

*Critical Data*

*Cloud*

*Virtualization*

*Backup*

*Storage*



**Prepare your storage for the Cloud...**

**Put us to the challenge**

Bull StoreWay NetApp Solution Center

[www.bull.com](http://www.bull.com)

**BULL**

Architect of an Open World™

# Bull StoreWay™ NetApp Solution Center

## Bull and NetApp join forces to meet the challenges of storage in a virtualized environment

Virtualization, which frees the applications from the IT infrastructure, is a critical technology in Cloud Computing. It involves the creation of a virtualized, dynamic Data Center, potentially followed by the virtualization of individual workstations. The StoreWay NetApp Solution Center helps companies faced with dramatically changing Data Centers by providing solutions for the major storage problems in virtualized environments, particularly in terms of managing storage capacity growth, business continuity, data archiving and access.

### A FEW EXAMPLES OF PROBLEMS WE CAN HELP WITH

You have established that:

- Your primary storage is costly and overloaded by more than 5TB of files and/or is experiencing 30% annual growth.
- Data protection is ineffective because your primary storage is saturated.
- Your email system comprises several hundred mailboxes and imposes strict quotas.

In sectors including administration, education, health, finance and retail:

- You have virtualized your servers and now want to upgrade the workstations (more than 50).
- You plan to migrate to Microsoft Windows 7.

### A comprehensive storage environment

The StoreWay Solution Center hosts a complete storage environment able to simulate a wide range of real client scenarios. It is based on an iSCSI SAN storage network comprising NetApp storage and archiving arrays, using novascale bullion servers with VMWare and Microsoft Windows virtual machines.

### A full range of services

The StoreWay NetApp Solution Center proposes live or remote demonstrations and presentations, either at our Bull agencies or on client sites. Customers can also use the technical resources and expertise of the StoreWay NetApp Solution Center to run their own feasibility demonstrations (POC) and prototypes.



« The StoreWay NetApp Solution Center will enable our customers to understand and assess the best storage solutions available on the market to suit their cost, risk and service level objectives. »

Olivier Gaumont, Enterprise Servers & Storage director - Bull Computing Solutions



« Bull teams are highly experienced and the strength of our partnership has given us a privileged upstream position in a number of projects. In the light of Data Center developments, we believe the StoreWay NetApp Solution Center to be a high added value approach for our customers. »

Marc Montiel, Managing Director, NetApp France



StoreWay Solution Center

# Prepare your storage infrastructure ...

## Check out the full range of our solutions

The StoreWay NetApp Solution Center offers an ideal framework for information technology professionals, enabling them to meet Bull storage experts and see how the storage solutions proposed by Bull and NetApp can help them to face up to the many challenges inherent to data management. We propose a range of solutions for demonstration and remain at your disposal to set up customized seminars, either at our site or at remote locations. See below for an overview of our demonstration scenarios:

### 1- How to manage the impact of a VDI project on storage?

In a Citrix XenDesktop environment, storage infrastructure availability and performance are decisive, since any problem could affect thousands of users. The storage architecture must therefore be able to offer the level of service required for strategic applications. The demonstration describes the NetApp hardware and software solutions able to resolve the storage problems specific to Citrix XenDesktop environments in large companies. More specifically, the various themes discussed cover the implications of VDI storage, the definition of a reference VDI architecture and its impact on storage. The advantages of data deduplication and thin provisioning are demonstrated using the example of provisioning more than 100 workstations with optimized backup and performance.

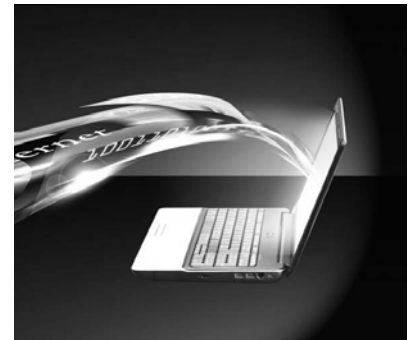


### 2- How to free primary storage space and index the contents?

The demonstration shows how to free storage space in the different environments (Windows/Linux, local files or NetApp NAS, Exchange applications, etc.). Data are transferred to various systems (local disks, NAS, WORM, CAS peripherals), while transparent data access is ensured via a web interface and keyword searches. In a global architecture, the demonstration concentrates on archiving according to customized criteria, content indexing, configuration, coordination as well as adaptation of the user interface.

### 3- How to backup and restore data in a virtualized environment?

In a VMware environment, the centralized management of virtual machines generally implies integrated backup and recovery. The demonstration presents the NetApp SnapManager® for Virtual Infrastructure (SMVI) solution that is implemented to reduce the backup window via near-instant snapshot copies, which implies simplified management.



#### TECHNICAL INFRASTRUCTURE

- **NetApp FAS 2040 2U array**,  
Xeon bi-core, 4GB mem with Data OnTap 8.0.1: 12 SAS Internal disks 450GB, disk shelf 4243 including 12 SATA disks 1TB
- **NetApp FAS 3240 array - stretch Metrocluster**:  
2 controllers 3U, 16GB mem, 2GB NVRAM with Data OnTap 8.0.1, 2 disk shelf DS14 including 14 FC disks 450GB 15Krpm
- 1 Rack of 3 Novascale servers R460 F2 each including:
  - 24Go RAM
  - Intel® Xeon® E5550, 2.66 Ghz, 8 M Cache, 6.40 GT/s QPI, Turbo, HT
  - Qlogic 2562 Dual Channel 8Gb Optical Fibre Channel HBA PCIe
  - 3 SAS internal disks 300GB.
  - 3 additional SAS internal disks for the management server
  - 2 Gigabit Ethernet switches, rackable and manageable type Linksys 24 ports
  - 1 switch FC Brocade BR 300 16 ports
- 2 of the 3 servers are running VMware vSphere 4.1

# Offers and services

## Standard seminar program

Attend one of the seminars on the main issues of storage; they are open to everyone and are organized regularly by the StoreWay NetApp Solution Center, either on site or via a remote connection. The full program can be consulted on the StoreWay NetApp Solution Center website.

## Customized seminars

Contact your sales representative to organize a StoreWay NetApp Solution Center visit either on site or via a remote connection, tailored to your specific requirements.

## Architecture workshops

Use the StoreWay NetApp Solution Center as an opportunity to discuss your problems with technical experts. Discover the new technologies and advanced technical functions during practical workshops.

## Feasibility and prototype demonstration

Use the StoreWay NetApp Solution Center infrastructure and expertise to assess the suitability of new technologies to your requirements – either by adapting existing demonstrations or using your own data and applications.

## Market and technology presentations

Discuss with our consultants to understand the storage market trends, the economic and commercial advantages of new storage solutions.

## Expertise & consulting

Work with our consultants and experts to develop an overview of your future storage infrastructure and see how you can upgrade your current environment.

## Storage solutions

Make the most of the trans-organizational IT expertise at Bull's Service and Expertise Center in Grenoble to understand how your storage solution can be integrated into your server, middleware and application environment.



- For more information and reservations, contact your sales representative or email [storeway\\_contact@marketing.bull.net](mailto:storeway_contact@marketing.bull.net)
- To know more on the Bull StoreWay Solution Center, connect to [www.storewaysolutioncenter.com/netapp](http://www.storewaysolutioncenter.com/netapp)