

CONFIGURE COMTROL'S ROCKETPORT WITH VMware ESXi

This document provides a general overview for adding a RocketPort card to a VMware ESXi environment.

Environment:

Dell Precision WorkStation T5500 500 Gibabyte SATA drive 8 Gigabytes RAM Host memory VMware ESXi 6.5.0 Guest Operating System - Windows 10 Enterprise RocketPort Infinity Octa, DB9, uPCI RocketPort Express, Octa DB9 PCIe RocketPort uPCI 16 port

Pre-requisites:

1. A host computer must have "Intel Virtualization Technology for Directed I/O" enabled in BIOS.



2. Ensure vmware tools is installed on the Guest Operating System

Overview:

Adding a RocketPort card is a two step process within the ESXi configuration.

1. Enable the RocketPort (RP) card to be available through ESXi Host (Direct I/O). 2. Assign the RocketPort card to be used by the Guest Operating System.

Procedure:

- 1. Enable the RP card to be available:
 - a. From within a web browser, Enter the IP Address of your ESXi server
 - b. Login with your username and password
 - c. In the VMware ESXi web client, Go to 'Host' -> 'Manage' in the left (Navigator) part of the GUI.

In the right part of the GUI, select the 'Hardware' tab and select 'PCI Devices'. Search for Comtrol, to display the RocketPort cards.

| mware ESXI | | | | | rool@19 | 12.168.13.6 + 1 | Help 👻 🔍 | Search |
|----------------------|-------------------------------|----------|-------------------|--|---------|-----------------|-------------|---------------|
| Navigator | D Iocalhost.comtrol.com - Man | age | | | | | | |
| * 🗐 Host | System Hardware | icensing | Packages | Services Security & users | | | | |
| Manage | | | | | | | - | - |
| Monitor | PCI Devices | 8 | Toggle passthroug | gh 🥖 Configure SR-IOV 📓 Reboot host 🕴 🥑 Refresh | | | Q comtr | ol 🔪 🤌 |
| 1 🛱 Virtual Machines | Power Management | | Address 😔 | Description | | Parent 😔 | SR-IOV | Passthrough s |
| Storage | 1 | | 0000:02: | Comtrol Corporation RocketPort Infinity Octa, 8port, DB | | 0000:01:00.0 | Not capable | Active |
| Networking | 1 | | 0000:05: | Comtrol Corporation Multiport serial controller | | 0000:04:00.0 | Not capable | Active |
| | | | 0000:08: | Comtrol Corporation RocketPort UPCI 16 port w/external I/F | | 0000:00:1e.0 | Not capable | Active |
| | | 6 | Quick filters | | | | | 3 items |
| | | | | | | | | |

d. Select the cards that will be available to the VM guest and select 'Toggle passthrough'. Reboot the Host ESXi computer.

- 2. Make PCI card enabled with Direct I/O available to the Guest Operating System.
 - a. Select the Guest Virtual Machine (powered off) and go to the 'Actions Tab' -> 'Edit settings'
 - b. In the 'Edit Settings' window, select Add other device -> 'PCI device' for your RocketPort card(s).



c. Select the RP Card for the PCI Adapter just added.

| 🗗 Edit settings - Windows 10 (ESXi 6.5 v | rirtual machir | ne) | | | |
|--|---|---|--|--|--|
| Hard disk 1 | 48 | GB | | | |
| SCSI Controller 0 | LSI Logic SAS | | | | |
| SATA Controller 0 | | | | | |
| SB controller 1 | USB 2.0 | | | | |
| Ima Network Adapter 1 | VM Network | | | | |
| Giran CD/DVD Drive 1 | Host device | | | | |
| Video Card | Specify custom settings | | | | |
| PCI device 1 | RocketPort Infinity Octa, 8port | | | | |
| PCI device 2 | <class> Multiport serial contro</class> | | | | |
| New PCI device | RocketPort Infinity Octa, 8port | | | | |
| | RocketPo | rt Infinity Octa, 8port | | | |
| | <class> N</class> | <class> Multiport serial contro</class> | | | |
| on system iocainost.comu | RocketPo | rt UPCI 16 port w/ex | | | |

d. Install the RocketPort driver for the installed cards within the guest Virtual Machine.

e. To verify the driver is installed, Go to the 'Start Menu' -> 'All Programs' -> 'Comtrol' -> 'RocketPort' -> 'RocketPort Drivers Management Console'

The GUI should display the RocketPort cards and Com Port assignments.



Notes:

Ensure vmware tools is installed on guest o/s. When adding the RocketPort card to the guest O/S through the settings, ensure the VM is powered off.

References:

See these links for additional information and the procedure for enabling the PCI Device (RocketPort card) for the HOST for I/O passthrough.

https://pubs.vmware.com/vsphere-51/index.jsp?topic=%2Fcom.vmware.vsphere.vm_admin.doc%2FGUID-058AEDF0-117E-4E17-956D-37181E22D499.html&resultof=%22%41%64%64%22%20%22%61%64%64%22%20%22%50%43%49%22%20%22%70%63%69%22%20

https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1010789

CONTACT AND SUPPORT INFORMATION

Warranty Information

Comtrol offers a 30-day satisfaction guarantee and 5-year limited warranty. Sales Support +1.763.957.6000 sales@comtrol.com Technical Support +1.763.957.6000 www.comtrol.com/support Email, FTP, and Web Support info@comtrol.com ftp.comtrol.com www.comtrol.com

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