

CAN INSTALLATION AND CODESYS GATEWAY TROUBLESHOOTING GUIDE

STW CAN DRIVER INSTALLATION

The STW CAN Drivers are installed as part of the WinFlash installation process. If given the option, make sure to select USB as the interface type. The drivers can be found at the standard install location C:\Program Files (x86)\STW\KEFEX Winflash\CANDLLS\peakinst. CoDeSys users can also find the drivers at C:\Program Files (x86)\3S CoDeSys V3.5\GatewayPLC\STW_CAN_DLLS\peakinst. OpenSYDE users can find the drivers in the openSYDE folder in the can_driver_installation_peak folder. Otherwise the driver can be downloaded from this link https://drive.google.com/open?id=153x_nJAuikKLKYUC4PaGiT7zHpLdhl81.

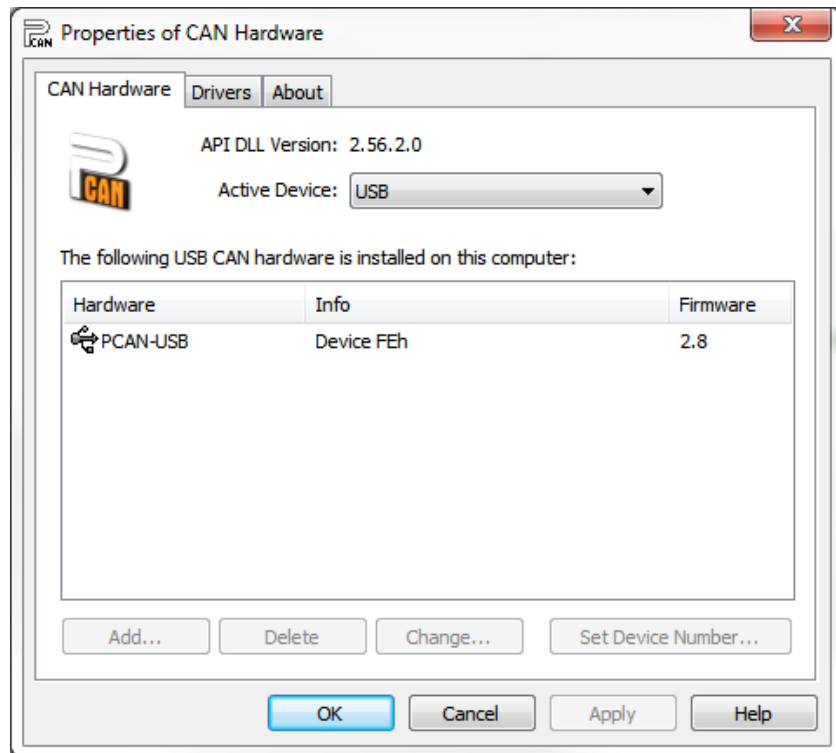
PEAK DRIVER INSTALLATION

If the LED on the CAN dongle does not light, you may need to download the drivers directly from PEAK at <https://www.peak-system.com/quick/DrvSetup>. If the LED still does not light, please contact STW for support.

TROUBLESHOOTING

Verify that the file C:\Windows\SysWOW64\CanApi2.dll exists. For 32-bit systems, the file is C:\Windows\System32\CanApi2.dll. If the file cannot be found, you can download it from this link <https://drive.google.com/open?id=1RrrLhJeJlyEKo5TKNcGFhdm4xs23o6D>.

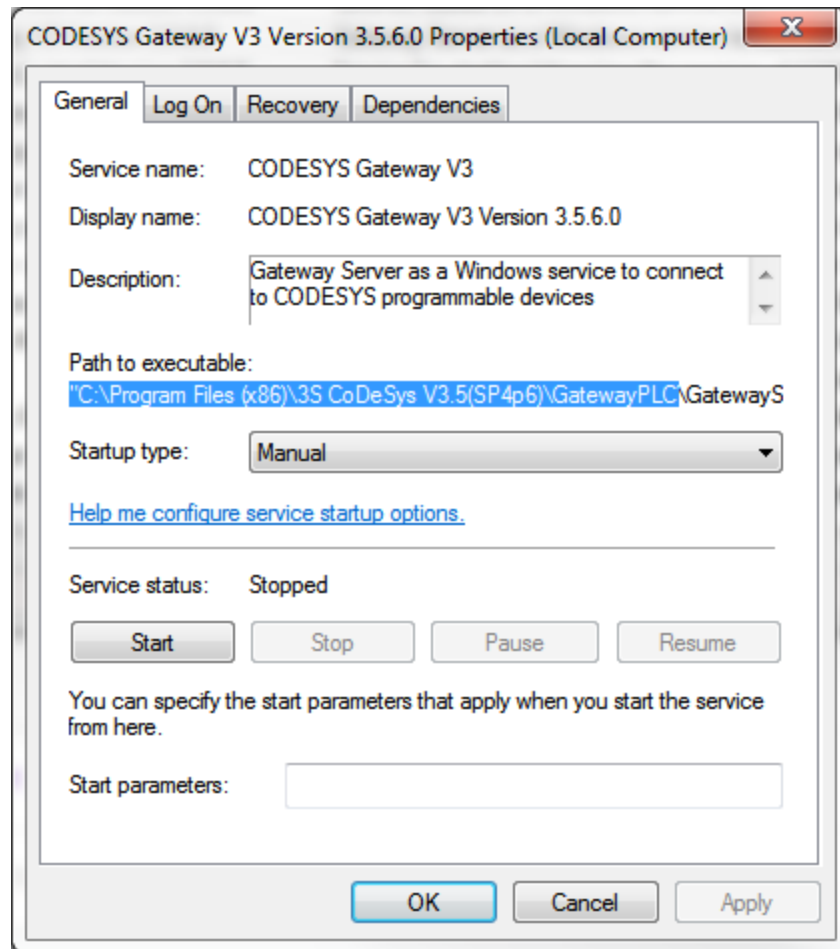
Verify that the driver interface is USB. In your Windows Control Panel, you should be able to find "CAN Hardware". Please select that and confirm that USB is selected. If it is not, please select USB and then click Apply.



CODESYS GATEWAY OPERATION

CONFIRM GATEWAY FILES LOCATION AND CONFIGURATION

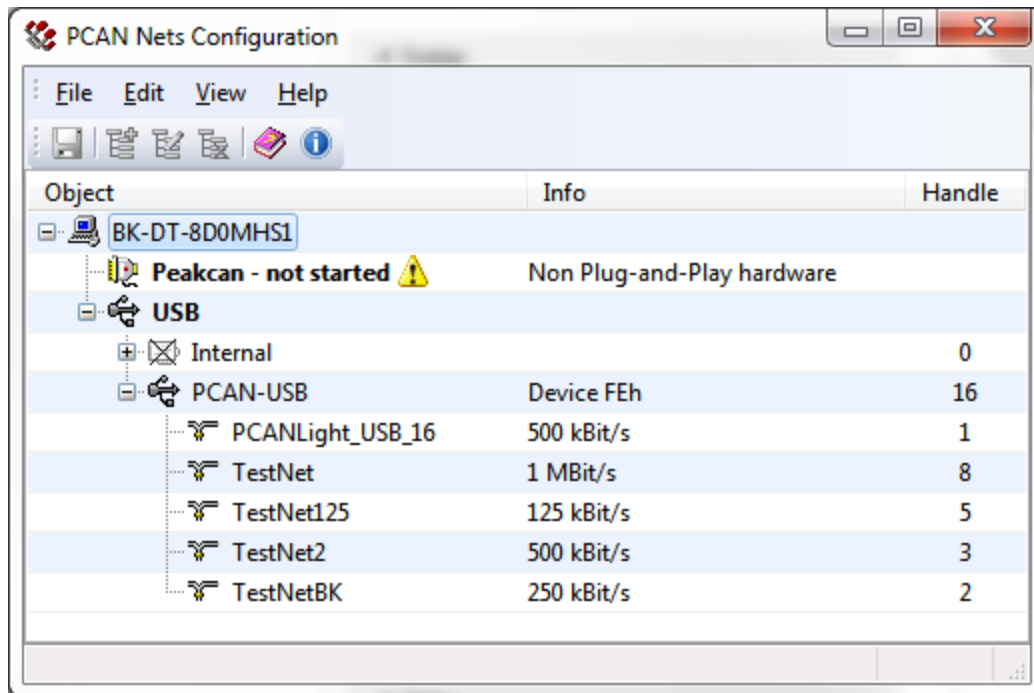
Using the Services control (Right click on taskbar, select Task Manager, select Services tab, click services button on bottom right), locate the "CODESYS Gateway V3" service, whichever version that is running is fine. Right click on the service and select Properties. Confirm the path of the service.



(For SP11 gateways, the Gateway.cfg file will indicate another folder location. Navigate to this folder and then continue.) Navigate to the folder and confirm that the Gateway.cfg file matches the contents of the Gateway-STW-CAN.cfg file. Also confirm that the stwpeak2.ini file in the folder has the "NET_NAME=TestNet" line.

CONFIRM NETWORK EXISTENCE

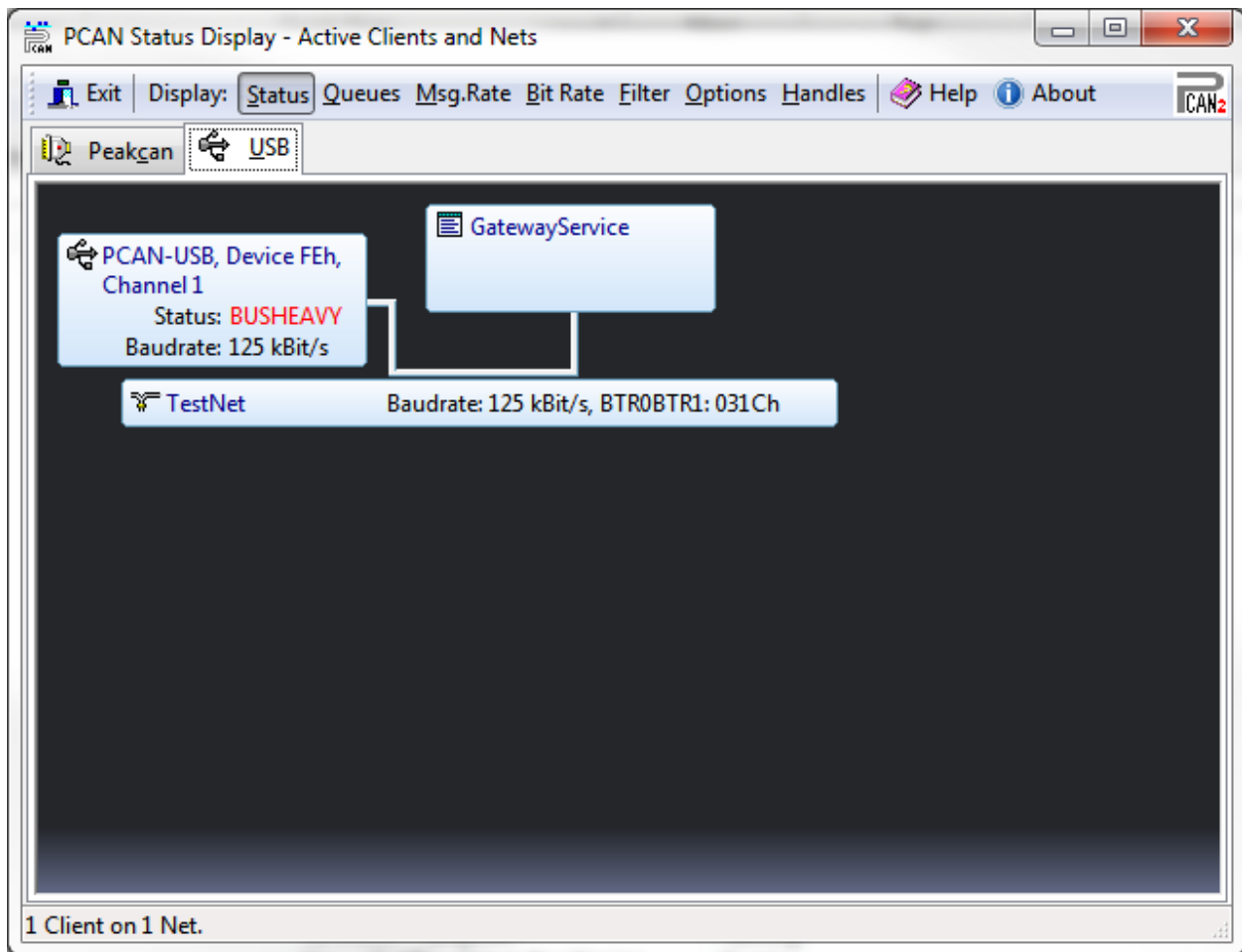
Using the PCAN Nets Configuration tool, confirm that the "TestNet" network is attached to a PCAN-USB device.



If it does not exist, please add it. Note, you may have to launch the tool by right clicking on it and selecting "Run as administrator" to make changes. Make sure to save your edits.

CONFIRM GATEWAY OPERATION

Return to the services control. Right click the "CODESYS Gateway V3" service and select stop. Make sure that the service can completely stop. If the service gets stuck at "stopping", you will need to manually kill the service. Go back to the Task Manager Services tab. Locate the "CODESYS Gateway V3" service and note the number in the PID column. Now start a Command Prompt by right clicking on it and selecting "Run as administrator". Use the command "taskkill /F /PID #####". Replace the ##### with the PID value from the Task Manager Services tab. The service should no show as stopped. In the services control, right click the "CODESYS Gateway V3" service and select start. Now go to your CoDeSys program, select the controller device, then the "Communications Settings" tab. You should see a green light on the Gateway. If you do not, contact STW for support. You can now select "Scan network..." You should see the LED on the dongle blink. You can also confirm the Gateway operation with the PCAN Status Display tool.



If you cannot confirm the gateway is connecting to the dongle, please contact STW for support.

CONFIRM CONTROLLER CONFIGURATION

For a successful connection, the configuration of the controller must match the settings in the Gateway.cfg file. On the Controller->Configuration tab in CoDeSys, make sure the proper CAN bus is selected and its baud rate is set as expected. Confirm the baud rate, the NodeID, and BaseID match the settings in the Gateway.cfg file. If any changes need to be made to the Gateway.cfg file, please save the changes and then start and stop the gateway per the above instructions.

CONFIRM CONTROLLER OPERATION

To connect to the controller with CoDeSys, the controller must be running a correctly configured CoDeSys program. First time use of the controller will require a built application and the CoDeSys RTS loaded onto the controller through either WinFlash or openSYDE. Once loaded, confirm externally that the application is running. The CoDeSys template application has a cycling LED that can be used to confirm that application is running.