

Chapter 7 Managing Jobs

Overview

This chapter describes how to:

- Re-schedule, delete, and de-activate jobs
- View:
 - The results of the last automatic job
 - The media required for the next automatic job
 - The media that may be off-site (if you followed the schedule)
- View and print reports, system messages, and attached files
- Respond to alerts

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Control Console

You enter Control Console whenever you start the program. From the Control Console, you can access information from the various managers that comprise Backup Director. In Backup Director, various managers provide different views of your installation. For example, protected resources are featured in Resource Manager; managed and non-managed media are featured in Media Manager, etc.

In fact, Control Console is so comprehensive, you could use it without ever having to use the other managers, aside from updating your resources and your configured devices.

But then you would not be taking advantage Backup Director's flexibility!

Control Console provides a high-level view of your entire installation:

- Which media are required for the next automatic job
- Which jobs are waiting for processing
- The status of the last automatic job
- Any conditions that are interfering with jobs, such as unavailable devices
- System messages

Control Console Tabs

To help orient you to Backup Director, the Control Console is organized by tabs which briefly describe each icon option.

- **Basics**—Displays a list of basic operations and guides you through the basic steps to perform each operation.
- **Status**—Provides a list of windows that display different information about current and upcoming jobs.
- **Reports**—Provides a list of reports that display different information about the installation.
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Managers—Provides an alternate means of accessing the different managers.

Basics Tab

The Basics tab provides “tutors” to guide you through basic Backup Director operations. Refer to this tab the first time you are performing one of the listed operations. After you are familiar with operations, you can turn off the display of this tab through the Control Console's Preferences dialog box. See chapter 3 for a description of Basics options.

Status Tab

This tab lists features that display various types of information about your installation's jobs and managed media.

- **Job Queue**—View, edit, delete jobs in the job queue.
- **Last Automatic**—View all system messages generated by the last automatic backup job.
- **Next Required Media**—View the status of managed media required for the next media rotation.
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Off-Site Media Advisor—View the location (on- or off-site) and vault rotation status of your managed media.

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System Messages—View system messages generated by jobs.

Job Queue

The queue is where all backup, restore, and utility jobs are placed for processing. If your installation is configured for concurrent jobs, Backup Director can process multiple jobs simultaneously. For example, a backup job can run on one device, while a restore job runs on another device.

To view the Job Queue window

- > From the Control Panel window, select the Status tab and click the Job Queue icon.

Parameter Description

Submitter	The name of the user who created the job.
Operation	The type of operation the program requested by the job or the description of a scheduled job. For example,, this parameter displays Media Journal or Default Automatic .
Status	<p>Describes the job's state relative to the job server. The possible states are:</p> <p>Ready—The job is waiting for the job server to call the appropriate operation engine.</p> <p>Servicing—The operation engine is processing the job.</p> <p>Server Hold—The job has failed during processing.</p> <p>Operator Hold—An operator or administrator has deliberately de-activated the job.</p> <p>Resubmitted—The job has been on server or operator hold and is being returned to the queue.</p>

that the program is currently processing.

<u>Parameter</u>	<u>Description</u>
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Operation	The operation performed during the job.
Phase	The current activity.
Job ID	The identification number Backup Director assigns a job.
Elapsed Time	Records the time that has passed since the program began processing the job.
Resource	The resource currently being accessed.
Path	The path currently being operated on.
File	The file currently being operated on.
Media	The label of the media in use during the current operation.
Session	The name of current session written for or accessed by the current job.
Device	The device in use during the job.
State	The activity performed by the device.
Scheduled Items	The total number of items submitted for the current operation. This parameter is used for restore operations only.
Bytes	The total number of bytes submitted for the current operation. This parameter is used for restore operations only.
Remaining Items	The remaining number of items submitted for the current operation. This parameter is used for restore operations only.
Bytes	The remaining number of bytes submitted for the current operation. This parameter is used for restore operations only.

To view a restore or utility job being processed

> From the Job Queue window, highlight a restore or utility job that the program is currently servicing and choose the **View** button. The Restore or Utility Job Status window appears. If you are doing a restore, this window also displays the number of items scheduled to be restored and how many remain to be restored. A sample of the Restore Job Status window appears in chapter 6.

Aborting a Jobs and Operations

To abort a job

1. From the Backup, Restore, or Utility Job Status windows, choose **Abort**. A prompt appears.
2. Confirm that you want to abort the job.

Changing a Job's Schedule

Through the Job Queue window you can change the schedule of existing scheduled jobs.

To view or edit a job's schedule

1. From the Status tab, select the **Job Queue**. The Job Queue window appears.
2. Highlight the job you want to re-schedule. The status of the job must be "Ready" in order for you to edit it. An alarm clock icon indicates a scheduled job.
3. Select the **View** button. The Scheduling Options dialog box appears.
4. Select the new parameters to re-schedule the job.
5. Select **OK** to save the new parameters.

See chapter 5 for information about editing the schedule parameters.

Last Automatic

This window lists the type of process the program performed on each resource and the outcome of the process during the automatic operation.

To view system messages for the last automatic job

- > From the Last Automatic window, choose the **Messages** button. The System Messages window automatically filters systems messages based on the job ID of the most recent automatic job.

Parameter Description

Submit Time	The time at which the program initiated the automatic job.
Operation	Indicates whether rotation occurred during the automatic job.
Status	Indicates whether the program successfully completed (Completed) on a particular resource or, if an error occurred, the type of error such as Media/HW Error .
Items	The number of items on the resource included in the operation.
Size	The size of the resource or session or total of items?
Media	The label of the media on which the file copies were written.
Session	The session type and number which contains the file copies.
Start Time	The time at which the program began processing the resource.

Next Required Media

The Next Required Media window displays the name of the media required for the next automatic job or, more specifically, next rotation day operation.

To view media required for the next automatic job

1. From the Control Panel window, select the Status tab and select **Next Required Media**. The Next Required Media window appears.
2. Select the type of operation, **Next Automatic Backup** (the default option) or **Next Scheduled Rotation**. When you view this window the day before rotation day, the next automatic job and rotation day job are identical. The window displays the media label and indicates whether it is mounted on a configured device. The **Scheduled** parameter displays the date and time the program will initiate the selected job.
 - > If it is after the rotation time and you have yet not rotated media sets, a prompt appears.

For more information about configuring the rotation time, see chapter 4.

<u>Parameter</u>	<u>Description</u>
Media Label	The media that Backup Director requires to complete the next automatic job. The program will use any of the listed media.
Device	Indicates whether the media required for the next type of automatic job you selected is mounted (Yes or No). If the device is an autoloader, the program considers media in the magazine to be mounted.

Off-Site Media Advisor

Palindrome recommends that you follow the off-site storage schedule displayed in the Off-Site Media Advisor window. The Off-Site Media Advisor window indicates where your managed media sets **would be located** if you actually followed the schedule.

To view the status of the on- and off-site media

- > From the Control Panel window, select the Status tab and select the Off-Site Media Advisor icon.

<u>Parameter</u>	<u>Description</u>
Retrieve from off-site storage	The managed media set(s) that you should retrieve from off-site storage for the next rotation day. The program schedules media set for retrieval based on the number of days notice specified in Configuration Manager.
Take to off-site storage	The managed media set(s) that you should deliver to the off-site storage facility.
Should be off-site	A summary of managed media sets that should currently be at the off-site storage facility.
Should be on-site	A summary of managed media sets that should currently be on-site.

System Messages

Backup Director records messages generated by jobs directly in the System Messages window. If you are monitoring jobs that are processing in attended mode (**Prompt With Questions** option is turned on), some messages may prompt you to take action. You should check the Last Automatic and System Messages window frequently for important system messages pertaining to your automatic and custom jobs.

You can limit the number of system messages available at any one time by restricting how many days a message can remain in the window or by limiting the size of the System Messages window.

See chapter 4 for information parameters for the System Message database.

To view a system message

1. From the Control Panel, select the Status tab and choose **System Messages**. The System Messages window appears.
2. Highlight a system message in the System Messages window. The full description of the system message and any recommended action appear below the system messages.
3. Choose the **Close** button to leave this window.

<u>Parameter</u>	<u>Description</u>
Severity	<p>The importance of the message. The choices are:</p> <p>All—Displays all of the message severity levels.</p> <p>Note—Displays status information which may be useful.</p> <p>Warning—Alerts you to a potential problem which may require action.</p> <p>Error—Requires prompt action.</p> <p>Internal—Usually indicates that an internal software error occurred. You should report these to your reseller or Palindrome Technical Support.</p>
Module	<p>The module that is used to a perform an operation. For example, PALREST.NLM is used to restore items.</p>
Code	<p>The subject category of a system message. For example, MUM refers to media usage. The subject code precedes a number assigned to a specific message in that category. You can find the subject categories and specific messages described in the <i>Administrator's Reference Guide</i>.</p>
Date	<p>The date and time the program recorded the system message.</p>
Job ID	<p>The identification number Backup Director assigns a job.</p>
Description	<p>The full description of the system message corresponding to the code and number.</p>
Recommendations	<p>When available, text in this parameter describes the significance of the message and often indicates what action you should take.</p>

The default view of the System Messages window displays both primary and linked messages for the most recent jobs. The most recent system messages appear at the top of the list. **Primary messages**

indicate general information. **Linked messages** provide detailed information about issues addressed in primary messages. Linked messages appear indented below the primary message they describe.

To enlarge the message description

1. Highlight the system message.
2. Choose the **Details** button. The System Message window appears.

In addition to providing a description and recommendation, the window indicates any linked messages associated with this message in the upper-right corner. Choose the **Next** and **Previous** buttons to review these messages.

> If the **Attached** button is active, there is a file with additional information that is linked to the System Message window.

3. Choose **OK** to close the System Message window.

To view additional available system messages.

1. Browse through the currently available messages by sliding the thumb button or clicking the down arrow.
2. If the **More** button is active, the program has additional messages to generate for the current filter parameters. Choose the **More** button to generate additional messages. The program appends these messages to the bottom of the window. Continue to browse.

Filtering the System Messages

Filtering messages can help you focus on a manageable number of system messages.

To filter system messages

1. From the System Messages window, choose the **Define Filter** button. The Filter dialog box appears. You can select only one value for each parameter.

> To view only primary messages, select the **Show Primary Messages Only** option. You can still view any linked messages through the System Message window.
2. In the **Severity** parameter, select the message severity you want to view.
3. In the **Module** parameter, select the module you are interested in.
4. In the **Code** parameter, select the subject category you are interested in.
5. In the **Job ID** parameter, type the Job ID for which you want to view messages.
6. Choose **OK** to save your filter parameters.
7. From the System Messages window, choose the **Enable** button to display the System Messages window based on the criteria you chose.

NOTE: When looking for system messages associated with a failed job, you must filter on the job's original job ID, not the new job ID assigned by the program.

To return to the default view

- > Choose the **Disable** button. The **Enable** button retains the filter parameters you saved.

Printing the System Messages

Since the System Messages window does not retain system messages indefinitely, you may want to have a record of system messages. Also, this record may be helpful for troubleshooting problems.

To print the system messages

1. Select the *File/Print Report* option. To see the format of the report before you print it, select *Print Preview*. The Print Report dialog box appears.
2. Select your printing parameters.
3. Choose **OK** to print the messages currently in the system messages database.

TIP: You can use the **Print** button to print an individual system message from the System Message window.

Administrator/Operator Notification

Backup Director provides a variety of tools to notify you and other authorized staff of important events as they occur.

- Alert icons
 - Notification messages
 - E-mail messages
 - SEND messages
 - SNMP messages

These notification features signal that operations have completed or that a problem exists which interferes with the processing of a job. These notification messages are very general. You can investigate the cause of these messages by viewing the System Messages window.

Alerts

Alert icons can help you monitor your installation and address problems in a timely manner. Backup Director checks your installation for system messages and conditions that require your attention. If there are any conditions or new messages that require attention, the program activates the appropriate alert. When active, the alert icons appear in color; when inactive, the alert icons are gray.

The alerts palette displays six types of installation conditions.

Job Server Inactive—Indicates that the job server is not loaded.

Job(s) Require Attention—Indicates that an attended job requires a response to a system message in order to continue processing.

Job(s) On Hold—Indicates that a fatal error occurred while processing an unattended job. In the Job Queue window, red document and alarm clock icons indicate that regular and scheduled are on server hold.

Check Last Automatic—Indicates that the last automatic job failed. For example, a fatal media or device error occurred.

Check Next Media—Indicates that the media set for the next automatic job has not been mounted.

Check Device—Indicates that a configured device is not available for scanning.

To respond to an active alert

1. Click the active alert.

> If the Job Server Inactive alert is on, a system message appears with a description and recommendations.

If you need to load the job server, at the server console prompt type:

LOAD PALJSRVR //<<installation path>>

where <<installation path>> is the volume and directory of your installation directory (for example, VOL1:\PAL).

> If the Check Next Media alert is on, the Next Required Media window appears indicating the media that should be mounted.

> If the Check Last Automatic alert is on, the Last Automatic window appears from which you can view messages specific to this job.

> If either the Job(s) on Hold or Job(s) Require Attention alert is on, the Job Queue window appears. A red phone icon indicates one or more attended jobs need attention. The server hold status indicates that one or more jobs failed. Highlight this job and choose View to display the system message(s).

2. Correct the condition. Follow the recommendations or refer to the *Administrator's Reference Guide*, if necessary.

Notification on the Windows Desktop

Control Console can notify you of any problem, even if you are working in another Windows application.

You can receive notification from Backup Director while working in other applications by minimizing Control Console. If an alert condition exists, the Backup Director icon will flash.

Message Notification

Through Configuration Manager you can configure:

- NetWare SEND messages
- E-Mail messages
- SNMP messages

The program sends the messages or e-mail based on the outcome of an operation to administrators and operators. Only a subset of all system messages are significant enough to generate notification messages.

Through File Manager, end users can configure notification of completed restore jobs; administrators are notified of unsuccessful backup and restore jobs and certain error conditions resulting from end user jobs.

The e-mail notification feature requires that you have Novell's Message-Handling Service (MHS), installed and properly configured. MHS is a software program that permits the reliable transfer of electronic messages from one place to another.

SNMP Messages

SNMP (Simple Network Management Protocol) sends messages to specially configured workstations. Palindrome SNMP messages appear in one of two forms. If you are using NMS (NetWare Management System), configured workstations receive full message descriptions. If you are using another system, such as HP Open View, the SNMP message indicates only that a message with a certain level of severity (such as a "Warning") has been recorded.

See chapter 4 for information about configuring Palindrome SNMP messages.

Reports Tab

Reports provide a means of quickly summarizing the current status of various aspects of your Backup Director installation. Device, Resource, and Media summary reports use parameters from the information tabs. See Appendix D, "Viewing Installation Information," for further descriptions.

- **Future Media Rotations**—Displays the managed media sets and the dates on which they will be required for rotation. The program calculates the rotation dates based on the media scheduling parameters and takes into account changes such as deferred or early rotations that alter future dates.
- **Resource Summary**—Displays the resources that are currently protected by your installation (also known as the "Protected Resource List"). This is the same list of resources that appears when you open the Operations menu and select *Change Sequence Order* in Resource Manager.
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Device Summary—Displays all devices that are connected to the Backup Director installation server and indicates which devices are configured for Backup Director operations.

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Media Summary—Displays information about media created by your installation.

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Configuration Summary—Displays the current system, operation, and media scheduling parameters.

Summary Reports

To view a report from the Reports tab

1. Choose the report icon you want printed.
 - > A prompt asks if you want to preview the report. Choose Yes. Choose No to select printing parameters and print the report.

> If you selected the Media Summary icon, the prompt first asks if you want session-level detail.

> If you selected the Future Media Rotations icon, a window appears. Use the **More** button and the thumb button to display additional dates. The program appends these rotation dates to the bottom of the window. Select the **Print Preview** button to display the report format.

2. The Print Preview window appears.

> To view all pages in the report, choose the **Next Page** and **Prev Page** buttons.

–To view two consecutive pages on your screen, choose the **Two Page** button.

–To view report line items, choose the **Zoom In** button.

To print a report

1. From the Print Preview screen, choose the **Print** button. The Print dialog box appears.

2. Change the parameters if necessary.

> Set the **Print Range**, **Print Quality**, **Copies**, and **Printer** parameters.

> To change the default printer and the page layout, choose the **Setup** button.

TIP: Palindrome recommends that you print the reports in landscape (horizontal) mode in order to print the reports in the largest font size possible.

3. Choose **OK** to submit the print job.

Sample Summary Reports

The Resource, Device, and Media Summary reports contain some of the parameters described in Appendix D, “Viewing Installation Information.” The parameters for the Configuration Summary report are described in Chapter 4, “Customizing Your Installation.”

Managers Tab

This tab lists the other Backup Director managers and the functions you can perform:

- **Resource Manager**—Manage your Protected Resource List and perform operations on selected resources.
- **File Manager**—Perform operations on selected directories and files on a single resource. This manager is also available for end users to back up and restore their own files.
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Media Manager—View the contents of media in your library, de-activate damaged media, and perform other utility operations on physical media.

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Device Manager—Configure devices for Backup Director operations and perform

read/write and autoloader tests.

-

Configuration Manager—Configure access to other Backup Director installations, manage users, customize operations, or install other Palindrome products.

To select a manager

> From any manager, open the Managers menu and select a menu option. The manager window appears.

or

> Click a manager icon from the Managers tab or managers palette.
