

## Backup Exec 9.0 for Windows Servers

### MEDIA SET POLICY

Term	Definition
Append Period	Starts when data is first written to a tape. At the end of the Append Period, no more data can be added to the tape. Ensures that only data within a certain time window is on a tape.
Overwrite Period	Starts when the last dataset is written to a tape. At the end of the Overwrite Period, a tape can be safely reused (erased or overwritten).
How Long Before a Tape Can Be Reused?	The amount of time that a tape is protected varies, with a lower and upper bound. In other words, the protection period "floats." Lower bound = Overwrite Period. Upper bound = Overwrite + Append Periods.

### AUTOMATING BACKUPS

Action	Steps
Separate your data into different TYPES	Create one or more SELECTION LISTS for each TYPE. Click on the Job Setup Selections tab > On the left pane marked Job Setup, click on New Selection List items. In the selection list, mark your selections > type a description name in the Selection list name field. Click the OK button and this will save your selections. Selection lists can be edited from the Backup Selection Lists as well.
What POLICIES do you want applied to each TYPE?	Create a MEDIA SET for each POLICY Click on the Media Tab > On the left pane marked Media click on New Media Set All media sets can be viewed and edited from the Media tab.
What kinds of BACKUP JOB need to be used for each TYPE?	Create a JOB DEFINITION for each JOB (full, delta). Click on the Job Setup Tab > Click on New Job. Define the target DEVICE POOL, MEDIA SET, and SELECTION LIST. All Job Definitions can be viewed and edited from the Job Setup Tab.
When do the different types of JOB need to be SCHEDULED?	All schedules for SCHEDULED JOBS all can be viewed and edited in the Job Monitor tab. Create one or more schedules for each JOB DEFINITION by selecting the Job Setup Tab > right mouse click on selected SCHEDULED JOB > Select Properties > Click on SCHEDULE.

### MONITORING JOBS

Operation	Steps
Monitoring Jobs	Select the Job Monitor tab, there is a SCHEDULED JOB the color will be dark blue; ACTIVE JOBS will be displayed bright blue. If the Job fails the color changes to Red. Check the Job History pane for complete and detail information on all Jobs.

### RECOVERY

Operation	Steps
Recovery	Last Full backup, then either (all incrementals) or (last differential) backup.

### MEDIA SELECTION ALGORITHM

Term	Definition
Append Jobs	Tapes that are already a member of the target MEDIA SET (as stated in the JOB DEFINITION) are searched. The tape with the least Append Period remaining is selected for the job. If no appendable tapes are available, the job either terminates or switches to an Overwrite Job, depending on the JOB DEFINITION.
Overwrite Jobs	<ol style="list-style-type: none"> <li>All media in the targeted device pool are evaluated.</li> <li>The job will select either scratch (blank) media or recyclable tapes (those whose Overwrite Period have expired) in the target MEDIA SET.</li> <li>The other group (recyclable tapes or blank tapes) is searched.</li> <li>If the Overwrite Protection Level is set to FULL, and no tapes were found in steps 2 and 3, a Media Request Alert is generated, and the rest of the algorithm is ignored.</li> <li>Tapes Imported from another backup server installation are searched. If one is found, a prompt (if enabled) is generated, and the imported tape is overwritten.</li> <li>If the Overwrite Protection Level is set to PARTIAL, and no tape has been found to this point, a Media Request Alert is generated, and the rest of the algorithm is ignored.</li> <li>If the Overwrite Protection Level is set to NONE, the tape with the oldest data on it is overwritten, regardless of MEDIA SET.</li> </ol>
Media Notes	<ul style="list-style-type: none"> <li>When a tape is overwritten, it is assigned to the target MEDIA SET as stated in the JOB DEFINITION.</li> <li>If more than one tape is required for a job, the algorithm is repeated for each tape.</li> <li>If multiple tapes are equally appropriate for a job, the tape in the lowest numbered slot is used.</li> <li>The search order (steps 2 and 3) and the Overwrite Protection Level can be changed by selecting Tools-&gt;Options-&gt;Media Overwrite.</li> </ul>

### COMMAND LINE UTILITIES

Term	Definition
BEDIAG <system name>	Collects diagnostic information about specified system, or local system if not specified. Can also get Windows event logs and application information. Creates text file BEDIAG.FAX.
BEMCMD	Performs various Backup Exec functions (definitions and running jobs; device, media, and monitoring operations). For further information, see Chapter 14 in the Administrator's Guide.
BESTART and BESTOP	Starts and stops the Backup Exec services in the proper order. Useful for troubleshooting.