

IBM TotalStorage™ Network Attached Storage 300
(Model 325)



Release Notes

Network Attached Storage 300

7/13/01

THE INFORMATION CONTAINED IN THIS DOCUMENT IS PROVIDED ON AN "AS IS" BASIS. In no event will IBM be liable for damages arising directly or indirectly from any use of the information contained in this document.

First Edition (July 13, 2001)

This edition applies to the IBM 5195 TotalStorage Network Attached Storage 300 (Model 325) (product number 5195-325).

Order publications through your IBM representative or the IBM branch office servicing your locality. Publications are not stocked at the address below.

IBM welcomes your comments. A form for reader's comments is provided at the back of this publication. If the form has been removed, you may address your comments to:

International Business Machines Corporation
Design & Information Development
Department CGF
PO Box 12195
Research Triangle Park, NC 27709-9990
U.S.A.

You can also submit comments on the Web at www.ibm.com/networking/support/feedback.nsf/docsoverall.

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© **Copyright International Business Machines Corporation 2001. All rights reserved.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Release notes

This document contains the release notes for the Model 325.

Refer to www.storage.ibm.com/support/nas for possible updates to these release notes and for copies of the base documents.

Contents of these release notes are:

- Using a keyboard, monitor, and mouse for initial setup and configuration
- Summary of configuration and administration tools for the Model 325
- Microsoft Services for UNIX and NFS Support in the Model 325

Using a keyboard, monitor, and mouse for initial setup and configuration

It is highly recommended that you directly attach a keyboard, monitor, and mouse to the Model 325 when:

- Initially setting up and configuring the device
- Changing or adding to RAID arrays (for example, adding a new array with Storage Manager 7, adding a new RAID controller, or adding a storage expansion unit)
- Troubleshooting the device

Summary of configuration and administration tools for the Model 325

Table 1 on page 2 has several new entries that did not appear in the *User's Reference*.

There are several ways to setup and administer the Model 325. Table 1 on page 2 suggests which tool you can use for specific functions, but does not list all options or combinations. The administrator training-level or administrator preferences may determine an alternate approach from that suggested in the table.

Table 1. Summary of configuration and administration tools for the Model 325

Administration Tool	Main functions
Windows Domain Controller (not NAS appliance)	On a clustered node, users and user groups must be defined and authenticated by the Windows Domain Controller.
IBM Advanced Appliance Configuration Utility	<p>Access a headless Model 325 node, particularly for the initial setup of the network connectivity. (Alternatively, you can attach a keyboard, mouse, display to each node of the Model 325.)</p> <ul style="list-style-type: none"> • Set time and date • Configure initial network connectivity parameters • Access to Windows 2000 for NAS GUI, Terminal Services (NAS Desktop), and Universal Manageability Services
Windows 2000 for NAS GUI	<p>Provides ease-of-use administration, but not all the capability of Terminal Services and IBM NAS Administration</p> <ul style="list-style-type: none"> • Configure networking connectivity, private (for clustering) and public LAN connections (must do on each node) • Create and format logical drives • Join domains • Setup access permissions and disk quotas for CIFS, NFS, HTTP, FTP, and NetWare shares (must configure on node where volume is active) • Use Persistent Storage Manager • Use NAS Backup Assistant, or NTBackup and Restore wizard • Learn detailed inventory information about hardware, OS, and so on, using Universal Manageability Services.
IBM NAS desktop and IBM NAS Admin program, via a Terminal Services session or a directly-connected keyboard and display	<p>Provides in-depth administration of all aspects of Model 325. Provides all of the Windows 2000 for NAS GUI functions above, plus:</p> <ul style="list-style-type: none"> • RAID configuration via Storage Manager 7 <ul style="list-style-type: none"> – Create RAID arrays and LUNs – Add additional RAID or storage enclosure after initial purchase – Rename storage subsystems • Cluster Administration <ul style="list-style-type: none"> – Setup cluster – Define failover for each volume – Evict a node (force failover of a node) – Cluster resource balancing by assigning preferred node • Diagnose system problems <ul style="list-style-type: none"> – Check 10/100 or GB Ethernet using PROSet II – Check Fibre Channel card using FastTCheck – Check RAID subsystem using Storage Manager 7
Persistent Storage Manager (PSM) Disaster Recovery	Restores a previously saved PSM image of the system partition to a failed machine. This will restore all configuration information on the failed node. You create the recovery boot diskette from the PSM tools in the Windows for 2000 NAS GUI.
Recovery CD	Reinstalls the software to the original state as shipped on the machine. Any configuration information is not restored via the Recovery CD. You must first boot with the Recovery Enablement Diskette, and then reboot with the Recovery CD. To create the Recovery Enablement Diskette run \DiskImages\Recovdsk.bat on the Supplemental CD-ROM.
Planar ASM Adapter configuration program	Configures the onboard planar Advanced Systems Management Adapter. To create this diskette, run C:\IBM\ASMP\UPDATES\32P0083.EXE on the Model 325 operating system volume.
ASM PCI Adapter configuration program	Configures the optional Advanced Systems Management PCI Adapter. To create this diskette, run C:\IBM\ASMP\UPDATES\24P1874.EXE on the Model 325 operating system volume.

Microsoft Services for UNIX and NFS Support in the Model 325

Support for the Network File System (NFS) is provided in the Model 325 by a preloaded and preconfigured software component, Microsoft Services for UNIX. The levels of NFS supported by Services for UNIX, and in turn the Model 325, are NFS Versions 2 and 3. Any client workstation that is using an NFS software stack supporting NFS Version 2 or NFS Version 3, regardless of the client workstation's operating system, should be able to connect to the Model 325 and access its storage as defined by the Model 325 administrator.

You administer NFS file shares and other attributes with standard Windows administration tools, including those provided as part of the IBM NAS desktop, and the Microsoft Windows 2000 for NAS user interface. Additional configuration of the User Name Mapping component of Services for UNIX, which maps the UNIX user name space to the Windows user name space, is required to support NFS security.

Note: As documented in the *User's Reference*, a Windows Primary Domain Controller (PDC) is required to support initial setup and configuration of the Model 325. For NFS security in the Model 325, it is strongly recommended that you set up the same PDC as a Services for UNIX User Name Mapping server. The design of Services for UNIX with respect to clustering and failover forces both Model 325 nodes to be configured to use the same User Name Mapping server, whether that server is on one of the nodes or is on another server or workstation in the network. If one of the nodes is configured as the User Name Mapping server, and that node should fail, NFS users will not be able to attach to the Model 325 storage until the node comes back up. Centralizing the user name mapping on a PDC ensures that if either node fails, NFS users can continue to be authenticated and given access to the Model 325 storage.

To set up the PDC as a User Name Mapping server, you must install Services for UNIX Version 2.0 or higher on the PDC, selecting the components **Server for NFS** and **Server for NFS Authentication**, and then you must configure the **User Name Mapping** component on the PDC. Additionally, you must configure the **User Name Mapping** component on the Model 325 to use the PDC as the User Name Mapping server.

Please consult the online documentation for Services for UNIX for more information on configuring User Name Mapping. To view the online documentation for Services for UNIX on the Model 325 (either node can be used):

1. From the Model 325 desktop, click the **IBM NAS Admin** icon.
2. On the left pane of the IBM NAS Admin console, expand **File Systems**.
3. Expand **Services for UNIX**.
4. Select any of the items that appear under **Services for UNIX**.
5. Click anywhere on the right pane of the IBM NAS Admin console, then click the **F1** key to bring up the online documentation for Services for UNIX in a separate window.

Director Support Program problem on Recovery CD code image

If you use the Recovery CD to restore the preloaded software image on your Model 325 appliance, and if you are using the IBM Director (or Tivoli IT Director) Management Console on your network to manage the appliance, the appliance names (one name for each of the two nodes of the appliance) may no longer appear in the list of systems and devices. (The appliance name for each node

should appear in the list as **IBM5195-xxxxxxx**, where **xxxxxxx** is the serial number of the node, located in the lower right corner of the bezel on the front of the node.) If this occurs, you will need to download and install a patch for the IBM Director Support Program that is part of the preloaded software on the appliance.

Go to www.storage.ibm.com/support/nas, then go to the **Downloads** section under **5195 TotalStorage NAS 300 (Model 325)** to find the patch package titled, *IBM Director Support Program patch*. Download and install the patch on your appliance as instructed by the documentation accompanying the package.

Startup problem caused by addition of SCSI adapter

If you purchase the optional PCI Fast/Wide Ultra SCSI adapter and install it in one of the nodes of your Model 325, you may experience a problem where the node will not boot to the Microsoft Windows Powered operating system because it cannot recognize its internal hard drives. You will need to update the SCSI adapter firmware to Version 2.20 to correct this problem. This firmware can be downloaded from the web.

Go to www.storage.ibm.com/support/nas, then go to the **Downloads** section under **5195 TotalStorage NAS 300 (Model 325)** to find the package titled, *PCI Fast/Wide Ultra SCSI Adapter Flash Diskette Version 2.20*. Download and install the firmware on your appliance node's SCSI adapter as instructed by the documentation accompanying the package.



Part Number: 38P8100



Printed in the United States of America
on recycled paper containing 10%
recovered post-consumer fiber.

(1P) P/N: 38P8100

