



## Brodart

# Timing the move to virtualization with a server refresh

When refreshing legacy servers, Brodart took the opportunity to migrate to a virtualization environment. Dell™ vStart virtualization-ready infrastructure helps the company improve performance, simplify management, and reduce risk.

**M**essaging, database, collaboration, and other mission-critical applications are important tools of the trade for midsize retailer and wholesaler Brodart, a Pennsylvania-based library solutions merchant. Brodart provides a range of products from shelf-ready books to electronic ordering systems and furniture.

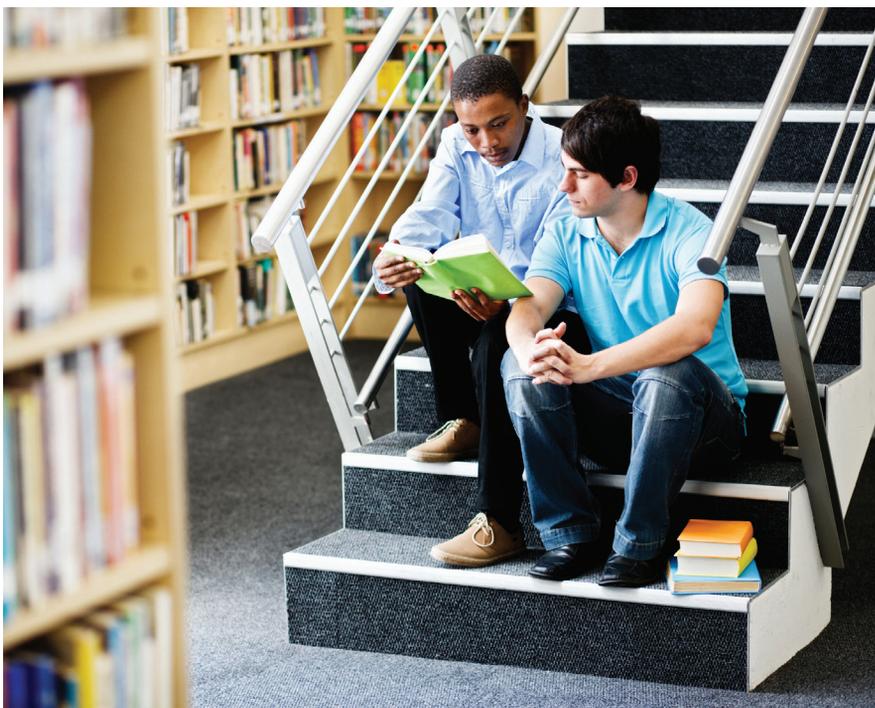
Running I/O-intensive applications on legacy gear was encumbering the company's operations. It also created concerns about the challenges of potential downtime during an upcoming server refresh. Brodart realized that migrating to a virtualized server infrastructure was inevitable. "Most of our servers were nearing end of life," says Brad Huyck, manager, IT operations at Brodart. "I knew we needed to virtualize as many servers as possible as part of the refresh."

## Moving rapidly to virtualization

Brodart investigated options to accelerate the migration to virtualization while helping to reduce risk and complexity. After making an effort to thoroughly understand Brodart's needs, Dell referred the company to Interphase Systems, a third-party organization specifically qualified to assist Brodart with its virtualization project.

To help simplify the project and accelerate time to deployment, Brodart opted for the Dell vStart 100 infrastructure, which provides the servers, networking, storage, management tools, and services required for a successful virtualization deployment in one preassembled, validated solution. "To my knowledge, no other partner offers anything like vStart," says Huyck. "It turned out to be a perfect fit for our company. It made a lot of sense for us to deploy a prevalidated, virtualization-ready infrastructure in one fell swoop."

Interphase worked with the Brodart IT team to deploy vStart based on VMware vSphere® virtualization software, Dell PowerEdge™ servers, Dell PowerConnect™ switches, and a Dell EqualLogic™ Internet SCSI (iSCSI) storage area network (SAN). Huyck says he expected a six-month deployment. "I had been involved with a virtualization project in a previous job, and we shot ourselves in the foot because we



## Consolidated deployment pays off

By providing servers, networking, storage, management tools, and services in one preassembled, prevalidated solution, Dell vStart accelerates the transition to a virtualization infrastructure.

# 6x

Brodart started to achieve business value just four weeks after procuring the virtualized vStart infrastructure—six times faster than expected.

# 50%

The capability to clone virtual machines without waiting for hardware helped reduce the time to stage, test, and deploy new applications by 50 percent.

# 10x

In the vStart environment, a virtualized server can be deployed at least 10 times faster than it takes to procure, rack, and configure a physical server.

used direct attach storage, and it turned out not to be enough.”

The team had virtual servers up and running within the first week of delivery. The vStart infrastructure arrived completely racked and cabled, so all Brodart had to do was plug it in. “It even included the power distribution units and uninterruptible power supplies,” Huyck says. “Just four weeks after we made the purchase, we were already achieving business value. That’s about six times faster than I expected.”

Brodart virtualized around 20 of its legacy servers immediately, including those running the Oracle® Application Express tool, domain controllers, Domain Name System (DNS) servers, terminal servers, FTP servers, databases, and security applications. All were running on the PowerEdge servers and EqualLogic SAN. “We’re still moving things over, and we’ve already reduced the amount of rack space required to run our operations by 25 percent,” says Huyck. “We also benefit from the energy efficiency of the Dell PowerEdge R710 servers. I’d estimate that our power and cooling requirements have been reduced by 30 to 40 percent thus far.”

### Optimizing virtualized server deployment

The ability to create and delete virtual machines at will streamlines testing

and minimizes disruption to authorized users as Brodart moves its applications to advanced operating systems. “We still have some servers running Windows NT, if you can believe it,” says Huyck. “We’re upgrading as we move off the old servers. Virtualization gives us the opportunity to upgrade a system from one OS to another or to a new application version, and have our dev environment and our production environment side by side. That simplifies testing and also minimizes downtime during the transition.”

Virtual machines can be deployed much faster than procuring, racking, and configuring a physical server. “We can deploy a new server at least 10 times faster now,” says Huyck. Brodart can also recover data more rapidly and conveniently than before by restoring from point-in-time snapshots of virtual servers.

Brodart is in the final stages of testing virtual deployments of Microsoft® Exchange Server 2010 messaging and Microsoft SharePoint® Server 2010 collaboration applications. The IT team can clone virtual machines and does not have to wait for hardware, helping reduce the time it takes to stage, test, and introduce new applications by 50 percent. And the organization can provide high availability for applications and databases once they are

virtualized because it can move workloads between physical host servers using VMware® vMotion® software.

### Streamlining management and recovery

Easy administration of servers, networking, and storage is another benefit of deploying Dell vStart. Huyck and two associates manage the virtual infrastructure by performing most administration tasks directly from the VMware vCenter™ management console using the Dell Management Plug-In for VMware vCenter. The plug-in provides an additional Dell tab in the vCenter interface that displays health information for each server. Administrators can automatically perform Dell-recommended vCenter actions based on Dell hardware alerts.

Moreover, Brodart and its IT team did not have to wait long before virtualization and vStart helped them avert days of downtime for critical business applications. “Just after we brought in vStart, we lost one of our legacy database servers,” says Huyck. “Previously, we would have had to buy new equipment, wait for it to come in, and lose data each day while we waited. But with vStart, we were able to get back up and running in less than six hours. That’s a great example of how virtualization is benefiting the business, and it was great timing.” 