IND-Concepts

System Integration, Industrial Problem Solving and Automation Supplies

Ind-Concepts
PLC Trainers and Automation Supplies

PeakHMI quick start

In this quick start guide we will interface your plc with your PC and run PeakHMI. It will run for 2 hours in configuration and 20 minutes in runtime, then the program needs to be restarted, just double click on the icon again. This is a great way to get comfortable with an HMI (Human Machine Interface or MMI Man Machine Interface) as more and more machines are using them to control some or all of the interaction of the human side of the machine.

We are big fans of PC based HMI and have tried to stay away from the hardware type HMI (touch screen and key based). If you have an issue with one of the dedicated HMI, e.g. C-MORE, PanelView, Red Lion (the best of the bunch), there is very little you can do to get out of a jam, other then change out the HMI/touch screen. With a PC based HMI you can change the PC or hard drive, you can ghost the project for a back up and have you equipment/process up and running in seconds. You can have several PC for the price of the others.

The objective of this guide is to show you how to set up the HMI on your PC and get it operational. You can change anything in PeakHMI you choose. The point is for you to learn how your PLC runs in relation to your HMI. You can not hurt the PC or HMI. Just delete the HMI project and download it again or try and repair what's not working.
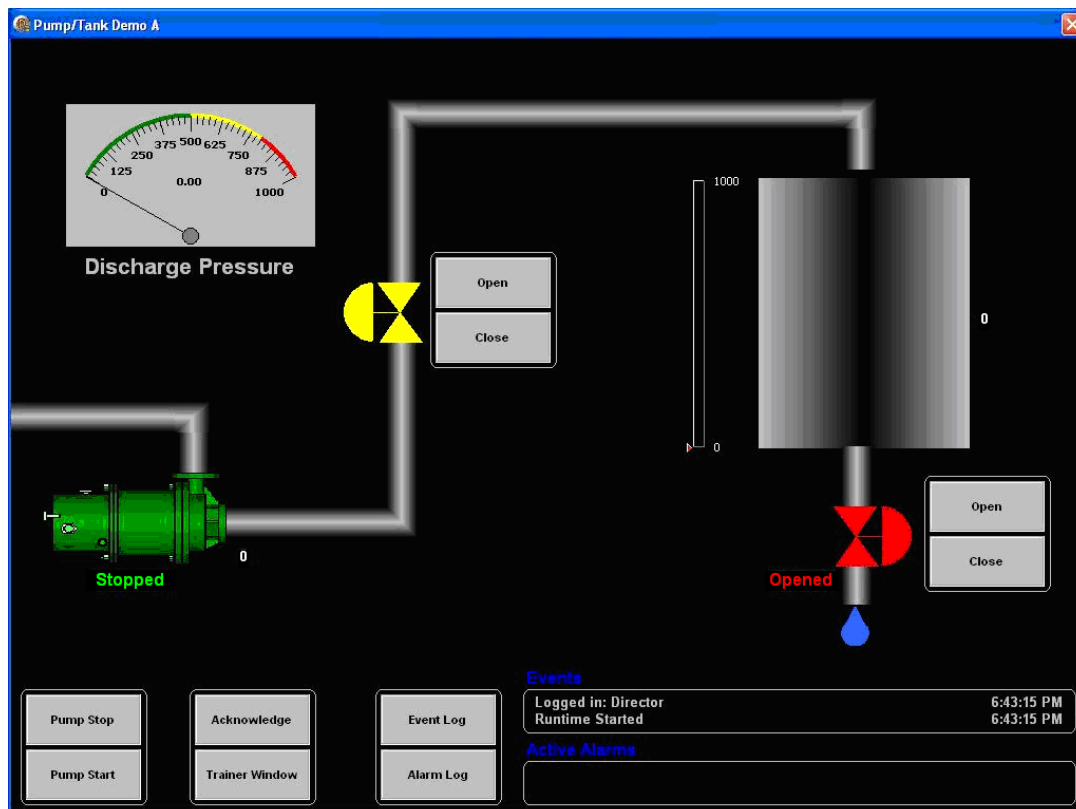

By using the inputs on your PLC and the soft inputs on the screen/HMI you will see the pump run and stop, the tank fill and empty (run dry or over fill) then alarm out, valves open and close, pump discharge pressure increase and decrease. You need to experiment with this and find out how and why everything is working. This is not the future, it is here and now. This is the next step in your automation control.

IND-Concepts

System Integration, Industrial Problem Solving and Automation Supplies

Ind-Concepts
PLC Trainers and Automation Supplies

There are two files you need to download, the demonstration version of PeakHMI and the demonstration project (your PLC choice) in this example we are using the Allen Bradley MicroLogix 1000 (Pump Tank Demo A_ML_1000). Both files can be found on our Download/Product Support page www.plctrainer.net/SupportDownloads.htm

Create a directory on your hard drive, name it PeakHMI and place both downloaded files in this directory. The root directory is easiest. C:\PeakHMI
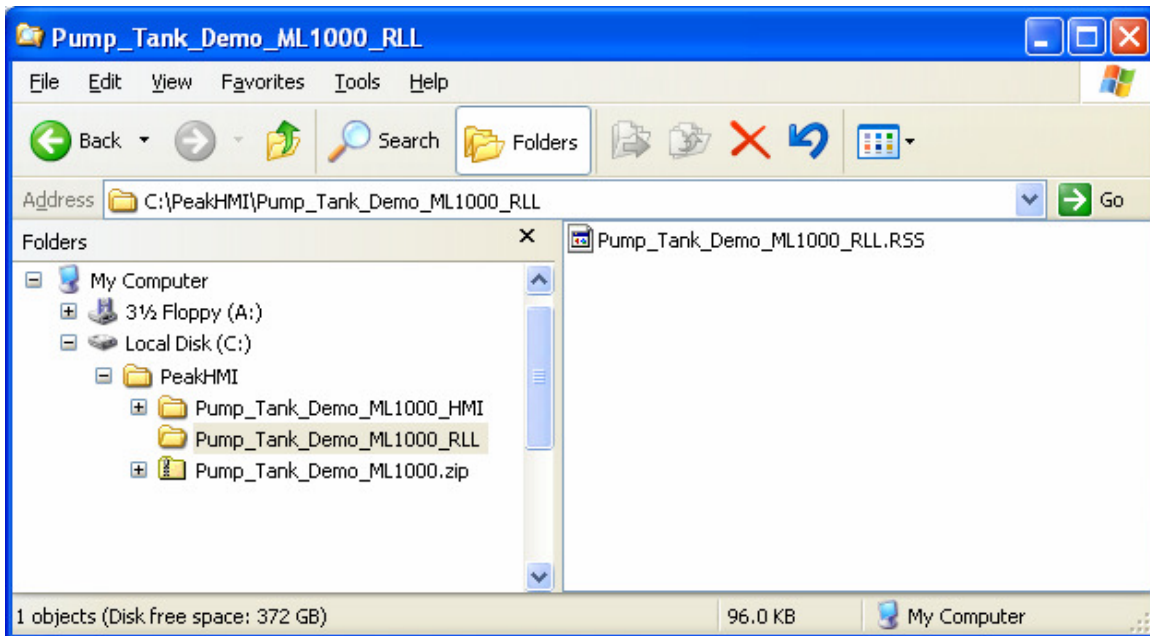
IND-Concepts
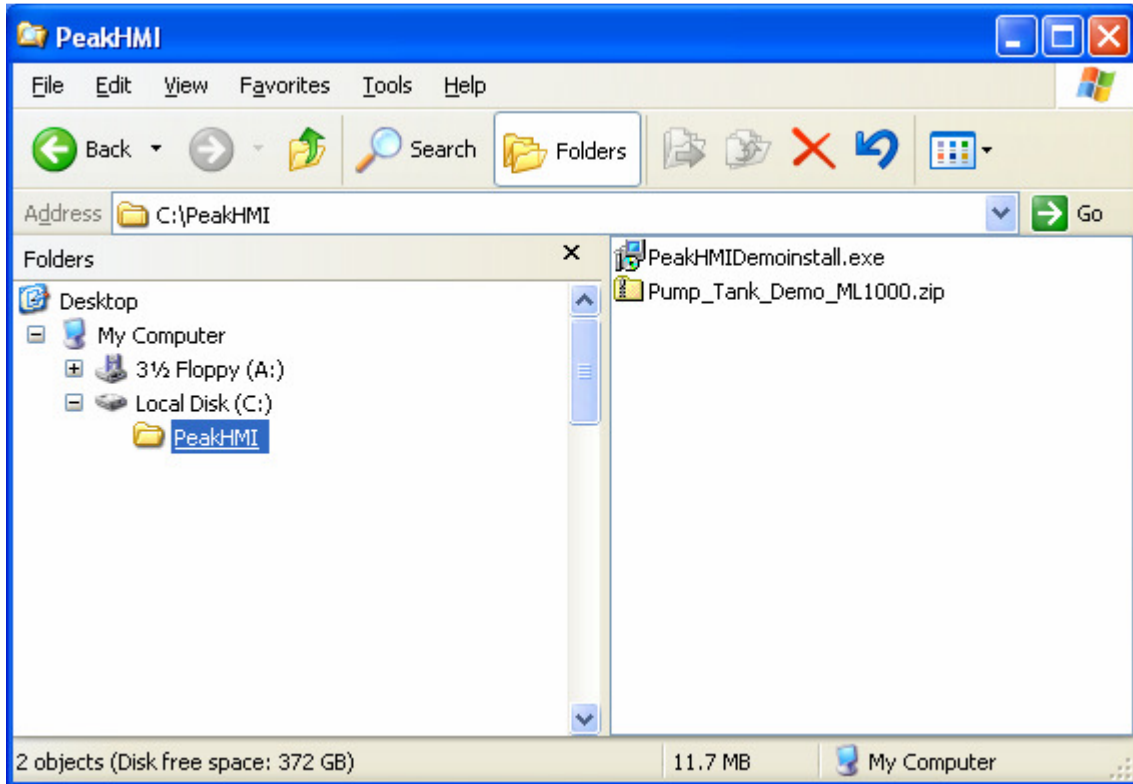
The directory 'Pump_Tank_Demo_ML1000.zip' is a zip archive. Inside the archive are two directories and one file. Unzip the archive to the C:\PeakHMI directory.
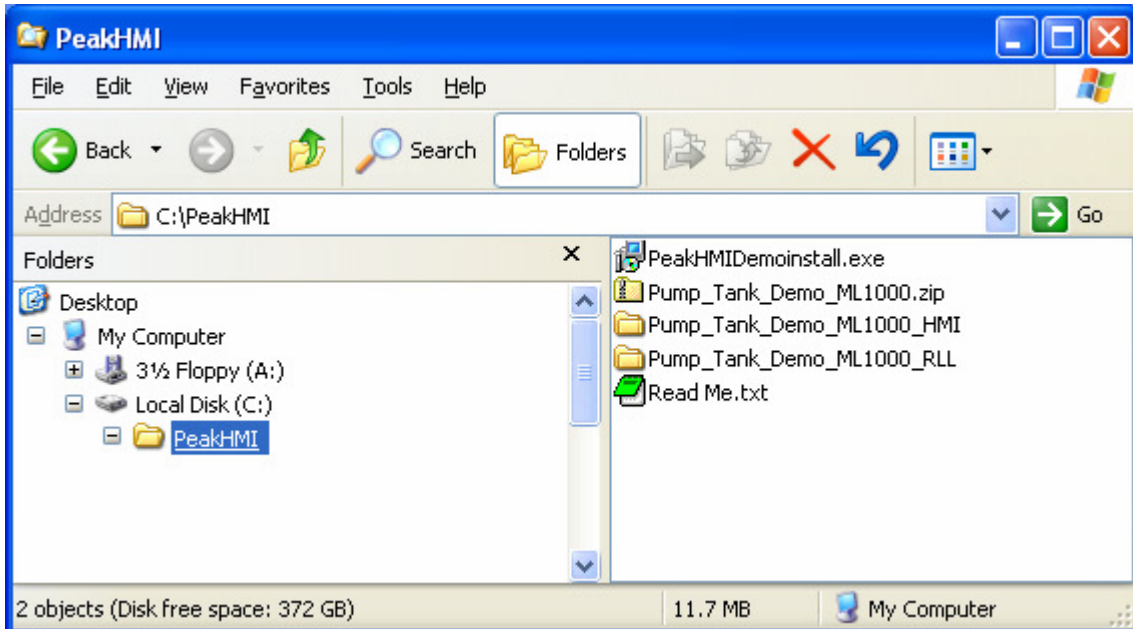
Double click on the PeakHMI demo installer. Follow the prompts using the default selections.

After you restart the computer you will need to download the PLC program to the trainer. If you used the paths defined above the RSLogix PLC project will be at:
C:\PeakHMI\Pump_Tank_Demo_ML1000_RLL\ Pump_Tank_Demo_ML1000_RLL.RSS

IND-Concepts

Use RSLogix to select and download the project to the trainer. Make sure you command the PLC to run before you quit RSLogix. Do the same for every type of supported PLC.

After the PLC project has been downloaded RSLinx must be stopped. If RSLinx is running, right click on your RSLinx icon on the right side of you tool bar and click shutdown. Again if you are using another PLC type just stop and close your communication software or programming software.

I also do not have RSLinx running as a 'service' I have found that RSLinx, and a lot of other programs, try and steal your com port preventing you from using it with other programs.

Just like any other HMI you can not have RSLogix and RSLinx communicating with the PLC at the same time you have your HMI running and communicating with the PLC (only one program can use the serial port at a time)

For the easiest path, follow these step by step procedures to get your new PeakHMI up and running. Remember you can not hurt this software/program. This is intended for you to play with and learn from.

Now we will start PeakHMI and select the demonstration project. Double click on the desktop icon (if you did not create one go to your Start/Programs/Everest Software/PeakHMI)

You will be prompted to select a project directory; this is the location of your project. You created the directory in the step above. If you used the recommended structure you will see C:\PeakHMI. If you used a different name, browse to that location and select the directory.
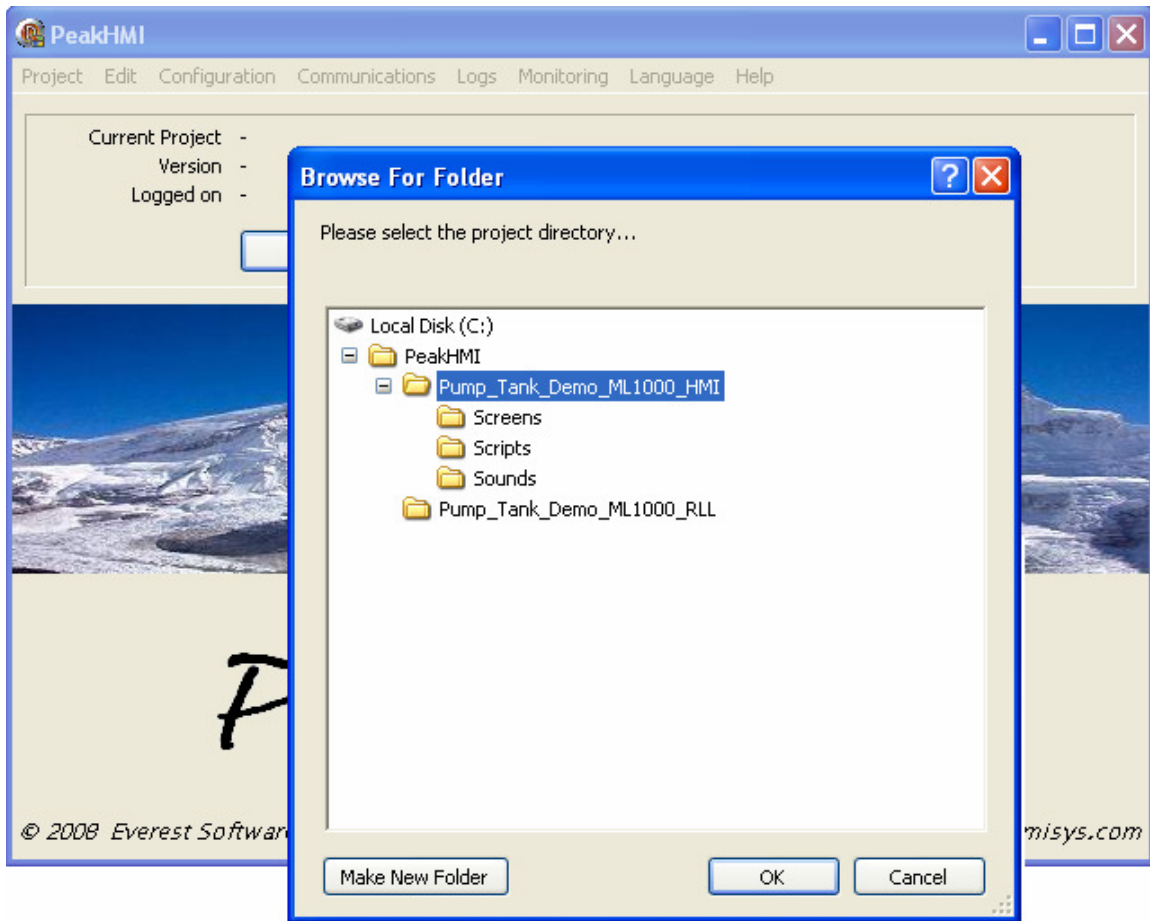
Point it to the directory created above and select the OK button.

Verify that RSLinx is not running and select the menu item Monitoring/Start.
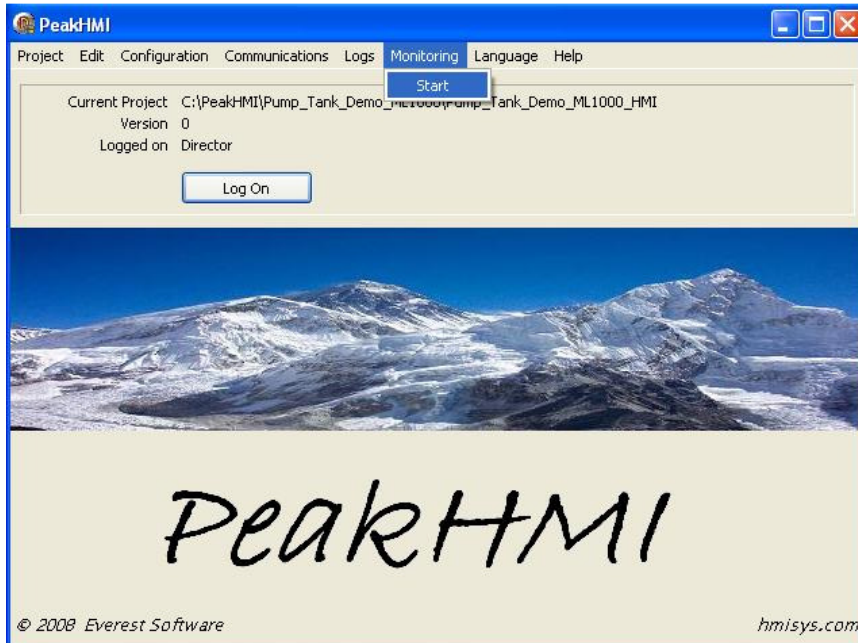
Now have fun and learn. You can not hurt your PC or the programs by using this. Now is the time to get comfortable with HMI, not while you are trouble shooting in the field.

All HMI (that I know of) are similar, they use tags and the setups are similar. So by learning PeakHMI you will also be familiarizing yourself with HMI in general. One of the nice features of PeakHMI is the complete project can be created without the need to learn a scripting language. While PeakHMI does include a powerful scripting engine it is not required for the creation of robust, user friendly HMI applications.

Don't forget to visit our site as we are getting new products daily and we now have a ton of used PLC and Automation Supplies in our eBay store. If you do not want to purchase from eBay contact us and we will sell you the item outside of eBay. http://stores.ebay.com/plc-trainer-and-cables

Mark
info@plctrainer.net
www.plctrainer.net