Procedure to Install new "inf" file for DL750 to use with LabVIEW via USB

Precautions & Notes:

1) In general, to communicate with the DL series scopes via USB, the following files needs to be installed in you windows "system" & "inf" folders:

a) ykusb.inf & b) ykusb.sys

This installation procedure is explained in the following document: " **IM701710-61E_030.pdf** ". These files only support connection to the DL series via USB from XVIEWER, DL Waveform Viewer, DL Gate and other Yokogawa provided DL software. This file does not support communication with the DL series from LabVIEW via USB.

2) In order to use the DL750 via USB from LabVIEW, you have to add the "ykdl_USB.inf" file, which is provided by Yokogawa. Compared to the above (1) installation procedure, to install this new "inf" file, you only need one file (i.e. "ykdl_USB.inf"). The second file, i.e. the "sys" file, is directly obtained from the National Instruments folders. The path for this "sys" file is automatically determined by the information written in the "ykdl_USB.inf" file. **Please keep in mind this new "inf" file does not support communication via USB from XVIEWER, DL Waveform Viewer, DL Gate and other Yokogawa provided DL software. It only supports USB from LabVIEW. To use DL series scope via USB from XVIEWER etc, you will have to revert (change driver) back to "ykusb.inf".**

Installing "ykdl_USB.inf"

This installation procedure assumes the following:

a) You already have "NI Measurement & Automation Explorer" installed. This program is installed when you install LabVIEW or other NI products.
b) You have already installed the USB drivers (ykusb.inf & ykusb.sys) for the DL Series.
c) You are working with Windows 2000 (for XP, the procedure is the same, but the example screens shown in this procedure may vary, so please take caution)
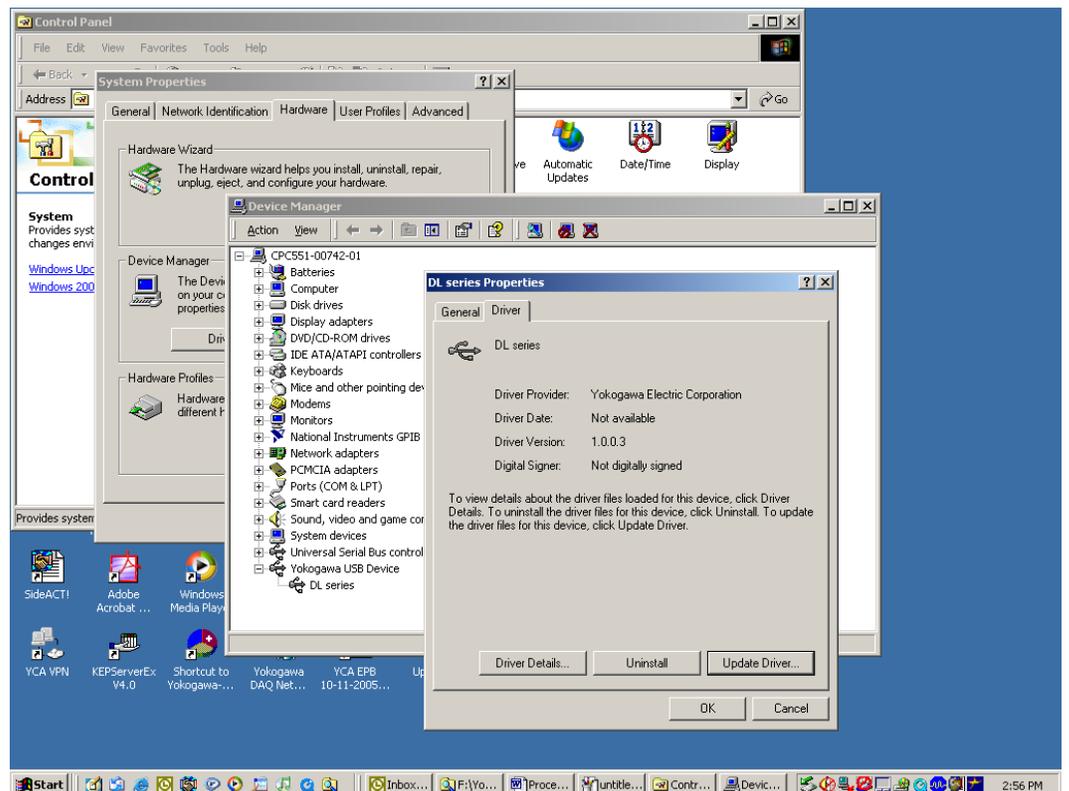
1) Upon connecting the DL scope via USB to the PC, Windows automatically recognizes that a DL Series hardware has been connected and adds an item to the USB desktop tray as show below. This is due to the fact, that Windows uses the "ykusb.inf" and "ykusb.sys" file. Thus far it is not using "ykdl_USB.inf" file. Therefore, to add "ykdl_USB.inf" please follow the steps below.
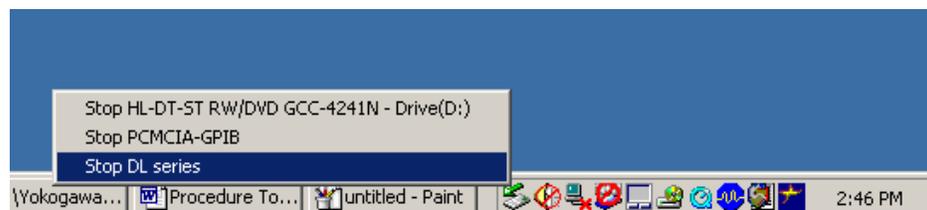
2) Once you have connected the instrument, go to "Systems Device Manager" and right click on "DL Series" and click on "properties", as shown below.
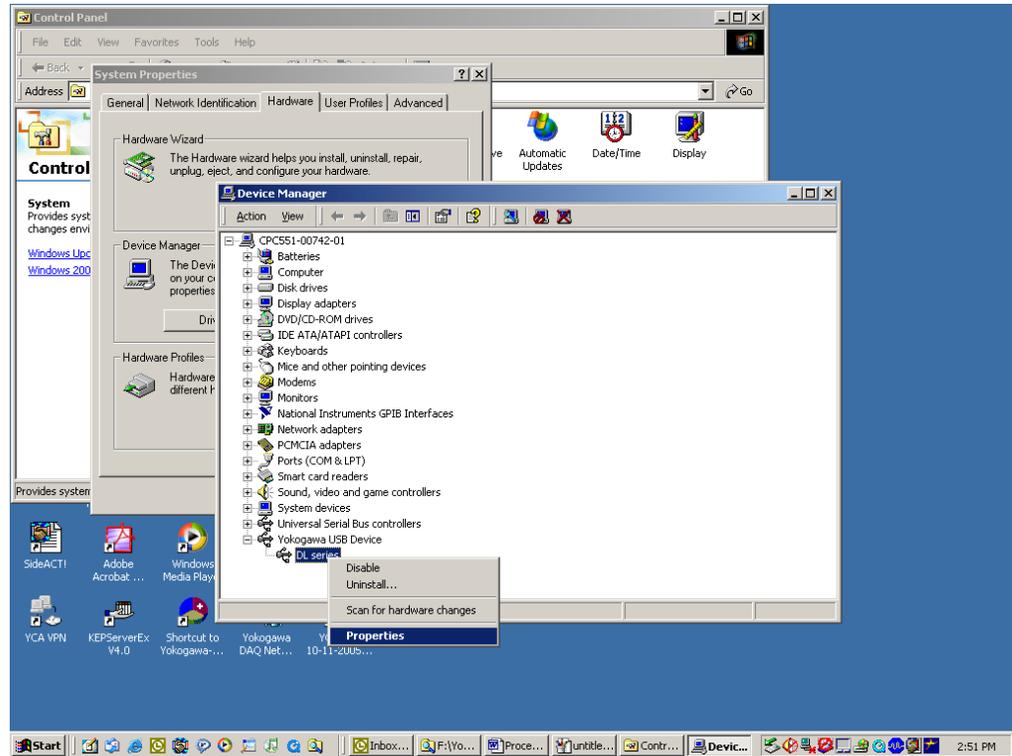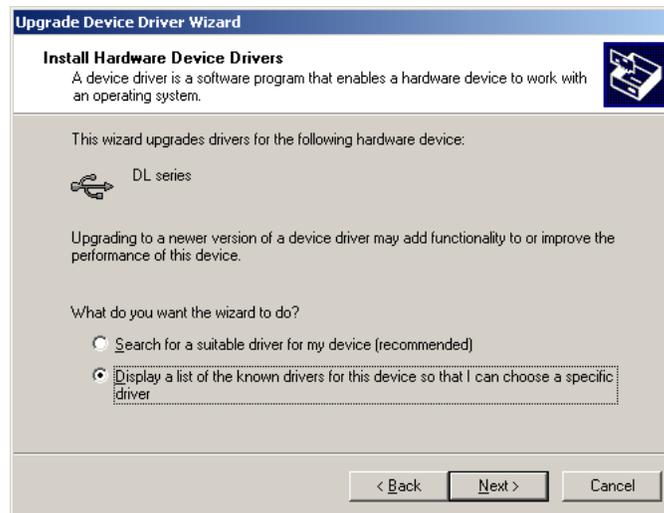

3) Next go to the "Driver" tab on the "DL Series Properties" and select "Update Driver".

4) Once you click on "Update Driver", the following window appears. Click Next to advance.

Upgrade Device Driver Wizard

Welcome to the Upgrade Device Driver Wizard

This wizard helps you upgrade a device driver for a hardware device.

To continue, click Next.

< Back   Next >   Cancel

5) Select "Display a list of known driver………choose a specific driver", and click Next.

Upgrade Device Driver Wizard

Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.

This wizard upgrades drivers for the following hardware device:

DL series

Upgrading to a newer version of a device driver may add functionality to or improve the performance of this device.

What do you want the wizard to do?

○ Search for a suitable driver for my device (recommended)

◉ Display a list of the known drivers for this device so that I can choose a specific driver

< Back   Next >   Cancel

6) Select "DL series" and click on "Have Disk".

Upgrade Device Driver Wizard

Select a Device Driver
Which driver do you want to install for this device?

Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.

Models:

DL series

◉ Show compatible hardware
○ Show all hardware of this device class

Have Disk...

< Back   Next >   Cancel

7) Next click on the "Browse".

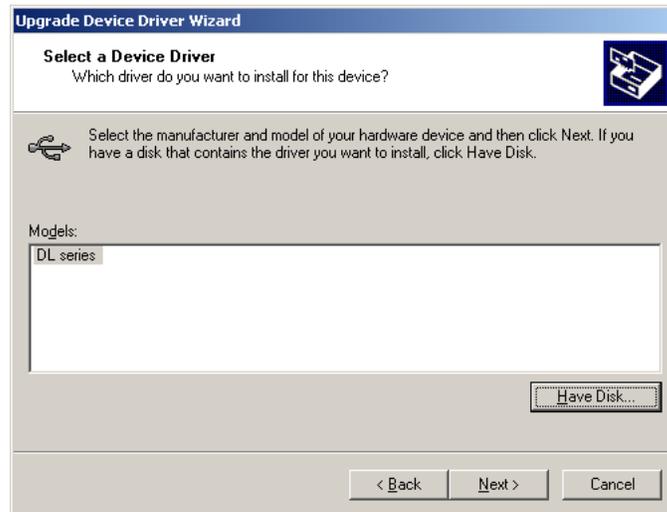8) Browse to the "ykdl_USB.inf" file and double click on the file.
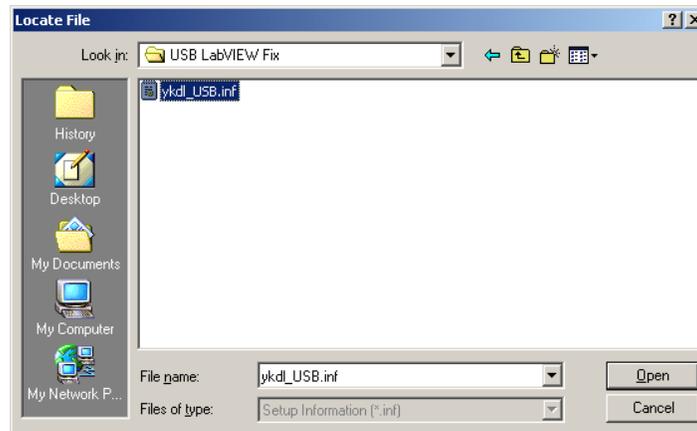
9) Click "OK" to continue.

10) If the following windows prompt appears, then retry steps 7, 8 and 9.

11) If everything is correct than, you will find your self back at the below screen. Notice that the 2 options in Step 6 are missing. This means that you are on the right path. Click Next.
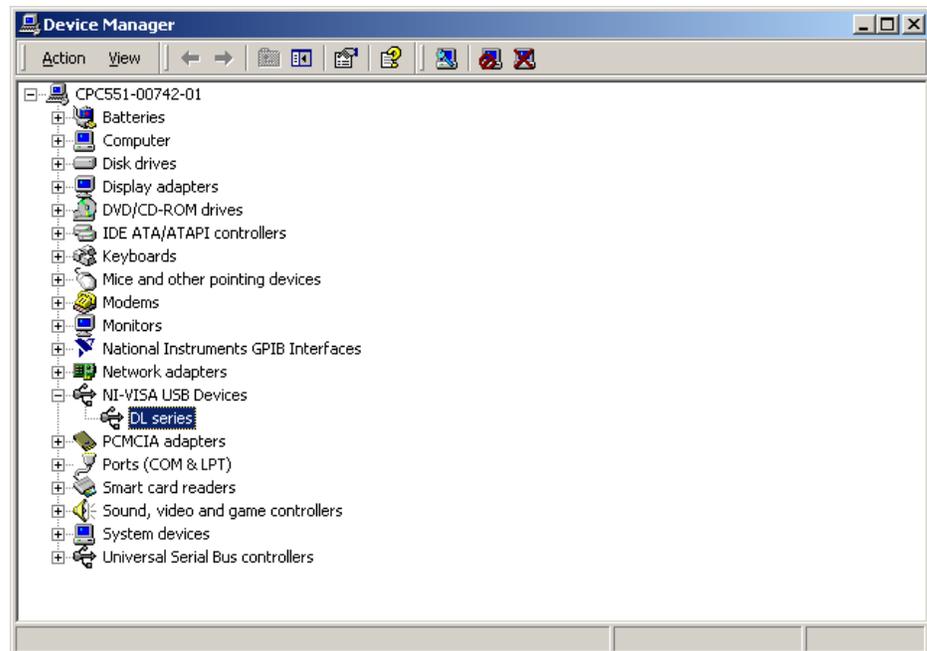

12) Click Next again.

13) Click Finish.

14) Click "Close".

15) Notice the below screen. The "Yokogawa USB Device" has disappeared and the device is now shown under "NI-VISA USB Devices".


16) This completes the installation of the "ykdl_USB.inf" file.

17) You will notice that if you right click on the "DL Series" and go to "Properties". Then go to "Driver Details". You will see that the "sys" file is automatically changed to "NIVIUSBK.sys", compared to previously which was "ykusb.sys".
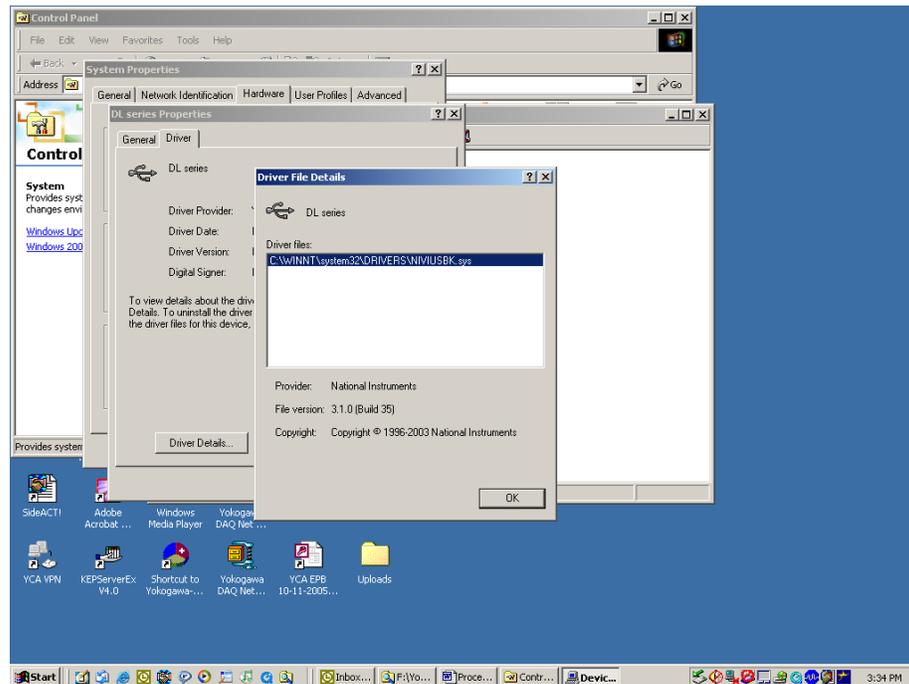
18) Another way to verify the installation of "ykdl_USB.inf" file, is to open "NI Measurement & Automation Explorer", and check if the DL series USB device shows up under "Device and Interfaces".
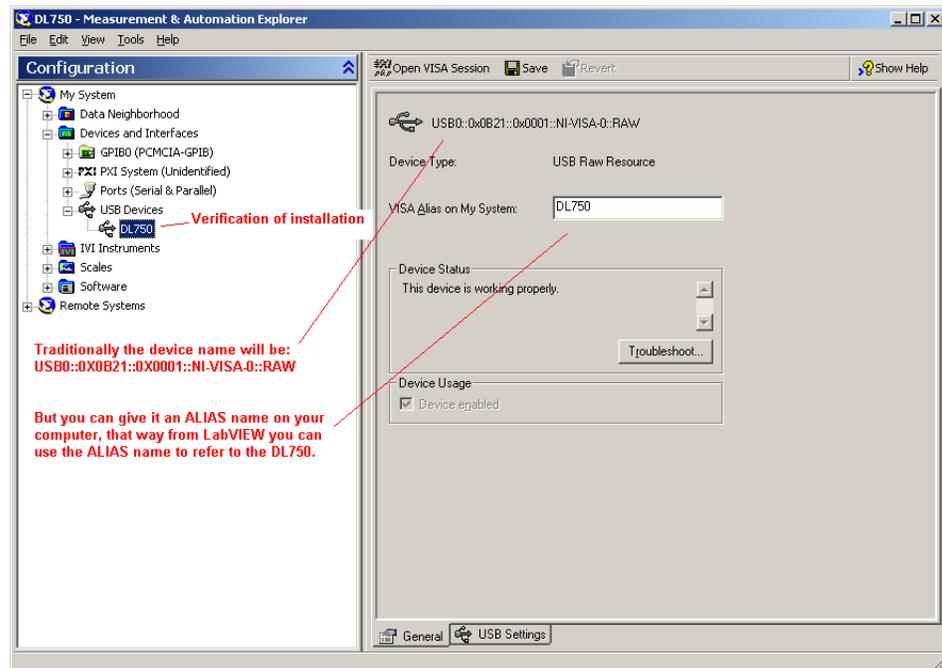
19) How does it look in LabVIEW using the GPIB version drivers? See below picture.