



# ATS

Advanced Technology Services, Inc.

We Make **Factories** Run Better.

## Upgrading to an ePro Classic

When upgrading from a Panelmate Power Pro HMI to a Panelmate ePro Classic HMI, the configuration file used on the older Power Pro must be converted and modified to use an OPC Server instead of a resident communication driver. The Power Pro Configuration Editor v 2.50 or newer will be needed for this conversion.

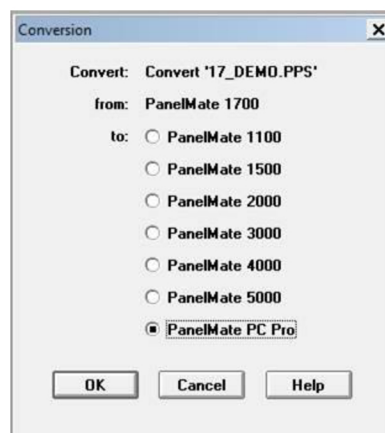
The Panelmate ePro HMIs utilize a customized OPC Server software, KepServer\_ePro. This software is included with the purchase of an ePro Classic and must be used to create the OPC driver file that will be used to communicate from the HMI to the PLC.

The following examples go through the process of converting and modifying the existing Power Pro configuration, creating the OPC driver file, installing OPC drivers from the KepServer\_ePro CD and setting up the ePro Classic to run the Power Pro configuration.

This software is a 32-bit software and runs best in Windows XP but can run in Windows 7 if installed properly. Instructions for installing in Windows 7 can be found on the Panelmate Downloads page of the ATS Online Store at [http://info.atsonlinestore.com/html/panelmate\\_downloads.html](http://info.atsonlinestore.com/html/panelmate_downloads.html).

### Converting and Modifying the Power Pro Configuration

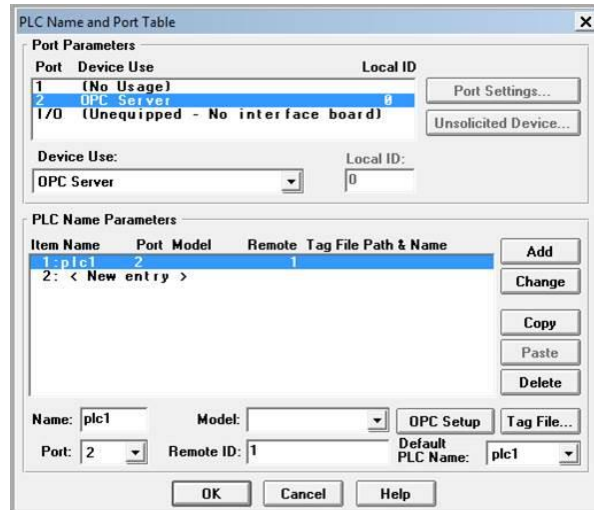
1. Start the Power Pro Editor software and verify that the configuration database is open.
2. Import the Power Pro configuration file (.pps) into the database by clicking on File, Import and navigate to the drive location where the configuration is stored. The software will read the configuration settings and imported it into the appropriate HMI Series.
3. Convert the configuration to a Panelmate PC Pro configuration by clicking on the configuration in the database to highlight it and then click on File, Convert.
4. The Convert Windows will open. Select Panelmate PC Pro and click OK.



# 800.328.7287

[www.atsonlinestore.com](http://www.atsonlinestore.com)

- Expand the converted configuration and double-click on the PLC Name and Port Table. Click on the driver set up in the Port Parameter section of the window to highlight it and click on the Device Use: dropdown menu and select OPC Server. If your configuration communicates via Port 1 to one PLC and Port 2 to another PLC, this will have to be done for both ports.



- Click on the first PLC in the PLC Name Properties section of the window to highlight it and then click on OPC Setup. In the setup window, the Server Name **must** be set to EatonElectrical.KEPServer\_ePro (case sensitive). The Access Path Name will be set to the Channel Name and Device Name that's setup in the OPC Server file that must be developed for the ePro Classic. The example here is set to Channel1.Device1. Click OK to return to the PLC Name and Port Table. (If a customer installed OEM-Specific OPC Server software is used, the Server Name will need to point to the

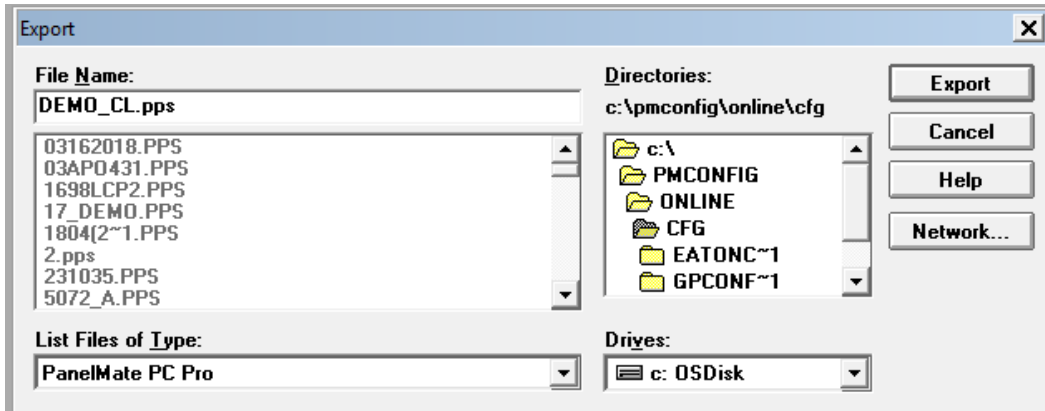
If the PLC Name and Port Table lists multiple PLCs, the OPC Setup will need to be performed for each PLC. For example, if a second PLC is listed, the Access Path Name could be set to Channel1.Device2.

Once all PLCs are modified, click OK to exit the PLC Name and Port Table.



- Click on the name of the configuration file to highlight it and Save the changes to the database.

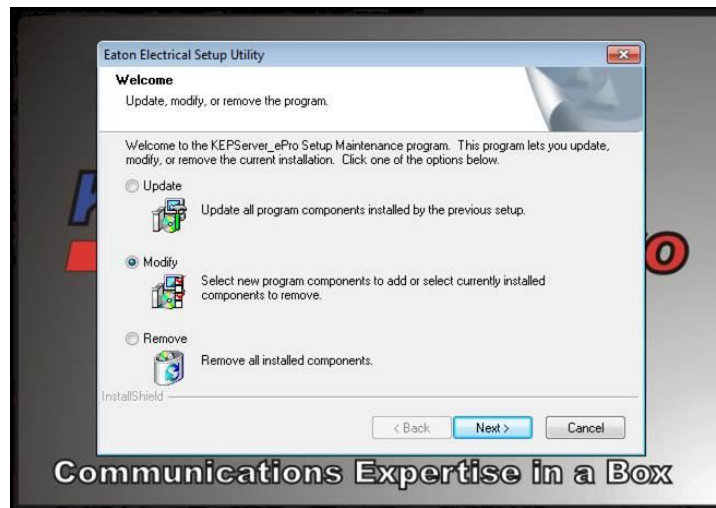
8. Export the modified configuration as a new .pps file name by clicking File, Export (**Do Not Use Export As**)



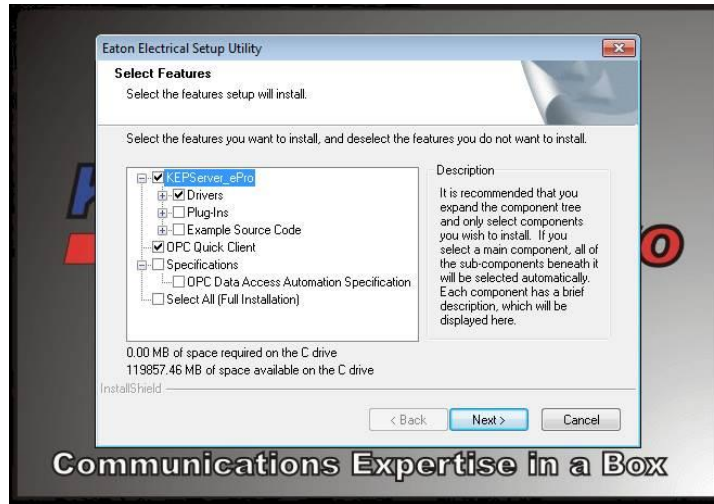
9. Move the modified .pps file to a USB jump drive that will be used to move the configuration to the new ePro Classic HMI.

## Creating the OPC Server File (.opf)

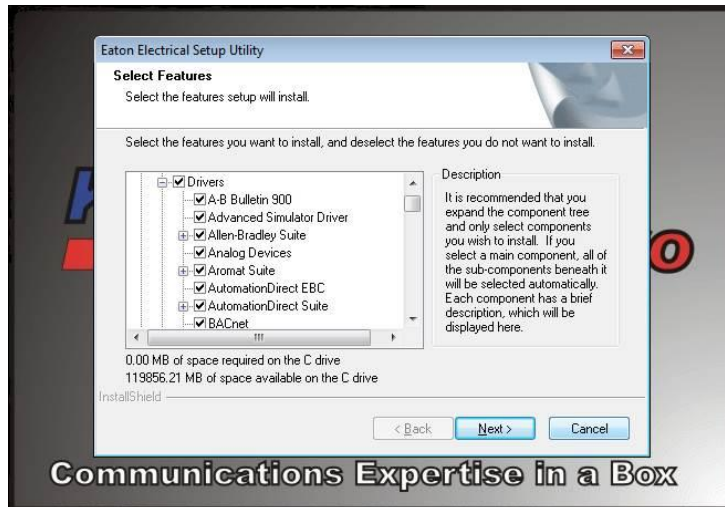
1. Install KepServer\_ePro from the CD that's included with the ePro Classic on a computer to develop the OPC Server file.
2. Select Modify and click on Next.



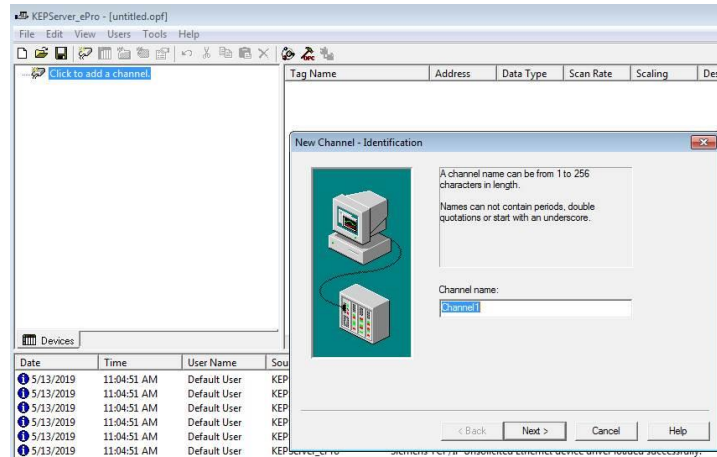
KEPServer\_ePro, all Drivers and the OPC Quick Client will be preselected for installation.



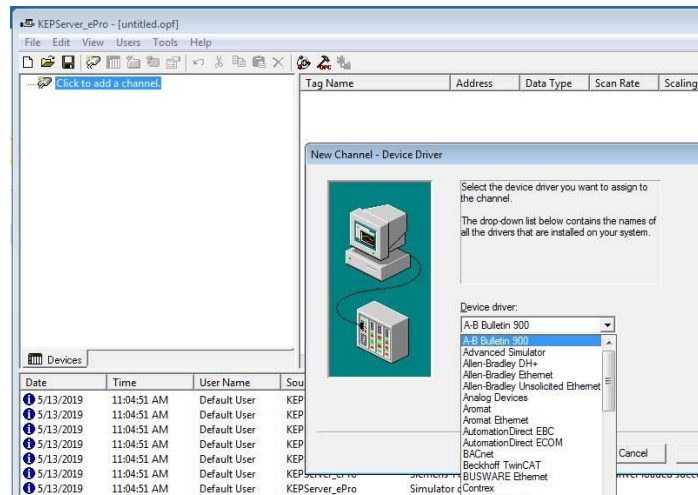
All Drivers can be installed or expand the Drivers menu and select just the communication protocol needed for creating the OPC Server file. Click Next and when installation is complete, click Finish.



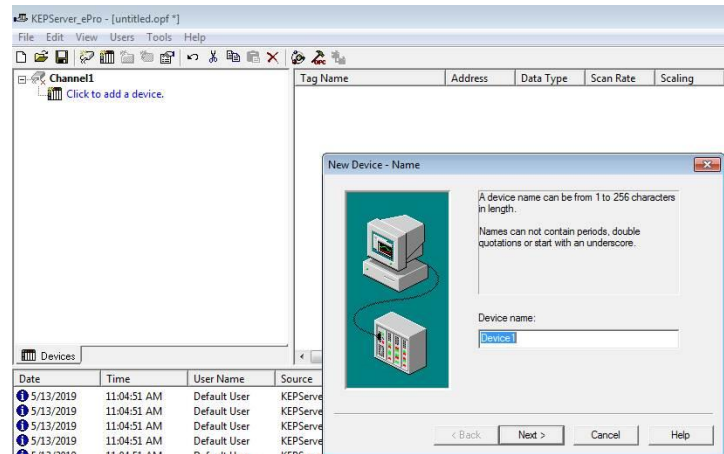
- Open the KepServer\_ePro software and Click to Add a Channel. Name the Channel or leave the Default name. Click Next. **Note:** KepServer\_ePro will run in Demo mode for 2 hours. If more time is needed, save your OPC Server file and restart the software for another two hours of development time.



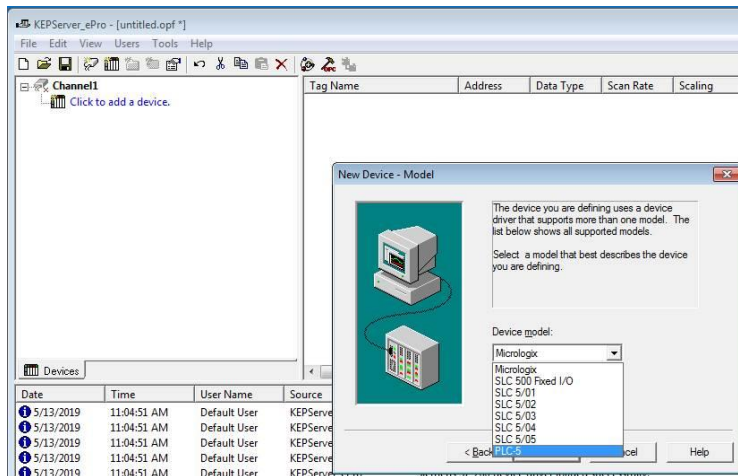
Select the Communication Protocol to be used to communicate with the PLC. (In this example, DF1 was selected.) Click Next to progress through the communication setup and click Finish when done.



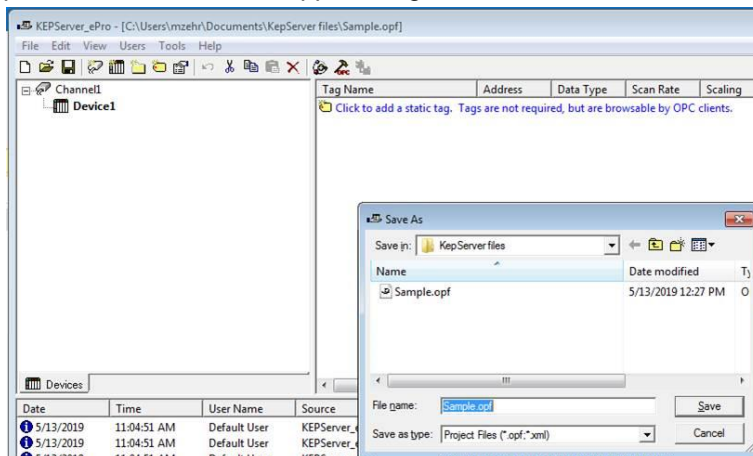
- Click to Add a Device. Name the Device or leave the default Device Name then click on Next.



Select the PLC Device Model. Proceed through configuring the Device Settings. **Note:** If the protocol settings request that the PLC rack slots be populated with the I/O module model number, make sure that information is set up as leaving that information blank can cause issues in communicating to the PLC.



- If Static Tags are needed, these can be set up now. Save the OPC Server file and copy it to the external jump drive that contains the .pps configuration file.



## Installing the new .PPS and .OPF files on the ePro Classic

1. Connect a USB Mouse and keypad to the ePro Classic. Power up the HMI and Exit out of the Demo configuration.
2. Copy the new .PPS and .OPF files to the ePro PS unit to "D:\Cfg" directory.
3. Edit D:\PMStart.cmd and point MyCfg = to the path and name of the PPS file.
4. Click on the KepServer\_ePro icon in the System tray, when the KepServer\_ePro window opens, click on File, Exit and Shutdown. The software cannot be running in the background but must be shut down before the modifications in the next steps are made.
5. Install KEPServer\_ePro on the ePro PS unit, choose Modify from Upgrade, Modify, remove selection and select the correct driver from the driver list to install (copy the installation CD to USB memory stick or browse to a shared drive with the install files over Ethernet).
6. Open KEPServer\_ePro and set the Default project to the new OPF file. (Tools > Options ..., General Tab, Default Project property), then save and close KEPServer\_ePro.
7. Perform a Protect Mode Save operation (Start > ePro Manager, Protect Mode Save tab, Commit).
8. Connect the appropriate communications cable.
9. Go on line and debug. Note: the configuration should start automatically after the Protect Mode Save operation and reboot.

Some communication protocols that are available with resident COM drivers in the Power Pro HMI may require additional communication converters or OEM-specific OPC Server software when upgrading to the ePro Classic.

Known protocols that require additional hardware and **possible** adapters are:

AB Data Highway Plus	1784-U2DHP
AB DH-485	1747-UIC
Modicon Modbus Plus	TSXCUSBMBP (must use v7.0 driver)
Siemens Profibus	6GK1571-0BA00-0AA0 (Simatic S7 via Profibus or MPI)

**Note: ATS cannot guarantee operation of hardware adapters. ATS does not provide setup and support of hardware adapters or OEM-specific OPC Server software.**