Storix Backup Administrator on IBM PowerLinux servers

One-step bare-metal restore supports super-fast recovery, cloning and migrations — no need to reinstall the OS

Highlights

- Back up all user data and the OS

- Restore to dissimilar hardware and storage

- Migrate legacy System p Linux systems to PowerLinux

- Migrate physical systems to LPARs

- Create bootable backup tapes for PowerLinux

- Boot and install from the network, without a NIM server setup

- Integration with IBM Tivoli Storage Manager

In a 24x7 world, super-fast backup and recovery is all-important. In environments where IT projects routinely require testing and benchmarking on essentially live data, backup and recovery is also all-important because it is the mechanism for creating real-world testing and workload environments.

An additional consideration complicates the already challenging world of performing backup and recovery — the recovery-server environment rarely matches the source-server configuration. This means that backup is a multistep process, one step backs up the data and a second step backs up the operating system (OS) and applications. This also means that recovery is a multistep process, the OS (and then the applications) must be reinstalled and configured, and then the data can be loaded. This is a cumbersome disaster-recovery routine that IT departments around the globe have frustratingly endured for decades.

This type of recovery process can be particularly complex in a Linux® environment, where the culture embraces the concept of countless numbers of separate, honed-down OSs that run stand-alone applications.

A proven bare-metal restore solution

IBM® PowerLinux™ POWER7® processor-driven servers have done a lot to streamline the challenges of running so many distinct OSs. PowerLinux servers deliver inherent support for innumerable logical partitions (LPARs) and Workload Partitions (WPARs), as well as a

wealth of Linux OS, development, tuning and productivity tools. However, disaster recovery is still typically a multistep process: reinstalling and configuring the OS and the applications, and then reloading the data.

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– David Huffman, President, Storix

Storix, Inc., headquartered in San Diego, US, has come up with a simpler and faster disaster-recovery method, which more than 10,000 enterprise clients around the world use. Referred to as *bare-metal restore (BMR)* solutions, (also known as *crash-recovery or system disaster-recovery* solutions), Storix Backup Administrator (SBAdmin) stands out even among the few other solution providers in this category because it does more than merely back up a disk-image of the system. Disk-image backups require the backup to be restored to an identical disk (same type, size and location, and it restore file corruptions and file fragmentations. Among other disadvantages, this means there is no opportunity to automatically increase I/O performance during the recovery.

In contrast, SBAdmin provides Adaptable System Recovery (ASR), allowing you to rebuild your Linux system (or IBM AIX® or other OSs) to the same or dissimilar disks and servers.

A flexible BMR solution

The ability to use SBAdmin to recover to different types of disk and server environments provides a great deal of flexibility that is impossible with disk-image solutions. You can even alter the configuration as you restore, which means your

backup will fit onto essentially any hardware configuration. Thus, SBAdmin not only offers a lot of options for restores, but other repurposing of the backed-up system becomes easily possible: provisioning, cloning, hardware migration (including physical migrations to virtual environments), and storage migration.

Application downtime can cause substantial cost even if it lasts only short durations, which makes the rapid-restore process provided by SBAdmin extremely valuable.

According to David Huffman, President, Storix, "In many of our customer sites, SBAdmin is routinely used for creating test environments and for migrations to virtual environments. It is so easy and quick to use that it becomes the tool of choice for workload and development testing."

A secure BMR solution that works with Tivoli

SBAdmin provides the option to encrypt the back up data using up to 256-bit AES encryption , thus complying with the toughest of today's corporate security standards. Additionally, SBAdmin works in conjunction with IBM Tivoli® Storage Manager to streamline the most challenging of backup processes in larger IT environments, while still honoring the security and single-management benefits offered by Tivoli.

Why SBAdmin for PowerLinux

SBAdmin is particularly valuable in the Linux environment because, unlike most UNIX® environments, Linux distributions do not include an **mksysb** utility or other disaster-recovery tools. Linux users who are faced with a recovery situation must often go back to their original distribution media to rebuild their Linux environment.

Instead, SBAdmin backs up Linux environments at the file level, ensuring that no users ever have to go back to the Linux distribution media.

No other Linux disaster utility can recover everything, the operating system, the applications and the data, to a dissimilar environment.

When you consider that application downtime can become very costly in a very short amount of time, the rapid-restore process provided by SBAdmin is extremely valuable. No other Linux disaster utility can recover everything, the operating system, the applications and the data, to a dissimilar environment.

Why PowerLinux

Making the decision to run your Red Hat or Novell SUSE Linux applications on PowerLinux servers brings exceptional value to your Linux IT investments. The IBM Power Systems family is designed to provide outstanding performance, availability, scalability and dynamic-resource allocation. Unique IBM virtualization features allow you to process more information on a single server, creating the potential to save on total cost of system ownership, as well as space and energy costs.

Equally important, both Red Hat and Novell SUSE Linux run natively on Power Systems servers. IBM has worked to enable its entire server and storage product line to interoperate with Linux. This includes ensuring that Linux uses the unique advantages and enhanced functions provided by IBM Power Systems. IBM pioneered the use of Linux for mission-critical workloads on Power Systems servers, while also ensuring that key business application workloads and the IBM software family run with the stability and efficiency demanded of IBM Systems.

For more information

TTo learn more about Storix and IBM PowerLinux servers, contact your IBM marketing representative or IBM Business Partner, or visit the following websites:

ibm.com/partnerworld/powerlinux and
www.storix.com/powerlinux

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