

## Backup and Restore in VMware environments

The backup and restore of virtual machines, files and applications, adapted to the needs of VMware infrastructures

The implementation of a virtual server environment requires changes to data backup strategies. A backup environment designed for a physical server and its applications is not necessarily efficient in an environment with multiple virtual machines.

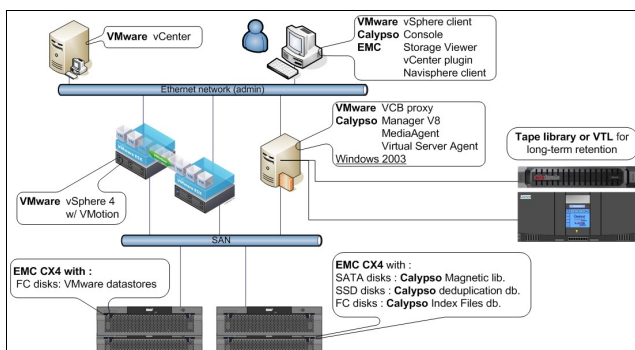
In order to take full benefit of a VMware environment, several approaches to data backup and restore are covered during the seminar. Their application for differing service levels, their impact on cost and risk management are also discussed.

### Content and objectives

- Presentation of data backup and restore challenges in a VMware infrastructure,
- Data backup and protection solutions in a VMware environment,
- Definition of a reference backup architecture, and the impact of VMotion and VMware on the backup process,
- Integration of EMC CLARiiON storage and the VMware infrastructure: robustness and ease of administration,
- Value of data deduplication technologies in VMware backup environments,
- Demonstration of the Bull StoreWay Calypso solution: granular backup and restore.

### Value for your IT infrastructure

- Perfect integration of the EMC CLARiiON storage within the VMware infrastructure,
- Global backup and recovery solution, applicable to both physical and virtual servers,
- Controlled backup and networking storage footprint, due to de-duplication, compression and delta block incremental backup,
- Simplified licensing mode and easy administration thanks to VMS automated discovery and protection,
- Granular recovery choices, including applications with consistent protection needs.



|                  |                         |
|------------------|-------------------------|
| Duration : 3h00, | Location :              |
| Demo : 1h30      | Bull Grenoble or remote |

Audience : IT managers, architects, storage / applications / telecommunications & networks managers, storage administrators, project managers, consultants, ...

Keywords: EMC RecoverPoint, replication, Disaster Recovery, CDP, SAN, IP, WAN, AIX, VMware, heterogeneous

Demonstration Brief



# Bull StoreWay EMC Solution Center

Bull StoreWay EMC Solution Center addresses major today's storage challenges of IT managers. It proposes live demonstrations in real environments, using the latest market technologies.

## Technical infrastructure

### Primary Site – 143 TB :

- 3 Bull NovaScale R460 servers running VMware ESX, VMS Windows 2003 32 & 64 bits
- 1 Virtual Center, NovaScale server
- 1 Bull Escala PL260 server, AIX 6.1 and PowerVM, 1 HMC station
- 1 Express 5800 server 120Rh (VCB proxy)
- 1 Symmetrix V-Max, 37 TB, FC/SATA
- 1 CLARiiON CX4-240, with iSCSI and FC connectivity, 28 TB FC / SATA, 5 EFD
- 1 Celerra NS-20F, with iSCSI /CIFS / NFS connectivity, FC disks (24 TB)
- 1 Centera / 4 nodes, SATA disks (12 TB), with Ethernet connectivity, 1 CUA
- 4 Cisco 24 ports Ethernet switches, 1 Brocade 24 ports FC switch
- 1 VTL DL3D 3000, 42 TB
- 2 RecoverPoint appliances

### Backup site – 42 TB :

- 1 Bull NovaScale R460 server running VMware ESX and VMS Windows 2003 32 & 64 bits
- 1 Virtual Center, NovaScale server
- 1 Bull Escala PL260 server, AIX 6.1 and PowerVM
- 1 CLARiiON CX4-120, with iSCSI and FC connectivity, with 26 TB FC/SATA disks
- 1 Celerra NS-20F, with iSCSI/CIFS/NFS connectivity with 21 TB both FC and SATA disks
- 2 Ethernet Cisco 24 ports switches, 1 Brocade FC 24 ports switch
- 2 RecoverPoint appliances

## The missions of the StoreWay Solution Center

The expert team of the Solution Center is at your disposal to help you to:

- Understand the latest trends and anticipate the evolution of new storage technologies,
- Reduce implementation risks and increase productivity,
- Evaluate potential acquisition and operational cost savings,
- Find solutions to your business challenges and compliance with legal constraints,
- Analyse the best practices to configure and manage your storage environments.

## A complete range of services

The StoreWay Solution Center enables you to benefit from its expert teams and proposes:

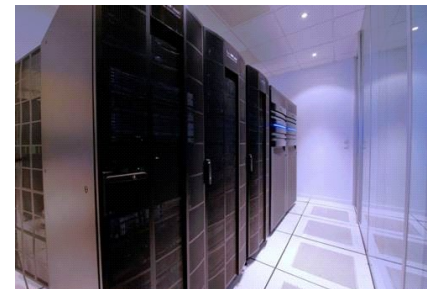
- **A program of seminars**, addressing major issues like storage, virtualization, backup/archiving and Disaster Recovery, ... through remote webcasts or seminars in Grenoble,
- **Personalized seminars**, organized upon request through your local sales representative,
- **Architecture workshops**, on the latest technologies and innovations.

## Bull StoreWay – Integrator of storage solutions.

As a storage integrator, Bull offers a complete range of consulting, implementation and support services covering all the aspects of data management. Through its StoreWay division, Bull partners with leaders within the storage industry.

As an ASN partner of EMC (Authorized Services Network), Bull StoreWay has a network of more than 400 certified support technicians and implementation engineers.

Bull StoreWay ensures the design, the deployment and the support of storage solutions adapted to your needs.



For more information and reservations, contact your sales representative or: [storeway\\_contact@marketing.bull.net](mailto:storeway_contact@marketing.bull.net)

For more information and news concerning the Solution Center, connect to: [www.storewaysolutioncenter.com](http://www.storewaysolutioncenter.com)