

## **Sample of a job aid for a network administrative task**

When we were using backup tapes as our backup method, this job aid was written to provide instructions for another employee to perform the task of switching out backup tapes each week, if I was ever unavailable for the task.

# Switching out weekend backup tapes

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## **Switching out weekend backup tapes**

# Switching out weekend backup tapes

## Overview

There are two tapes for each day on the weekend. The first tape backs up the home directories on the e: drive. The second tape backs up the **perforce\_depot**, **rappid\_testcases**, **transfer**, and **weekly\_reports** directories on the e: drive, in addition to a couple of others.

**NOTE:** The database (on the C: drive) for the backup software is backed up onto BOTH tapes. In order to be able to do a restore from a tape, the database must be backed up onto that tape. That way the backup software knows what files are on the tape and knows about the directory structure.

## Switching weekend backup tapes

The overall procedure for resetting the backup tapes for the following weekend is the following:

1. Print the job logs for each of the four weekend jobs.

See **Printing the job logs** on page 1.

2. Remove the tapes from the weekend.

**IMPORTANT NOTE:** When taking out a tape, you **MUST** take the tape out and then close the door to the tape drive. **DO NOT** put another tape in immediately after taking a tape out. The tape drive must register the removal before accepting an insert. This will be mentioned again in the appropriate step in the detailed instructions that follow.

3. Insert tapes to be used for the following weekend.
4. Mount the tape drive. This sometimes has to be done twice.
5. Format each of the four tapes.
6. Modify each of the four backup jobs for the weekend.
7. Select the appropriate tape for each job.
8. Save the job (replace the appropriate job file).
9. Delete the job on the **Job Queue** tab.
10. Add the same job back onto the **Job Queue** tab.
11. Make sure the job says “**Ready**.”

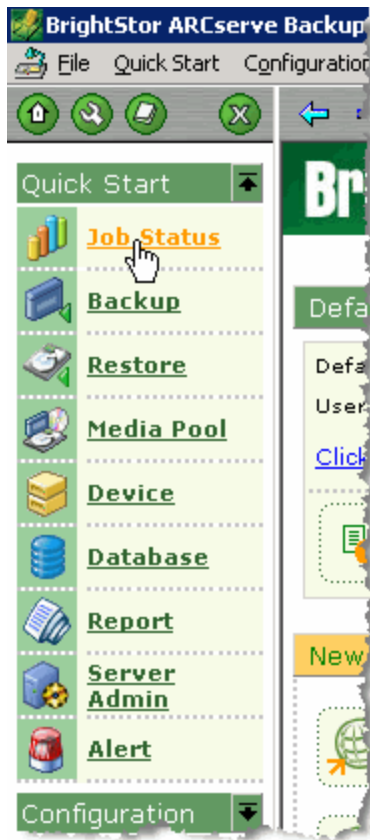
## ***Printing the job logs***

Follow these steps to print the job logs for the weekend jobs so there is a record of what was backed up and when for each job:

1. Log in as administrator on devserver1.
2. Open **Manager**.

## Switching out weekend backup tapes

- Click the **Job Status** link in the **Quick Start** section.

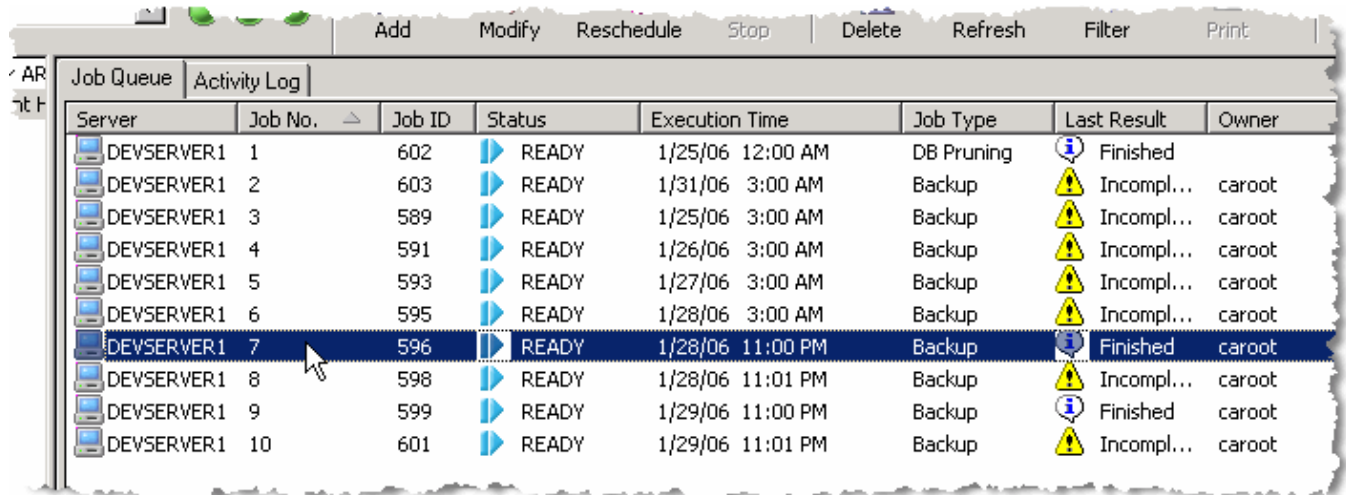


- The status of all the jobs is listed in the right pane. The results of the jobs are listed in the **Last Result** column.

**NOTE:** If a job says **Incomplete**, it still might have completed well enough to be considered a successful backup job. One example that has been occurring lately, is when someone has WS\_FTP open some of the files are kept open. In the **Job Log**, a warning is listed saying "Unable to open file." This just means that these files were not backed up. Since they are not critical files, that is alright.

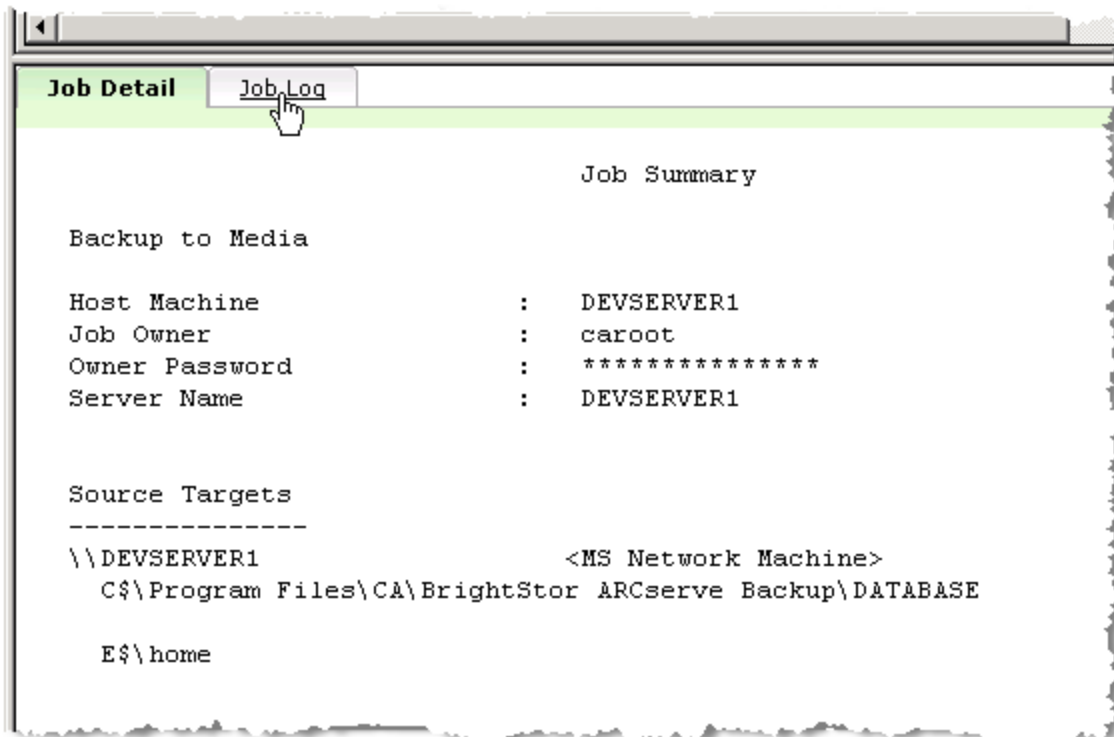
## Switching out weekend backup tapes

5. On the **Job Queue** tab, click **Job No. 7** to select it.



Server	Job No.	Job ID	Status	Execution Time	Job Type	Last Result	Owner
DEVSERVER1	1	602	READY	1/25/06 12:00 AM	DB Pruning	Finished	
DEVSERVER1	2	603	READY	1/31/06 3:00 AM	Backup	Incompl...	caroot
DEVSERVER1	3	589	READY	1/25/06 3:00 AM	Backup	Incompl...	caroot
DEVSERVER1	4	591	READY	1/26/06 3:00 AM	Backup	Incompl...	caroot
DEVSERVER1	5	593	READY	1/27/06 3:00 AM	Backup	Incompl...	caroot
DEVSERVER1	6	595	READY	1/28/06 3:00 AM	Backup	Incompl...	caroot
DEVSERVER1	7	596	READY	1/28/06 11:00 PM	Backup	Finished	caroot
DEVSERVER1	8	598	READY	1/28/06 11:01 PM	Backup	Incompl...	caroot
DEVSERVER1	9	599	READY	1/29/06 11:00 PM	Backup	Finished	caroot
DEVSERVER1	10	601	READY	1/29/06 11:01 PM	Backup	Incompl...	caroot

6. Click the **Job Log** tab.



**Job Detail** | **Job Log**

Job Summary

Backup to Media

Host Machine : DEVSERVER1  
Job Owner : caroot  
Owner Password : \*\*\*\*\*  
Server Name : DEVSERVER1

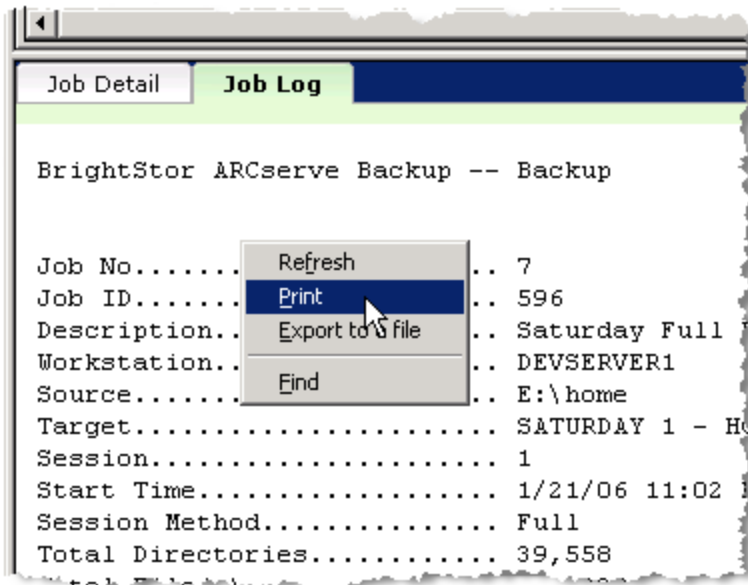
Source Targets

-----

\\DEVSERVER1 <MS Network Machine>  
C\$\\Program Files\\CA\\BrightStor ARCserve Backup\\DATABASE  
E\$\\home

## Switching out weekend backup tapes

7. Right-click anywhere on the tab and select **Print** from the popup menu.



8. Do not exit the software. You will need it again.

### ***Replacing the tapes***

Now, you will work directly with the tape drive to replace the tapes.

The following symbols represent the buttons on the Exabyte:

- \* Center button
- ▲ Up arrow button
- ▼ Down arrow button
- Right arrow button
- ◄ Left arrow button

There are three sets of tapes for the Saturday backups and two sets of tapes for the Sunday backups. The previous Saturday backup tapes are in manila envelopes in the server cage. If there are no tapes available in the cage for Saturday, check with Joe Pelletti. Reuse the Saturday Backups package that has the earliest date written on it. The previous week's Sunday backup tapes are in the box in the server cage underneath the manila envelopes. Reuse these tapes.

Follow these steps:

1. In the server cage, on the Exabyte, press ▼ twice to get to the menu system.
2. Press ◄ and/or ► until you get to **Unload Drive**.

## Switching out weekend backup tapes

3. Press \*.

Since the tape loader is full, there will only be one slot available into which the tape can be unloaded.

**NOTE:** If this is not the case, press ◀ and/or ▶ to select a slot into which to put the tape.

It is important to remember that the numbering on the Exabyte and the number within the ArcServe Backup software is different. The following table displays the numbering for the tapes in the Exabyte and the corresponding job numbers and slot numbers within the software:

Slot # in Exabyte	Slot # in Software (Day)	Job Number(s)
1	0 (Monday)	2
2	1 (Tuesday)	3
3	2 (Wednesday)	4
4	3 (Thursday)	5
5	4 (Friday)	6
6	5 (Saturday 1 – Home)	7
7	6 (Saturday 2 – Others)	8
8	7 (Sunday 1 – Home)	9
9	8 (Sunday 2 – Others)	10
10	9 (Cleaning tape)	N/A

When switching tapes in the Exabyte, replace the tapes in slots 6 through 9 on the Exabyte. When setting up the jobs in the software, change jobs 5 through 8 and associate each of those jobs with slots 7 through 10 respectively.

4. Press the \* button to select the slot into which the tape will be unloaded from the tape drive.
5. Press ◀ to or ▶ move to the **Export Cartridges** option.
6. Press \*.
7. Press ◀ or ▶ to select slot 6.
8. Press \*.

The door to the tape loader slides open.



## Switching out weekend backup tapes

9. Remove the tape.

**IMPORTANT NOTE:** When taking out a tape, you **MUST** take the tape out and then close the door to the tape drive. **DO NOT** put another tape in immediately after taking a tape out. The tape drive must register the removal before accepting an inserted tape.

10. Press any key to close the door.
11. Press ▲ to let the Exabyte update the inventory.
12. Repeat steps 5 through 11 for slots 7, 8, and 9 to remove the other tapes.
13. Press ◀ or ▶ to select the **Import Cartridges** option.
14. Press ◀ or ▶ to select slot 6.
15. Press \*.

The door to the tape loader slides open.

16. Put the first Saturday tape (Saturday 1 – Home) into the tape loader right-side up and backwards.

**IMPORTANT:** The side without the label (or without a spot for a label if there is no label) should face out. The label side has a switch allowing you to indicate whether you want to record (**REC**) on the tape or **SAVE** the tape. This is the side that goes in first.

17. Press \*.
18. Press ▲ to let the Exabyte update the inventory.
19. Repeat steps 13 through 18 to insert the other three tapes.

**NOTE:** When you insert the last tape, the inventory will update automatically.

20. Close and lock the server cage.

# Switching out weekend backup tapes

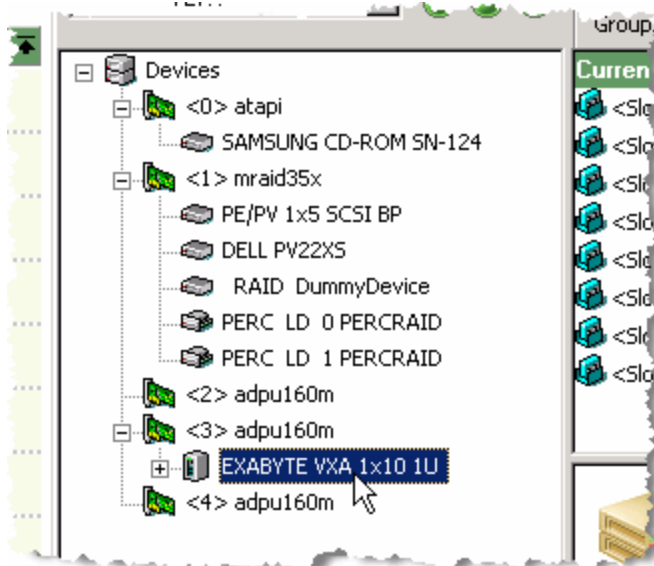
## *Mounting the tape magazine*

The tapes in the tape loader must now be mounted. Follow these steps:

1. In the ArcServe Backup software, click the **Device** link in the **Quick Start** section.

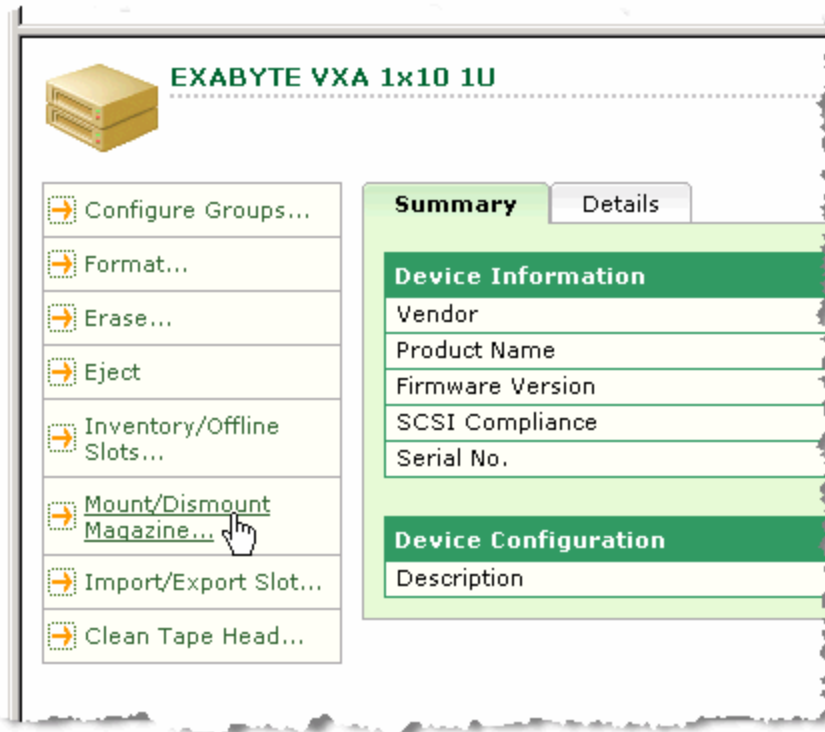


2. Select the **EXABYTE VXA 1x10 1U** under <3> in the **Devices** tree.

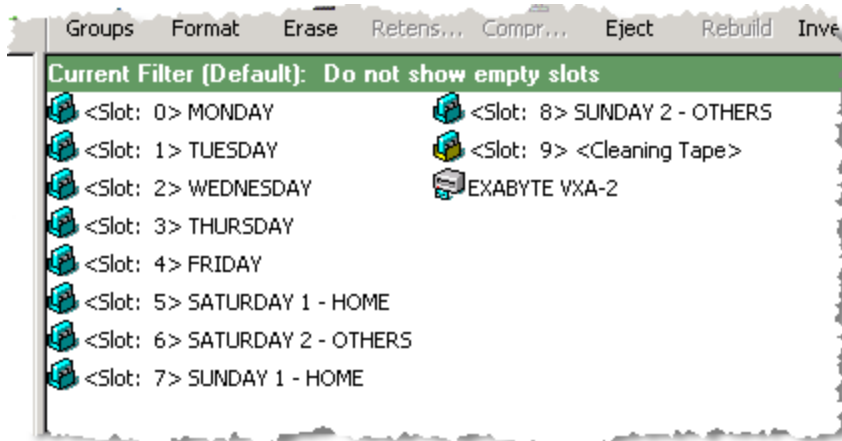


## Switching out weekend backup tapes

3. In the lower right-hand pane, click the **Mount/Dismount Magazine** link.



It will take a while (maybe about 45 minutes) for the magazine of tapes to be mounted.



If any of the slots in the upper right-hand pane say “Updating...”, then the mount was not completely successful. If this is the case, click the **Mount/Dismount Magazine** link again.

# Switching out weekend backup tapes

## Formatting the tapes

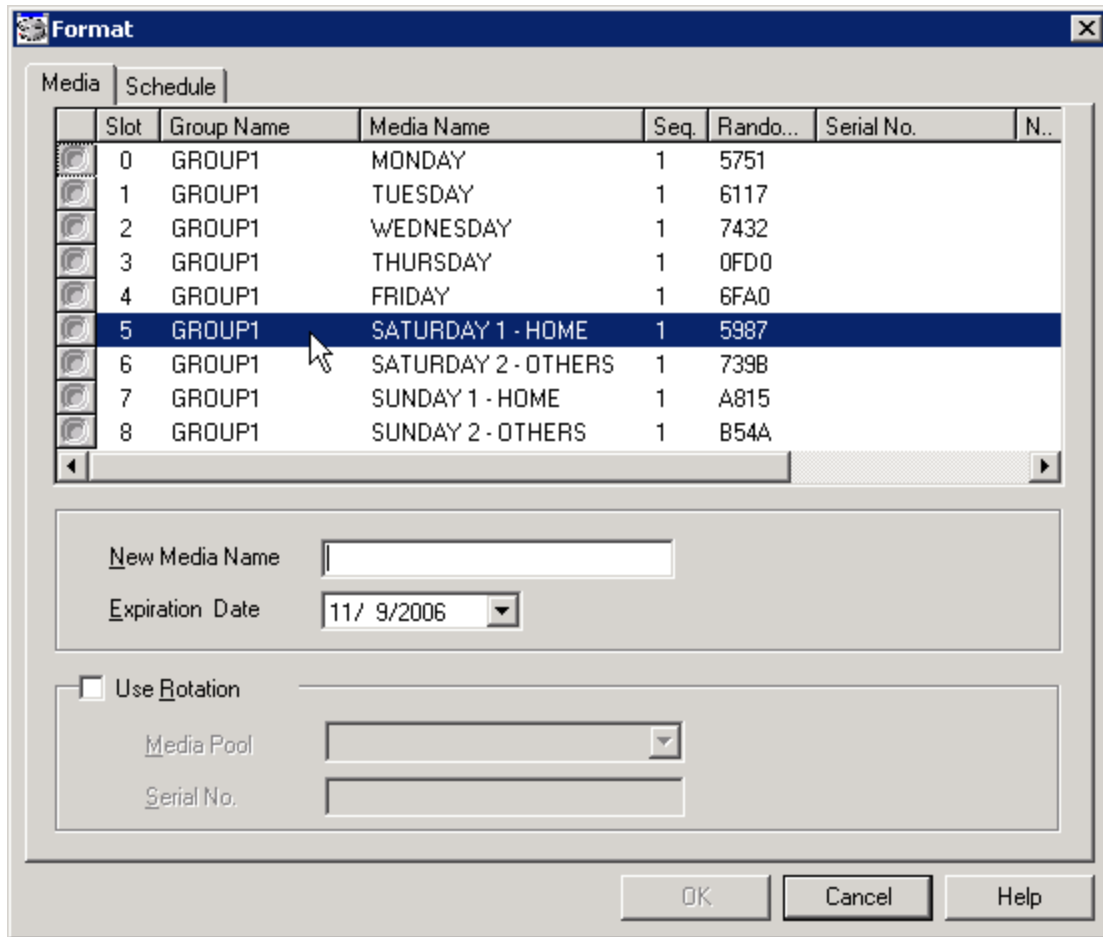
Once the magazine of tapes is mounted correctly, the four tapes you inserted must be formatted. Follow these steps:

1. While the **Device** screen is still active, click the Format link in the lower right-hand pane.



## Switching out weekend backup tapes

The **Format** dialog box displays.



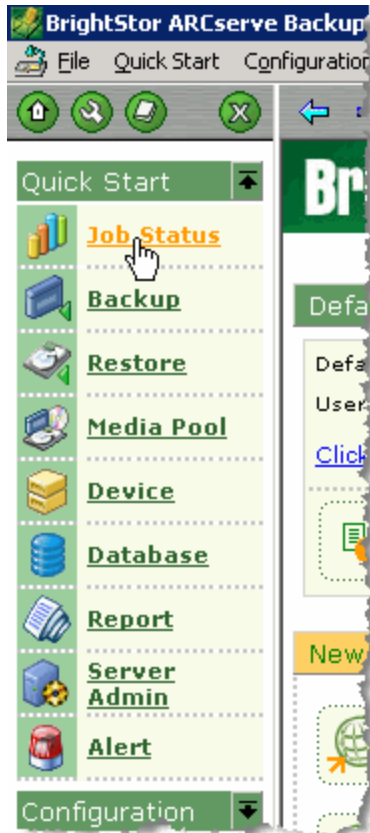
- Click on Slot **5**, the **SATURDAY 1 – HOME** tape.
- Type **SATURDAY 1 – HOME** in the **New Media Name** edit box.
- If the **Expiration Date** is past or coming up soon, change it to at least a year out from the current date.
- Click **OK**.
- Repeat this procedure for the other three tapes, selecting the appropriate slots and renaming the media with the same names previously used.

# Switching out weekend backup tapes

## Updating the job scripts

Once you have formatted the tapes, the job scripts have to refer to the newly formatted tapes. Follow these steps to update the job scripts to refer to the formatted tapes:

1. Click the **Job Status** link in the **Quick Start** section.

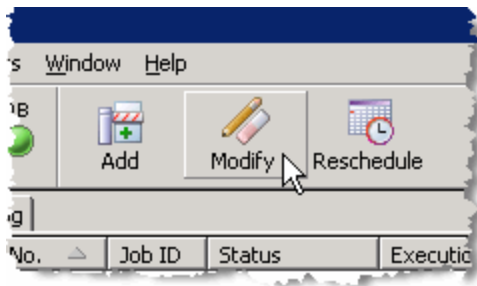


2. Select **Job No. 7** on the **Job Queue** tab.

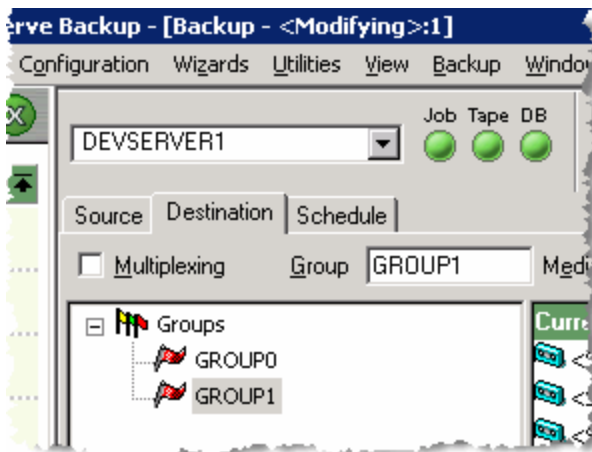
A screenshot of the 'Job Queue' tab in the BrightStor ARCserve Backup software. The table displays a list of backup jobs with columns for Server, Job No., Job ID, Status, and Execution Time. Job No. 7 is selected and highlighted in blue. A mouse cursor is pointing at Job No. 7. The table shows 10 jobs, all with a status of 'READY'.

## Switching out weekend backup tapes

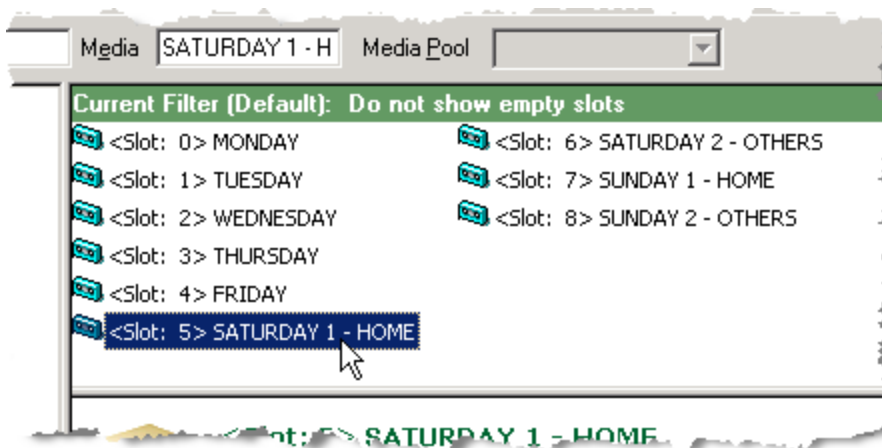
3. Click the **Modify** button on the toolbar.



4. Click the **Destination** tab on the **Modifying** screen.

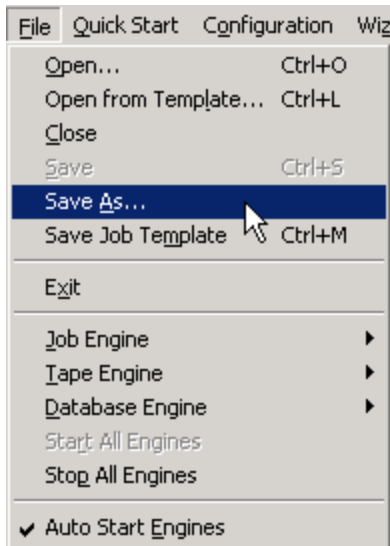


5. In the upper right-hand pane, select **<Slot: 5> SATURDAY 1 – HOME**.

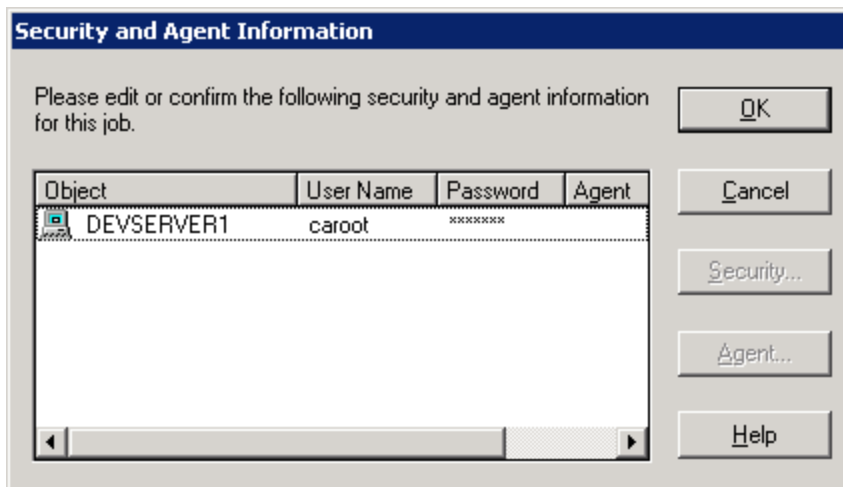


## Switching out weekend backup tapes

6. Select **Save As** from the **File** menu.



The **Security and Agent Information** dialog box displays.

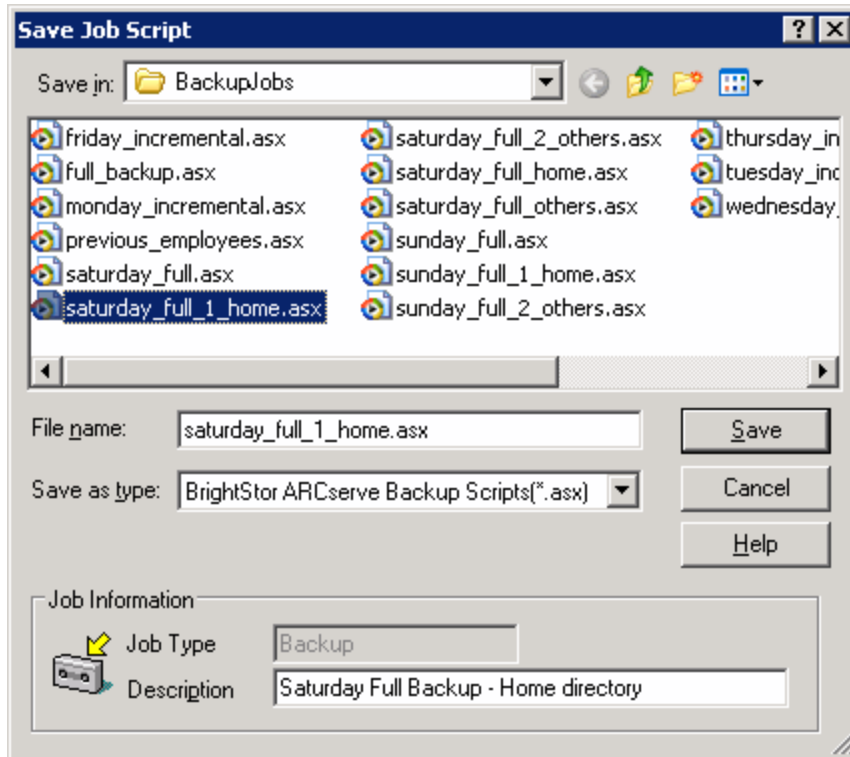




## Switching out weekend backup tapes

7. Click **OK**.

The **Save Job Script** dialog box displays.



8. Select the **saturday\_full\_1\_home.aspx** file.

9. Click **Save**.

The job script is saved with the reference to the newly formatted tape.

10. Repeat this procedure for each of the other three tapes saving over the corresponding job scripts.

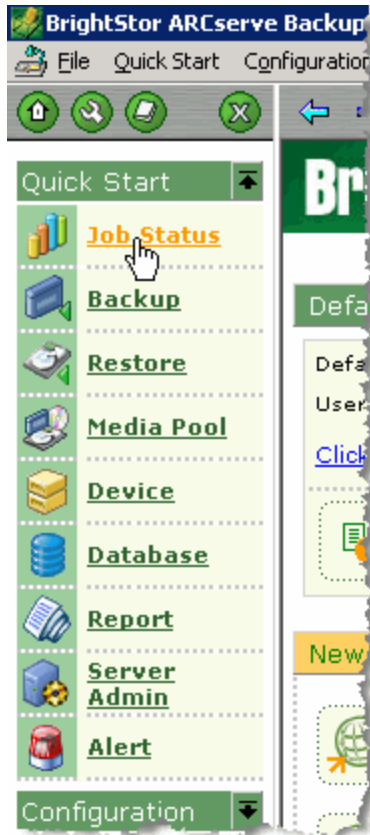
- saturday\_full\_2\_others.aspx → SATURDAY 2 – OTHERS
- sunday\_full\_1\_home.aspx → SUNDAY 1 – HOME
- sunday\_full\_2\_others.aspx → SUNDAY 2 – OTHERS

# Switching out weekend backup tapes

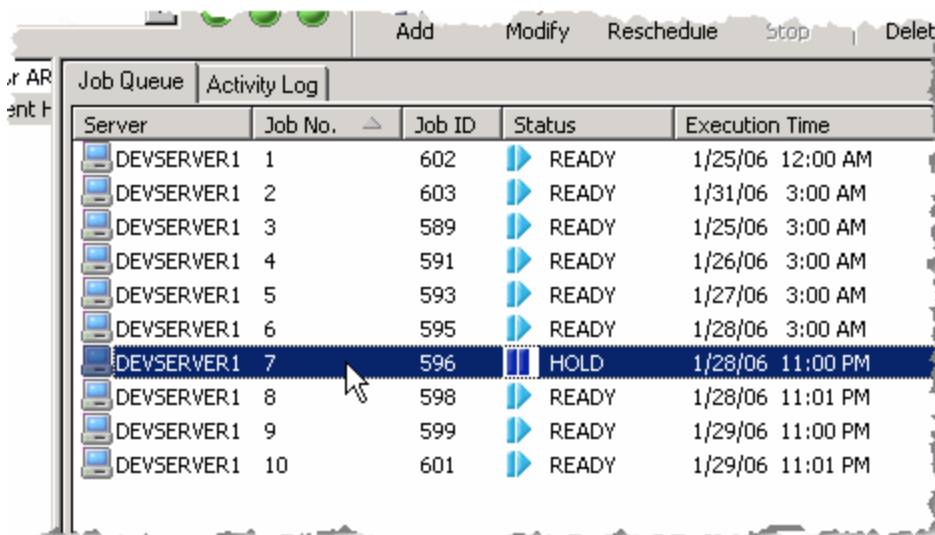
## Updating the jobs in the Job Queue

Once you have updated the job scripts to use the newly formatted tapes, follow these steps to delete the old jobs and add the updated jobs to the job queue:

1. Go back to the **Job Status** screen.



2. Select Job No. 7.

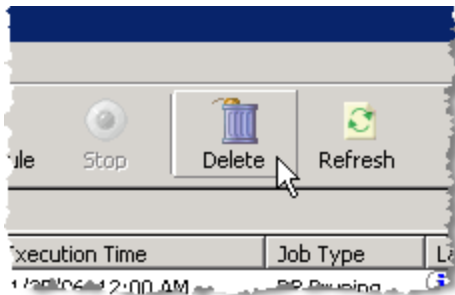


Server	Job No.	Job ID	Status	Execution Time
DEVSERVER1	1	602	READY	1/25/06 12:00 AM
DEVSERVER1	2	603	READY	1/31/06 3:00 AM
DEVSERVER1	3	589	READY	1/25/06 3:00 AM
DEVSERVER1	4	591	READY	1/26/06 3:00 AM
DEVSERVER1	5	593	READY	1/27/06 3:00 AM
DEVSERVER1	6	595	READY	1/28/06 3:00 AM
DEVSERVER1	7	596	HOLD	1/28/06 11:00 PM
DEVSERVER1	8	598	READY	1/28/06 11:01 PM
DEVSERVER1	9	599	READY	1/29/06 11:00 PM
DEVSERVER1	10	601	READY	1/29/06 11:01 PM

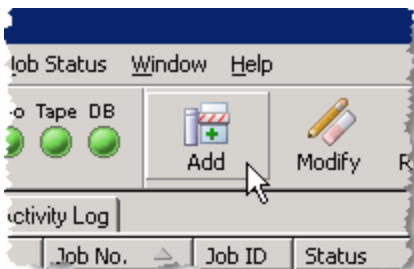
## Switching out weekend backup tapes

**NOTE:** The **Status** on the job you modified is “**HOLD.**” This is normal.

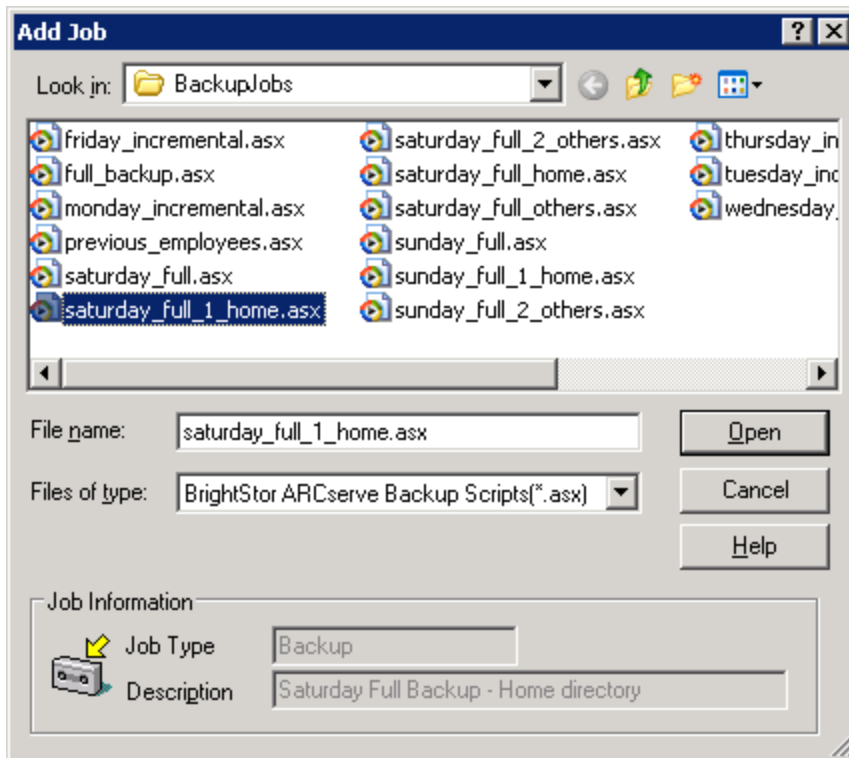
3. Click the **Delete** button.



4. Click the **Add** button to add the updated job script to the **Job Queue**.



The **Add Job** dialog box displays.



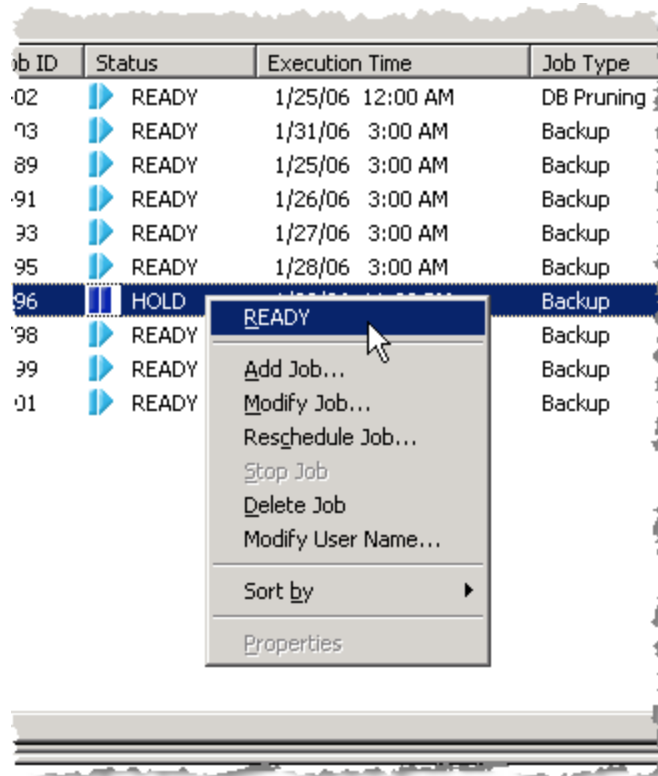
5. Select **saturday\_full\_1\_home.asx** from the list of job scripts.

## Switching out weekend backup tapes

- Click **Open**.

The job is added to the list of jobs in the **Job Queue** in the correct order.

- Make sure the **Status** for each of the four weekend jobs reads “**READY**.”



Job ID	Status	Execution Time	Job Type
02	▶ READY	1/25/06 12:00 AM	DB Pruning
03	▶ READY	1/31/06 3:00 AM	Backup
89	▶ READY	1/25/06 3:00 AM	Backup
91	▶ READY	1/26/06 3:00 AM	Backup
93	▶ READY	1/27/06 3:00 AM	Backup
95	▶ READY	1/28/06 3:00 AM	Backup
96	⏸ HOLD		Backup
98	▶ READY		Backup
99	▶ READY		Backup
01	▶ READY		Backup

Right-click context menu for Job 96:

- READY
- Add Job...
- Modify Job...
- Reschedule Job...
- Stop Job
- Delete Job
- Modify User Name...
- Sort by ▶
- Properties

- If the **Status** is not “**READY**,” right-click on the job and select **READY** from the popup menu.

# Switching out weekend backup tapes

## Checking the tape IDs

The last step in this process is to check that the tape IDs in the device match the tape IDs saved in the job scripts. This ensures that the backups should run properly. If the IDs don't match for a job, the software will not be able to find the correct media for the job.

1. Click the **Job Status** link in the **Quick Start** section.



2. Select **Job No. 7** on the **Job Queue** tab.
3. Click the **Job Detail** tab in the lower right-hand pane.
4. Scroll down to the **Destination Target** section.

## Switching out weekend backup tapes

5. Note the **Media ID** number.

The screenshot shows a web-based interface for backup management. At the top, there are two tabs: "Job Detail" (selected) and "Job Log". Below the tabs, the interface displays job information in a structured format. A dashed line separates the header "Destination Target" from the main content. Under "Node Name", the value is "DEVSERVER1 <Windows Machine>". Below this, a table-like structure shows "Device Group" as "GROUP1" and "Media Name" as "SATURDAY 1 - HOME". A section titled "Media Statistics" follows, with a dashed line underneath. This section lists several fields: "Media ID" (5987), "Sequence Number" (1), "First Media Timeout" (5), "Additional Media Timeout" (0), "Location" (NONE), and "Session Password" (a series of asterisks). A yellow callout bubble points to the "Media ID" value, containing the text: "This number needs to match the ID for the tape."

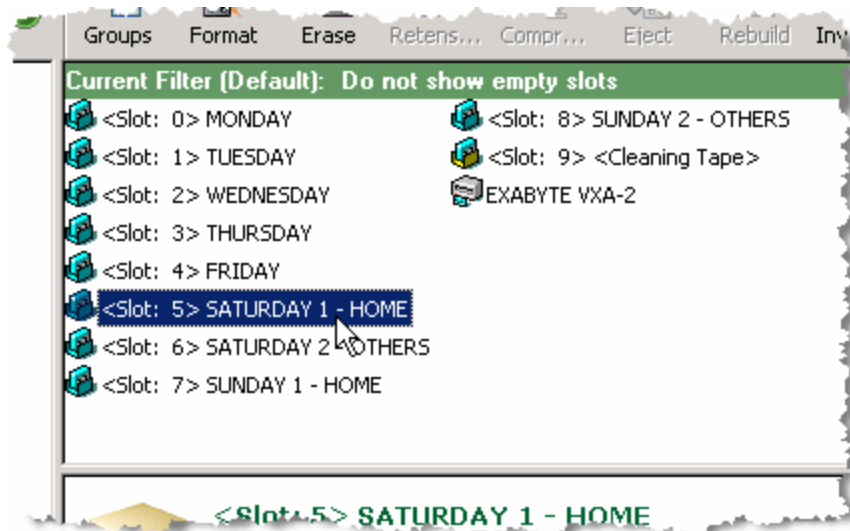
Destination Target	
Node Name	
DEVSERVER1 <Windows Machine>	
Device Group	: GROUP1
Media Name	: SATURDAY 1 - HOME
Media Statistics	
-----	
Media ID	: 5987
Sequence Number	: 1
First Media Timeout	: 5
Additional Media Timeout	: 0
Location	: NONE
Session Password	: *****

## Switching out weekend backup tapes

- Click the **Device** link in the **Quick Start** section.

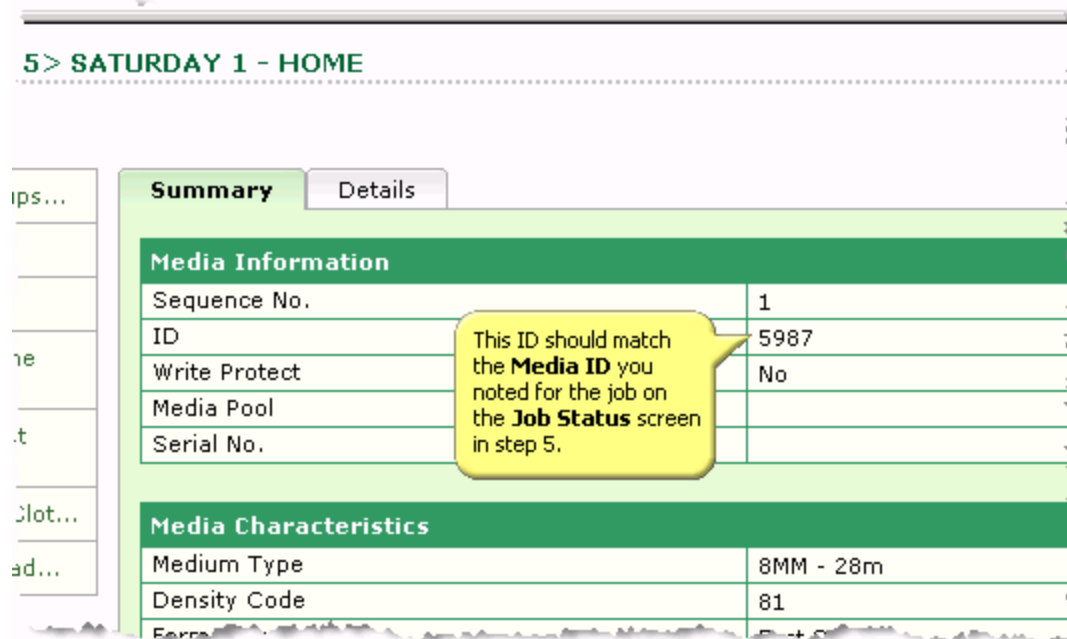


- Select **<Slot: 5> SATURDAY 1 – HOME** in the upper right-hand pane.



## Switching out weekend backup tapes

8. In the lower right-hand pane, note the **ID** in the **Media Information** section of the **Summary** tab.



5> SATURDAY 1 - HOME

Summary Details

Media Information	
Sequence No.	1
ID	5987
Write Protect	No
Media Pool	
Serial No.	

This ID should match the **Media ID** you noted for the job on the **Job Status** screen in step 5.

Media Characteristics	
Medium Type	8MM - 28m
Density Code	81
Format	Full

9. If the two IDs match, the job should complete successfully.

**NOTE:** If the IDs do not match, repeat the **Updating the jobs in the Job Queue** procedure on page 15. If the IDs still do not match after completing the procedure, reformat the tape (see **Formatting the tapes** on page 9) and then update the job in the **Job Queue** (see **Updating the jobs in the Job Queue** on page 15) again. Remount the tape magazine (see **Mounting the tape magazine** on page 7) if necessary.