

Install VHidMini.sys as 1st HID Driver Problems

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.development.device.drivers/2007-07/msg00050.html>

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I'm writing a HID driver based on the VHidMini.sys source in the 11/2006 WDK. I'll use vhidmini in the examples below. If I install vhidmini and there is already a HID driver on the system, such as a USB mouse, the driver installs and I can use the test program to talk to it.

I'm installing vhidmini on Vista Business 32 and Vista Ultimate 64.

If I install vhidmini as the first ever HID driver, the install fails with a "The system cannot find the file specified" error. I'm install using Device Manager by right clicking one of my unknown devices (using HPQ0004 in this example until our real acpi id is available in the BIOS) and selecting Update Driver Software..., then choosing Browse my computer for driver software, then choosing Let me pick from a list of device drivers on my computer, the choosing Next, then choosing Have Disk, then pointing to the directory where the driver inf and sys files are located and then choosing Next.

Seems like there is a problem finding hidclass.sys. How do I change the vhidmini.inf so that the basic HID files (hidclass, hidparse...) get installed correctly?

Start of inf file

[Version]

Signature="\$SCHICAGO\$"

Class=HIDClass

ClassGuid={745a17a0-74d3-11d0-b6fe-00a0c90f57da}

Provider=%VENDOR%

CatalogFile=vhidmini.cat

LayoutFile=layout.inf

DriverVer=09/21/2006,6.0.5736.1

;

; Layout.inf (etc.) list all files shipped with the operating system so the
; source description sections are only needed if other files are needed.

;

; In order to use IHV drivers, the SourceDisksNames section must list the
; disk(s) containing the drivers and the SourceDisksFiles section must list
; which disk number each file to be copied is found on.

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```
; Disk number 99 is used to avoid a conflict with the disk numbers defined
; in layout.inf
;
; Files used in a driver installation need to be digitally signed otherwise
; installation may fail. See documentation elsewhere in the DDK regarding
; driver signing.
```

```
[SourceDisksFiles]
vhidmini.sys = 99
```

```
[SourceDisksNames.x86]
99 = %DISK_NAME%,,,\i386
```

```
[SourceDisksNames.ia64]
99 = %DISK_NAME%,,,\ia64
```

```
[SourceDisksNames.amd64]
99 = %DISK_NAME%,,,\amd64
```

```
[DestinationDirs]
CopyFilesSYS = 12 ; should it be 10 to take care of 98 stuff?????
CopyFilesDLL = 11 ; %SystemRoot%\system or system32 – 98 or Win2000
CopyFilesSYS_98 = 10, system32/drivers
```

```
[Manufacturer]
%VENDOR%=Vendor, NTx86, NTia64, NTamd64
```

```
; For Win2K
[Vendor]
;:%VHidMini% = VHidMini.Inst,
{D49F883C-6486-400a-8C22-1A9EF48577E4}\HID_DEVICE
%VHidMini% = VHidMini.Inst, ACPI\HPQ0004
%VHidDevice% = VHidDevice.Inst, HID\MyVirtualHidDevice
```

```
; For XP and later
[Vendor.NTx86]
;:%VHidMini% = VHidMini.Inst,
{D49F883C-6486-400a-8C22-1A9EF48577E4}\HID_DEVICE
%VHidMini% = VHidMini.Inst, ACPI\HPQ0004
%VHidDevice% = VHidDevice.Inst, HID\MyVirtualHidDevice
```

```
[Vendor.NTia64]
;:%VHidMini% = VHidMini.Inst,
{D49F883C-6486-400a-8C22-1A9EF48577E4}\HID_DEVICE
%VHidMini% = VHidMini.Inst, ACPI\HPQ0004
%VHidDevice% = VHidDevice.Inst, HID\MyVirtualHidDevice
```

```
[Vendor.NTamd64]
;:%VHidMini% = VHidMini.Inst,
```

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```
{D49F883C-6486-400a-8C22-1A9EF48577E4}\HID_DEVICE  
%VHidMini% = VHidMini.Inst, ACPI\HPQ0004  
%VHidDevice% = VHidDevice.Inst, HID\MyVirtualHidDevice
```

```
[ControlFlags]
```

```
ExcludeFromSelect = HID\MyVirtualHidDevice
```

```
=====
```

```
; VHidMini (Root Enumerated Hid Device) install section
```

```
=====
```

```
[VHidMini.Inst]  
CopyFiles = CopyFilesSYS_98, CopyFilesDLL  
AddReg = VHidMini_98me.AddReg
```

```
[VHidMini.Inst.NT]  
CopyFiles = CopyFilesSYS, CopyFilesDLL
```

```
[VHidMini.Inst.NT.HW]  
AddReg = VHidMini_Parameters.AddReg
```

```
[VHidMini.Inst.NT.Services]  
AddService = vhidmini,0x00000002,vhidmini_Service_Inst,
```

```
[CopyFilesSYS]  
vhidmini.sys  
HidClass.sys  
HidParse.sys
```

```
[CopyFilesSYS_98]  
vhidmini.sys  
HidClass.sys  
HidParse.sys
```

```
[CopyFilesDLL]  
Hid.dll
```

```
[VHidMini_Parameters.AddReg]  
HKR,,"ReadFromRegistry",%REG_DWORD%, 0x00000001  
HKR,,"MyReportDescriptor",%REG_BINARY%, 06, 00, FF, 09, 01, A1, 01, 85, 01,  
09, 01, 15, 00, 26, ff, 00, 75, 08, 95, 01, B1, 00, 09, 01, 15, 00, 26, FF,  
00, 75, 08, 95, 01, B1, 00, 09, 01, 75, 08, 95, 01, 81,00, C0
```

```
[VHidMini_98me.AddReg]  
HKR,,"DevLoader,,"*ntkern  
HKR,,"NTMPDriver,,"vhidmini.sys"
```

```
[vhidmini_Service_Inst]  
DisplayName = %VHidMini%  
ServiceType = %SERVICE_KERNEL_DRIVER%
```

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```
StartType = %SERVICE_DEMAND_START%
ErrorControl = %SERVICE_ERROR_IGNORE%
ServiceBinary = %12%\vhidmini.sys
```

```
=====
; VHidDevice (Virtual Hid Device) install section
; - Only a Null service is installed.
=====
[VHidDevice.Inst]
```

```
[VHidDevice.Inst.NT]
```

```
[VHidDevice.Inst.NT.Services]
AddService = ,0x00000002, ; NULL Service
```

```
=====
[Strings]
; *****Localizable Strings*****
VENDOR = "Microsoft Corp"
VHidMini = "Root Enumerated Hid Device (sample)"
VHidDevice = "Virtual Hid Device (sample)"
DISK_NAME = "Virtual Hid Device Sample Install Disk"
; *****Non Localizable Strings*****
```

```
SERVICE_BOOT_START = 0x0
SERVICE_SYSTEM_START = 0x1
SERVICE_AUTO_START = 0x2
SERVICE_DEMAND_START = 0x3
SERVICE_DISABLED = 0x4
```

```
SERVICE_KERNEL_DRIVER = 0x1
SERVICE_ERROR_IGNORE = 0x0
SERVICE_ERROR_NORMAL = 0x1
SERVICE_ERROR_SEVERE = 0x2
SERVICE_ERROR_CRITICAL = 0x3
```

```
REG_EXPAND_SZ = 0x00020000
REG_DWORD = 0x00010001
REG_MULTI_SZ = 0x00010000
REG_BINARY = 0x00000001
REG_SZ = 0x00000000
*****
```

```
End of inf file
```

```
.
```