

## How-To: Using AltaAPI-LV on MS-Windows 8 and Windows 10 18 November 2015

### INFORMATION

MS-Windows 8 and Windows 10 introduced enhanced security features including digital signing not only for device drivers but also for device information files, i.e. .inf files. Additionally, Windows Server 2012 R2 applies to this document discussion as it is based on Windows 8.1.

### THE PROBLEM

The Alta API for LabVIEW was built to run on Windows 7 and earlier as well as LabVIEW RT (LV-RT). This only works for LV-RT if the NI-VISA driver is used, but also works fine on these earlier versions of Windows that did not have this extra inf signing requirement.

The usage of the NI-VISA driver requires updating the driver listed via Windows Device Manager. Instructions for doing this are outlined in the AltaAPI-LV Users Manual.

As of this writing, because of the additional security mentioned above, the NI-VISA device inf files cannot be installed on these systems, and therefore the NI-VISA driver cannot be used. But this is really only needed for LV-RT.

### THE SOLUTION

Users of Windows 8 and 10 can still load and use AltaAPI-LV by simply not using the NI-VISA driver. Instead, the standard Alta Windows driver can be used by over-writing the DLL files from the AltaAPI-LV distribution.

The 64-bit Alta API contains the standard distributed 64-bit Layer 0 and Layer 1 DLLs. Additionally, this API contains the 32-bit Layer 0 and Layer 1 DLLs. Using these DLLs instead of the NI-VISA-targeted DLLs solves the problem. There are only two possibilities to choose from depending on what LabVIEW you are using, 32-bit or 64-bit.

After you have installed the AltaAPI for Windows and AltaAPI-LV, proceed as follows -  
(Ensure that you have copied the folder AltaAPI-LV to the appropriate user.lib folder for your LabVIEW installation, per the instructions in the AltaAPI-LV User Manual.)

#### Steps for 64-bit LabVIEW:

Copy these DLLs:

#### From:

C:\Program Files\Alta Data Technologies\Alta Software\ADT\_L0\_API\Win64\bin\ADT\_L0.dll

C:\Program Files\Alta Data Technologies\Alta Software\ADT\_L1\_API\Win64\bin\ADT\_L1.dll

#### To:

C:\Program Files\National Instruments\LabVIEW 201x\user.lib\AltaAPI-LV

### Steps for 32-bit LabVIEW on 64-bit OS:

Copy these DLLs:

**From:**

C:\Program Files\Alta Data Technologies\Alta Software\ADT\_L0\_API\x86\bin\ADT\_L0.dll

C:\Program Files\Alta Data Technologies\Alta Software\ADT\_L1\_API\x86\bin\ADT\_L1.dll

**To:**

C:\Program Files (x86)\National Instruments\LabVIEW 201x\user.lib\AltaAPI-LV

### Steps for 32-bit LabVIEW on 32-bit OS:

Copy these DLLs:

**From:**

C:\Program Files\Alta Data Technologies\Alta Software\ADT\_L0\_API\Win32\bin\ADT\_L0.dll

C:\Program Files\Alta Data Technologies\Alta Software\ADT\_L1\_API\Win32\bin\ADT\_L1.dll

**To:**

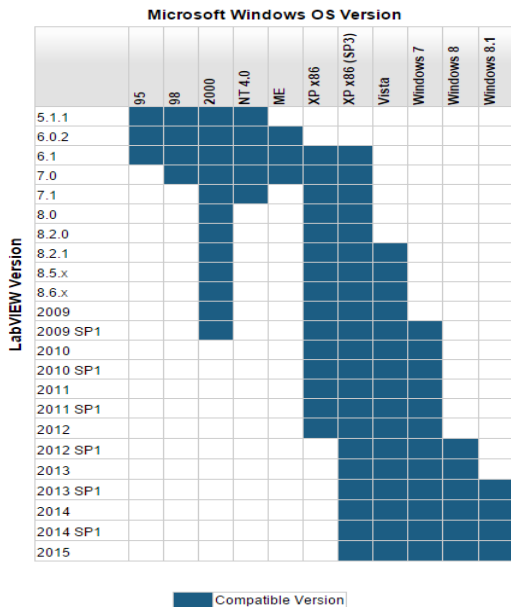
C:\Program Files (x86)\National Instruments\LabVIEW 201x\user.lib\AltaAPI-LV

After these DLL files are copied to the appropriate user.lib folder, all LabVIEW sample Vis and subsequent user Vis will work using the standard Windows driver. API code within the DLLs are identical with the exception being the low-level access through the Windows driver versus the NI-VISA driver.

## NOTE: LabVIEW Versions and Windows 8 and 10

According to National Instruments, some versions of LabVIEW are not supported on the newer Windows versions. Please refer to this chart, obtained from the NI web site at

<http://digital.ni.com/public.nsf/allkb/B972242574D4BB99862575A7007520CB>



As seen, the only LabVIEW versions compatible with Windows 8.1 is 2013 SP1, 2014, 2014 SP1, and 2015.