Purpose-Built Virtual Tape Solution for IBM Power Systems Environments

If you work in an IBM i Power Systems (IBM i, AIX) environment, you know that the standard backup methods used with local, attached tape storage can be frustrating at times. Your backup streams may run slow. You're manually handling tape media more than you feel you should. The tapes must be handled, transported and stored offsite (often a long distance away) for disaster recovery planning. The backbone of your business—the Power Systems server—shouldn't be causing you backup headaches due to the Total Cost of Ownership (TCO).

You may have heard about virtual tape appliances but so far, you haven't considered them due to the cost and complexity of existing solutions. From a price/TB standpoint, the ETI-NET SPHiNX™ delivers the most cost-effective virtual tape solution on the market today. You can streamline backups and improve recovery times while dramatically decreasing the costs of maintaining backup and recovery operations. With SPHiNX, the host system backs up to disk as a virtual tape device, then you can connect your existing tape devices to the SPHiNX on the back-end if physical tape remains a requirement.

DEDICATED APPLIANCE READY FOR YOUR BACKUP ENVIRONMENT

Purpose-built for Power Systems users, SPHiNX offers a backup solution that improves the efficiency within your backup environment, provides rapid recovery, enhanced security and simplifies data transfers all while saving you money. As a disk-based system, SPHiNX is capable of backing up and restoring data many times faster than traditional tape drives and libraries with no physical tape to handle, mount or rewind. Providing near immediate access to stored data, SPHiNX drastically reduces recovery time to meet increasing RTO and RPO requirements. As a dedicated appliance, standard RAID protected disk, hot swappable drives and redundant power supplies are supported to ensure reliable high availability of data. Further, as an appliance, the management of virtual tape operations is easy and can be done remotely via a graphic user interface (GUI) and accessed using any standard Web browser.

STREAMLINE BACKUP/RESTORE PROCESSES

With SPHiNX, you can create and connect multiple virtual tape drives as a backup target to improve backup times without having to manage save times (vary on/off) for the devices across the systems. SPHiNX uses its own connected disk storage, so you aren't using more expensive, internal disk space on the Power Systems server. Additionally, SPHiNX can be designated as an Alternate IPL device in order to migrate data to a new system or restore the entire system image of an old system or partition. This means that system downtime can be reduced as any full system save backups can be restored efficiently back to a system partition using a virtual tape drive on the SPHiNX as the designated Initial Program Load (IPL) device.

SEAMLESS INTEGRATION INTO YOUR EXISTING ENVIRONMENT

SPHiNX looks just like a standard tape (TAP or TAPMLB) device to the IBM hardware resource manager. SPHiNX emulates an IBM 3580 tape drive or IBM 3584 tape library, therefore implementing a virtual tape solution shouldn't change the way you run your backup environment—other than saving you time and operational costs. You can continue to use any of the IBM i-supported backup applications and mechanisms that you may already be using, such as SAVE commands or HelpSystems Robot Save. For AIX partitions, all major backup applications are supported without any disruption to the current policies and processes.

SIMPLE, FLEXIBLE TAPE MANAGEMENT

If your IT department currently exports data to tape, then you know all too well the inherent risks of physical tape media. Identifying and isolating the cause of media errors and backup failures on tape can be challenging. Further, using staff and resources to locate and obtain the physical tape you need to restore a file is a costly use of resources. With SPHiNX, you are backing up to and restoring from disk, so restore time begins near instantaneous within a far shorter time with no manual tape handling.

SPHiNX includes flexible options for writing to physical tape if you need to export data to tape due to archive or offsite storage policies. Data can be efficiently written to attached physical tape drives at full streaming rate, maximizing capacity, utilization and physical assets. Stacked Tape Export format provides the ability to stack multiple virtual tapes onto a single physical media cartridge reducing tape media costs. Native Tape Export format keeps the data in the same format that the backup application wrote, supporting of offsite disaster recovery, where the physical tape can be directly restored to the host server.

VIRTUAL TAPE THAT GROWS WITH YOUR BUSINESS

SPHiNX is not limited to any specific configuration, and the SPHiNX supports dynamic virtual tape sizes and an unlimited number of virtual tape cartridges. Storage and up to 32 virtual tape drives can easily be added on an "as needed" basis and you can leverage existing disk from any mainstream SAS or FC connected third-party external storage arrays. Data reduction, up to 12:1, allows virtual cartridges to be automatically compressed as they are written to the SPHiNX disk storage. SPHiNX can connect extensively across your entire data center to support multiple host servers or partitions on a server with multiple virtual tape drives per partition.

ENCRYPTION PROTECTS YOUR DATA STORED TO TAPE

The SPHiNX provides optional data encryption by using strong AES-256 encryption and a robust key management infrastructure to satisfy regulatory compliance and strong company security policies. With SPHiNX all data at rest is considered to be data at risk thus data stored on SPHiNX disk is encrypted and any data written to physical tape can remain encrypted. If you backup to disk and archive to tape, then you can rest easy knowing that if the tapes are compromised in transport or the data gets into the wrong hands, you can avoid the enormous cost of a data breach notification.

SPHiNX SPECIFICATION
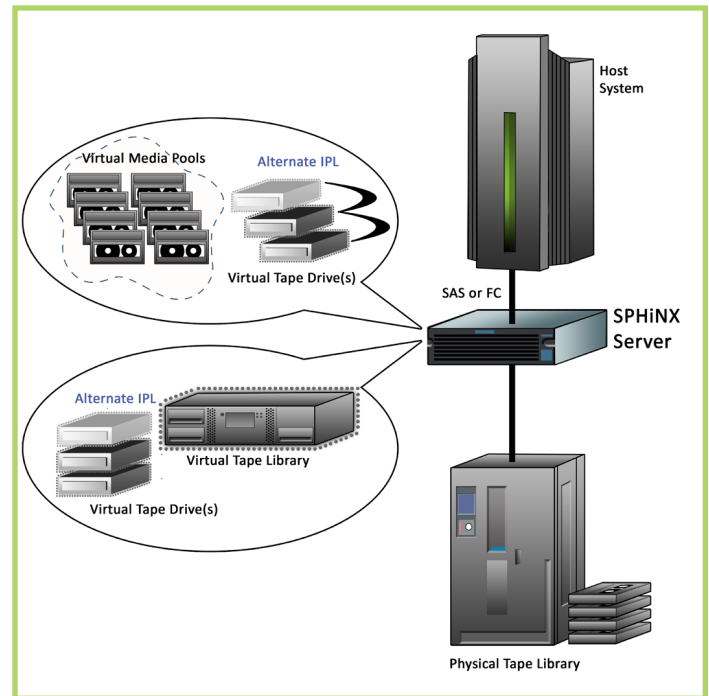
DATA REPLICATION OR DISASTER RECOVERY OPERATION

Depending upon your business data archival policies, SPHiNX can completely remove physical tape from your environment while enabling immediate access to your data. With the support of optional data replication, SPHiNX is able to synchronize data copies between one or more sites by replicating data over the WAN between one or more SPHiNX systems. SPHiNX optimizes available network bandwidth by supporting bandwidth limit settings, multiple replication streams, and data reduction by transmitting only the delta changes over the network or WAN Acceleration which can drastically reduce latency and network overhead when transmitting data over the wide area network (WAN).

GREENBANK MEETS ENCRYPTION/ REPLICATION GOALS WHILE REMOVING TAPE MEDIA FROM THE BACKUP ENVIRONMENT

GreenBank, a commercial bank, was using physical tape as their primary backup. The IT department's goal was to eliminate physical tape from the backup environment by finding a disk-based solution with replication and encryption. Today, their IBM Power Systems environment and IBM i backups function the way they had envisioned. Using SPHiNX, the data is securely backed up offsite using data replication, allowing for faster restores and an improved speed and operation of the Power System—which is the backbone of GreenBank's environment. Additionally, all information is encrypted so the transfer of data is very secure, and there are two copies of each backup—one onsite and one further offsite than before, increasing the security of data even more in the event of a local system issue or natural disaster occurring.

A COST-EFFECTIVE VTL SOLUTION IN YOUR POWER SYSTEMS ENVIRONMENT

SPHiNX combines crucial data protection features, including disk-based virtual tape, integration with physical tape, as well as optional data encryption and data replication. Purpose-built for Power Systems environments, SPHiNX provides great advantages to IBM i and AIX users. Media and operational costs are decreased while performance and security are increased to meet your business goals. With limited to no disruption to your existing backup environment, implementation is seamless. Most of all, SPHiNX provides almost an instantaneous ROI.

ABOUT ETI-NET AND SPHiNX

ETI-NET is the worldwide leader in backup of critical data for industries that never stop. We develop software which allows NonStop servers to access modern storage technologies. Now in our third decade of operation, ETI-NET enjoys a reputation for delivering leading-edge components to major data-centers globally.

ETI-SPHiNX, a subsidiary of ETI-NET, meets the specific needs of corporations, remote offices and data centers by providing a holistic data protection solution that saves money, time and resources. Offering complete disaster recovery capabilities for mid-range server and open system host environments, SPHiNX also scales easily to grow with your business. As a primary repository for backups, SPHiNX can be used as secondary tiered storage for replicated data to meet disaster recovery requirements.

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