



Backgrounder: The History of LiveState Recovery

Being able to recover from disasters that befall organizations is one of the primary responsibilities of the IT administrators. So it is not simply important to backup a system but also to successfully restore this system if it's initially destroyed or made unusable. IT administrators generally perform backup using tape or disk, and of course, there are pain points associated with using either. These pain points include:

- Decreasing or non-existent backup windows
- Speed – restoration usually requires lengthy manual rebuild of the server before recovery can take place
- Reliability – backups may not always be reliable due to files being skipped or not seen
- Ease of Use
- Scalability
- Cost

In 2001 PowerQuest started expanding its expertise in disk-imaging to develop a solution called V2i Protector. This solution would help organizations overcome these backup and recovery pain points by providing a non-intrusive method for backups and a rapid and painless approach to recovery. The idea was simple, provide IT administrators with a way to create compressed virtual backup (or point-in-time) images of system volumes – including operating systems, server settings, applications and configurations – that could be used to restore systems in minutes as opposed to hours using traditional methods.

Utilizing PowerQuest's Virtual Volume Imaging (V2i) technology, backups could be created to a SAN, NAS or RAID array without interrupting user productivity or application usage. And when it comes to bare metal recovery, the unique restoration capabilities of V2i Protector boots the system, auto-detects hardware and loads appropriate drivers for bare-metal recovery in minutes allowing IT Administrators to now easily meet stringent recovery time objectives (RTOs) and overcome their backup and recovery challenges.



LiveState Recovery Milestones

1993

PowerQuest founded

September, 2002

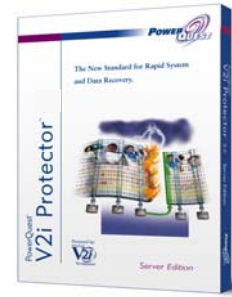
PowerQuest released V2i Protector 1.0

Supports Windows 2000 Server and Windows 2000 Advanced Servers

Available in English

V2i Protector would allow organizations to:

- Back up operating system and data files without bringing a server offline
- Recover from a server outage in a fraction of the time it typically takes
- Complete a bare metal restoration in minutes
- Improve system backup reliability
- Enhance existing backup environments



January 15, 2003

Version 1.1 released extending its disaster recovery protection to include hidden server utility partitions.

Additional enhancements include:

- The ability to incorporate external command files during and following the protection process to allow for greater control over the state of critical applications like database.
- Unicode support for double-byte systems to address the needs of customers in the Asia Pacific region.
- Ability to mount multiple backup images as network volumes
- Multiple volume restores
- Functionality within a SAN environment

June 10, 2003

Version 2.0 released with new Edition for Windows Desktops

Server Edition supports Windows NT Server, Windows 2000 Server, Windows 2000 Advanced Server, Windows 2003 Server

Desktop Edition supports Windows XP Home, Windows XP Professional and Windows 2000 Professional systems

Both Editions available in English, French, German and Japanese

Additional enhancements include:

- Hot incremental imaging and rollbacks
- New user interface
- Improved database support by permitting users to simultaneously capture & restore multiple database volume-sets
- Removable and spanned media support: allowing users to write and save backups directly to a CD or DVD.
- Updated Recovery Environment including a simple auto-detection process during bare-metal recovery. Also provides boot-level access to network, USB, FireWire CD or DVD drives where backup images may be stored.
- Integrated disk-to-disk copy functionality
- Remote deployment and configuration for the Server Edition.

September 22, 2003

Release of V2i Protector 2.0 Management Console

Available in English, French, German and Japanese



Centralized console for V2i Protector Server and Desktop Editions deploys client agents and configures routine backup schedules

Features include:

- Configure automated backup schedules for a defined group of servers, PC and/or laptops
- Deploy customized scripts to automate the functionality of V2i Protector
- Email notification to administrators of backup activities

October 28, 2003

Release of V2i Protector 2.0 Small Business Edition

Supports Windows NT, 2000, 2003 and Small Business Server

Available in English, French, German and Japanese

Small Business Edition is a lower priced, scaled down version of V2i Protector Server Edition. It does not include incremental backups, writing directly to CD/DVD and no disk to disk copy.

December 2003

PowerQuest acquired by Symantec Corporation

October 5, 2004

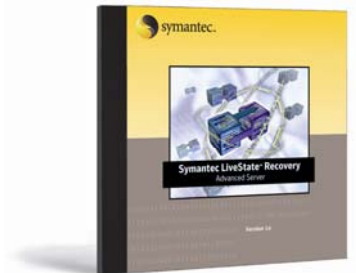
Release of Symantec LiveState Recovery 3.0 (formerly known as V2i Protector)

Three editions (Advanced Server, Standard Server and Desktop) are available in English, French, German, Japanese, Italian, Spanish, and Portuguese

New features allow IT administrators to:

- Automatically backup systems when events occur that could threaten their stability. These events include application installation (using setup.exe, install.exe, or MSIEXEC); user logon/logoff; and number of megabytes of storage that change. (Advanced Server and Desktop editions only)
- Remotely restore (through embedded Symantec pcAnywhere host technology) servers and desktops using the Symantec Recovery Disk included on the product CD
- Set databases that are Microsoft Volume Shadow Copy Service (VSS)-aware to the quiet state during snapshots without actually taking them offline
- Convert from simple disk to dynamic disk and vice versa
- Adjust system usage performance dynamically to more effectively utilize resources
- Simplify management of snapshots and minimize storage requirements by consolidating incremental snapshots (Advanced Server and Desktop editions only)
- Use the Symantec Recovery Disk to restore systems, perform virus scans, check disk integrity and retrieve files or folders.

Note: Standard Server is a lower priced, scaled down version of Advanced Server without event-driven backup, incrementals, consolidating images, writing directly to CD/DVD and no disk to disk copy.



March 2005

Release of Symantec LiveState Recovery Manager 3.0 providing centralized, policy-based system protection for servers and desktops/laptops.

Available in English only

Features include:

- Monitor backup status for an entire network and identify how many devices are enabled for recovery, how many have jobs scheduled, how many missed scheduled jobs and how many are off line.
- Define backup policies then deploy them through a drag and drop interface



- Detailed storage information for each computer including volume name, size, amount of space used, last backup, last backup location file system type and backup history and events
- Jump start backups on remote systems when jobs are not successful
- Leverage Symantec pcAnywhere to remotely restore systems

September 2005

Release of Symantec LiveState Recovery 6.0 and revolutionary technologies that allow IT Administrators to restore Windows systems anytime, from anywhere to virtually any device. Solutions are available in English, French, German, Japanese, Italian and Spanish and include new Suite offerings and Options.

Server solutions:

- LSR Advanced Server Suite (which includes Advanced Server, Restore Anyware, LightsOut Restore, & LiveState Recovery Manager)
- LSR Advanced Server
- LSR Standard Server
- LSR Restore Anyware Option
- LSR LightsOut Restore Option
- LSR Manager for Servers (*not available in Spanish*)

Desktop solutions:

- LSR Desktop Suite (which includes LSR Desktop, Restore Anyware & LiveState Recovery Manager)
- LSR Desktop
- LSR Manager for Desktops (*not available in Spanish*)

New product options and features include the following:

- The Restore Anyware Option allows any Windows server or desktop to be restored to any other Windows server or desktop, independent of hardware configuration. The option also includes virtual conversion tools and instructions on converting existing machines into a VMDK file and the ability to restore recovery points to virtual environments in VMWare.
- The LightsOut Restore Option uses integrated pcAnywhere technology and industry lights-out standards to restore unattended servers (including blade servers) from remote locations and devices.
- Integration with Symantec Backup Exec. IT administrators can create Backup Exec jobs in LiveState Recovery Manager to protect system recovery points and move them to tape for storage off site in a safe and secure location.
- Network bandwidth throttling
- Windows domain controller support
- Sending SNMP traps
- Enhanced Symantec Recovery Disk

LiveState Recovery solutions are integrated with LiveState 6.0 applications and platforms, advancing Symantec's strategy to provide customers with an integrated Windows server and desktop management environment that includes provisioning and configuration management, patch management, asset and software usage management, remote control and disaster recovery.

For more information on LiveState Recovery visit us online at:
<http://sea.symantec.com/slsrecovery>