

To automatically connect a particular USB device:

1. Identify and obtain the USB device's vendor ID and product ID as reported by the host operating system.
2. Edit the virtual machine's configuration file (.vmx) to contain an autoConnect entry for the USB device.

**Caution:** Be aware that you may "break" the USB functionality for your virtual machine if you configure conflicting autoconnect settings.

### Identifying and Obtaining the USB Device's Vendor ID and Product ID

On a Linux host, after you connect the USB device, you can find the vendor and product ID in the /proc/bus/usb/devices file. For example:

```
more /proc/bus/usb/devices
T: Bus=01 Lev=01 Prnt=01 Port=00 Cnt=01 Dev#= 3 Spd=1.5 MxCh= 0
D: Ver= 2.00 Cls=ff(vend.) Sub=00 Prot=00 MxPS= 8 #Cfgs= 1
P: Vendor=0529 ProdID=0001 Rev= 2.15
S: Manufacturer=AKS
S: Product=HASP HL 2.15
```

Here, 529 is the vendor ID and 1 is the product ID for the HASP HL device.

On a Windows host, you may find the vendor and product IDs in the registry.

**Caution:** This procedure involves accessing the registry. Incorrect changes to the registry can leave your system unstable or unable to run. Always back up the registry before you edit it, and exercise caution in making changes to the registry. VMware takes no responsibility for problems that may arise.

1. Open the registry. (Choose **Start > Run >regedit.**)
2. Search for your USB device's name or brand in the following registry path:  
HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Enum\USB\

```
For example, the following output was a result of searching for a Cruzer Mini USB key:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Enum\USB\Vid_0781&Pid_7101\00526174
HardwareID: USB\Vid_0781&Pid_7101&Rev_0102
          USB\Vid_0781&Pid_7101
LocationInformation: Cruzer Mini
Mfg: Compatible USB storage device
```

Here, the vendor ID is 781 and the product ID is 7101.

### Editing the Virtual Machine's Configuration File

The configuration (.vmx) file is normally located in the same directory in which the virtual machine was created. Make sure the virtual machine is powered off before you edit this file.

To autoconnect the HASP HL device from the previous example, add the following line in the `.vmx` file of the virtual machine:

```
usb.autoConnect.device0 = "0x529:0x1"
```

Or, for the Cruzer Mini device, add:

```
usb.autoConnect.device0 = "0x781:0x7101"
```

**Note:** Prepend `0x` to each value — it must be in hex format.

You can specify multiple devices for autoconnect, provided that there are not more than two USB devices available to the host at the same time. Multiple entries for `autoConnect` are shown in the following example. An ellipsis ( `?` ) indicates the omission of an actual vendor or product ID. You need to include a specific value, as shown for `device0` and `device1`.

```
usb.autoConnect.device0 = "0x529:0x1"  
usb.autoConnect.device1 = "0x781:0x7101"  
usb.autoConnect.device2 = ....  
usb.autoConnect.device3 = ....
```

For more information about using USB devices in Workstation 5, see "Using USB Devices in a Virtual Machine" in the *VMware Workstation 5 User's Manual*.

### **New Autoconnect Options for Workstation 5.5**

In Workstation 5.5, the parameters for autoconnecting USB devices have been expanded to include the USB device name and path, in addition to the already supported PID and VID syntax. Workstation 5.5 also makes extra information available in the `vmware.log` file, located in the virtual machines's directory, to make entering these parameters easier.

When a device is connected to the host, the virtual machine discovers the device and adds an entry to `vmware.log`. The virtual machine also discovers all devices attached to the host when the virtual machine is powered on, resumed, or reverted, and adds an entry for each device. For example, consider this `vmware.log` entry:

```
XXX XX XX:XX:XX: vmx| USB: Found device [name:SomeCompany\ USB device  
vid:0123 pid:abcd path:1/2/1]
```

There are four space-separated parameters available: `name`, `vid`, `pid`, and `path`.

#### **The name Parameter**

The `name` parameter is the string that describes the USB device. You may add the complete string of the USB device as a parameter, or a partial string if you want to match multiple USB devices for a specific word. Note that the string is not case sensitive and that spaces must be escaped with a backslash ( `\` ) as they are in the `vmware.log` string.

To match the whole string from the example, use:

```
usb.autoConnect.device0 = "name:SomeCompany\ USB device"
```

To match all USB devices with "SomeCompany" in their names, use:

```
usb.autoConnect.device0 = "name:SomeCompany"
```

#### **The vid and pid Parameters**

The `vid` and `pid` parameters do the same thing as the previous `autoconnect` entry. To match the SomeCompany USB device in the above example, use:  
`usb.autoConnect.device0 = "vid:0123 pid:abcd"`

To match any device that has the Vendor ID (VID) of SomeCompany, use:  
`usb.autoConnect.device0 = "vid:0123"`

### **The path Parameter**

The `path` parameter in `vmware.log` provides the path to the specific port on the host where the USB device is attached. Using `autoconnect` with the `path` entry binds a specific host port to that virtual machine. If the `path` parameter is used exclusively, any device that is attached to that host port automatically connects to that virtual machine.

To always connect any device attached to the host port in the above example, use:  
`usb.autoConnect.device0 = "path:1/2/1"`

You can use the `name`, `vid`, `pid`, and `path` parameters in any combination. For the `autoconnect` to succeed, each parameter you enter must match.

To `autoconnect` the USB device in the example when connected to the same host port, use:  
`usb.autoConnect.device0 = "name:SomeCompany\ USB\ device vid:0123  
pid:abcd path:1/2/1"`

To `autoconnect` the USB device in the example, regardless of the host port to which it is connected, use:  
`usb.autoConnect.device0 = "name:SomeCompany\ USB\ device vid:0123  
pid:abcd"`