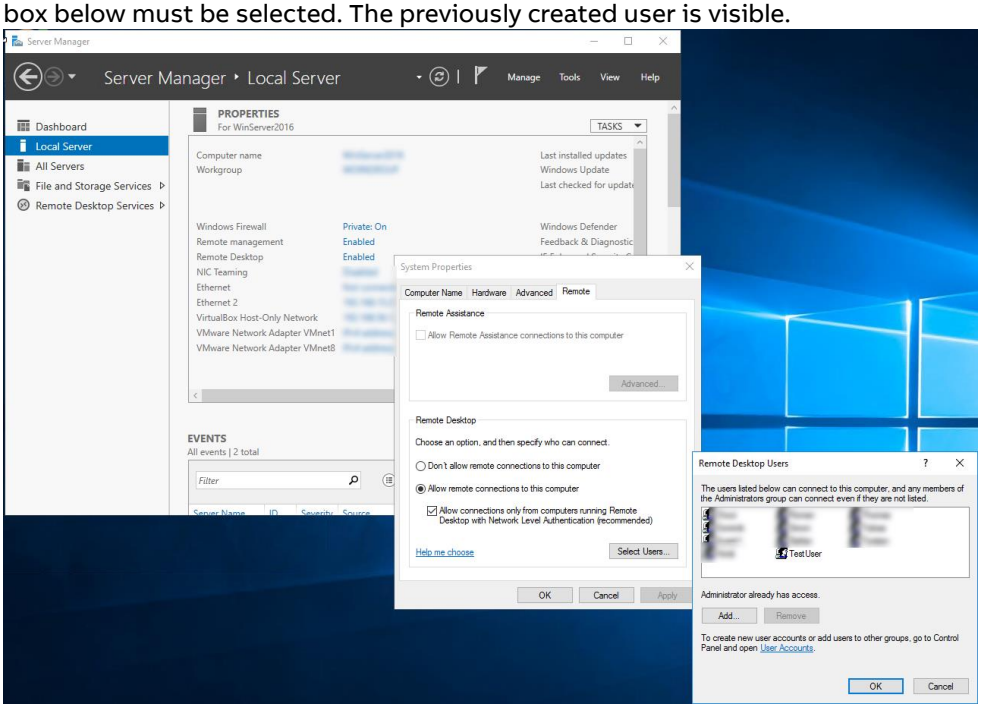
Now, we have created a new user and give them permissions to login via Remote Desktop app.

3.3 Enable Remote Desktop on Windows Server

- Be sure **Remote Desktop** and **Remote Management** is enabled



- Klick on the **Enabled** button to see advanced features.
  Be sure, **Allow remote connections to this computer** is selected. Also, the check-box below must be selected. The previously created user is visible.



4 Setup of Automation Builder License server

4.1 License types

ABB provides different license types. Network license for shared usage within a local area network or for usage on Windows Server operating systems. Per license one user can use the license at the same time.

Network licenses that can be borrowed for offline use are available on request.

Be sure, that you order a **Network Enabled** license if you are working on Windows Server operating systems. Other licenses without Network Enabled will not work.

Premium licenses are already network enabled.

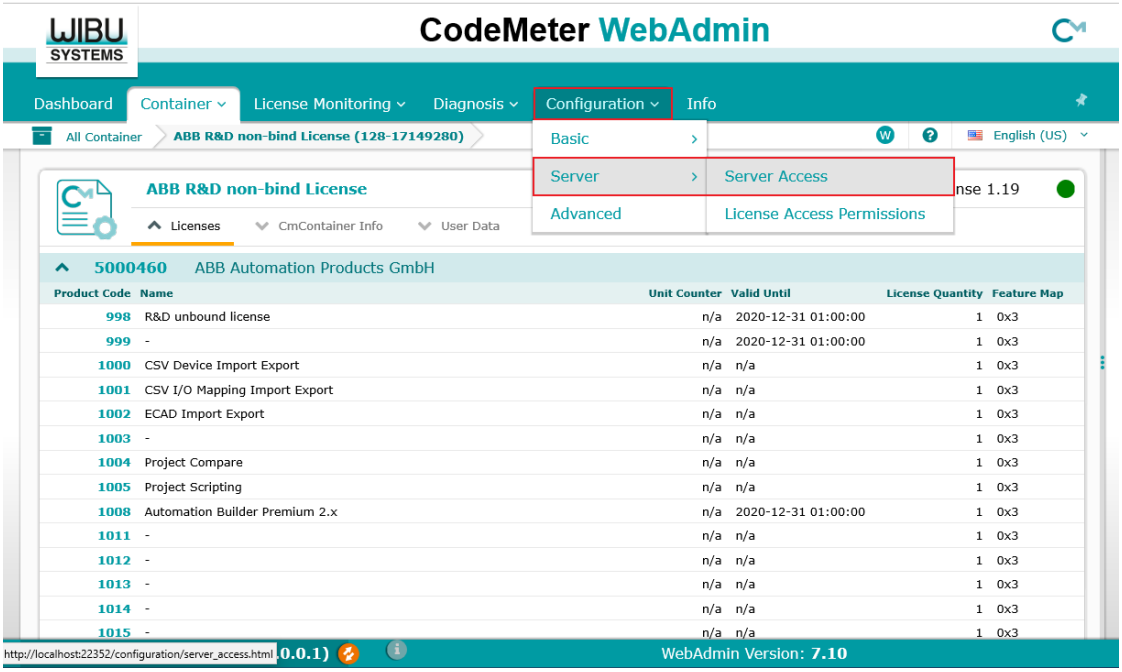
Trial licenses are not Network Enabled.

4.2 Configuring a network license server

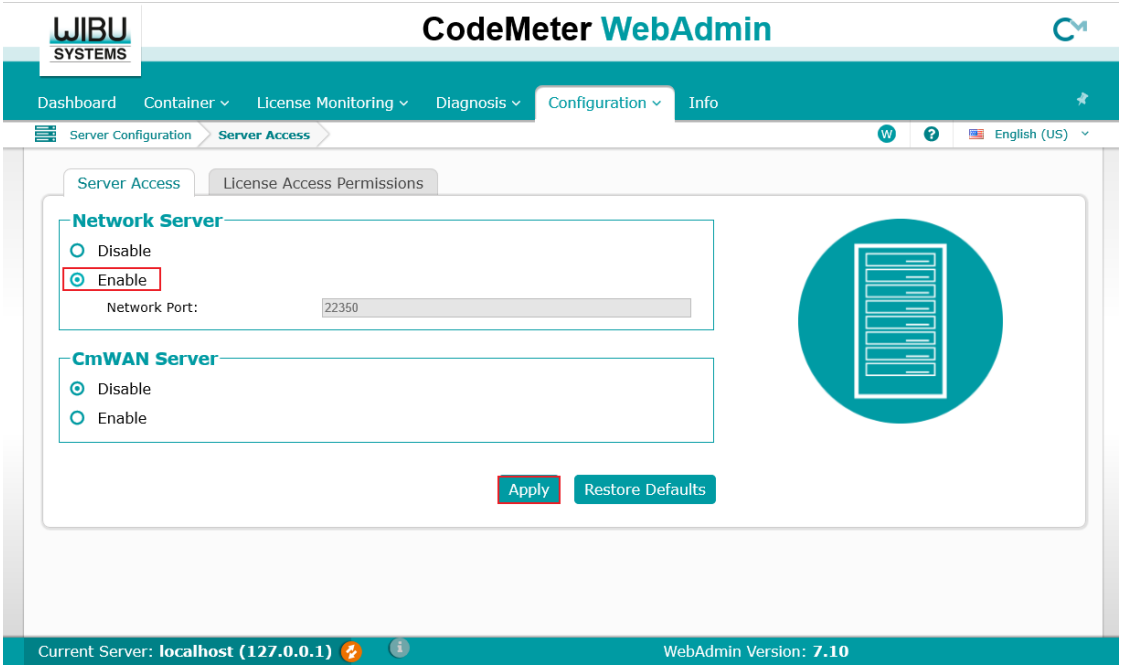
Network license must be registered.

Automation Builder license must be activated.

- Launch CodeMeter WebAdmin
- Select **Configuration → Server → Server Access**



- Enable Network Server
- Select **Apply**



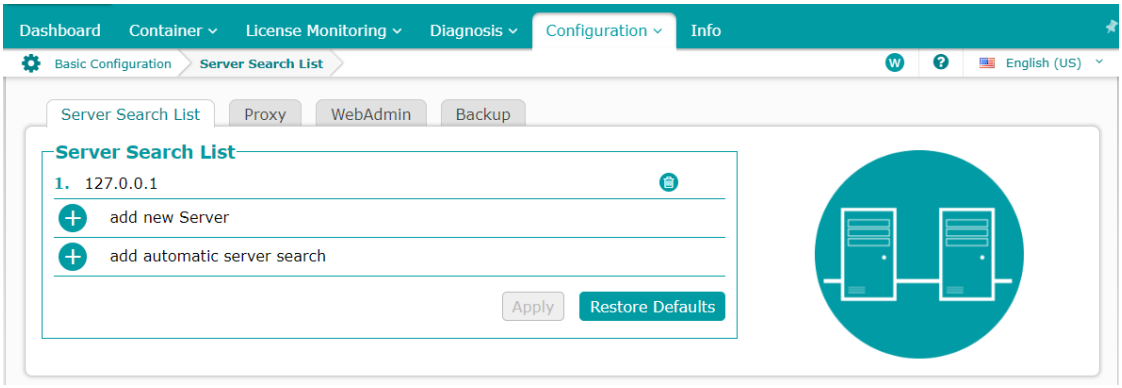
- For the changes to take effect, restart CodeMeter Control Center

	Note: Further information's can be found in the online help. Please check chapter: PLC Automation with V2 CPUs > Getting started > Managing your licenses > Network licenses > Setting up a network license > Configuring a network license server

4.3 Configuring the client side

The default settings of Automation Builder and the CodeMeter (on client side) are 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.

It's recommended to use the localhost "127.0.0.1" as first entry to search on your computer for your license. If you have a server with licenses, just add an new entry and the IP address of the server and move them to position 1.



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