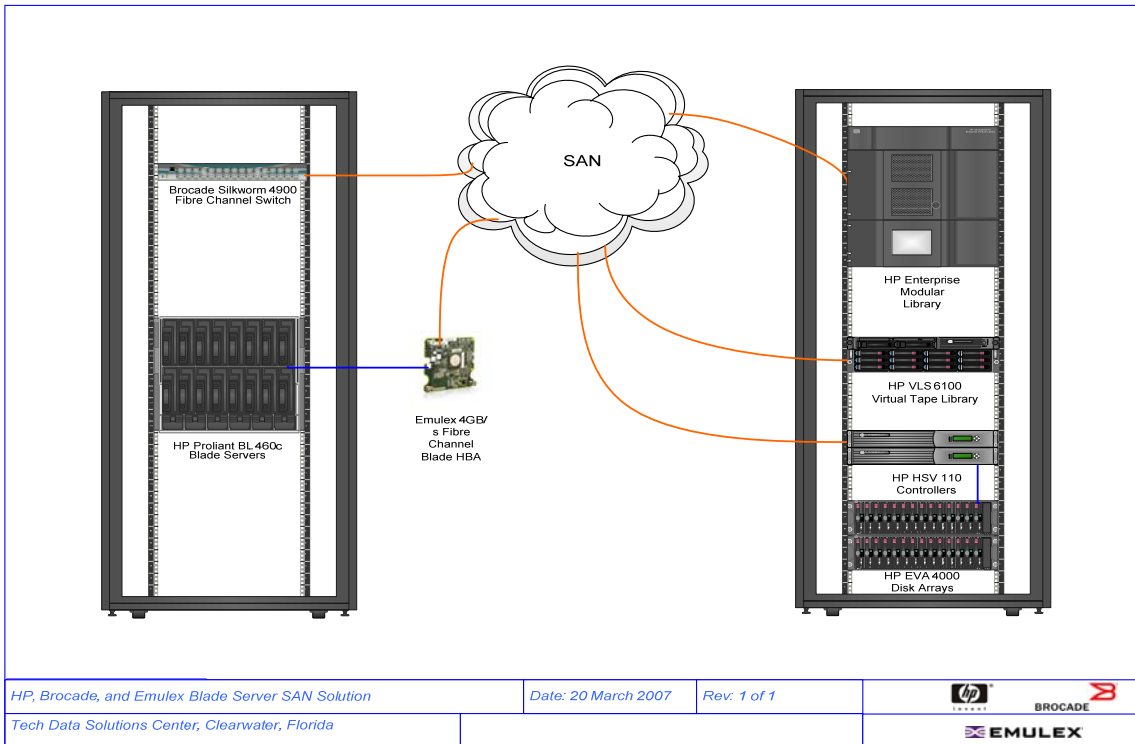


**Solution Overview:** Modern organizations need flexible, cost-effective IT infrastructures, in which computing, storage and networking resources can be deployed in the most easily scalable and efficient form factors. For an increasing number of customers, that means adopting blade servers, which take up dramatically less space than traditional rack-mounted servers and can be more easily upgraded as business and application needs change.

The amount and density of computing power available in a blade-server environment increases the need for storage systems that can efficiently and quickly handle the massive amounts of data produced by, or required by, blade servers. More than 40 percent of blade servers use Fibre Channel Storage Area Networks, or SANs, for their storage because SANs excel at meeting a number of key requirements for blade servers.

SANs provide the highest data transfer speeds, the greatest reliability and the most options for redundancy and failover of any storage topology. While blade servers are usually limited to two direct-attached disk drives, customers can easily increase the capacity of a SAN exponentially by adding more arrays. Because a SAN allows any application to access any unused capacity within the storage network, storage managers are freed from having to buy enough storage to meet each application's peak demands, regardless of whether that storage sits idle most of the time. SANs also support clustering and failover, which reduces downtime by allowing one storage array to immediately assume the workload of a failed array.

Linking blade servers to a SAN requires an HBA, in the form of a mezzanine card specifically engineered for the blade design. HP has partnered with Emulex and Brocade to showcase blade servers connecting to a SAN. The HP blade server SAN solutions involve HP storage arrays, an autoloader tape library, and a virtual tape library, all interconnected with Emulex HBAs on the blade servers, all through a Brocade Silksworm fibre channel switch. The HP SAN solution allows Tech Data systems engineers to demonstrate server and storage consolidation, server and storage virtualization, and backup solutions.



HP, Brocade, and Emulex Blade Server SAN Solution

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Rev. 1 of 1

Tech Data Solutions Center, Clearwater, Florida



**Contact Information:** To learn more about this solution call the following System Engineers:

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## Government:

*"The emergence of storage networks and high storage growth rates are forcing users to look at storage area management software. Solutions that manage the complex relationships between applications, their storage, and everything in between should be considered by users with medium to high levels of storage complexity or growth as a way to reduce costs and improve efficiency."*

Nick Allen  
Vice President and Research Director  
Gartner, Inc.

Today's real-time government must synchronize IT with government needs to ensure the availability of critical IT services, and enable the government to better manage change. Simultaneously, the costs and complexity associated with maintaining these IT services must be held in check to meet budgetary requirements.

Growth of capacity and complexity of SAN products has made management of data storage infrastructure a major area of weakness in most enterprises. Storage area management software has emerged as the solution for IT organizations that need to simplify the management of heterogeneous storage infrastructure in an effort to reduce costs, maintain service levels, and maximize information availability.

HP, Brocade, and Emulex SAN products offers government the means to manage their storage growth with market leading management software that helps government meet service levels, control costs, and maximize IT staff and employee productivity.