



Using RDX® QuikStation® and QuikStor® in VMware® Environments

INTEGRATION BRIEF



Removable disk storage is essential for many SMB customers to meet compliance requirements for data protection in a virtual or hybrid IT environment. Using RDX Removable Storage can help meet those requirements with best of class data backup scenarios for VMware.

Utilizing physical disk storage in a VMware virtual machine (VM) is mostly realized with iSCSI disk subsystems which are connected to the network. Using iSCSI initiators, each VM can access its own portion of disk storage. The following guide explains how to utilize ESXi host-connected RDX QuikStation disk arrays and QuikStor drives directly from a VM.

Overland-Tandberg RDX QuikStor drives and QuikStation appliances

An alternative backup storage solution, especially for smaller SMB and single-server solutions, is a directly-connected RDX QuikStor, which is available either as internal drives with a USB 3.0 or SATA III interface or as an external drive with an USB 3.0 interface.

For iSCSI network-attached removable disk storage, the RDX QuikStation is designed to provide data protection and offsite disaster recovery for either physical or virtual SMB and SME environments.





The RDX QuikStation and the QuikStor each combine the benefits of disk and tape

SATA III drives in VMware environments

VMware allows data to pass through SATA ports to a guest machine, which you can use as a virtual backup server. The RDX devices provide a high performance solution for all storage tasks requiring removability and off-site storage for compliance backup and archiving tasks.

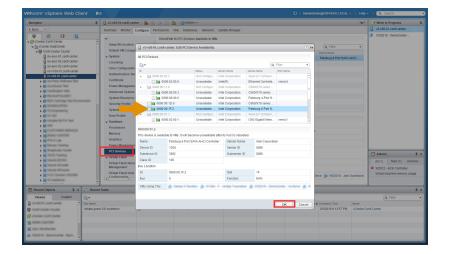
RDX Installation

Install a SATA controller to your ESXi host. Make sure that the controller supports AHCI. Potential RAID functionality should be turned OFF. Install your RDX SATA III drive or appliance as directed. Connect SATA and power cables.



Switch the ESXi host to maintenance mode

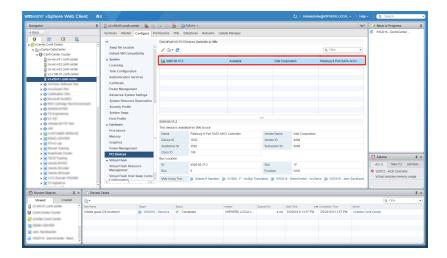
It is recommended to switch the ESXi host into maintenance mode during the following operations.



Scroll down the Configure list to the Hardware section and select **PCI Devices**.

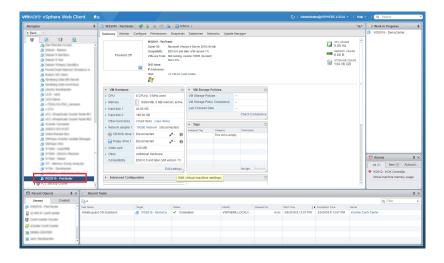
With the device selected in the DirectPath I/O list, click the **pencil icon** at the top of the list to edit it.

Select the **appropriate device** to be used and click **OK**.



The device is shown in the DirectPath list.

You need to restart the host to activate the change.

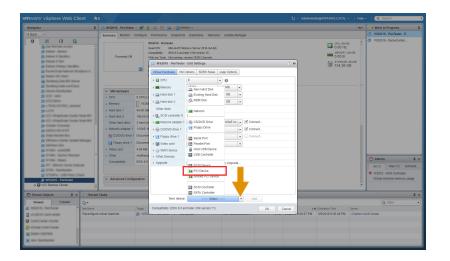


After the host is restarted, the controller is ready to be assigned to a virtual machine.

Select the **VM** to which you would like to assign the controller. (If the VM is running, please turn it off.)

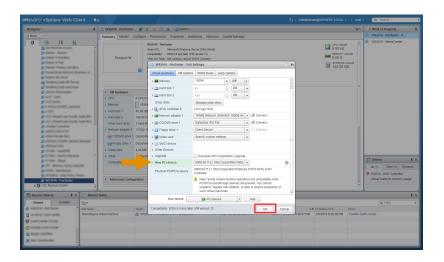
In the Summary tab, under VM Hardware, click **Edit Settings**.





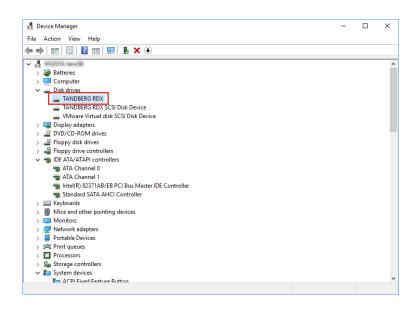
At the pop-up screen, using the **New device** menu at the bottom, select **PCI Device**.

Click **Add** to the right of the menu button.



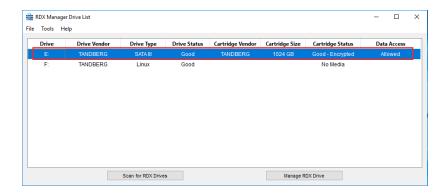
The new PCI passthrough device is shown.

Click OK.



You can use **Windows Device Manager** to check that the RDX device is now shown.



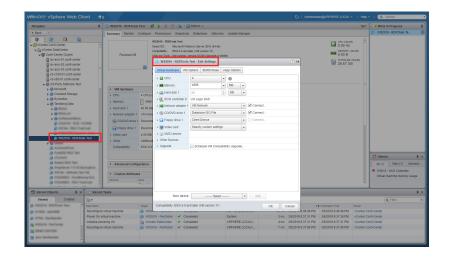


A quick check of the **RDX Manager Drive List** should also show the drive available.

The virtual machine needs now to be restarted to have the SATA controller recognized. Once rebooted, return the ESXi host back to operating mode from maintenance mode.

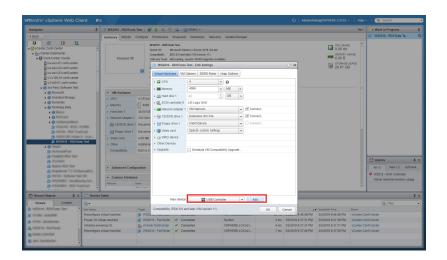
USB 3.0 drives in VMware environments

USB 3.0 controllers, which are available at the ESXi host, can be utilized by virtual machines. That way, VMs are able to access RDX drives directly for individual storage tasks.

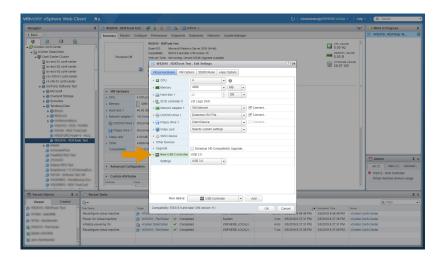


Select the USB drive and, under the Summary tab, in the VM Hardware subsection, click **Edit Settings** to open the pop-up settings screen.

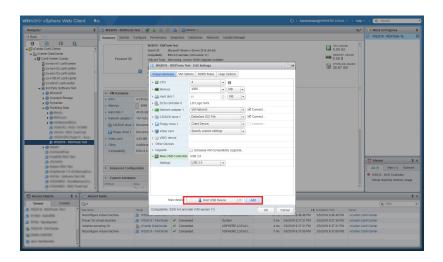




Using the **New device** drop-down list at the bottom, select **USB Controller** and click **Add**.

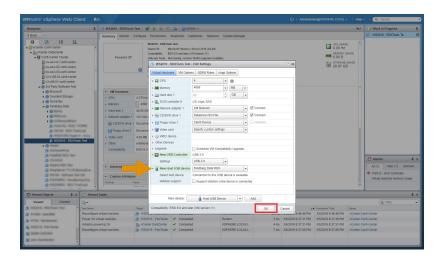


The **New USB Controller** is added to the Virtual Hardware list.



Again, using the **New device** drop-down list at the bottom, select **Host USB Device** and click **Add**.



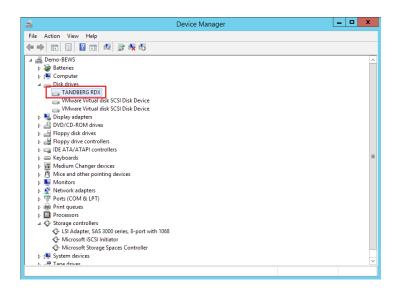


The New Host USB device is added to the hardware list.

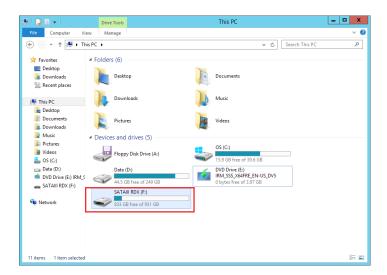
Click **OK**. The virtual machine can now be restarted.

Start the user interface, choose the desired virtual machine and select **Power On**.

The RDX drive is now ready for individual storage tasks.



After restarting your virtual machine, the **Windows Device Manager** shows the RDX as a new disk drive.



The RDX drive is also now visible in the **explorer** of the virtual machine and can be used for backup and archiving tasks.