

Cheyenne Service Pack 3 for ARCserve 6.0 for Windows NT

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INTRODUCING SERVICE PACK 3 FOR ARCSERVE 6.0

This chapter summarizes the new features and software enhancements for Service Pack 3.

In this chapter, you will learn:

- 1-2 ➤ What is Service Pack 3
- 1-3 ➤ Installing Service Pack 3
- 1-5 ➤ New ARCserve Features
- 1-7 ➤ Enhancements for Service Pack 3

What is Service Pack 3?

Service Pack 3 is a software upgrade integrated with ARCserve 6.0. If you have a prior release of ARCserve, you can download the *Update.exe* patch from Cheyenne's web site to install Service Pack 3 for ARCserve 6.0. Service Pack 3 provides enhancements and new features in the following areas:

- **Job performance**
- **Data integrity**
- **Job security**
- **Job configuration**
- **Hardware support**
- **User interface**

Installing Service Pack 3

1

To install Service Pack 3, you must have ARCserve 6.0 installed on your Windows NT server or workstation.

Use the following procedure to install Service Pack 3.

1. Download the *Update.exe* file from Cheyenne's web site to the local drive of your Windows NT server or workstation.



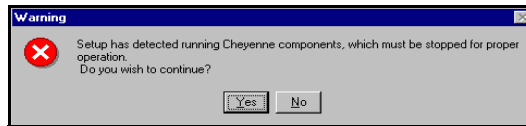
NOTE: Cheyenne's web site:
<http://www.cheyenne.com>

2. Do one of the following to run the *Update.exe* file in Windows NT:
 - In your Windows NT 4.0 Program Manager, click on the *Start* button, type the drive and directory where the *Update.exe* file exists in the *Open:* list box in the *Run* dialog box, then click the *OK* button.
 - In your Windows NT 3.51 Program Manager, click on the *File* menu, then select the *Run* menu option, type the drive and directory where the *Update.exe* file exists in the *Command Line:* list box of the *Run* dialog box, then click on the *OK* button.

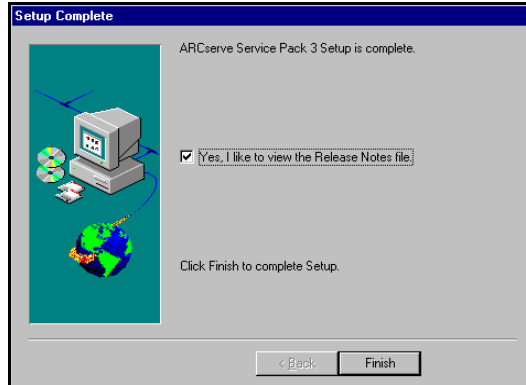
The *Welcome* dialog box appears.

3. Click on the *N*ext button.

-
- The setup program checks if there are any ARCserve services running, and prompts you to click on the Yes button to shut down the services.



- Click on the Yes button.
The *Setup Complete* dialog box appears.



- Click on the check box to open the readme file, then click on the *Finish* button to install the program files.

New ARCserve Features

1

The following new features have been implemented for ARCserve 6.0 in Service Pack 3.

- **Removable Device Support** - ARCserve now backs up data to removable optical drives, such as zip or jaz drives, PD drives, and MO drives.
- **Tape Alert Support** - ARCserve now supports Hewlett Packard's Tape Alert management feature for DDS-3 devices that support the TAPEALERT firmware. System Administrators will now be able to monitor ARCserve tape devices and media by using *HP Open View* through the SNMP protocol.
- **CRC Verification support** - When you back up your data, you can verify the individual data packets with CRC verification. CRC stands for *Cyclic Redundancy Check* and it prevents data corruption by generating a numeric value for each packet, then checking that value against the data on the tape.
- **Preferred machines** - You can now setup an entire machine with all of its volumes as a share in the ARCserve browser. It will be displayed under the *Preferred Shares* node of the ARCserve browser.
- **DDS-3 tape format** - ARCserve supports the use of DDS-3 tape format on Sony and HP tape devices allowing you to save from 12-24 Gigabytes of data on a 120 mm tape cartridge.

-
- **Post commands based upon job status** - You can base your batch commands on the outcome of a job. Now you can select to run or not to run a command if a job fails, is completed, or incomplete. For instance, you might or might not want to run a detailed report on a job if it fails.
 - **GFS Media Prediction Report** - Now you can run reports to produce detailed media information for media pools used in your rotation schemes including the media status and session information.
 - **ARCserve job queue security** - You can restrict access to the ARCserve job queue by granting varying security permissions to ARCserve\$ for different user/group identities for the job queue.
 - **Alert Configuration** - Now you can re-use the configurations you define for different jobs and view the entire ALERT configuration in the *Activity Log* for each job.
 - **Improved tape merging performance via tape cataloging** - ARCserve now creates a tape catalog file on your tapes to improve performance for tape merging jobs and database backup jobs.

Enhancements for Service Pack 3

1

The following software enhancements have been implemented in Service Pack 3.

- **Tape positioning optimization** - Tapes are no longer automatically rewound after completion of a job. Additional sessions are appended to the tape saving users time when backing up and verifying data.
- **Media pool management enhancement** - You can now manage media pools by assigning or removing media devices to or from existing pools in the ARCserve Manager.
- **Media name display** - Now the name for your media pools you configure for your GFS rotation backup jobs is displayed on the *Calendar View* tab of the *ARCserve Backup* window.
- **User notification for non-job related events** - Users can now configure ALERT notifications for specific non-job related events, such as the tape or database engine starting, error messages, or other events viewed through the *Activity log*.
- **Enhanced detailed Registry backup performance** - You can now backup your Windows Registry entries to the key level as a separate tape session with optimized performance.
- **Importing/Exporting multiple changer slots** - ARCserve now supports importing or exporting multiple tapes to your tape changer devices from the tape library.

Enhancements from
SP2

The following enhancements were implemented in Service Pack 2.

- **Multiple node copy support** - This enhancement allows users to copy files from multiple locations to a single target directory.
- **ARCbatch utility** - The ARCbatch job utility allows you to submit, delete, or modify the execution time for jobs in local or remote ARCserve job queues from the Command Prompt (Console mode). You can use a job script created in the ARCserve manager or in a text file using the *ARCbatch Job Information Template* in the *ARCbatch.wri* file in your ARCserve home directory.



NEW FEATURES FOR ARCserve 6.0 SP3

In this chapter, you will learn:

- 2-2 ➤ New Features for SP3
- 2-3 ➤ Removable Drive Support
- 2-13 ➤ CRC Verification
- 2-16 ➤ Job Configuration Improvements
- 2-17 ➤ GFS Media Prediction Report
- 2-18 ➤ Machine Level Preferred Shares and Preferred Machines
- 2-21 ➤ Configuring Post Commands Based on Job Status
- 2-23 ➤ ARCserve Job Queue Security
- 2-37 ➤ Tape Cataloging

New Features for SP3

The following new features in SP3 enhance job performance, increase your hardware and software compatibility and capabilities, assure greater data integrity, add usability for configuring jobs, and increase security for your backed up data and job management.

Hardware and Software Support

Installing Service Pack 3 for ARCserve 6.0 allows you to take advantage of the following hardware and software improvements when backing up and restoring data, scanning device sessions, and merging device sessions with the ARCserve database.

- **Removable device support**
- **Tape Alert firmware for HP DDS-3 tape devices**
- **DDS-3 tape format for HP and Sony tape devices**
- **CRC verification**
- **Tape catalog support**

Removable Drive Support

Service Pack 3 allows you to back up data, restore data, scan sessions, merge removable sessions, and manage removable media on your removable devices. Service Pack 3 supports SCSI removable devices for your backup and restore jobs. The ARCserve Manager identifies and treats the removable media as tape media.

Service Pack 3 does not support WORM devices. Also, write protection is not supported.



NOTE: For the most up-to-date list of certified devices, go to Cheyenne's web site:
<http://www.cheyenne.com/>

Before you can back up to removable media, you must:

- Enable your removable device
- Format your removable storage media
- Configure removable device groups



NOTE: You cannot turn on a removable device after Windows NT boots up because no drive letter is assigned to the removable device.

SCSI Removable Devices

The following SCSI removable devices are supported in SP3.

Vendor	Product	Firmware
Hewlett Packard	C113F	1.33
Sony	SMO-F541+3	1.11
Pinnacle Micro	APEX 4.6G	1.04
Hitachi	OD152-1	D09C



Vendor	Product	Firmware
Mashita	PD-1 LF-1000	A105
Mashita	LF-7300	A101
MAXOPTIX	TMT 4-2600	
IOMEGA	JAZ	
IOMEGA	ZIP	
SYQUEST	EZFLYER	
SYQUEST	SYJET	
Olympus	SYS 230	

NOTE: For removable drive support to function properly, you must use Service Pack 4 or greater for Windows NT 3.51 and Service Pack 2 or greater for Windows NT 4.0.

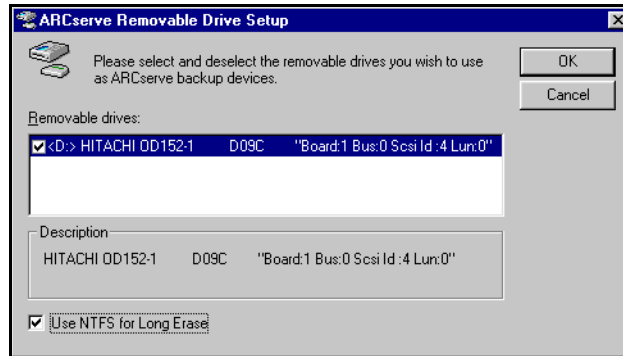
Enabling Removable Drives

Before you can back up to your removable media, you must enable the drive so ARCserve can recognize it.

Use the following procedure to enable a removable device.

1. In Windows NT 4.0 click on the *Start* button, then select the *Programs* menu, the *ARCserve for Windows NT* sub menu, and the *Removable Drive Setup* option or click on the *Window* menu, select the *ARCserve* program group, then double click on the *Removable Drive Setup* icon in Windows NT 3.51.

The *ARCserve Removable Drive Setup* dialog box appears.



2

2. Select the removable drive you want to enable for ARCserve by clicking on the check box for the drive in the *Removable drives*: list area, select whether or not to use NTFS long erase by selecting or deselecting the *Use NTFS for Long Erase* check box, then select the *OK* button.



NOTE: If you want to format the removable tape in NTFS, you select the “Use NTFS for Long Erase” check box.

Your removable device is enabled and you can view it in ARCserve’s *Device Manager*.

Formatting Removable Media

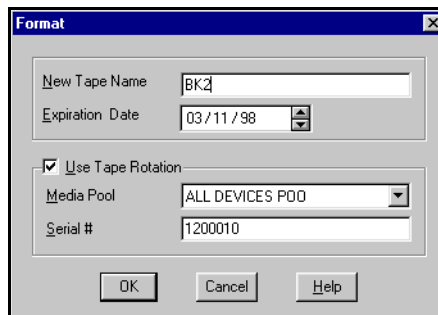
After your device is recognized by ARCserve, you must format your removable storage media as an ARCserve storage media. In ARCserve’s graphical user interface, removable media is represented as if it were tape media. This is not an error. ARCserve treats removable media in the same manner as tape media.



NOTE: You must use Windisk.exe to partition removable media. Unpartitioned media is not supported by ARCserve.

Use the following procedure to format your removable media.

1. Click on the *Device* menu, then select *Format* or click on the *Format* button on the tool bar.



2. Type a name for the new storage media in the *New Tape Name* list box, select the tape's expiration date by clicking on the up and down arrows in the *Expiration Date* spin box, click on the *Use Tape Rotation* check box to include the removable media in a media pool (then select a media pool from the *Media Pool* drop-down list and type a serial number in the *Serial #* list box), then click on the *OK* button.



NOTE: If you reformat removable storage media using the "Long Erase with NTFS" option, all existing data on the storage media will be erased.

Erasing Removable Storage Media

You may need to reuse or regroup your removable media. You can use the Erase Utility for Removable drives to do the following:

- **Quick erase** - deletes the tape label
- **Quick erase plus** - destroys the tape label and serial number
- **Long erase** - destroys all data and formats the removable media in FAT or NTFS

NOTE: Formatting and erasing the removable media will delete the sessions on the media, not the user data.

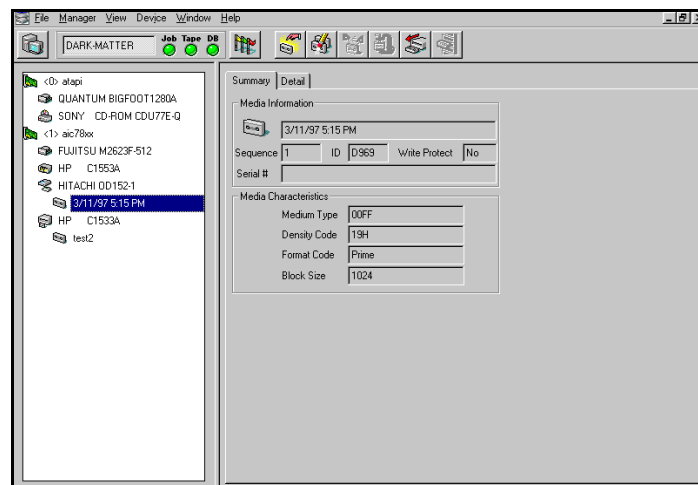


Use the following procedure to erase removable media.



1. From the **Quick Access** panel, click on the **Device Management** button.

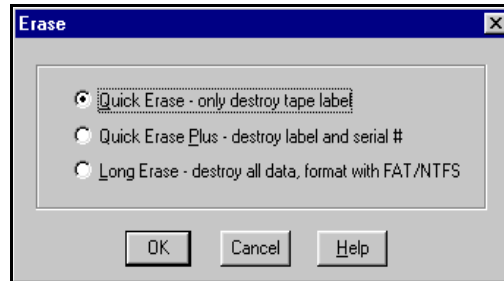
The **Device** window appears.





2. Click on the removable media you want to erase, then click on the *Erase* button on the tool bar or right click on the media, then select the *Erase* menu option.

The *Erase* dialog box appears.



3. Click on the option button for the type of erase you want to use, then click on the *OK* button.



NOTE: Always use the ARCserve Device Manager to eject removable media.

Device Group Configuration for Removable Devices

You configure removable device groups through ARCserve's *Device Management* window. Creating or deleting new removable device groups, renaming removable device groups, and assigning or removing individual devices are all simple tasks done in ARCserve's user-friendly interface.

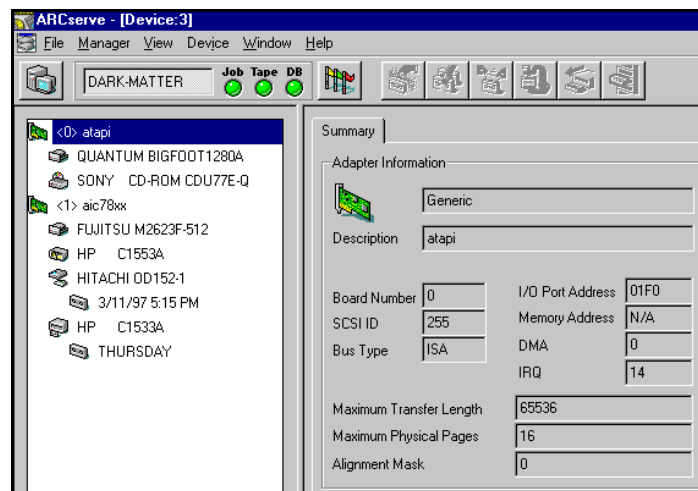
2

Creating Removable Device Groups and Assigning Removable Media

Use the following procedure to create removable device groups and assign removable devices to them.

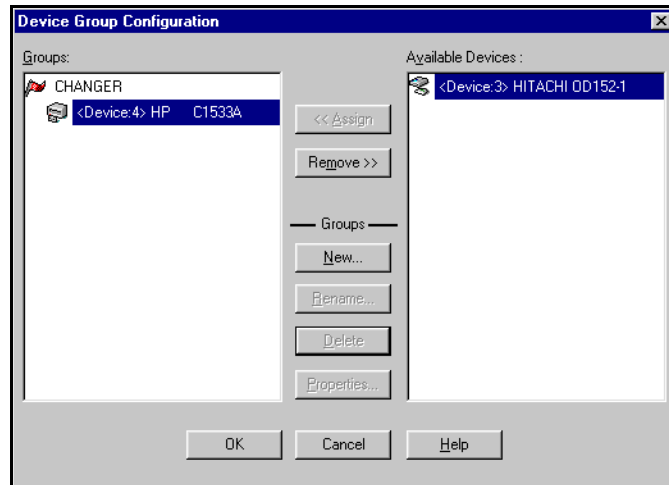
1. From ARCserve's *Quick Access* panel, select the *Device Management* button.

ARCserve's *Device Management* window appears.



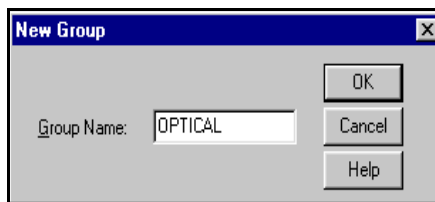
2. Click on the *Device* menu, then select the *Device Group Configuration* menu option.

The *Device Group Configuration* dialog box appears.



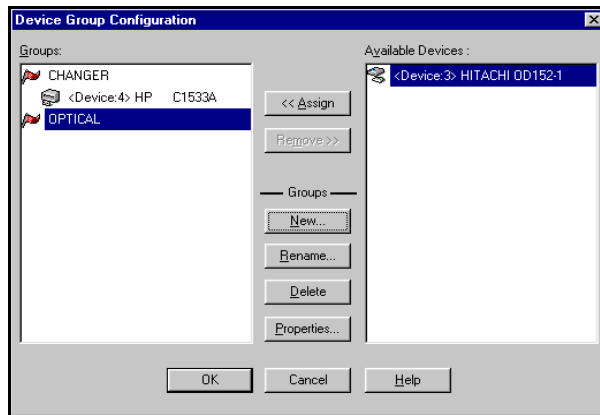
3. To create a new removable device group, click on the New button.

The *New Group* dialog box appears.]



NOTE: You cannot assign a removable drive into a group of tape drives.

4. Type the name for your new group (*Optical*, in the above example) in the Group Name: list box, then click on the *OK* button.



2

5. Do one of the following:
 - To assign a removable device to your new group, highlight the group in the Groups: window, click on a device in the Available Developments: window, click on the <<Assign button, then click on the *OK* button.
 - To remove a removable device from a group, highlight the device under a group in the Groups: window, then click on the Remove>> button.

Renaming Removable Device Groups

Use the following procedure to rename a removable device group.

1. In the *Device Group Configuration* dialog box, click on the group node in the Groups window, then click on the Rename button.

The *Rename Group* dialog box appears.



2. Type the new name for the removable device group in the Change to: list box, then click on the *OK* button.

CRC Verification

CRC (Cyclic Redundancy Check) verification allows you to check the integrity of backed up data as you perform your backup jobs, while verifying with the scan option, without referencing the data on the disk. Thus, users can alter files on the hard disk without affecting the results of the verification for the changed files. In CRC verification, the data's signature, a numeric value for bytes of data for each packet of data that is transferred, is stored in a check sum on the tape as the packets are transferred. Later, the checksum is compared against the data on the tape after it is backed up. If these values do not match, the data has been corrupted.

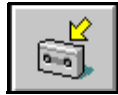
2

This can be useful for administrators in a large enterprise who need to verify large volumes of data during periods when demands on system resources are lowered.

For example, an administrator configures a backup job for a group servers that runs between 12:00 AM and 7:00 AM. If he were to perform a comparison of the tapes to the hard disks for all of the backup sessions in the backup job, he might not be able to complete the verification before the employees started arriving at 8:00 AM the next morning. Thus, the results of the comparison would indicate that the data had changed if anyone saved any new data to the servers while the verification was running.

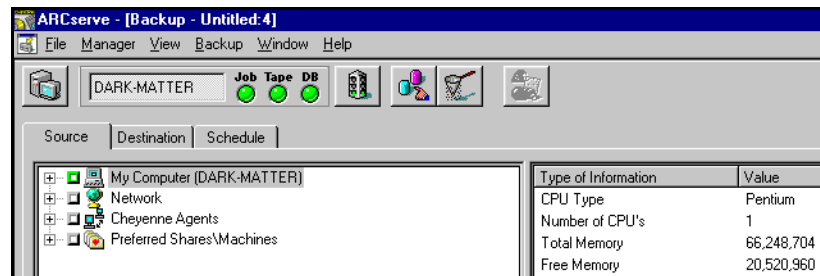
The results of a CRC verification are unaffected when users save new data to the servers because the data in the checksum was generated when the data on the servers was backed up and stored on the tape, then compared to the tape sessions afterwards. Thus, any changes in data before the verification is completed will not affect the results.

Use the following procedure to verify data blocks in a backup job with CRC.



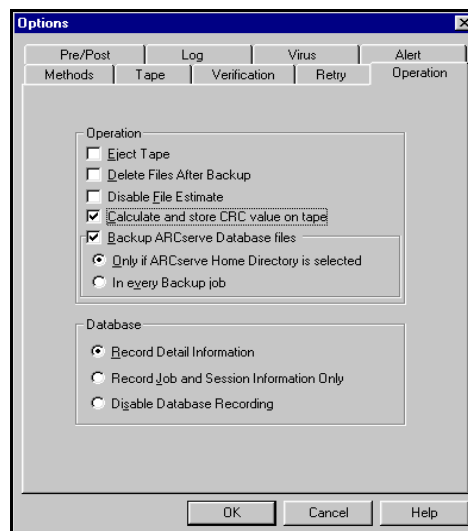
1. In ARCserve's *Quick Access* panel, click on the *Backup* button.

ARCserve's *Backup* window appears.

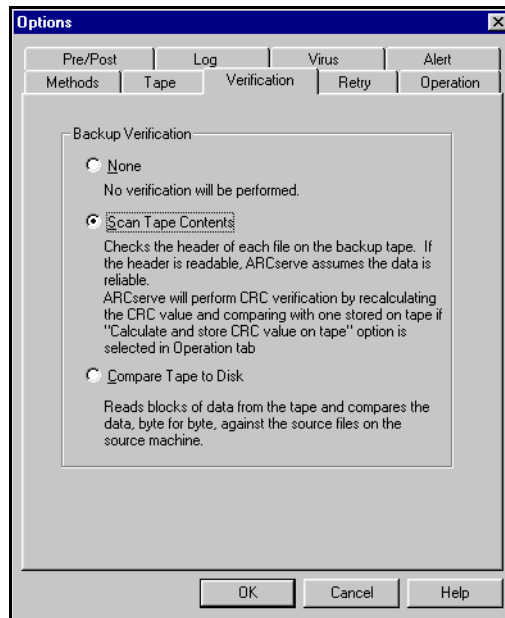


2. In the *Backup* window, click on the *Backup* menu, then select the *Options* menu option.

The *Options* dialog box appears.



3. On the *Operation* tab of the *Options* dialog box, click on the *Calculate and Store CRC Value on Tape* check box, then click on the *Verification* tab.



2

4. Click on the *Scan Tape Contents* option button, then click on the *OK* button.



NOTE: You can calculate and store CRC values without performing a verification job. Later, you can run a scan job to verify the data.

Job Configuration Improvements

Service Pack 3 enhances your ability to configure jobs in the following areas:

- **GFS Media Prediction Report**
- **Machine level preferred shares**
- **Managing removable devices**
- **Post commands based on job status**

GFS Media Prediction Report

ARCserve now support a new report for the different backup jobs in your GFS rotation scheme. The report will contain the following information for each job.

- **Date and time of the job's execution**
- **Backup type and method**
- **Tape information**
- **New name for your backup media after formatting**

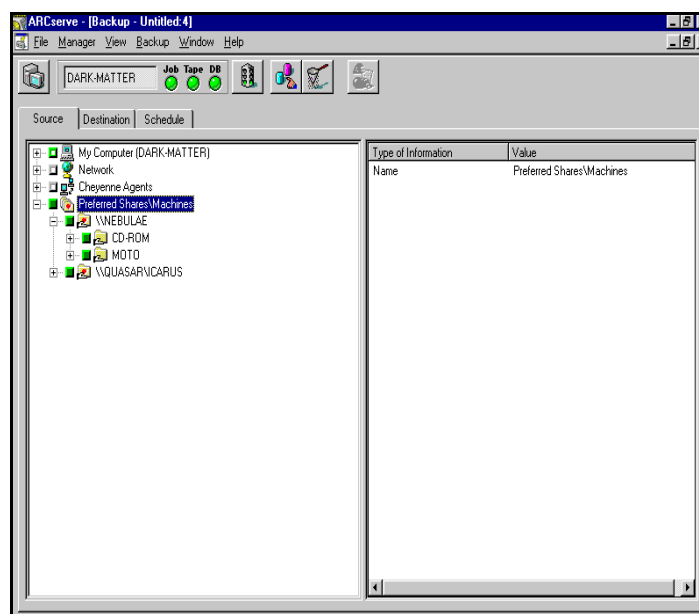
2

The following is sample GFS Media Prediction Report for a five-day weekly rotation scheme with the full backup on Fridays and incremental backup jobs on weekdays.

GFS Media Prediction Report	
Host Server : LUKE_NT40W	Media Prefix : MICH
Next Backup Date & Time: Friday, 3/14/97 2:44 PM	
<< Friday, 3/14/97 2:44 PM >> Backup Type & Method: Weekly FULL The following media can be used: 1 < RI ANK TAPE > The media will be formatted as W-MICH-FRI- 3/14/97.	
<< Saturday, 3/15/97 2:44 PM >> No Backup Job Scheduled.	
<< Sunday, 3/16/97 2:44 PM >> No Backup Job Scheduled.	
<< Monday, 3/17/97 2:44 PM >> Backup Type & Method: Daily INCREMENTAL The following media can be used: 1 < BLANK TAPE > The media will be formatted as I-MICH-MON- 3/17/97.	
<< Tuesday, 3/18/97 2:44 PM >> Backup Type & Method: Daily INCREMENTAL The following media can be used: 1 < BLANK TAPE > The media will be formatted as I-MICH-TUE- 3/18/97.	
<< Wednesday, 3/19/97 2:44 PM >> Backup Type & Method: Daily INCREMENTAL The following media can be used: 1 < BLANK TAPE > The media will be formatted as I-MICH-WED- 3/19/97.	
<< Thursday, 3/20/97 2:44 PM >> Backup Type & Method: Daily INCREMENTAL The following media can be used: 1 < BLANK TAPE > The media will be formatted as I-MICH-THU- 3/20/97.	

Machine Level Preferred Shares and Preferred Machines

You can now setup *Preferred Shares* or *Preferred Machines* under the *Preferred Shares/Machines* node of the ARCserve browser. These objects let you access all of the shared drives or preferred machines without browsing your network. Now you can also back up and restore all of the shared drives under a preferred share on a machine.

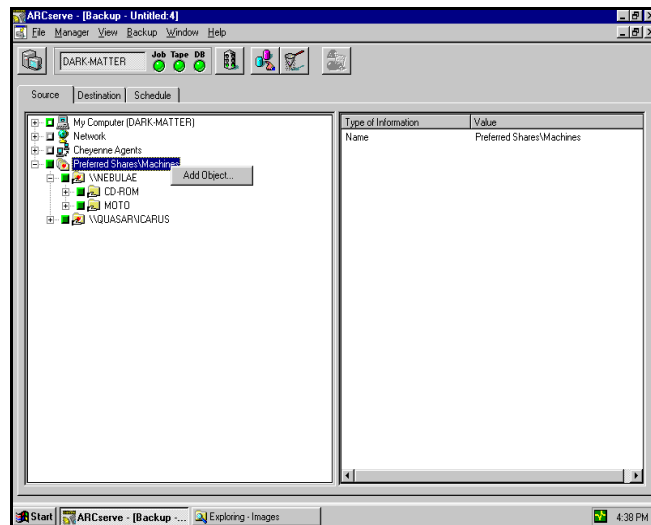


NOTE: This feature enables you to back up “share points” provided by other operating systems that are capable of creating “shares” in a Windows NT network, such as UNIX NFS or OS/2 LAN Server shares.

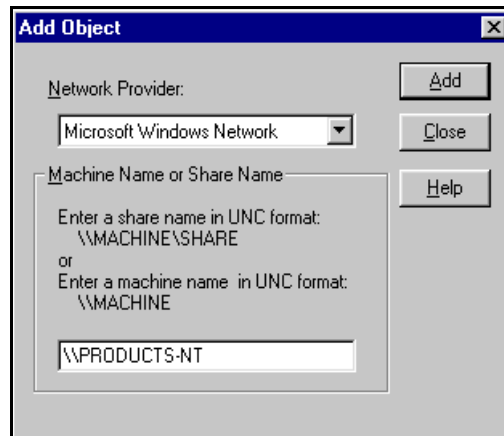
Use the following procedure to add a preferred share or a preferred machine to the *Preferred Share* node of your ARCserve browser.

1. In the tree of your ARCserve browser on the *Source* tabs of the *Backup* or *Copy* windows or the *Destination* tab of the *Compare* window, right click on the *Preferred Shares / Machines* node of your browser tree, then select *Add Object*.

2

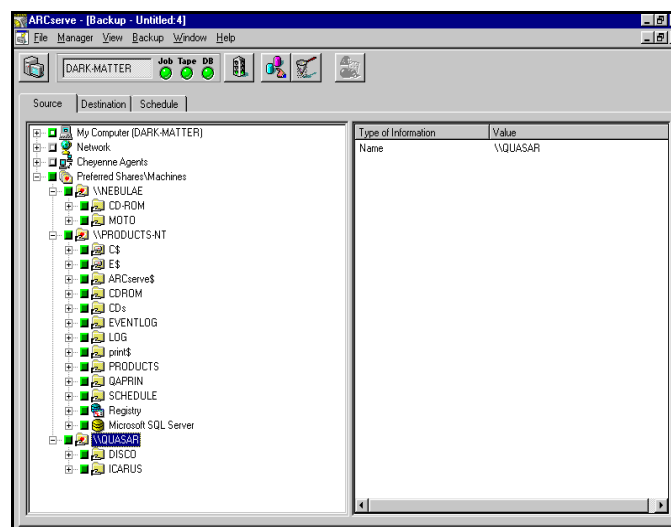


The *Add Object* dialog box appears.



2. Select the network provider in the *Network provider* drop-down list, type the name of your machine preceded by a double backslash, then click on the *Add* button.

The new machine-level share or preferred machine appears in the browser.



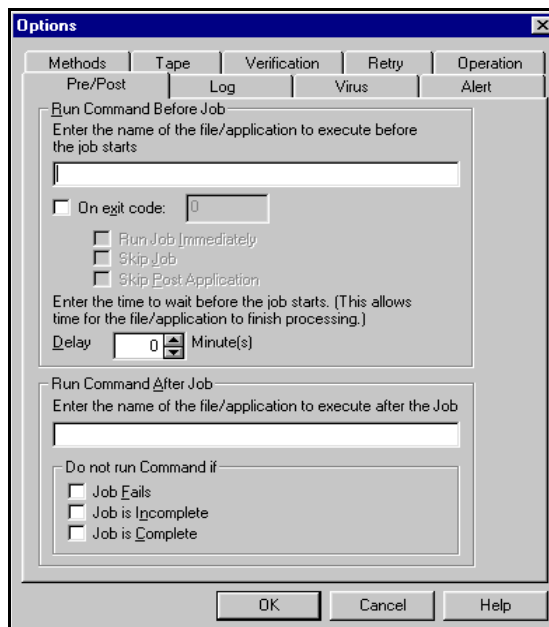
Configuring Post Commands Based on Job Status

You can run an executable file for an application after your job has run, and also specify whether or not to run the executable file based on the job's results. You can specify these *Post* commands at the Global or Machine level.

Use the following procedure to enter a Global Post command based on a job's results.

2

1. On the *Pre/Post* tab of the *Options* dialog box, type the file for the application you want to run after the completion of the job, then click on the check box for one of the following options.
 - Do not run Command if Job Fails
 - Do not run Command if Job is Incomplete
 - Do not run Command if Job is Complete





NOTE: To enter a post command for a specific machine, right click on the machine in the tree of the ARCserve browser, then select the “Pre/Post Option...” menu option.

The *Pre/Post* dialog box appears.

Pre/Post

Run Command Before Operation
Enter the name of the file/application to execute before Operation on this Machine.

☐ On exit code:

☐ Run Operation Immediately
☐ Skip Operation
☐ Skip Post Application

Enter the time to wait before the Operation starts. (This allows time for the file/application to finish processing.)
Delay Minute(s)

Run Command After Operation
Enter the name of the file/application to execute after Operation on this Machine.

Do not run Command if

☒ Operation Fails
☐ Operation is Incomplete
☐ Operation is Complete

OK Cancel Help

ARCserve Job Queue Security

ARCserve now supports different levels of security permissions for the ARCserve job queue allowing you to restrict job management for selected users or groups. Users must provide credentials to access the job queue. The user must be authenticated before he is allowed to perform any type of transaction in the ARCserve job queue. (i.e. add, modify, delete, or reschedule jobs)

ARCserve has the following default security permissions.

Permission	Type of Access
Administrator	Full Control
Administrators	Full Control
Backup Operators	Change
Everyone	Read

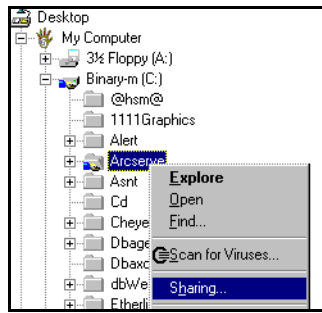
2

Modifying User Groups

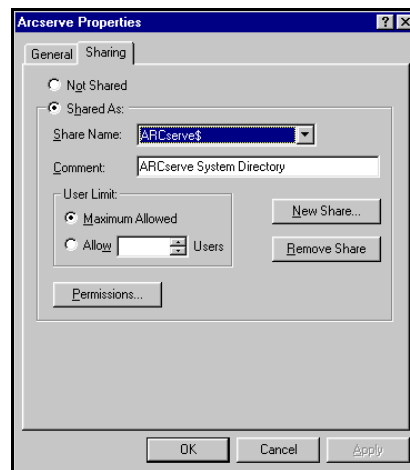
You can reassign the type of access to your job queue for user groups or names in your Windows NT 4.0 Explorer.

Use the following procedure to modify the type of access for a user group.

1. In your Windows NT 4.0 Explorer, right click on the **ARCserve\$** share on the tree of your browser, then select the ***S**haring* menu option.

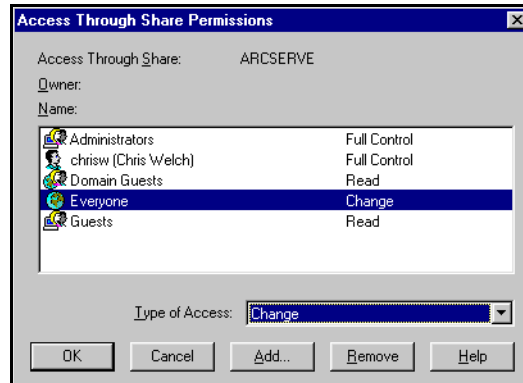


The *S*haring tab of the *ARCserve Properties* dialog box appears.



2. Click on the *P*ermissions button.

The *Access Through Share Permissions* dialog box appears.



2

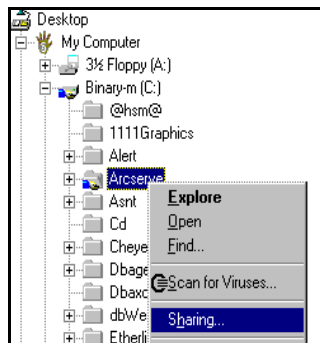
3. Click on the user group or name under the Name heading, click on the Type of Access drop-down list, select one of the following types of access from the list, then click on the *OK* button.
 - **Full Control** - The Full Control permission allows the user to access the queue, add and modify jobs, and reassign security permissions for the queue.
 - **Change** - The Change permission allows users to access the queue and administer jobs, but does not allow them to reassign security permissions.
 - **Read** - Read access allows users to monitor jobs in the ARCserve queue, but not to create, modify, delete, or reschedule them.
 - **No Access** - Users will not be able to access the ARCserve job queue remotely or locally.

Assigning Security Permissions

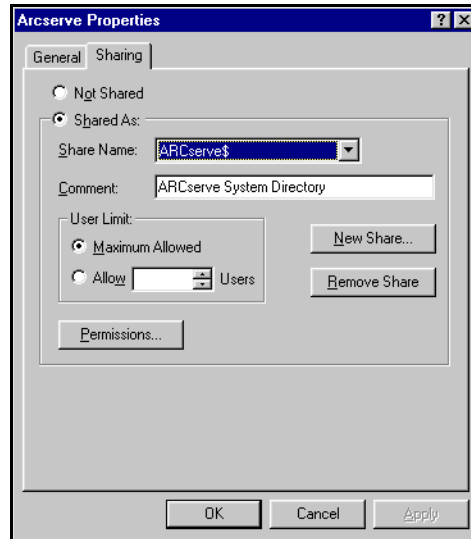
Job queue security for ARCserve is based on Microsoft's *Shared Directory Facility*. You can use the Windows NT 4.0 Explorer or the Windows NT 3.51 File Manager to set security permissions for the "ARCserve\$" share that you created when you installed ARCserve.

Use the following procedure to set security permissions for the ARCserve\$ share.

1. In the browser of your ARCserve server's Windows NT Explorer, right click on the *ARCserve* shared directory, then select the *Sharing...* menu option from the sub-menu.



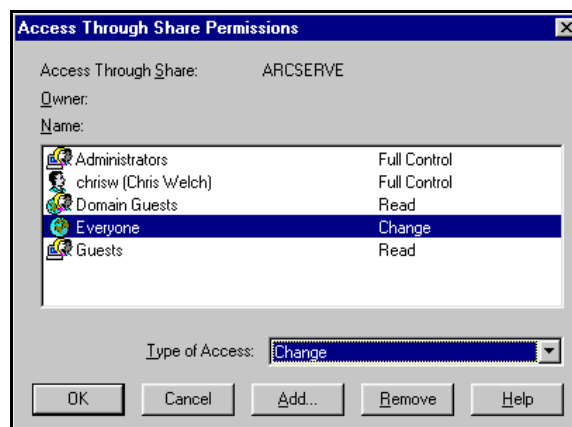
The *Sharing* tab of the ARCserve *Properties* dialog box appears.



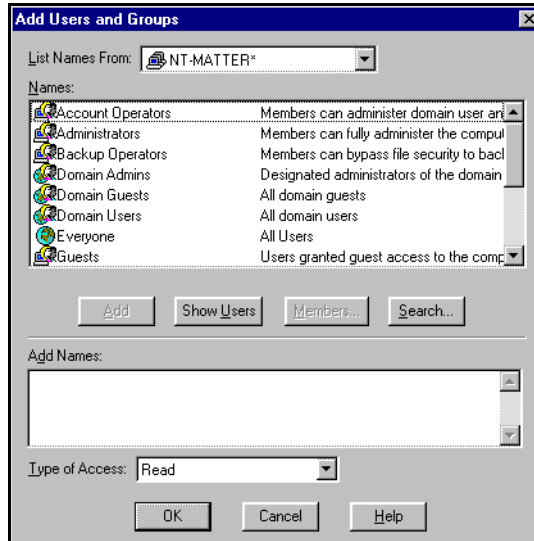
2

2. Specify the *user limit* by clicking on the Maximum Allowed option button or the Allow option button, then click on the Permissions button.

The *Access Through Share Permissions* dialog box appears.



-
3. Click on the **Add** button to add new users.
The *Add Users and Groups* dialog box appears.



4. Select the server you want to select names from in the *List Names From*: dialog box, select a name from the *Names* dialog box, click on the *Show Users* button to assign permissions to individual users, click on the *Add* button to add the name to your server's ACL list, select the type of access you are allowing a user or group, then click on the *OK* button.

There are four permissions to assign to ARCserve users.

- **Full Control** - The Full Control permission allows the user to access the queue, add and modify jobs, and reassign security permissions for the queue.
- **Change** - The Change permission allows users to access the queue and administer jobs, but does not allow them to reassign security permissions.

- **Read** - Read access allows users to monitor jobs in the ARCserve queue, but not to create, modify, delete, or reschedule them.
- **No Access** - Users will not be able to access the ARCserve job queue remotely or locally.

Modifying Security Permissions



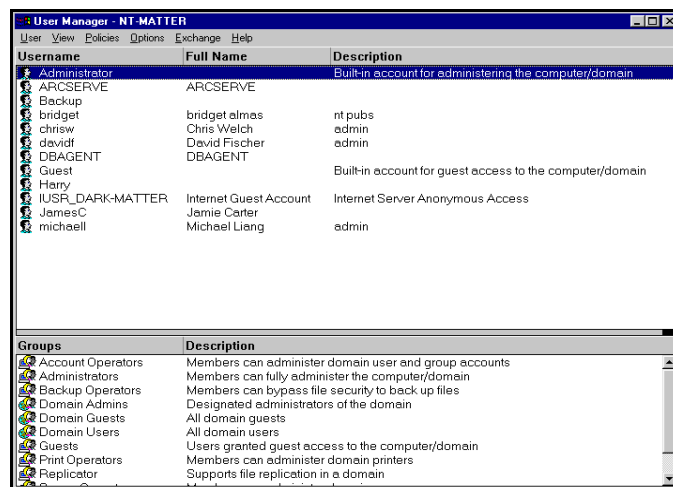
You can use the Windows NT *User Manager* to redefine the ARCserve security for users.

NOTE: You must be an Administrator, Server Operator, or Power User to modify user permissions.

Use the following procedure to modify user permissions.

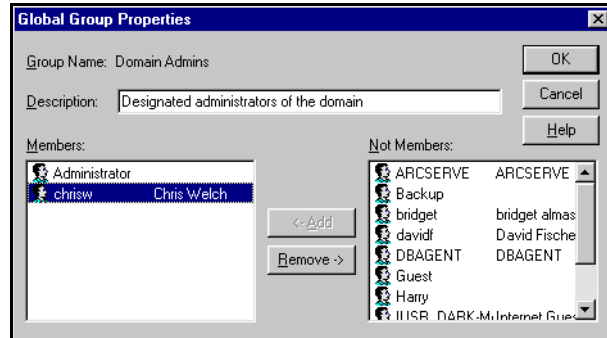
1. In Windows NT 4.0, click on the *Start*, then select the *Programs* menu, the *Administrative Tools* menu, then the *User Manager for Domains* application.

The *User Manager* appears.



-
2. Double click on the group you want to assign a user to.

The *Global Group Properties* dialog box appears.



3. Click on a user in the *Not Members*: list area, then click on the *<-Add* button to assign the user to a global group.

Accessing an ARCserve Job Queue

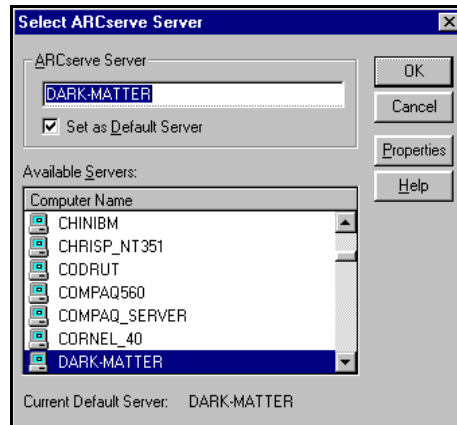
When you submit a job to a remote ARCserve queue from a particular job window, such as the *Backup* window, the remote ARCserve server first obtains your credentials and grants or denies access to the job queue based on a list of permissions you have set for the ARCserve\$ share.

The following procedure demonstrates how you can submit a Backup job to the job queue of a remote ARCserve server.



1. From the *Backup* window, click on the *Select Server* button.

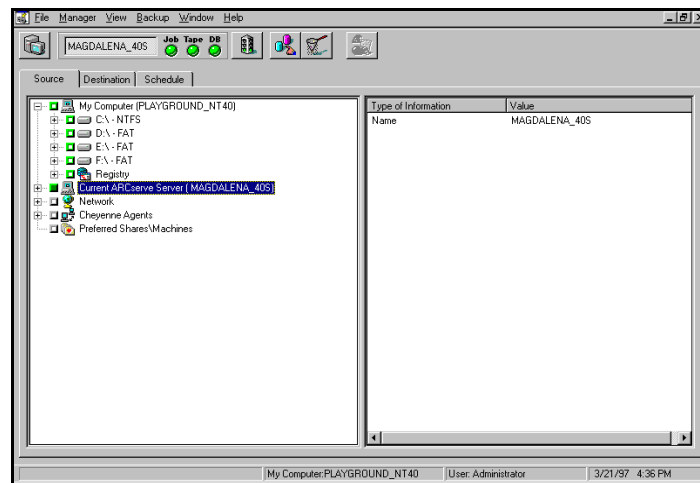
The *Select ARCserve Server* dialog box appears.



2

2. Click on a remote server in the *Available Servers* list area, then click on the *OK* button.

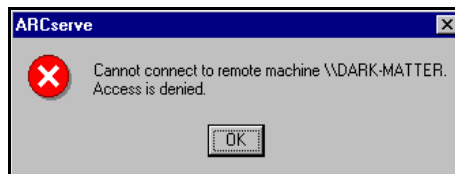
The current server is displayed in the tree of the browser.





3. After you have entered the job information on the *Source* tab, the destination information on the *Destination* tab, and the schedule for the job on the *Schedule* tab, you click on the *Run* button to submit the job.

If there are security permissions assigned to the remote queue, the following message appears.



4. Click on the *OK* button.
The *Security* dialog box appears.



NOTE: This dialog can be used to provide security information to access the job queue of a remote ARCserve server in the Job Status Manager.

View a remote job queue in the Job Status Manager

You can access a remote ARCserve job queue in the *Job Status Manager* to view job information and events in the *Activity Log* and add, modify, or delete jobs in the queue.

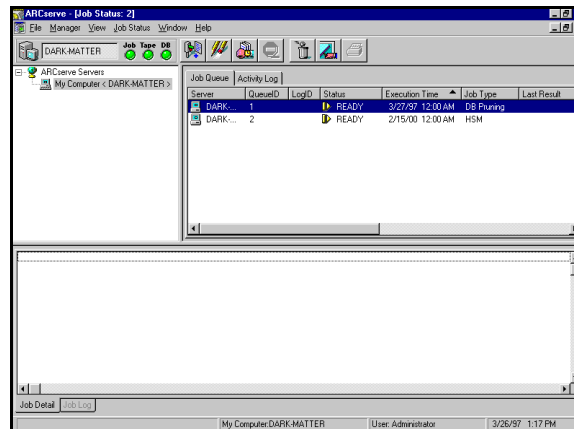
Use the following procedure to access a remote job queue in the *Job Status Manager*.



1. Click on the *Job Status* button on ARCserve's *Quick Access Panel*.

The *Job Manager* appears.

2



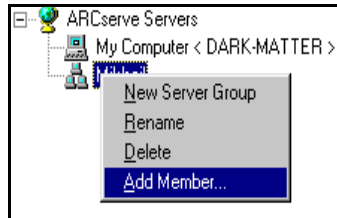
2. Right click on the *ARCserve server* node on the browser's tree, then select the N*ew Server Group* menu option.



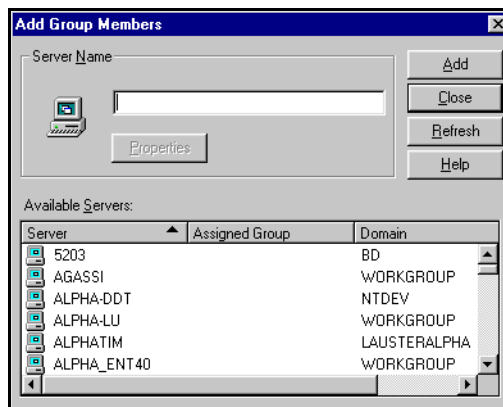
The new server group appears under the *My Computer* node of the browser's tree.

3. Type a name for the new group.

-
4. Right click on the new group, then select the **Add Member...** menu option.



The *Add Group Members* dialog box appears.



5. Click on an ARCserve server in the **Available Servers:** list area, then click on the **Add** button.

The ARCserve server is added to the tree under the group node.

6. Right click on the new ARCserve server, then select the **Security...** menu option.

The *Security* dialog box appears.



2

7. Type a valid *user name* in the U*ser Name* list box and a *password* in the P*assword* list box.

This information will be used to log on to the job queue of the selected server.

ARCserve System Account

The ARCserve system account is a master user account which you can use to access remote data from an ARCserve server. For example, the ARCserve system account could be for a member of the <i>Global Domain Administrators</i> group. This enables an ARCserve server to successfully log on and access the data of any servers or workstations participating in the current domain and any servers from domains trusting this domain. In such a case, you do not need to provide valid credentials each time you want to process data.
--

Tape Cataloging

Tape cataloging improves performance in your backup and tape merging jobs.

- During backup jobs, backup information is stored, then written to the database.
- During tape merging jobs, ARCserve reads the files stored during the backup then writes them to the database, instead of reading through the tape file-by-file.

2



NOTE: Tapes created with previous versions of ARCserve will be recognized and merged with the database using the previous merge method.



SOFTWARE ENHANCEMENTS FOR ARCSERVE 6.0 SP3

This chapter explores the software enhancements for ARCServe 6.0 Service Pack 3.

In this chapter, you will learn:

- 3-3 ➤ Multiple Node Copy Support
- 3-4 ➤ ARCbatch Job Script Utility
- 3-10 ➤ Media Name Display for GFS Rotation
- 3-12 ➤ User Notification for Non-job Related Events
- 3-15 ➤ Importing/Exporting Multiple Changer Slots

Service Pack 2 Enhancements

Service Pack 2 improved ARCserve's existing features and functionality in the following areas.

- **Multiple node copy support**
- **ARCbatch enhancement**

Multiple Node Copy Support



Selected marker



Partially selected marker

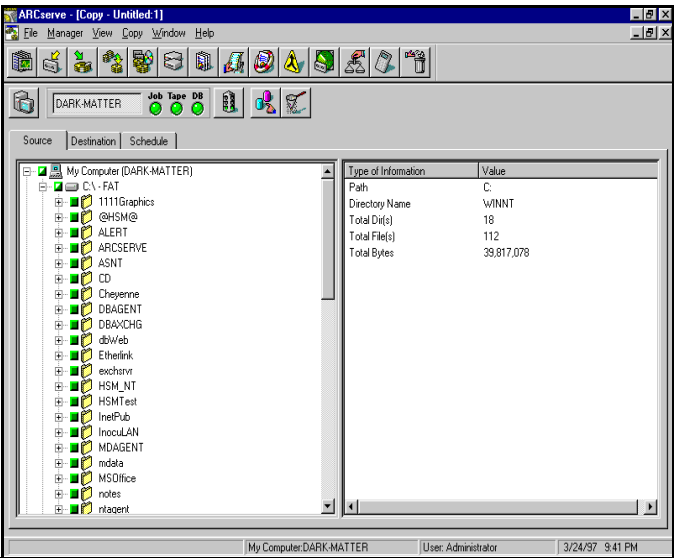


De-selected marker

Multiple node copy support allows you to copy files from several different nodes (locations) on the *Source* tab of the *Copy* window to a single destination on the *Destination* tab.

You browse source data by clicking on the tree to expose the nodes you want to select on the source tab of the *Copy* window, then clicking on the green box next to a folder. When the box is full, the directory is selected; if it is partially filled, some sub-directories are selected; and if it is empty, no files in the directory are selected.

3



ARCbatch Job Script Utility

ARCbatch enables you to create and save job scripts for backup, restore, copy, count, and delete jobs, then submit them to the ARCserve job queue from the Windows NT Command Prompt.

To run an ARCbatch script, you must first create the script, then run a command line from the MS-DOS Command Prompt.

Use the following procedure to run an ARCbatch job script.

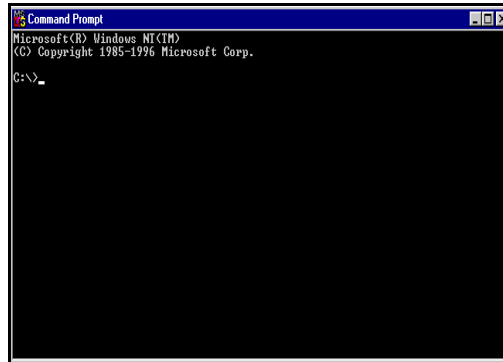
1. Create your ARCbatch job script using the information in the *ARCbatch Job Information Template* in the *ARCbatch.wri* file located in your ARCserve home directory.



NOTE: There are two new entries for ARCserve security in the ARCbatch Job Information Template, "HOSTPASSWORD" and "HOSTDOMAIN". For more information, see the *ARCbatch.wri* file in your ARCserve home directory.

2. Do one of the following:
 - In Windows NT 4.0, click on the *Start* button, then select the *MS-DOS Command Prompt* utility.
 - In Windows NT 3.51, click on the *Window* menu, select the *Main* group, then double click on the *MS-DOS Command Prompt* icon.

The *Command Prompt* window appears.



3. Type in the script for your job using the following syntax:

```
arcbatch /H=<server name> /
S=<path>script name
```

Where...	Is...
<i>Server Name</i>	the name of the target server for your ARCserve job script.
<i>Path</i>	the path to the directory where your job script is stored.

You can also use the following switches to specify additional job criteria.

Switch	Criteria	Format
/User	User ID	[UserName]
/Domain	Domain for a user ID	[DomainName]
/D	Execution date	<MM/DD/YY>
/T	Execution time	<HH:MM>
/G	Device group	
/TP	Tape name	

For example, you might submit the following command line to submit your job script to a job queue.

```
arcbatch /H=QA-SERVER /S=E:\SCRIPTS  
\BACKUP.ASX
```

Service Pack 3 Enhancements

Service Pack 3 improved ARCserve's features and functionality in the following areas.

- **Enhanced Media Pool management**
- **Media name display for media in GFS rotation schemes**
- **User notification for non-job events**
- **Importing/Exporting multiple changer slots**

Media Pool Management

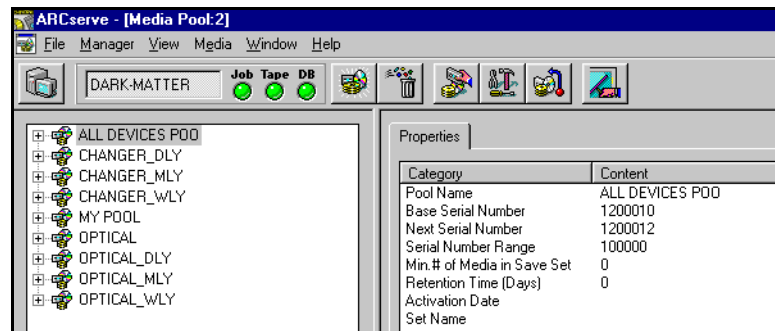
You can assign storage media to save sets and scratch sets of media pools in ARCserve's *Media Pool Manager*.

Use the following procedure to assign media to a media pool's save set or scratch set.



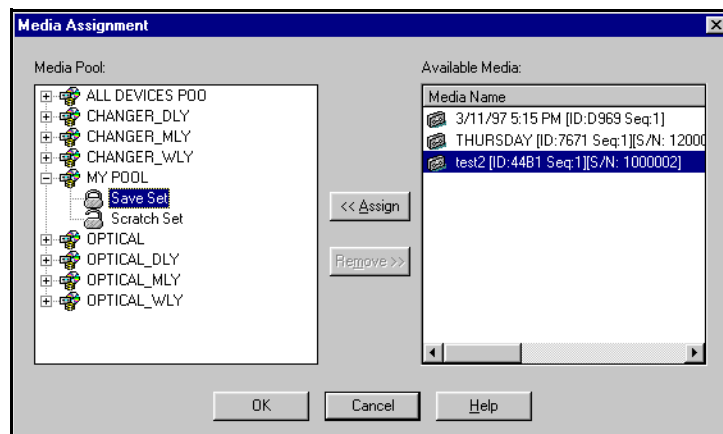
1. From ARCserve's *Quick Access* panel, click on the *Media Pool Management* icon.

The *Media Pool Manager* appears.



2. In the Media Pool Manager, click on the *Media* menu, then select the *Assign Media* menu option.

The *Media Assignment* dialog box appears.



3. In the *Media Assignment* dialog box, expand a media pool in the *Media Pool* window by clicking on it, select the save set or scratch set you want to assign or remove a device for by clicking on it, select the storage medium by clicking on it in the *Available Media* window or the *Media Pool:* window, clicking on the <<*A*ssign button to assign media to subsets of a media pool or the *R*emove>> button to remove media from a media pool, then click on the *OK* button.



NOTE: For additional information about save sets and scratch sets, see page 7-24 of the "ARCserve for Windows NT User Guide".

Media Name Display for GFS Rotation Scheme

When you select a GFS Rotation scheme for scheduling your backup jobs on the *Schedule* tab of the *Backup* window, you can view the name of the target storage media in the *Calendar* view if the GFS scheme is enabled. The syntax for a GFS media name in the Calendar view is as follows:

***Backup Type*-<Media Pool Name>-Date**

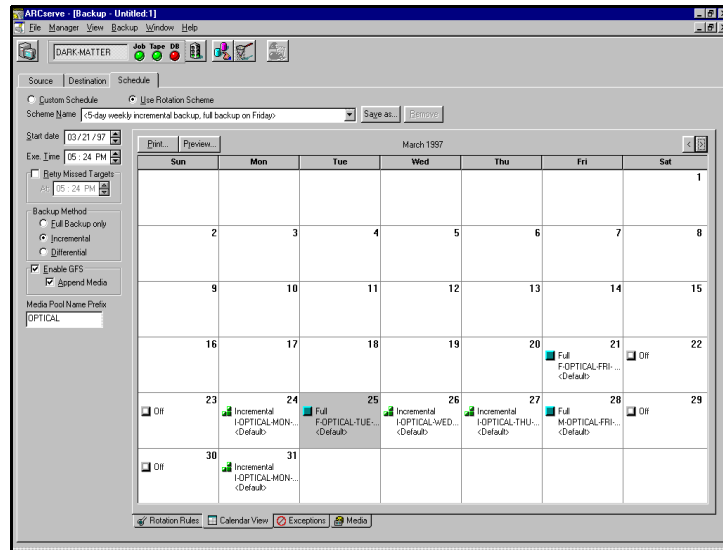
Where...	Is...
<i>Backup Type</i>	F - Full, I - incremental, D - differential, M - monthly, or W - weekly
<i>Media Pool Name</i>	The name for the media pool containing the backup medium for a particular job.
<i>Date</i>	The date on which the job will run in the following format: MM/DD/YY

To display the media pool name on the *Schedule* tab's *Calendar* view in the Backup window, do the following:

Click on the ***Enable GFS*** check box, then type the name of the media pool in the *Media Pool Name Prefix* list box.

The backup type, media pool name, and the date for a job will be displayed in the calendar.

Software Enhancements for ARCserve 6.0 SP3



3

User Notification for Non-job Related Events

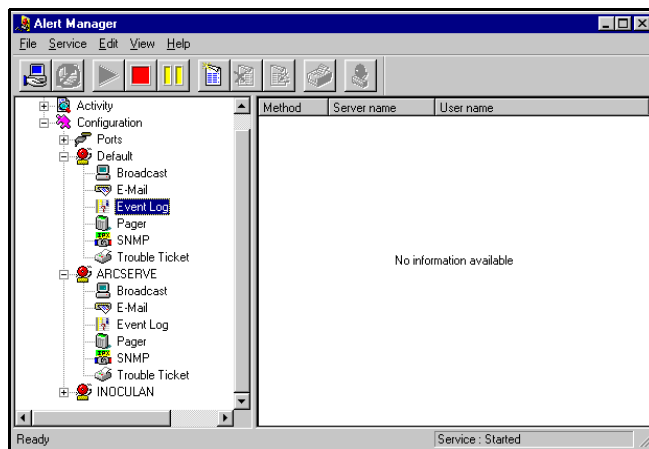
You can now configure ALERT messages for system events unrelated to job activity (generic ALERTS), such as engines starting or stopping or system errors. The text for specific events can be found in the *Activity Log* tab in the *Job Status* window or in the help file. You can configure ALERT messages when events with certain key words occur. For example, you might configure an ALERT message for any event occurring with the text “tape engine”.

To provide user notification for non-job related events, you must:

- Configure ALERT recipients in the ALERT Manager
- Configure the non-job related events in the ARCserve Server Administrator

Use the following procedure to generate non-job related ALERT messages.

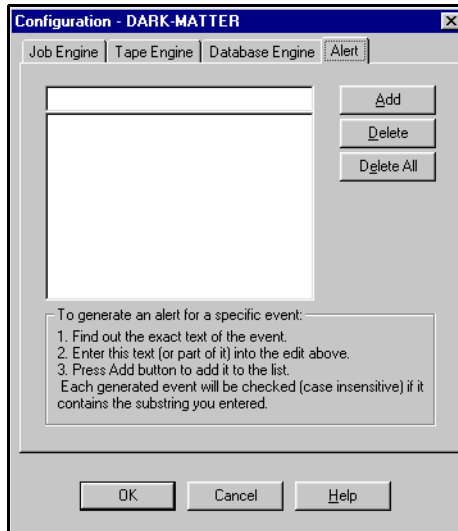
1. In the tree of the Alert Manager's browser, click on the *Configuration* node, click on the *Default* or *ARCserve* node, then click on the icon for the type of message you want to send.



3

2. Click on the *New Item* button to configure recipients for the type of ALERT message you selected.
For more information about configuring ALERT recipients, see chapter 12 of the *ARCserve for Windows NT User Guide*.
3. From the *ARCserve Server Administrator*, click on the *Admin* menu, then select the *Configuration* menu option.

The *Configuration* dialog box appears.



4. Type the text for the event into the edit box, click on the **Add** button, then click on the **OK** button.



NOTE: You can delete a generic alert or all alerts in the list window by clicking on the Delete or Delete All button.

Importing/Exporting Multiple Changer Slots

ARCserve now supports importing or exporting multiple tapes to and from your tape changers.

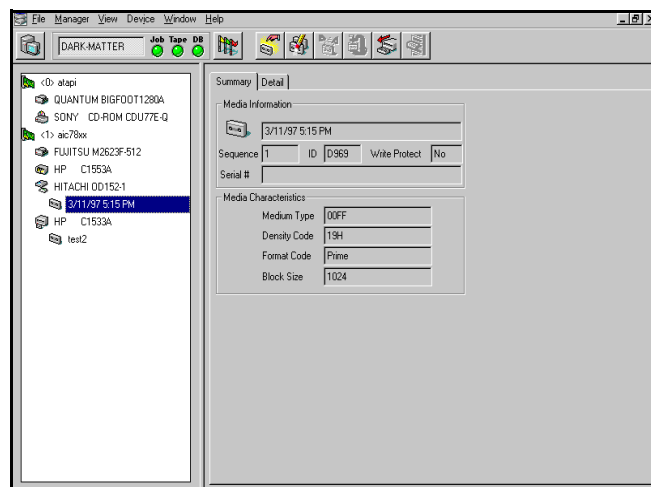
Importing tapes to
tape changers

Use the following procedure to import tapes in your tape
changers.



1. From the ARCserve Manager's *Quick Access Panel*, click on the *Device Management* button.

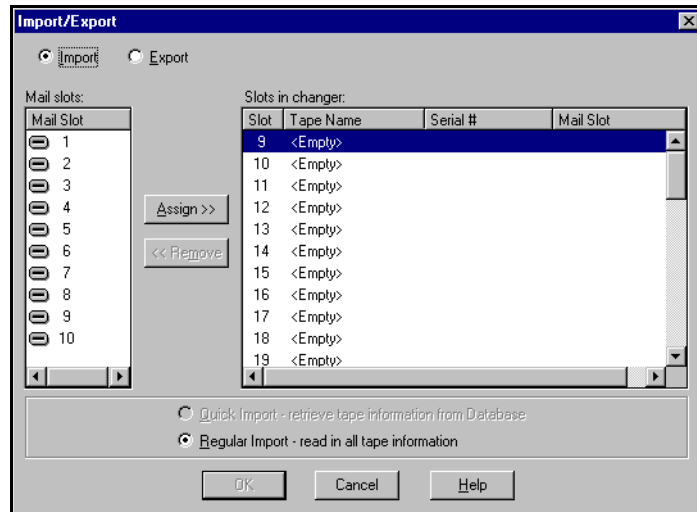
The *Device* window appears.



3

2. Click on the changer device in list window, then click on the *Import/Export* button.

The *Import/Export* dialog box appears.



NOTE: The Import/Export dialog box has two forms depending on whether the import or export option button is selected.

3. Click on the *Import* option button to view all the available empty slots in a tape changer.
4. Click on a mail slot (or mail slots) with tapes you want to assign to your tape changer in the *Mail Slots:* list window, click on the empty slot (or slots) in the *Slots in changer:* window where you want to assign a tape, then click on the *Assign>>* button.
5. Repeat this process for each tape you want to import, then click on the *OK* button.

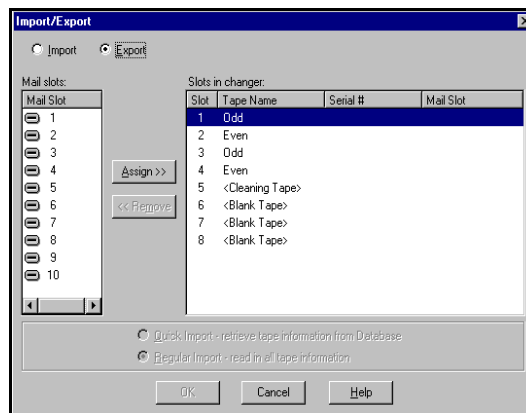


NOTE: You can choose to import the tape information from the ARCserve database by selecting the *Quick Import* option button or to read in all of the tape information from the tape itself by selecting the *Regular Import* option button.

Exporting tapes from a tape changer

Use the following procedure to export tapes from a tape changer.

1. Click on the *Export* option button to view all the occupied slots in a changer.
2. Click on the mail slots in which you want to move tapes, click the slots (or multiple slots) that you want to remove a tape (or multiple tapes) from, and click on the <<*Remove* button.



3

3. Repeat this process for every tape you want to export, then click on the *OK* button.

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