

Using SX-Virtual Link to enable virtually any USB Device in VMware Environment

VMware ESX servers require a USB dongle that is a licensing key; however, VMware does not support USB drivers while loading and looking for the license dongle. Silex SX-Virtual Link utility, when used in conjunction with a silex device server, can resolve this issue by enabling the USB dongle and virtually any other USB device to be used over an Ethernet or wireless network.

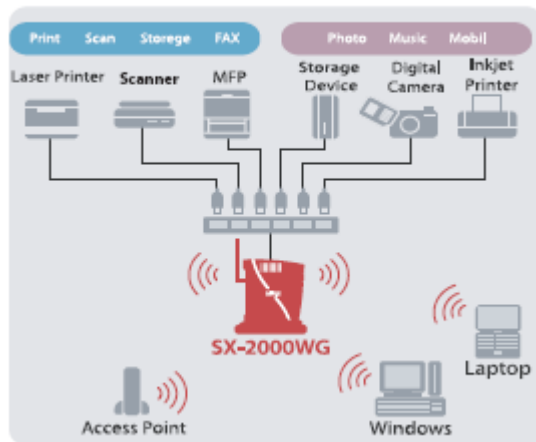
This document explains how a virtual machine running on VMware can use SX-Virtual Link to connect to almost any USB device (including the VMware license USB dongle) over an Ethernet or wireless IP network. Nearly all USB devices can now be supported through the virtual machine's standard Ethernet interface. SX-Virtual Link allows the USB device to be located anywhere on the network. No longer are you required to have the USB device tethered to a specific PC. USB devices can now be located in areas you would not want to place a virtual machine or VMware server and be controlled remotely by a virtual machine. The USB device will appear as though it were directly attached.

Why use SX-Virtual Link and Silex's device servers?

USB devices have become common place in today's business environment. These devices have been designed to increase the productivity of our work force. However, not everyone needs to use each USB device all of the time. Like printers, USB devices can be connected and shared over the network. By sharing the USB device over the network the cost of placing the USB device on every desk can be greatly reduced as well as the IT department's headache of maintaining all of those devices. Additionally there are times when a USB device would increase productivity but placing a PC at that location is not practical (manufacturing, Point of Sale, etc.)

Silex USB device servers allow users to connect virtually any USB device to an Ethernet or wireless network. By using a Silex USB Device Server, you can easily share devices like scanners, USB storage devices, digital cameras, MFPs and more. This capability is made possible by Silex's SX Virtual Link software, which emulates a direct USB port on Windows or Macintosh systems. The Virtual Link port takes the USB data, packages it into IP packets and sends it over the network to the Silex USB Device Server. By doing this the manufacture's original software can be used without any modification. The software simply sees the USB device as being directly attached to the PC.

🔗 Networking example:



Additionally this allows the VMware license USB dongle to be recognized.

Installing SX-Virtual Link in a VMWare environment

The steps to install a Silex device server vary slightly depending on which device server you are using (wired or wireless). In general the steps are

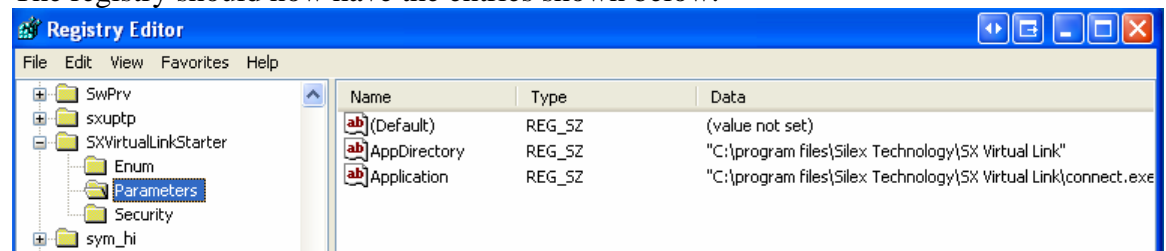
1. Use a USB cable to the device server to the USB device.
2. If using wired Ethernet connect an Ethernet cable from a hub or router to the USB device server.
3. Connect the required power cords.
4. Run the installation wizard that can be found on the bundled CD.

Please refer to the device server's setup guide for a more detailed setup procedure.

In a VMWare environment some additional steps need to be taken for Virtual Link to operate at bootup on a virtual machine.

1. Place instsrv.exe and Srvany.exe into the C:\Windows\System32 directory.
These files can be downloaded as part of the Windows 2003 Resource Kit which can be downloaded from:
<http://www.microsoft.com/downloads/details.aspx?FamilyID=9d467a69-57ff-4ae7-96ee-b18c4790cffd&displaylang=en>
2. Start a SX-Virtual Link Service.
 - a. Open a command prompt (Click <start> then <run> then type cmd and click OK).
 - b. From the command prompt type: instsrv SXVirtualLinkStarter C:\Windows\system32\srvany.exe. and then press enter.
 - c. Close the command prompt.
3. Edit the registry.
 - a. Open the registry editor Click <start> then <run> then type regedit and click OK).
 - b. Navigate to:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SXVirtualLinkStarter
 - c. Create a key called Parameters
 - d. In the Parameters key add the following strings: "C:\Program Files\silex technology\SX-Virtual Link" and : "C:\Program Files\silex technology\SX-Virtual Link\connect.exe"

The registry should now have the entries shown below.



Notes on Compatibility

Silex USB device servers are compatible with virtually every USB device. However, not all silex device servers support isochronous USB devices. Please check the silex web page www.silexamerica.com or contact technical support for updated compatibility information. You can also contact the silex sales department for help in selecting the device server that best suits your needs.

Silex Technical Support

If any questions arise please feel free to contact silex technical support.

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