## **vSPHERE vs. HYPER-V AND XENSERVER**

VMware's not the only game in town: Microsoft Corp.'s Hyper-V and Citrix Systems Inc.'s XenServer are also popular server virtualization tools. This table compares vSphere's storage features with those of Hyper-V and XenServer.

	VMware vSphere 4.0	Microsoft Hyper-V R2	Citrix XenServer 5.5
Thin provisioning of virtual disks	Yes	Yes	Limited, requires StorageLink and supported SAN
Fibre Channel over Ethernet (FCoE) support	Yes	Supports FCoE but not InfiniBand	Limited, no FCoE or InfiniBand
Jumbo frame support	Yes	Yes	No
Hot extend of virtual disks	Yes	No	No
Dynamically grow of storage volumes	Yes	No, requires third-party SAN tools to grow and shrink LUNs	No
Paravirtualization support for storage adapters	Yes	Yes	Yes, for Linux guests
Direct access to storage devices (VMDirectPath)	Yes	No	No
Live VMware Storage VMotion	Yes	No, Quick Storage Migration is not live	No
APIs for data protection	Yes	No	No
APIs for multipathing	Yes	No	Yes
Monitoring and alerting for thin disks	Yes	No	No