

Replacing Internal Storage

INTRODUCTION

Virtually every computer room, no matter how well organized has a series of servers for their moderate to less important applications that were configured with inexpensive internal storage. Over time, the accumulation of these servers presents system administrators with significant problems. The servers tend to be purchased from a variety of vendors and over time so the internal storage represents quite a wide assortment of disk capacities, management methods, age and reliability. Finally, the cost of managing and maintaining this “inexpensive” storage is now far higher than any savings originally achieved. The ultimate frustration is that there are always servers overflowing their storage capacity while others have substantial free space. What is needed is a simple, reliable, high capacity external storage pool that can easily be shared between several servers but without the very high cost of SAN and NAS solutions. That solution is a multi-ported disk array called “SAN-In-A-Box.”

WHY REPLACE INTERNAL STORAGE

- Create low-cost storage pool
- Share capacity between multiple servers

REQUIREMENTS

- Disk array with multiple ports
- High-speed data access
- Easy to install and manage
- Support all open servers and operating systems
- Low cost

TYPICAL ENVIRONMENTS

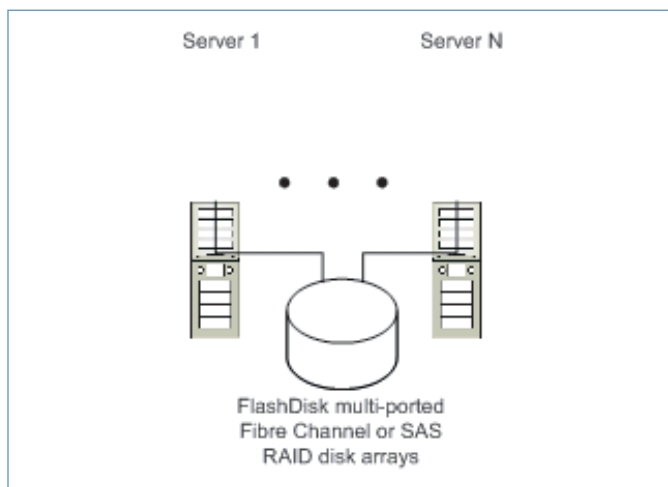
- Many moderate use servers
- Multiple server vendors and models
- Inefficient capacity utilization
- Multiple storage management approaches
- Multiple service organizations
- System administrator time limited
- Excessive downtime

BENEFITS

- Storage inexpensively shared
- Reliable external storage
- Augment or eliminate internal storage
- Simplifies storage management
- Storage monitoring and alerts

HOW IT WORKS

Each SAN-In-A-Box provides a pool of storage capacity that can easily be partitioned and provisioned to multiple, independent servers of any type running any operating system. From this storage pool, the available storage capacity can be allocated as needed to any connected server. Each server can be provisioned with the required amount of storage in distinct logical units. Each logical unit is mounted by the resident operating system on the server and is recognized as an independent logical volume. The system administrator manages the allocation of the available storage capacity in the storage pool from any available computer on the network. Thus, all storage for all servers is managed using a single storage management platform, called FlashConsole, that also provides real-time monitoring of the storage pool and delivers e-mail alerts to specified e-mail addresses in the event of problems. The result is a more reliable, easier to manage storage environment with higher capacity utilization and superior storage monitoring and alerts.



The diagram depicts a SAN-In-A-Box storage pool with several servers connected. The FlashConsole storage management system included with SAN-In-A-Box permits system administrators to manage all the storage in each storage pool from any computer on the network and receive e-mail notification of any problems.