

# Using RDX USB drives in Hyper-V environments

SOLUTION BRIEF

Easy VM integration  
deploying networked RDX



Server virtualisation in the SMB market is steadily increasing and becoming standard practice. Virtualization makes the infrastructure simpler, more efficient, and saves on operating costs. Simultaneously, the role of backup and disaster recovery is also becoming increasingly more important as physical servers and storage are consolidated.

## Flexible solutions for Microsoft® Hyper-V

Overland-Tandberg's RDX QuikStor removable disk system can be implemented in Hyper-V environments to offer easy-to-use and affordable storage for backup, archiving, data exchange and off-site storage. RDX provides a high-performance solution for all storage tasks requiring removability for off-site storage, or compliance backup and archiving tasks, and can now be connected to a virtual backup or application server running on Microsoft Hyper-V.

## Easy integration with USB device server

Allocating local attached removable storage to Hyper-V virtual machines is practically impossible. So users refrain from implementing this solution and many customers rely on network attached storage for backup.

The validated combination of RDX QuikStor USB drives and Silex Technology's DS-600 USB device server, enables fast, easy, and cost-efficient deployment within your existing ethernet network. The DS-600 USB device server converts the USB protocol into the ethernet network protocol. With this, virtual machines can easily access the RDX removable disk systems with all its features and functions for internal backup, storage or archiving tasks.

## Backup, disaster recovery, off-site storage

Backup is essential in order to continue after a catastrophic data loss event. Data loss could mean the loss of information which can never be recovered or rebuilt. RDX is an easy to use solution which is compatible with leading backup applications

### Challenges

- Deployment of removable storage devices for individual VMs is not supported
- Limited off-site capabilities threatens disaster protection
- Increased impact of virus and ransomware attacks
- Most storage solutions are cost-intensive and complex to manage within a virtual environment

### Solution Benefits

- Builds your business cyber security resilience and prepares and protects against disasters.
- Solves many issues protecting individual virtual machines on Hyper-V
- Use Removable Disk Storage with virtual machines on Hyper-V
- Local separation of backup data with RDX protects against local incidents
- Mix and match your backup and archive storage capacity needs with RDX media
- Easy to deploy and ease of use reduces operational costs
- Low cost and budget friendly
- Media rotation and off-site vaulting meets compliance requirements
- Rugged RDX media design means no special care is required

on the market. VMs can be quickly and easily recovered with RDX to ensure immediate business continuity after a system crash. Removability and off-site storage capabilities offer full disaster, virus and ransomware protection.

## Network attached RDX QuikStor

A network connected RDX QuikStor drive provides businesses with the flexibility of removable disk storage. Using the DS-600 USB device server in conjunction with the RDX USB drive, individual VMs are now able to access their own removable storage for individual storage tasks. Administrators are no longer dependent on centralized storage for backup as they are with a NAS device. In addition, the networked RDX can be placed outside of the datacenter for improved data protection in the event of a local disaster.

Furthermore, it simplifies the IT administrators daily work. They can place the RDX drive on their desk and mount the network attached RDX to different computer systems, which could be virtual or physical, for different data backup, restore or data update or migration tasks.

## Easy datacenter integration

The RDX QuadPAK rackmount kit allows for the integration of several RDX QuikStor drives and DS-600 USB device servers in an existing 19-inch rack cabinet. With this, dedicated tasks can be spread across multiple VMs or systems. As an example; one VM could perform a local backup with media rotation, one system could be responsible for archiving with off-site storage, and a third VM used for data transfer between different locations.

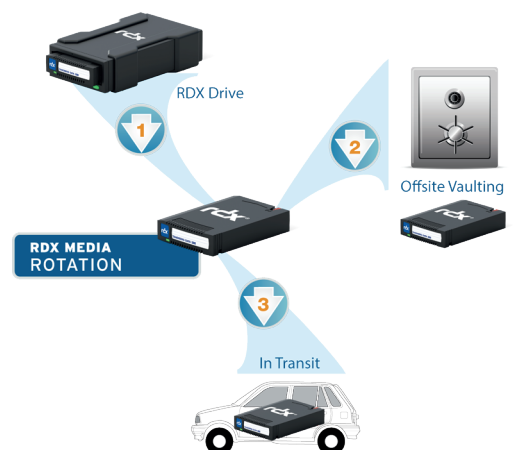
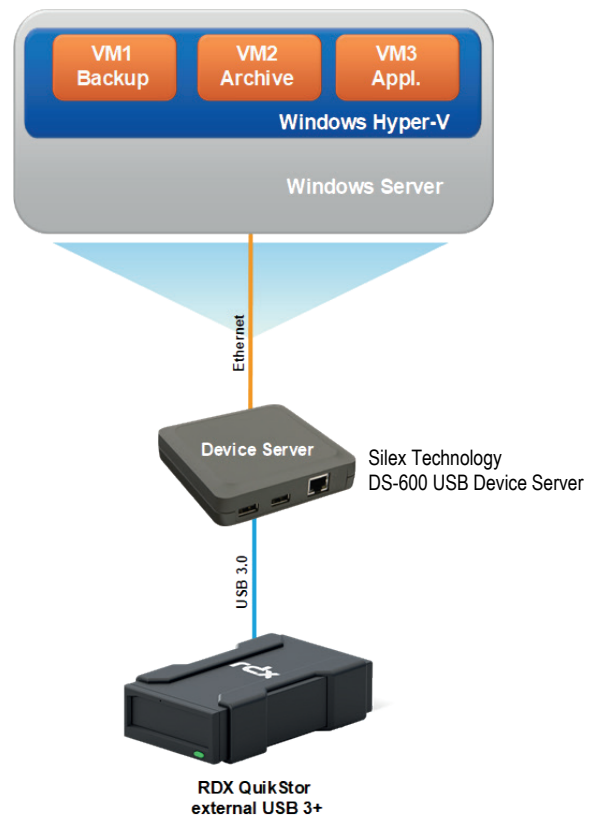
## Sharing a networked RDX

It is also possible to share one RDX QuikStor sequentially with several systems using the DS-600 USB device server by simply installing Silex's USB device server virtual link software on each system. For switching the storage between the different VMs, the existing connection is stopped and the required connection will be established. This can be done by scripting or manually.

## Benefits of removable disk storage

Using RDX QuikStor with the DS-600 USB device server allows businesses to implement a media rotation scheme in a Hyper-V environment.

For backup, media rotation is a best practice to provide multiple layers of protection. One media would reside in the drive ready for the backup or other storage tasks, one media is located offsite at an external location and the third one would be on its way either to or from the office. A media rotation scheme with at least three media cartridges enables users to meet most disaster protection and compliance requirements.





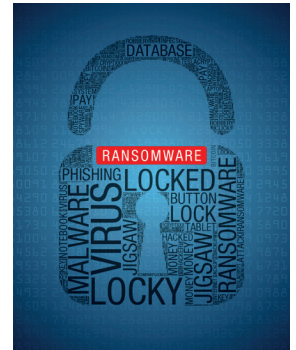
## Compliance archiving with WORM

RDX is also ideal for long term off-site archiving. The rugged media design withstands even rough environments and offers an archival life of more than 10 years. With the optional WORM feature, which is certified by KPMG, data archiving meets compliance requirements.

## Disaster and ransomware protection

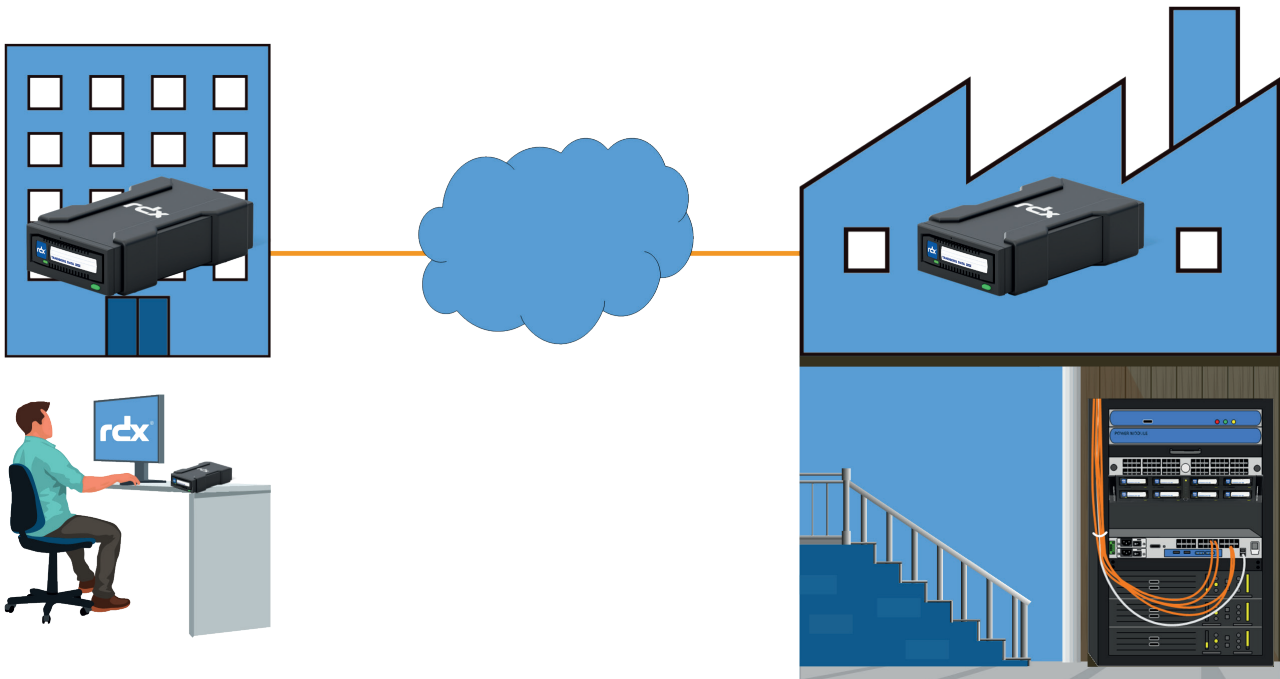
The removability of RDX media ensures full data protection for virtual environments in case of either disaster or virus and ransomware attacks. It has become an essential component for implementing a Cyber Security resilience strategy for businesses. Once ransomware has infected a computer, it is able to spread among other systems throughout the network. So backups to NAS systems or other host computers are also threatened. Off-site copies build the last line of defence for your information as they cannot be infected.

In situations where it is not possible to remove the RDX media immediately after the backup job, for example, if multiple backups are performed per day targeting the same media, the RDX RansomBlock software should be utilised. RDX RansomBlock only allows write operations to RDX media for granted applications. In case of a virus or ransomware attack or any other unauthorised access, RansomBlock will deny this operation and protect the data stored on RDX media from being infected or erased.







## Conclusion

When individual VMs, hosted by a Hyper-V environment, need removable storage, Overland-Tandberg's solution with RDX QuikStor removable disk systems and Silex Technology's DS-600 USB device server make a perfect fit. Applications running on individual VMs can fully benefit from all RDX QuikStor features.



## Networked RDX product portfolio

RDX Appliances					
					
<b>Product</b>	RDX QuikStor External Drive	RDX QuadPAK	RDX QuikStation 4		RDX QuikStation 8
<b>Form Factor</b>	External desktop	1.5U rackmount for up to 4 external RDX QuikStor drives	1U rackmount or desktop		2U rackmount
<b>Connectivity</b>	Ethernet with USB Device Server**	Drive dependent	iSCSI		
<b>Performance</b>	up to 260MB/s, depending on media type	Dependent on number of installed RDX drives	4 x 1 Gigabit Ethernet speed		2 x 10 Gigabit Ethernet speed
<b>Capacity</b>		Dependent on number of installed RDX drives	20TB using 4 x 5TB media, unlimited offline capacity		40TB using 8 x 5TB media, unlimited offline capacity
<b>Media Capacity Points</b>	500GB, 1TB, 2TB, 3TB, 4TB, 5TB (HDD); 1TB, 2TB, 4TB (HDD, WORM)				
<b>Operational mode</b>	Removable Disk Mode and Fixed Disk Mode		4 RDX removable and fixed disk drives 1 Logical volume across all RDX drives* 1 Protected logical volume across all RDX drives* Emulated disk autoloader		8 RDX removable and fixed Disk drives 1 Protected logical Volume across all 8 RDX drives* 2 Logical Volumes across 4 RDX drives* 2 Protected logical volumes across 4 RDX drives* Emulated disk autoloader, tape automation modes and hybrid mode
<b>Physical Specs</b>			<b>Rackmount</b>	<b>Desktop</b>	<b>Rackmount</b>
<b>Height</b>	41mm (1.63 in.)	72,5mm (2.85 in.)	43mm (1.69 in.)	68mm (2.68 in.)	86mm (3.4 in.)
<b>Width</b>	102mm (4.00 in.)	481mm (18.94 in.)	440mm (17.32 in.)	464.5mm (18.94 in.)	440mm (17.32 in.)
<b>Length</b>	478mm (18.82 in.)	248mm (9.45 in.)	478mm (18.82 in.)	481mm (18.94 in.)	521mm (20.5 in.) incl. bezel
<b>Weight</b>	11.3kg (25 lb.)	2.66kg (5.86 lbs.)	11.3kg (25 lb.)	13.6kg (30 lb.)	14.96kg / (33.3 lb.)
<b>Standard Warranty</b>	3-years OverlandCare Bronze Level (3-Years Advanced Replacement Service)				

\* Logical Volumes are available in fixed or removable mode. Total capacity is media and operation mode dependent.

\*\* Optionally available, verified systems can be found in our compatibility list.

Sales and support for Overland-Tandberg products and solutions are available in over 90 countries.  
Contact us today at [salesmea@overlandtandberg.com](mailto:salesmea@overlandtandberg.com)

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