

1. Record Nr.	UNINA9910810049803321
Autore	Tretau Roland
Titolo	IBM TotalStorage NAS integration guide // Roland Tretau et al
Pubbl/distr/stampa	San Jose, CA, : IBM International Technical Support Organization, 2003
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (698 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	"March 2003."
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 redbook -- Notice -- Comments welcome -- Summary of changes -- March 2003, Third Edition -- Part 1 Network Attached Storage concepts and hardware -- Chapter 1. The main concept behind Network Attached Storage -- 1.1 How this book is organized -- 1.2 Local Area Networks -- 1.3 Open Systems Interconnection (OSI) model -- 1.3.1 Device driver and hardware layer -- 1.3.2 Internet Protocol layer -- 1.3.3 TCP layer -- 1.3.4 Application layer -- 1.3.5 Protocol suites -- 1.4 File systems and I/O -- 1.4.1 Network file system protocols -- 1.4.2 Understanding I/O -- 1.5 Network Attached Storage (NAS) -- 1.5.1 File servers -- 1.5.2 Network appliances -- 1.5.3 NAS uses File I/O -- 1.5.4 NAS benefits -- 1.5.5 Other NAS considerations -- 1.5.6 Total cost of ownership -- 1.6 Industry standards -- 1.6.1 Storage Networking Industry Association -- 1.6.2 Internet Engineering Task Force -- Chapter 2. IBM TotalStorage NAS products -- 2.1 IBM TotalStorage NAS features and benefits -- 2.1.1 Included software -- 2.1.2 Preloaded and optional software -- 2.1.3 Limitations of the Windows Powered OS -- 2.1.4 IBM Advanced Appliance Configuration Utility Tool -- 2.2 IBM TotalStorage Network Attached Storage 100 -- 2.3 IBM TotalStorage Network Attached Storage 200 -- 2.4 IBM TotalStorage Network Attached Storage 300 -- 2.5 IBM TotalStorage NAS Release 2.5 -- 2.5.1 IBM TotalStorage NAS 200 Version 2.5 -- 2.5.2 IBM TotalStorage NAS 300 Version 2.5 -- 2.5.3 IBM TotalStorage NAS Version 2.5 at a glance

-- 2.5.4 IBM TotalStorage NAS 200 Model 25T (5194-25T) Version 2.5  
-- 2.5.5 IBM TotalStorage NAS Gateway 300 HW Version 2.5 -- 2.6 IBM  
TotalStorage NAS Release 2.7 -- Part 2 Implementing the NAS  
appliance in your network -- Chapter 3. Connecting to the NAS  
appliance.  
3.1 First steps -- 3.2 Assigning IP address to the appliance with IAACU  
-- 3.2.1 Universal Manageability Services -- 3.3 Connecting to the  
appliance -- 3.3.1 Using Terminal Services -- 3.3.2 Getting access with  
Internet Explorer -- 3.4 NAS Setup Navigator overview -- Chapter 4.  
Implementing the IBM TotalStorage NAS 100 -- 4.1 Initial configuration  
-- 4.1.1 Methods for setting up the NAS 100 device -- 4.2 Using the  
Navigator to set up the NAS 100 -- 4.2.1 Basic configuration -- 4.2.2  
Storage configuration and management -- 4.2.3 Microsoft Services for  
UNIX -- 4.2.4 User and security management -- 4.2.5 Sharing pooled  
storage -- 4.2.6 Completing setup -- 4.3 Ethernet adapter teaming --  
4.3.1 Overview of adapter teaming -- 4.3.2 Load balancing for the  
configuration -- Chapter 5. Implementing the IBM TotalStorage NAS  
200 -- 5.1 Using the Navigator to set up the NAS 200 -- 5.1.1 Basic  
configuration -- 5.1.2 Configuring the storage -- 5.1.3 Creating arrays  
and logical drives -- 5.2 Managing disks using ServeRAID Manager --  
5.2.1 Creating arrays -- 5.2.2 Creating and logical drives -- Chapter 6.  
Implementing the IBM TotalStorage NAS 300 -- 6.1 Using the Navigator  
to set up the NAS 300 -- 6.1.1 Basic configuration -- 6.1.2 Configuring  
the storage -- 6.1.3 Preparing the Cluster nodes -- 6.1.4 Configure  
Active Directory integration -- 6.1.5 Cluster configuration and setup --  
6.2 Defining arrays and logical drives on the NAS 300 -- 6.3 Setting up  
Microsoft Cluster Server (MSCS) -- Chapter 7. User and security  
management -- 7.1 Active Directory, NT 4 Domains, and Workgroups  
-- 7.2 UNIX NIS integration -- Part 3 Advanced IBM TotalStorage NAS  
topics -- Chapter 8. Advanced NAS configuration -- 8.1 Quota  
management and WQuinn StorageCeNTRal -- 8.1.1 Disk quotas --  
8.1.2 Directory quotas -- 8.2 File screening -- 8.2.1 Storage Reports.  
8.3 Dynamic storage expansion on IBM NAS -- 8.3.1 Tools for dynamic  
storage expansion -- 8.3.2 Increasing volume size for a NAS 200 disk  
-- 8.3.3 Increasing volume size for a NAS 300 shared disk -- 8.4  
Double-Take -- 8.4.1 Description of Double-Take -- 8.4.2 Double-  
Take features -- 8.4.3 Double-Take operations -- 8.4.4 Double-Take  
Installation -- 8.4.5 Setting up Double-Take -- 8.4.6 Creating a mirror  
-- 8.5 Persistent Storage Manager (PSM) -- 8.5.1 How PSM works --  
8.5.2 Creating images with PSM -- 8.5.3 Configuring PSM -- 8.5.4  
Creating a PSM image -- 8.5.5 Restoring a Persistent Image -- 8.5.6  
Disaster Recovery with PSM -- 8.5.7 Special considerations for PSM in a  
clustered environment -- 8.6 Additional tools -- 8.6.1 IBM World Wide  
Name utility -- 8.6.2 IBM FAStT Management Suite Java -- 8.6.3  
IBMSNAP -- 8.7 Uninterrupted Power Supply support -- Chapter 9.  
Systems management for NAS -- 9.1 Description of IBM Director -- 9.2  
Hardware aspects of systems management -- 9.3 IBM Director  
preloaded on NAS devices -- 9.4 Using IBM Director on a NAS appliance  
-- 9.4.1 Discovering NAS systems -- 9.4.2 Executing tasks -- 9.4.3  
Grouping systems -- 9.4.4 Event and action management -- 9.4.5 Rack  
Manager -- 9.4.6 System Availability -- 9.4.7 Capacity Manager --  
9.4.8 Cluster Systems Management (CSM) -- 9.4.9 ServeRAID Manager  
-- 9.4.10 Usage tips for the NAS 100 -- 9.5 How to install IBM NAS  
Extensions to IBM Director -- 9.6 Microsoft Multiple Device Manager  
(MDM) -- 9.6.1 NAS 100 and MDM -- 9.6.2 Controller installation on  
NAS 100 appliance -- 9.6.3 MDM functions -- Chapter 10. Cross  
platform storage -- 10.1 File sharing for Windows clients -- 10.1.1  
CIFS file sharing in a non-clustered environment -- 10.1.2 CIFS file

sharing in a clustered environment -- 10.2 Accessing the shares from our Windows clients -- 10.3 File sharing for UNIX clients.

10.3.1 NFS file sharing for non-clustered environments -- 10.3.2 NFS file sharing for clustered environments -- 10.4 How to configure Services for UNIX (SFU) -- 10.4.1 Configuring a cross platform share in a Windows 2000 Domain -- 10.4.2 Configuring cross platform share without a Domain Controller -- 10.4.3 Configuring the shared storage -- 10.4.4 Mapping the Gateway for NFS share from a Windows client -- 10.4.5 Accessing the shares from our UNIX clients -- 10.5 Accessing the shares with the Samba client -- 10.5.1 Setting up the Samba client on a RedHat Linux 8.0 -- 10.5.2 Mounting a NAS Share into the Linux file system -- 10.5.3 Using the smbclient program -- 10.5.4 Samba client configuration on AIX -- 10.5.5 Sources and additional information -- Chapter 11. Backup considerations -- 11.1 NAS 200 and 300 and their native backup solution -- 11.1.1 NAS 200 and 300 backup -- 11.2 Using PSM with backup software solutions -- 11.2.1 IBMSNAP utility -- 11.2.2 Using IBMSNAP with NTBackup -- 11.2.3 Creating a scheduled NT backup with IBMSNAP -- 11.2.4 Using IBMSNAP with TSM -- 11.2.5 Creating a scheduled TSM backup using IBMSNAP -- Chapter 12. NAS recovery procedures -- 12.1 Recovering the NAS 100 -- 12.1.1 NAS 100 boot behavior in case of an HDD failure -- 12.1.2 Recovery scenarios -- 12.2 Recovering the NAS 200 -- 12.2.1 Using the Recovery CD -- 12.2.2 Using the maintenance disk partition -- 12.3 Recovering the NAS 300 -- Chapter 13. Microsoft Active Directory and IBM TotalStorage NAS -- 13.1 Introduction to Active Directory (AD) -- 13.1.1 Benefits -- 13.1.2 Active Directory and Domain Name Service (DNS) -- 13.1.3 Domain controllers -- 13.2 Active Directory architecture -- 13.2.1 Objects, schemas, and publishing -- 13.2.2 Sites -- 13.2.3 Domains -- 13.2.4 Organizational Units (OUs) -- 13.3 Interoperability -- 13.3.1 Lightweight Directory Access Protocol. -- 13.3.2 Kerberos -- 13.4 Active Directory design -- 13.4.1 Domain design -- 13.4.2 Organizational Unit design -- 13.5 Design considerations for IBM TotalStorage NAS -- 13.5.1 Placement of the NAS devices -- 13.5.2 Authentication -- 13.5.3 Administration delegation -- 13.6 Bringing it all together - best practice -- 13.7 Further reading -- Part 4 IBM TotalStorage NAS solutions -- Chapter 14. Solutions for Windows based applications -- 14.1 Microsoft SQL Server 2000 on IBM NAS -- 14.1.1 Installation -- 14.1.2 Creating a shared folder -- 14.1.3 Creating a database manually using a Query Analyzer -- 14.1.4 Creating a database using Microsoft SQL Enterprise Manager -- 14.1.5 Migrating a database from local disk to IBM NAS -- 14.1.6 Defining a backup device on IBM NAS -- 14.2 Microsoft Exchange Server 5.5 on NAS -- 14.2.1 Pre-installation procedure -- 14.2.2 NAS storage setup -- 14.2.3 Installing Microsoft Exchange Server 5.5 -- 14.2.4 Moving the files to the NAS Appliance -- 14.3 DB2 UDB 7.1 on NAS -- 14.3.1 Installation -- 14.3.2 DB2 UDB 7.1 object on NAS -- 14.3.3 Connecting to the EXAMPLE database -- 14.4 Lotus Domino on NAS -- 14.4.1 Getting connected to the NAS box -- 14.4.2 Installing Lotus Domino -- 14.5 SAS on NAS -- 14.5.1 What is SAS? -- 14.5.2 The SAS solution scenario -- 14.5.3 SAS installation -- 14.5.4 Connecting SAS to the database -- 14.5.5 Querying SAS and getting the graph -- Chapter 15. Solutions for UNIX based applications -- 15.1 AIX NFS mount procedure -- 15.2 Implementing DB2 UDB V7.1 on AIX 4.3.3 -- 15.3 Implementing DB2 UDB V7.1 on RedHat Linux V7.1 -- 15.4 Implementing Oracle V8.1.7 on AIX 4.3.3 -- Part 5 Appendixes -- Appendix A. Ethernet adapter teaming -- Intel adapters -- Alacritech Quad-Port 10/100 Ethernet Adapter -- Appendix B. NAS 100

troubleshooting and BIOS access -- Troubleshooting -- Error  
messages.  
Temperature checkout.

---