

**Description:** Guide to activating an ICONICS USB hardware key (SafeNet Sentinel+) on VMware ESXi.

**OS Requirement:** Windows Server 2003 x64/Vista x64/ Server 2008 x64/Windows 7 x64/ Server 2008 R2 x64

**General Requirement:** VMware ESXi v4.1+ with VMware virtual machine(s) v7+.

## Introduction

Virtualization has taken an important role in main production environments. As formerly divided fields such as production information and field operations become unified, they now grow together, sharing the same hardware. These fields, while sharing the same hardware and system resources, can run on independent virtual machines.

ICONICS products can run on VMware-based virtual environments like VMware ESXi. This document describes how to activate an ICONICS USB hardware key (SafeNet Sentinel+) on VMware ESXi v4.1+ with VMware virtual machines V7+ from the VMware vSphere Client.

## Restrictions

Note that while ICONICS supports installation in virtual environments, cloning a virtual machine with a valid software license represents a violation of the license agreement. You are allowed to transfer the license from one virtual machine to another, but a given license should not exist on more than one virtual machine at a time.

## Activating ICONICS USB Hardware Key

1. Start the VMware vSphere Client.
2. When the VMware image is turned off, **Add the USB Controller** as shown in the figure below.

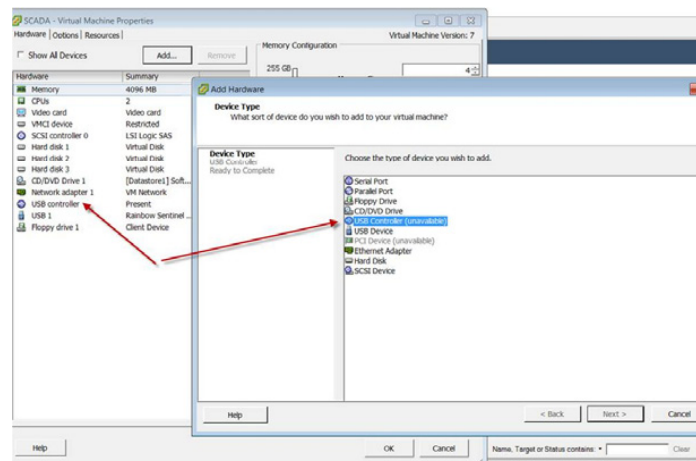


Figure 1 – Adding the USB Controller to virtual machine

3. Start the virtual machine.
4. **Add the USB Device** and press Next.

**Note:** Prior to this step a HW key (USB Sentinel +) should be plugged into HOST (real HW).

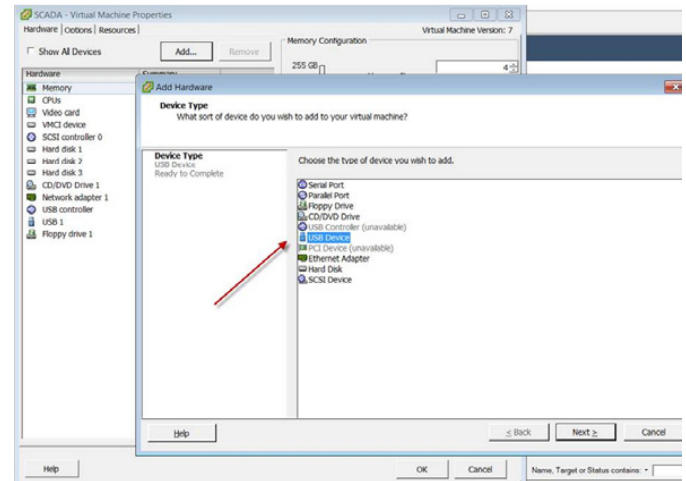


Figure 2 – Adding USB Device to virtual machine

5. **Add the ICONICS hardware key** as shown in the figure below.

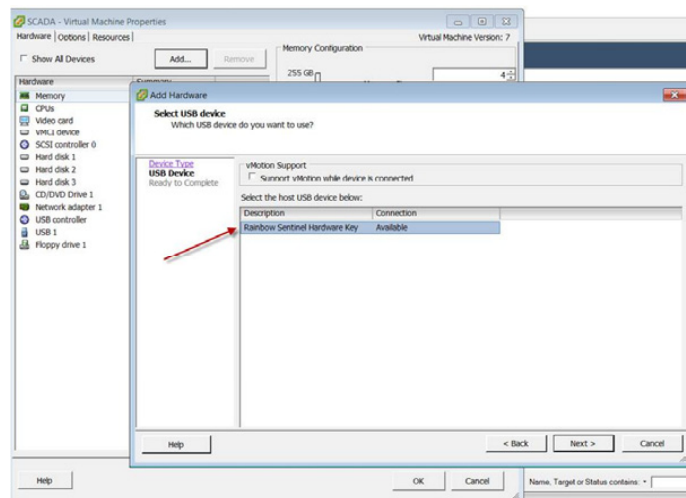


Figure 3 – Adding ICONICS hardware key to virtual machine

6. In the guest operating system, point the “Rainbow Sentinel Hardware key” to the correct driver in the device manager.

**NOTE:** Sentinel driver is installed into the following location: `C:\Windows\System32\Drivers\SENTUSB64.SYS`. If the driver is not installed on that PC you can install the ICONICS Licensing Software from an official GENESIS64 installation DVD, or you can go to the ICONICS licensing website and start the hardware key licensing procedure to install the proper driver.

7. In the guest operating system, check that “SafeNet Sentinel Hardware Key” is installed properly. You can do that by going to Control Panel → Devices and Printers → Properties → Hardware tab. You should get the result similar to Figure 4.

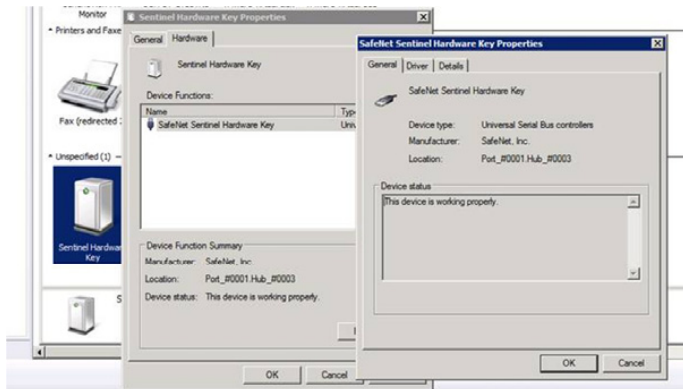


Figure 4 – Adding ICONICS hardware key to virtual machine

8. Run MonitorWorX Viewer from **Start → ICONICS GENESIS64 → MonitorWorX Viewer** and check that the hardware key is read correctly.

9.



For more details about using GENESIS64 on VMware Virtual machines refer to application note *GENESIS64 - Using GENESIS64 on VMware Virtual Machines*.