

Valueforge Business Continuity Solution

What Makes it More than a Simple Backup and Disaster Recovery Product?

The new Valueforge NAS-based Backup Disaster Recovery product offers customers an enterprise-class business continuity solution at a Small Business price.

Due to budgetary considerations, Small Business clients have typically been restricted to using backup and disaster recovery solutions that focus on the safe-keeping and restoration of data. The new Valueforge Business Continuity Solution goes beyond simple backup by additionally providing a means to have your business back up and running within 40 minutes of a server failure. Let us explain what makes our solution both enterprise-class and unique.

Key features of the Valueforge Business Continuity Solution (BCS)

1. Block-Level Backup

Standard tape and disk based backup systems rely on software that backs up files at the file level. The software sees data on the target machine to be backed up the same way that users on the network do ... as files and folders. In order to create an effective backup image during backup, the backup software must have exclusive access to the files to be backed up, or the backup will fail. Enterprise solutions use a technique called block-level backup to avoid access issues. The Valueforge BCS backs up your server's hard drive data at the block level. Data is stored as ones and zeros on digital media. A block-level backup reads the ones and zeros on the hard drive without concerning itself with the logical format of the data. By doing so, backup failures involving exclusive access (open files) on the backup target data are avoided. No special agents are needed to backup Exchange or SQL Server databases. The end result is that backups can occur during normal business operating hours without noticeable interference in the operation of the server. Servers protected by the Valueforge BCS can create backups as frequently as every 15 minutes and operate in production mode 24 hours a day, 7 days a week.

2. Disk-to-Disk Backup

Tape based backup has long been the standard for disaster recovery. However, anyone familiar with tape knows it has three shortcomings. They are slow performance, high media failure rate and failure to identify all files during a manual cataloging procedure (such as would be run during a recovery.) The result is a limitation on the amount of data that can be backed up because a finite time window exists for the backup process. Tape failure or cataloging failure results in lost data when the tape is called upon to perform a recovery. Disk based backup avoids these shortcomings by offering faster disk-speed data storage during backups. Data integrity is assured via use of RAID (disk redundancy) and by maintaining an on-disk file catalog.

3. **Optional Offsite Data Storage**

By its very nature, a true disaster will likely destroy not only the server being protected, but also the backup system located nearby to protect it. Whether the disaster is fire, weather-related, geological (earthquake) or theft, it often destroys the backup data in addition to the primary system. For this reason, good practice dictates that backup data must be rotated to an offsite location on a daily basis. Physically relocating backup media is not without its risks. Backup media can be damaged or lost while being moved offsite. Since the data being rotated offsite is typically the most recent, it is unavailable during casual restorations that require the most recent backup image. The Valueforge BCS offers the option to stream backup data to two high-availability data centers on the Internet (one in the eastern USA, one in the west). The most recent backup is always available locally on the BCS and the necessity for nightly off-site relocation of the backup media is eliminated.

4. **Rapid Business Recovery via Virtualization**

Mission-critical enterprise servers are usually protected via failover redundancy. Either, a spare server is kept on hand in perfect synchronization with the main server (ready to take over automatically upon server failure), or a cluster of servers is used. These are very expensive solutions. They require complete duplication of the server hardware *plus* the failover/clustering system. The Valueforge BCS provides nearly the same redundancy in a unique and cost-effective way:

When a server fails, there are two primary issues that dominate management's mind. They are: 1) Can all our data be recovered? 2) When will we be back up and running?

Both tape and disk based methods have the potential for recovering all data, though tape has more risks of data loss. Standard recovery procedures involve diagnosing the server failure, affecting a server repair, and then recovering the server system and data. This usually takes anywhere from 24 to 40 hours (longer if an unanticipated problem arises). The Valueforge BCS uses server virtualization technology to create a virtual copy of your server from the base disk image stored on its hard disks. This procedure is native to the BCS unit, and takes approximately 40 minutes to perform. When complete, the BCS can be booted and used as your main production server. Business operation can continue while the failed server is repaired and restored. This is the "Business Continuity" feature of our BCS. Compared to a standard recovery, there is almost *NO DOWNTIME* during a server failure!

5. **24/7/365 Included Maintenance and Support Agreement**

A product is only as good as the hardware, software and support behind it. Since the Valueforge BCS is part of the Valueforge Managed Services product line, all hardware/software support and monitoring is included in the bundled service package. Valueforge will make sure that backups are happening as required. We are responsible for all software and hardware repair issues during the term of your BCS agreement with us. These terms include the labor costs involved in restoration should the protected system fail. Your costs will never grow above the terms of your contract.

To discuss how a Valueforge Business Continuity System can be tailored to fit your needs, call us at 724-327-2010.