

Selecting Best Compatible Driver (Windows XP)

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.development.device.drivers/2008-05/msg00265.html>

- *From:* Brianhub <Brianhub@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Thu, 8 May 2008 10:10:01 -0700
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We have a driver package that is installed by when our software is installed. It is installed in to the Driver Store using the DriverPackagePreinstall function. The drivers are for a USB communication adapter for an industrial network. Because it is a custom driver class it can t be tested by Microsoft hardware lab. All the files are digitally signed and the catalog file is signed as well. In most cases the driver install fine when the USB adapter is plugged into the system.

We recently found a problem with a system that was taking 10 minutes to search for the driver. We looked at the setupapi.log file and found that the system was scanning a DVD we happened to have in the drive. The DVD happened to have a lot of files as well as 270 INF files on it. I did some research and found that only the path specified in the HKLM\Software\Microsoft\Windows\CurrentVersion DevicePath is supposed to be searched. The only path specified was %SystemRoot%\INF. Our INF file was in the Windows\INF directory and that was the INF file that was used after the search.

My question is why does the DVD get searched when it isn t specified in the search path? Is there a way to stop it (this doesn t happen on Vista systems). Also, the setupapi.log file gives many warnings indicating that the driver isn t signed when all files and the catalog file are correctly signed. Is this a bug that will be fixed or is the fact that the file is signed not detected for some reason?

See part of the setupapi.log file below.

Thanks,
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Brian

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[SetupAPI Log]
OS Version = 5.1.2600 Service Pack 2
Platform ID = 2 (NT)
Service Pack = 2.0
Suite = 0x0100
```

Selecting Best Compatible Driver (Windows XP)

Product Type = 1

Architecture = x86

[2008/05/08 12:22:13 620.3 Driver Install]

#-019 Searching for hardware ID(s):

usb\vid_5854&pid_9005&rev_0001,usb\vid_5854&pid_9005

#-018 Searching for compatible ID(s):

usb\class_ff&subclass_ff&prot_ff,usb\class_ff&subclass_ff,usb\class_ff

#-198 Command line processed: C:\WINDOWS\system32\services.exe

#I022 Found "USB\Vid_5854&Pid_9005&Rev_0001" in C:\WINDOWS\inf\oem4.inf;

Device: "Schneider Electric USB Controller"; Driver: "Schneider Electric USB Controller"; Provider: "Cyberlogic Technologies, Inc."; Mfg: "Schneider Automation, Inc."; Section name: "TSXCUSBMBP_Install".

#I087 Driver node not trusted, rank changed from 0x00000000 to 0x00008000.

#I023 Actual install section: [TSXCUSBMBP_Install.NT]. Rank: 0x00008000.

Effective driver date: 03/28/2008.

#I393 Modified INF cache "C:\WINDOWS\inf\INFCACHE.1".

#-147 Loading class installer module for "USB Device".

#E358 An unsigned or incorrectly signed file "C:\WINDOWS\system32\MbxCi.dll" for driver "USB Device" blocked (server install). Error 0x800b0110: The certificate is not valid for the requested usage.

Windows could not load the installer for MODICON_MBX. Contact your hardware vendor for assistance. Error 0x800b0110: The certificate is not valid for the requested usage.

[2008/05/08 12:22:15 1596.2]

#-199 Executing "C:\WINDOWS\system32\rundll32.exe" with command line:

rundll32.exe newdev.dll,ClientSideInstall

\\.pipe\PNP_Device_Install_Pipe_0.{65BD9C5E-9D98-4A4E-A54E-3BD028DDE1D6}

#I060 Set selected driver.

#-019 Searching for hardware ID(s):

usb\vid_5854&pid_9005&rev_0001,usb\vid_5854&pid_9005

#-018 Searching for compatible ID(s):

usb\class_ff&subclass_ff&prot_ff,usb\class_ff&subclass_ff,usb\class_ff

#I022 Found "USB\Vid_5854&Pid_9005&Rev_0001" in C:\WINDOWS\inf\oem4.inf;

Device: "Schneider Electric USB Controller"; Driver: "Schneider Electric USB Controller"; Provider: "Cyberlogic Technologies, Inc."; Mfg: "Schneider Automation, Inc."; Section name: "TSXCUSBMBP_Install".

#I087 Driver node not trusted, rank changed from 0x00000000 to 0x00008000.

#I023 Actual install section: [TSXCUSBMBP_Install.NT]. Rank: 0x00008000.

Effective driver date: 03/28/2008.

#-147 Loading class installer module for "USB Device".

#E360 An unsigned or incorrectly signed file "C:\WINDOWS\system32\MbxCi.dll" for driver "USB Device" will be installed (Policy=Ignore). Error 0x800b0110: The certificate is not valid for the requested usage.

#-166 Device install function: DIF_SELECTBESTCOMPATDRV.

#I063 Selected driver installs from section [TSXCUSBMBP_Install] in "c:\windows\inf\oem4.inf".

#I320 Class GUID of device remains: {01F5ED20-0BCB-11D4-A02A-00E0290C8B76}.

#I060 Set selected driver.

#I058 Selected best compatible driver.

#I060 Set selected driver.

#-019 Searching for hardware ID(s):

