Using RDX® QuikStor in VMware® Environments

Removable disk storage is essential for many SMB customer to meet their compliance requirements for Data protection in an virtual or hybrid IT environment.

Utilizing physical disk storage in a VMware virtual machine is mostly realized with iSCSI disk subsystems which are connected to the network. Via iSCSI initiators, each VM can access its own portion of storage. For iSCSI connected RDX Storage please see our RDX QuikStation removable disk appliances and documentations. An alternative backup storage solution, especially for smaller SMB and single server solutions, can be the directly connected RDX QuikStor SATA III. VMware allows it to pass through SATA ports to a guest machine which you can use as a virtual backup server.

The new RDX QuikStor SATA III internal drive provides a high performance solution for all storage tasks requiring removability and off-site store in compliance backup and archiving tasks.

The following guide explains how to utilize a RDX QuikStor drive directly from a virtual machine using a SATA controller connected to the ESXi host.

**RDX QuikStor 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 internal RDX SATA III drive into an empty slot (drives are available with 3.5" or 5.25" bezel). Connect SATA and power cables.

**Switch the ESXi host to maintenance mode**

It is highly recommended to switch the ESXi host into maintenance mode during the following operations.
Open the vSphere Client and select the desired ESXi host.

Select “Storage Adapters.”

Select the appropriate SATA controller (here, vmhba32 is selected).

The connected RDX drive is shown in the details pane.

Now select “Advanced Settings” from the hardware pane.

As currently no devices are configured for passthrough, click “Configure Passthrough...”

Select the appropriate SATA controller for passthrough.
The controller is now selected for passthrough.

You need to restart the host to get the changes activated.

The host has been restarted and the controller is ready to be assigned to a virtual machine.

Detailed information is shown in the device details pane.

Select the desired virtual machine which you would like to assign the SATA controller.

If the VM is running, please turn it off.

Choose “Edit Settings” from the commands pane.
This screen shows all assigned hardware to that virtual machine. As we need to add the SATA controller click “Add.”

Select “PCI Device.”
Click on “Next.”

Select the desired SATA controller.
Click on “Next.”
The selected SATA controller is displayed.

Click “Finish.”

The PCI device, our SATA controller, is now added as a new hardware of the virtual machine.

Click on “OK.”

The virtual machine needs now to be restarted to get the SATA controller recognized.
Turn your ESXi host back from maintenance mode to operating mode and start the virtual machine.

After restarting our virtual machine, the device manager shows up on the RDX QuikStor as a new disk drive.

The RDX drive is also shown in the explorer window.

The RDX QuikStor drive is now ready for use.