

1. Record Nr.	UNINA9910825052003321
Autore	Tretau Roland
Titolo	IBM TotalStorage NAS integrated demonstration kit // Roland Tretau et al
Pubbl/distr/stampa	San Jose, CA, : IBM International Technical Support Organization, 2002
Descrizione fisica	1 online resource (552 p.)
Collana	IBM redbooks
Soggetti	Computer storage devices Storage area networks (Computer networks)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"April 2002."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover -- Contents -- Figures -- Tables -- Examples -- Notices -- Trademarks -- Preface -- The team that wrote this IBM Redbook -- Comments welcome -- Chapter 1. General purpose -- 1.1 Purpose -- 1.2 General selling methodology -- Chapter 2. Demonstration scenarios -- 2.1 Demonstration Kit focus -- 2.2 Demonstration Kit content -- Chapter 3. Demonstration setup -- 3.1 Setup environment -- 3.1.1 Server minimum requirements -- 3.1.2 Storage minimum requirements -- 3.1.3 Networking minimum requirements -- 3.1.4 Base software minimum requirements -- 3.1.5 Supported products -- Chapter 4. The fast path demonstration setup -- 4.1 Installation of NAS operating system -- 4.2 Creating arrays and logical drives -- 4.3 Adding space to an existing array (logical drive) -- 4.4 PSM - creating an immediate image -- 4.5 PSM - creating a scheduled image -- 4.6 PSM - file deletion and restoration -- 4.7 PSM and NT backup -- 4.8 Creating an NFS share (AIX, HP, Linux, Solaris) -- 4.9 Creating and using a cross platform share -- 4.10 Creating and using LTO drive and TSM for backup -- Chapter 5. The four storage problems -- 5.1 . Storage consolidation demonstration -- 5.2 Data sharing demonstration -- 5.3 Data protection demonstration -- 5.4 Disaster recovery demonstration -- Chapter 6. NAS explanation module -- 6.1 IBM TotalStorage NAS features and benefits -- 6.2 IBM NAS and iSCSI storage products -- 6.3 The IBM TotalStorage Network Attached Storage 200 -- 6.3.1 IBM NAS 200 highlights -- 6.3.2 IBM NAS 200

Model 201 tower hardware -- 6.3.3 IBM NAS 200 Model 226 rack hardware -- 6.3.4 IBM NAS 200 technical specifications summary -- 6.3.5 IBM NAS 200 features and benefits -- 6.3.6 IBM NAS 200 optional features -- 6.3.7 IBM NAS 200 preloaded software -- 6.3.8 IBM NAS 200 high availability and serviceability -- 6.3.9 IBM NAS 200 scalability and growth.

6.3.10 IBM NAS 200 system management -- 6.4 IBM TotalStorage Network Attached Storage 300 -- 6.4.1 IBM NAS 300 hardware -- 6.4.2 IBM NAS 300 technical specifications -- 6.4.3 IBM NAS 300 features and benefits -- 6.4.4 IBM NAS 300 optional features -- 6.4.5 IBM NAS 300 preloaded software -- 6.5 IBM NAS 200 and 300 comparison -- 6.6 IBM TotalStorage Network Attached Storage 300G -- 6.6.1 IBM NAS 300G hardware -- 6.6.2 IBM NAS 300G technical specifications -- 6.6.3 IBM NAS 300G features and benefits -- 6.6.4 IBM NAS 300G preloaded software -- 6.6.5 IBM NAS 300G connectivity -- Chapter 7. Installation module -- 7.1 The physical installation -- 7.1.1 Preloaded and optional software -- 7.1.2 Limitations of the Windows Powered OS -- 7.1.3 IBM Advanced Appliance Configuration Utility tool -- 7.2 System setup -- 7.2.1 Universal Manageability Services (UM Services) -- 7.2.2 Terminal Services Client -- 7.2.3 Connecting to the NAS appliance -- 7.2.4 Using IBM Advanced Appliance Configuration Utility (IAACU) -- 7.2.5 IBM Advanced Appliance Configuration Utility (IAACU) -- 7.2.6 The Advanced Appliance Configuration Utility Agent -- 7.2.7 The Advanced Appliance Configuration Utility Console -- 7.2.8 Discovering NAS appliances -- 7.2.9 Using Families and Groups in the tree view -- 7.2.10 The NAS administration menu -- Chapter 8. Configuration module -- 8.1 Setting up the NAS appliance -- 8.1.1 Connecting to the NAS 200 -- 8.1.2 Default configuration -- 8.1.3 Using ServeRAID Manager -- 8.1.4 Adding space on an existing drive -- 8.1.5 Connecting additional expansion units -- 8.2 Setting up the NAS 300 -- 8.2.1 Default configuration -- 8.2.2 Defining arrays and logical drives on the NAS 300 -- 8.3 Sharing SAN-based storage through the 300G -- 8.3.1 Getting started -- 8.3.2 Re-initializing the 300G -- 8.4 To SAN or not to SAN -- 8.4.1 Finding the World Wide Name. 8.4.2 Zoning the IBM 2109 -- 8.5 Setting up the FAST200 -- 8.6 Setting up the MSS -- 8.6.1 Failover modes and SAN zoning -- 8.6.2 Transparent failover mode and zoning -- 8.6.3 Multiple-bus failover mode and zoning -- 8.6.4 Preferred controller in multiple-bus failover mode -- 8.6.5 Setting up failover modes -- 8.6.6 Creating a Logical Unit Number (LUN) -- 8.6.7 Creating a RAIDset -- 8.6.8 Initializing a RAIDset -- 8.6.9 Creating a partition -- 8.6.10 Assigning a unit number -- 8.6.11 Defining hosts and assigning logical drives -- 8.6.12 Assigning a connection name -- 8.6.13 Assigning a LUN to a host -- 8.7 Setting up the ESS -- 8.7.1 Regarding SAN zoning -- 8.7.2 Setting up the ESS -- 8.8 Claiming ownership of pooled storage with the 300G -- 8.9 Sharing the SAN-based storage to LAN/WAN clients -- 8.9.1 File sharing for Windows clients -- 8.9.2 File sharing for UNIX clients -- 8.9.3 Accessing the shares from our Windows clients -- 8.9.4 Accessing the shares from our Linux/Solaris/HP-UX clients -- 8.9.5 Accessing the shares from our AIX clients -- 8.9.6 Setting up FTP access permissions on the 300G -- 8.10 User and security management on the 300G -- 8.10.1 Active Directory, NT 4 Domains, and Workgroups -- 8.10.2 UNIX NIS integration -- 8.10.3 Password synchronization -- 8.10.4 AIX NFS mount -- 8.11 Quota management -- 8.12 RAID levels and RAID groups -- Chapter 9. Security module -- 9.1 User and security management -- 9.1.1 Active Directory, NT 4 Domains, and Workgroups -- 9.1.2 UNIX NIS integration -- 9.1.3 Password synchronization -- 9.2 Permissions -- 9.2.1 File sharing for

Windows clients -- 9.2.2 Accessing the shares from our Windows clients -- 9.2.3 File sharing for UNIX clients -- 9.3 Cross file locking -- Chapter 10. Persistent Storage Manager module -- 10.1 Persistent Storage Manager (PSM) -- 10.1.1 How PSM works. 10.1.2 Creating images with PSM -- 10.2 Using PSM with backup software solutions -- 10.2.1 IBMSNAP utility -- 10.2.2 Using IBMSNAP with NTBackup -- 10.2.3 Creating a scheduled NT backup with IBMSNAP -- 10.2.4 Using IBMSNAP with TSM -- 10.2.5 Creating a scheduled TSM backup using IBMSNAP -- 10.3 Instant volume restoration -- 10.3.1 Persistent Images (PIs): read-only and read/write -- 10.3.2 Persistent Images: restore (SnapRestore) -- Chapter 11. Backup and recovery module -- 11.1 Backup for IBM Network Attached Storage -- 11.2 IBM NAS cache exploitation for backup -- 11.2.1 IBM NAS cache mechanisms -- 11.2.2 Persistent Storage Manager True Image Copies -- 11.2.3 PSM True Image copies can either be read-only or read-write -- 11.2.4 Differences between PSM and other similar implementations -- 11.2.5 Archival, backup, and restoration of IBM NAS appliances -- 11.3 NAS 200 and 300 recovery procedures -- 11.3.1 Recovering the NAS 200 -- 11.3.2 Recovering the NAS 300 -- 11.3.3 Archive, backup, and restoration of the 300G -- 11.3.4 NT Backup -- 11.4 Integrating the NAS appliances with TSM -- 11.4.1 The NAS appliance and LAN-based backup -- Chapter 12. Systems management module -- 12.1 IBM Director overview -- 12.2 IBM Director summary -- 12.3 Netfinity systems management solution tools -- 12.3.1 Netfinity system design -- 12.3.2 Netfinity ASM product family -- 12.3.3 IBM Netfinity ASM Adapter -- 12.3.4 IBM Netfinity ASM Processor -- 12.3.5 IBM Netfinity ASM PCI Adapter -- 12.3.6 IBM Netfinity ASM Interconnect -- 12.4 Netfinity Director Software -- 12.5 IBM Netfinity Manager Software -- 12.6 IBM Netfinity ASM solution scenarios -- 12.7 Conclusion -- Chapter 13. SANergy module -- 13.1 Tivoli SANergy -- 13.1.1 SANergy uses a mix of File I/O and Block I/O -- 13.1.2 SANergy benefits -- 13.1.3 SANergy considerations -- 13.1.4 Tivoli Storage Manager. 13.1.5 SANergy with Tivoli Storage Manager -- 13.1.6 Application server-free backup and restore -- 13.1.7 SAN exploitation: LAN-free client data transfer -- 13.2 TSM with SANergy -- 13.2.1 TSM backup using SANergy -- 13.3 Getting backups off the LAN: TSM with SANergy -- 13.3.1 SAN zoning -- 13.3.2 Configuring SANergy -- 13.3.3 Installing the TSM Server version 4.2 -- 13.3.4 Configuring the TSM server -- 13.3.5 Installing and configuring a TSM Agent on the 300G -- 13.3.6 Configuring a TSM Agent -- 13.3.7 Installing a TSM client -- 13.3.8 Backup/Restore for the 300G with TSM and SANergy -- 13.3.9 Backup results -- Chapter 14. NAS expansion module -- 14.1 NAS expansion -- 14.1.1 Adding space on an existing drive -- 14.1.2 Connecting additional expansion units -- Chapter 15. High availability module -- 15.1 NAS 300: setting up Microsoft Cluster Server -- 15.2 NAS 300G: Our environment for clustering -- 15.3 Second node first-time setup -- 15.3.1 Configure the private network adapter -- 15.3.2 Joining the domain -- 15.3.3 Update drive letters -- 15.3.4 Shutting down the second node -- 15.4 First node first-time setup -- 15.4.1 Configuring the private network adapter -- 15.4.2 Joining the domain -- 15.4.3 Updating drive letters -- 15.4.4 Restarting the first node -- 15.4.5 Cluster setup -- 15.5 Second node second-time setup -- 15.5.1 Adding the second node to the cluster -- 15.6 Administering the cluster -- 15.6.1 Configuring cluster properties -- 15.6.2 Disk group administration -- 15.6.3 Cluster resource balancing -- 15.6.4 Configuring file shares -- 15.7 Client connectivity -- 15.7.1 Windows clients -- 15.7.2 UNIX clients -- 15.7.3 AIX clients -- Chapter 16.

Failure and recovery module -- 16.1 IBM NAS 200 high availability and serviceability -- 16.1.1 IBM NAS 200 and 300 comparison -- 16.1.2 The IBM TotalStorage NAS Version 2.0 at a glance.
16.2 IBM TotalStorage Network Attached Storage 300.
