Introduction

What is ARCsolo for Windows 95?
ARCsolo for Windows 95 is a data management and backup program designed to run on your Windows 95 machine.   With ARCsolo, you can perform immediate, scheduled, or   automated backups of your local and remote Windows 95 machines attached to your network.

High Performance:

- Tape spanning - large jobs requiring more than one tape automatically continue (span) to the tape(s) that you provide.
- Tape rotation - get accurate and complete backups of your data by scheduling repeating jobs that use a variety of options.

Versatile:

- InocuLAN virus scanning - lets you scan files during a backup or copy operation and notify users if a virus is detected.
- User-defined scripts - allow you to configure jobs once and re-use them when needed.
- Database views - give you quick access to information about jobs performed by ARCsolo and help you quickly locate and restore your data.
- Reports - give you a complete history of jobs performed and specific activity reports on the machines, directories, and tapes.

Flexible:

- Intelligent restore - provides you with three methods by which to select the data you need to restore.
- Support for a wide variety of SCSI 4mm, 8mm, DLT, and QIC tape drives.
- Support for autochangers.
- Ability to back up, copy, and restore files from any Windows machine and NetWare server.

Key Features of ARCsolo

Backup
Use the Backup Manager to back up data to tape.   ARCsolo performs a complete backup of your Windows 95 machine.   You can also back up files from Windows machines and NetWare servers.   ARCsolo does not back up registry information for Windows NT machines.   Other operating system files specific to Windows NT or to NetWare are backed up as DOS files.   Information about each backup job (such as the path and name of each file, as well as the tape used) is logged in the ARCsolo database.

Restore
Use the Restore Manager to restore data from tape using one of the following methods:
- Restore by Tree - Select from a tree of machines that have been backed up.
- Restore by Tape - Select from a tree of tapes that have been used for backups.
- Restore by Tape Media - Select a session from a tape currently in the tape drive.

Copy
Use the Copy Manager to copy files and directories from one drive to another.   This feature is especially useful for creating mirrored machines, drives, or directories.

Job Queue
Use the the Job Queue Manager to monitor all pending, completed, and active jobs from the Job Queue window.   Done and pending jobs can be rescheduled.   Log information is provided for each completed job.   In addition, you can submit new jobs, delete pending jobs, and stop active jobs from this window.

Logs
Use the Logs to track ARCsolo activity by viewing the Activity Log.   You can also monitor your tape devices by viewing the Tape Log, or log activity related to a specific job by configuring the Operation Logs.

Device
Use the Device Manager to view information about your tape devices and tapes, change a tape drive's compression mode, and perform tape maintenance functions such as formatting, erasing, and retensioning.

Database
Use the Database Manager to view information from the ARCsolo database, such as the jobs processed by ARCsolo, the tapes used by ARCsolo, and the devices you are using with ARCsolo.

Reports
Use the Reports Manager to generate and display reports based on the ARCsolo database.   For example, the Tape Media report helps you keep track of tape usage so that you can determine when a tape should be retired.

Utilities
ARCsolo provides several utilities.   For example, you can restore database files from a tape to the ARCsolo database, merge information from a tape into the ARCsolo database, and compare session data on a tape to their counterparts on a machine.

Wizards
Follow easy step-by-step instructions to configure jobs for backup, restore, and compare.

How ARCsolo Works

ARCsolo consists of two main components that work together to back up, copy, and restore your data. The components are: the ARCsolo Manager and the ARCsolo Engine.

The ARCsolo Manager

The ARCsolo Manager enables you to submit job requests to the ARCsolo Engine and monitor the status of your requests.   The ARCsolo Manager lets you:

- Open a Manager window, such as the Backup window or the Restore window, for each job request.
- Submit job requests from the open window.
- Monitor the status of each request.
- Switch between job requests by changing your Window focus.

The ARCsolo Engine

The ARCsolo Engine performs the operations that you requested in the ARCsolo Manager.   The ARCsolo Engine performs the following tasks:

Job Processing

The engine processes your jobs at their designated date and time.   It constantly scans the job queue. When it finds a job that is ready to run, the Engine sends it to the appropriate handler.

Tape Management

The engine controls your tape devices.   When a tape device is needed for an ARCsolo job, the engine lets your hardware know it is needed.

Database Management

The engine maintains a database history of:

- Files, directories, drives, and machines that ARCsolo has backed up or copied.
- Information about jobs that have been processed by ARCsolo, such as the type, the final result, the start and end time, etc.
- Tapes used by ARCsolo, such as the name, date it was first formatted, date it expires, sessions on it, etc.

By default, everything that happens within ARCsolo is recorded by the ARCsolo database.

Starting the ARCsolo Manager

The ARCsolo Manager enables you to perform your backup, copy, restore, and related operations.
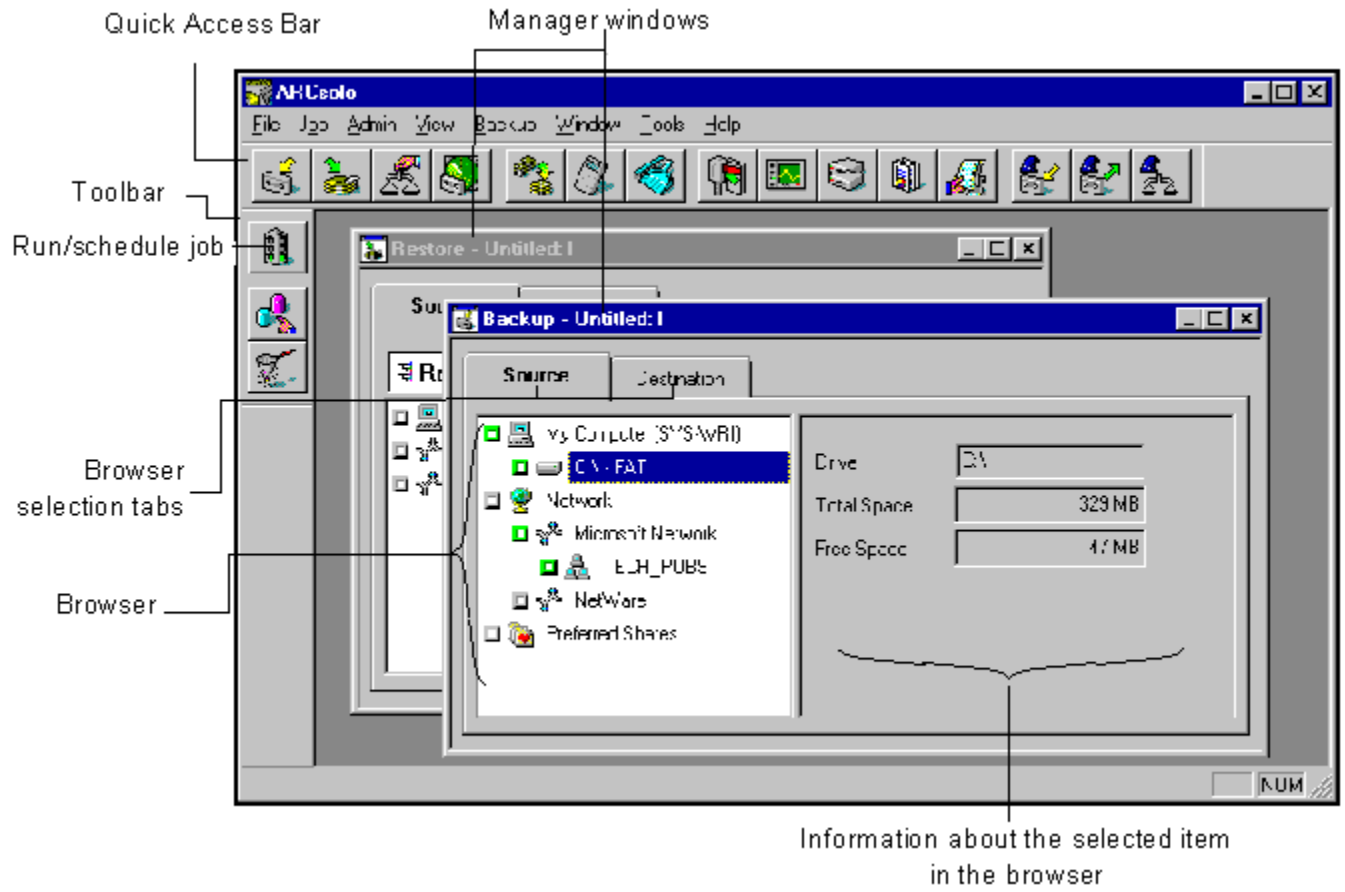
To start the ARCsolo Manager:

1. **Select ARCsolo from the Windows 95 Start menu.**
    The ARCsolo Manager opens.   The Backup window opens by default.   The ARCsolo for Windows 95 Quick Access bar appears.   From here you select the ARCsolo operation that you want to perform.

Basic ARCsolo Manager Features

[Click here](#) to see a figure which shows a typical ARCsolo window, identifies its basic parts, and briefly describes them:

Quick Access Bar

Manager windows

Toolbar

Run/schedule job

Browser
selection tabs

Browser

ARCsolo

File Job Admin View Backup Window Tools Help

Restore - Untitled: I

Su

R

Backup - Untitled: I

| Source | Destination |

My Computer (SYSAWRI)

C:\ - FAT

Network

Microsoft Network

ECH_PUBS

NetWare

Preferred Shares

Drive   C:\

Total Space   329 MB

Free Space   47 MB

NUM

Information about the selected item
in the browser

Performing basic ARCsolo Procedures

There are some basic ARCsolo concepts and operations that you will encounter frequently as you use the program.

**You should learn (or at least be familiar with) the following simple concepts:**

- Selecting files and directories (for backing up, copying, and restoring)
- Selecting tape groups and tapes (for backing up to, restoring from, managing, and performing various utilities on)
- Using the Quick Access bar
- Using the Browser
- Using the ARCsolo menus

Basic elements in the Browser

The Browser facility is used in many Manager windows to enable you to choose the source and destination for your backup, copy, and restore operations.   The Browser operates in two modes:

<u>Machine tree</u>: view and select files, directories, drives, shares, machines, volumes, and servers.
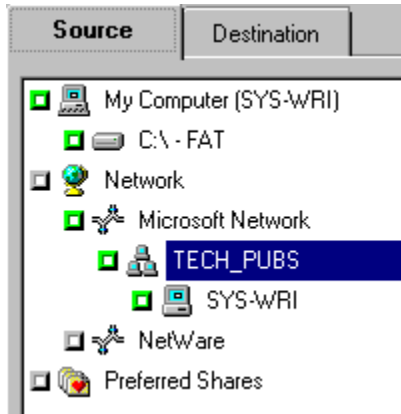
<u>Tape tree</u>: view and select a tape.
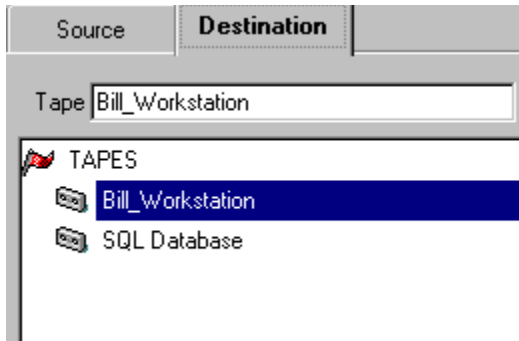
The Browser mode is determined by the type of operation (e.g. backup or restore) and whether the Source or Destination tabs are selected.

You can use the Browser to select your local Windows 95 machine, remote Windows 95 machines, or NetWare servers.   You can also use the Browser to select a disk, a directory, or individual files within a directory.

Note: ARCsolo backs up files from a NetWare server, but it does not back up native NetWare (bindery or NDS) information. For a complete backup of NetWare servers, contact Cheyenne Software for information about related products.

Using the Machine Tree in the Browser

The machine tree in the Browser enables you to view and select files, directories, drives, shares, machines, volumes, and servers for your backup, copy, restore, and related operations.

The basic elements of the machine tree are described in the following table:

Symbol	Represents
	Available network on your LAN
	Network Provider (e.g. Microsoft Network or NetWare Network)
	Microsoft Network Domain or Workgroup
	Microsoft Network machine
	Novell NetWare file server
	Preferred Shares
	Disk drive
	Directory
	File
	Indicates that the file, directory, or volume is compressed

For more information:

Selecting an object in the machine tree
Selecting your local machine
Selecting an entire drive
Selecting individual directories
Selecting individual files

Selecting an object in the machine tree

To select an object in the machine tree, fill the green box to the left of the object.   (Click the box to fill it.)
To deselect on object, clear the green box.   (Click the box again to clear it.)

A filled box indicates that the item has been selected. A partially filled box indicates that some files or directories below this level have been selected.

Box	Represents
☐	This machine, drive, directory, or file is not selected
◨	Some, but not all, of the machine, drive, or directory are selected
■	The entire machine, drive, directory, or file is selected

Selecting your local machine

To select your local machine:

1. **In the Browser, select *My Computer*.**
    Click the green selection box next to *My Computer*.   This automatically selects the entire machine for the job.   All drives, directories, and files on the machine are selected.

Selecting an entire drive

To select an entire drive:

1. **Expand the machine in which the drive resides (by double-clicking on the name of the machine).**
   The Browser now shows you a graphical tree of the drives available on the machine.

2. **Select the drive.**
   Fill the green box next to the drive (by clicking the box).   This automatically selects the entire drive for the operation.   All directories and files on the drive are selected.

You will notice that the box next to the machine name is half filled.   This signifies that part of the machine has been selected.

Selecting individual directories

To select individual directories:

1. **Double-click on the name of the machine that you want to use.**
   The Browser shows you a graphical tree of the drive(s) available on the machine.

2. **Select the drive that you want to use.**
   If the machine you selected has more than one drive, you must select the drive that houses the directory(ies) you need.   Double-click on the name of the drive to display the graphical tree of directories and files on it.   A list of all directories for that drive appears.

3. **Select the directory.**
   Fill the green box next to the directory (by clicking the box).   To select a subdirectory, expand the directory tree until the subdirectory is displayed.

You will notice that the boxes next to the name of the machine, drive, and any parent directories are all half-filled.   This signifies that part of the machine, drive, and, if applicable, directory is selected.

Selecting individual files

To select individual files:

1. **Double-click on the name of the machine that you want to use.**
    The Browser shows you a graphical tree of the drive(s) available on the machine.

2. **Select the drive that you want to use.**
    If the machine you selected has more than one drive, you must select the drive that houses the directory(ies) you need.   Double-click on the name of the drive to display the graphical tree of directories and files on it.   A list of all directories for that drive appears.

3. **Continually select directories until you reach the directory that contains the file(s) you want.**
    Double-click on the name of the directories to expand the graphical tree of subdirectories and files under them.

4. **Select the file(s).**
    Fill the green box next to the file (by clicking the box).   You can select as many files as you like.

You will notice that the boxes next to the names of the machine, drive, and parent directories for the file(s) are all half-filled.   This signifies that part of the machine, drive, and directories has been selected.

Using the Tape Tree in the Browser

The Browser is also used to select the tape that you want to use for your jobs.   Depending on the job you want to perform, you may need to select a tape as your source or destination.

To use the Tape Tree:

1. **Expand the Tape Tree.**
   The Browser displays the available tapes.

2. **Highlight or specify the name of the tape you want to use.**

The following options are available:

- **Appending the job to any tape** - By default, an asterisk (*) appears in the *Tape* field.   If you leave the asterisk in this field and make sure the tape option, *Append to Tape* is selected.

- **Appending the job to a specific tape** - If you want to append the job to a specific tape, enter the name of the tape in the *Tape* field and make sure the *Append to Tape* tape option is selected.

- **Reformatting the tape with a specific name** - If you enter a name in the *Tape* field (instead of selecting an existing tape) and select an "Overwrite..." tape option, ARCsolo will reformat the tape in the drive with the name that you specified.

- **Reformatting the tape without a specific name** - If you leave the asterisk (*) in the *Tape* field (instead of entering a name) and select an "Overwrite..." tape option, ARCsolo will reformat the tape in the drive, using the current date and time for the tape name.

Providing security information for remote machines

You must provide a valid username and password for the remote machines or shares that you wish to back up, copy, or restore data to.   You can enter the username and password:

- From the Browser, by clicking on the machine or share with your right mouse button.
- From the Browser, when attempting to expand the machine or share to view directories.   (You will be prompted for the information.)
- When submitting a backup, copy, or restore job.   (You will be prompted for the information.)

Browser
The Browser uses your local username and password by default in order to access machines or shares for browsing.   If your local username and password are not valid on the remote machine or share, then you will be prompted to enter the information when you attempt to expand that node.
You can also enter a username and password from the Browser by clicking on the machine or share with your right mouse button.

Submitting a job
You may also change or verify the username and password for a machine or share each time you submit a job.   If you have already provided account information for a machine or share, either in the Browse mode or in a previous backup job, ARCsolo will retain this information and simply ask you to verify it. (This information is stored for future sessions.)

When you submit a job, the Security Information dialog box opens.   This dialog box displays the security information for each machine or share that is accessed during this job.   To change the account information, select the machine/share, then click the Security button.

There are two methods for providing security.   They are:

- Global default security information
- Individual security information

For more information:
Global security information
Individual security information

Global security information

Provide global, default security information if:

- You are performing a job on several remote machines
- The security information you will provide applies to all the remote machines you are selecting as a source or destination

To provide global, default security:

1. **From the feature menu, select Set Default Security.**
   For example, if you are setting up a backup job, the Set Default Security option is offered in the Backup menu.   The Default Security dialog box appears.

2. **Provide a user name and password ARCsolo should use to access the remote machines.**
   ARCsolo will use the information you enter here to access each machine you select for the job.

Individual security information

Provide individual security information if:

- You are only selecting a few remote machines
- You have provided default security information and you want to override it for a particular machine

To provide individual security:

1. **In the Browser, click the remote machine with your *right* mouse button.**
   A pop-up menu appears.

2. **From the pop-up menu that appears, select *Security*... and enter the information.**
   The Security dialog box appears.   The user name and password you provide here will override any default security information you have provided FOR THIS MACHINE ONLY.

Using the Quick Access bar

ARCsolo has a Quick Access bar that allows you to select the ARCsolo feature you want to use.

To select a function:

1. **Click the button for the function you want.**

Using the ARCsolo menus

ARCsolo's menu bar appears at the top of every window.   This menu bar contains drop-down menus by which you can select a function to be performed.   To select an option from a drop-down menu, first click the menu title in the toolbar then select the item from the menu.

You can also use shortcut keys display menus or to select items within a menu.   The shortcut key is the underlined letter in the menu or item name.

Use the shortcut keys as follows:
- To display a menu, press ALT+(the shortcut key)
- To select a menu item from a displayed menu, press the shortcut key

Security Screen

The Security screen allows you to provide a valid username and password to access a remote machine. This screen contains the following fields and buttons:

User Name: Enter a login name for the machine.

Password: Provide the password for the login name.

OK: Click this button when you are done.

Backup basics

●

Manager Window

ARCsolo's powerful backup capabilities are easy to use.   With them, you can back up:

- Your local Windows 95 machine
- User shared files from remote machines on your Microsoft Network
- Files from your NetWare file servers

Select the Source tab.

Clicking the box next to a directory name like this...

...automatically selects all files and subdirectories below it.
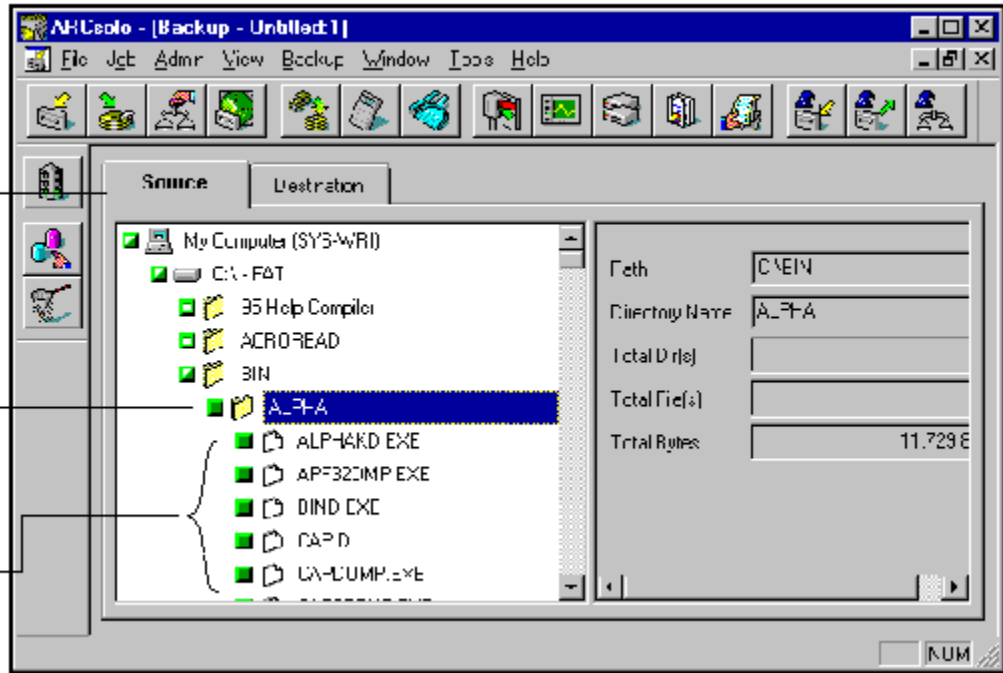
How to back up files

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Following are the basic steps for making a backup - that is, using the default backup options to back up your data to tape.

To perform a basic backup:

1. **Click the Backup button** [icon] **on the Quick Access bar.**
   The Backup Manager window opens.

2. **Select the files and directories you want to back up.**
   In the Browser, select the Source tab, then select the objects in the machine tree that you want to back up.   Refer to the Software Basics section for details on how to use the Browser to select files and directories.

3. **Select the backup tape.**
   Select the Destination tab.   Then select the tape.   Refer to the Software Basics section for details on how to use the Browser to select tapes and tape groups.

4. **Specify any options for the job** [icon]**.**

5. **Specify any filters for the job** [icon]**.**

6.   **Click the Run/Schedule button** [icon] **to run the job.**
   The Run/Schedule dialog box appears.   This dialog box enables you to run the job, or schedule the job for a later time.

   To save this job to a script file, click the Save button in this dialog box.

7. **Click OK to submit this job.**

Options for backup jobs

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Using ARCsolo's advanced backup features, you can specify job options such as a method to verify the reliability of the backup job, how to handle open files, and how to handle tapes.

In addition to specifying a source and destination for your backup, you can also tell ARCsolo how to handle such functions as:

● **Tape options -** specifying the tape(s) ARCsolo can use and/or overwrite for the backup job

● **Job verification method -** select how ARCsolo will, after the files are backed up to the tape, ensure that the data on the tape is readable

● **Accessing open files -** how to back up files that are being used by other users

● **Various utility options -** whether to record the source file paths in the database, clear the archive bit on backed up files, eject the tape from the tape drive, or delete the source files after they are backed up

● **Log options -** allow you to determine the level of detail you want recorded into the Job Queue's Log

● **Virus options -** scan files for viruses before they are backed up

To access the options for backup jobs, follow the procedure below:

1. **From the Backup Manager, click the Options button.**
   The Options dialog box appears.

2. **In the Options dialog box, select the tab for the type of advanced option you want to specify.**
   Depending on the tab you select above, the options you can apply appear in this section of the Options dialog box.

[Methods Options](#)
[Tape Options](#)
[Verification Options](#)
[Retry Options](#)
[Operation Options](#)
[Log Options](#)
[Virus Options](#)

Methods Options

These options determine which files are backed up or copied and, after the file is backed up or copied, what ARCsolo does with the file's archive bit.   The following table outlines each option:

Method	Rely on archive bit?	Which files are included?	Archive bit turned off after the job?
Full (Keep Archive Bit)	No.	All source files.	No.
Full (Clear Archive Bit)	No.	All source files.	Yes.
Incremental (Archive Bit)	Yes.	Source files whose archive bit is turned on.	Yes.
Differential (Archive Bit)	Yes.	Source files whose archive bit is turned on.	No.

For more information:

What is an archive bit?
Deciding which method is right for you

What is an archive bit?

A file's archive bit is a marker that indicates whether the file has been modified.   An archive bit that is set (turned on) indicates that the file has changed since it was last backed up or copied.

Turning off (resetting) the file's archive bit is a procedure that affects what ARCsolo will back up or copy the next time.   An archive bit that is off indicates to ARCsolo that this file has not changed since it was last backed up.

Deciding which method is right for you

The method you select determines whether ARCsolo will back up or copy all files, or only files whose archive bit is on.   It also determines whether ARCsolo will turn off the archive bit after the file has been backed up or copied.

Some of the questions you should be asking yourself when deciding upon a backup method strategy are:

- How much data gets backed up?
- What percentage of my data changes each day?
- How long do I want the backup job to take?

In general, if you have large amounts of data to be backed up or copied every day, running regular differential or incremental backup or copy jobs and an occasional full backup or copy job may be your best solution.

Following are the advantages of each method:

Full (Keep Archive Bit)
Includes all the source files.   This method does not change the archive bit.   You might use this option if you wish to perform an unscheduled full backup that will not affect your incremental for differential backups.

Full (Clear Archive Bit)
Includes all the source files.   This method ignores the file's archive bit until after the file is backed up or copied.   At that time, ARCsolo turns off the file's archive bit.   At the end of the job, all files that have been backed up or copied have their archive bits turned off.

Incremental
Includes only files that have changed since the last Full (Clear Archive Bit) or Incremental backup (or copy). ARCsolo checks the file's archive bit.   If the archive bit is on, ARCsolo backs up or copies the file, then turns archive bit off.   The next time an incremental backup (or copy) is done, this file is skipped (unless it is modified again).   In general, this is considered the quickest method for backing up files.

Differential
Includes files that have been changed since the last Full (Clear Archive Bit) or Incremental backup (or copy).   ARCsolo checks the file's archive bit. If the archive bit is on, ARCsolo backs up or copies the file, but in this case, ARCsolo does not turn off the archive bit afterwards.

Tape Options

Tape options (for Backup) determine which (if any) tapes can be overwritten when ARCsolo writes to a tape.   These options also determine how additional tapes are handled (when backing up to more than one tape).   This section describes each option and how to choose the right one for each job.

For more information:

Session Password
First Tape Options
Additional Tape Options

Session Password

This option provides greater security for the data you are backing up in this job.   The password that you specify here is required if (and when) you restore this data.

Note: Use this option with care!   You MUST remember the password!   None of the job sessions will be restored if you do not provide the correct password.

First Tape Options

The "first tape" is the tape you use when the job begins.   If the backup job requires more than one tape (if, say, the job is very large or the job is being appended to a tape that is nearly full), the selection you make for this option applies only to the first tape.   Select the tape you will allow ARCsolo to use as the first tape for the backup job.

Append to Tape
By default, ARCsolo uses this option.   ARCsolo simply appends the job sessions to the selected tape.

Note: Unlike the Append to Tape option described above, the following tape options (the "Overwrite..." tape options) formats the tape and then starts writing data to it at the beginning of the tape.   As a result, any data that had been on the tape is lost.

Overwrite Same Tape Name, or Blank Tape
Select this option if you want ARCsolo to overwrite the tape in the drive only if it is the one you specified for the job or if the tape is blank.   Here's how it works: If the tape in the drive is not the one specified for the job, ARCsolo looks to see if it is blank.   If the tape isn't blank either, ARCsolo prompts you to supply the specific tape and waits the time specified in the Tape Timeout field for you to do it.   When the correct tape (or a blank tape) is provided, it is reformatted, and the backup job begins.

Note: The job fails if the tape timeout period expires and ARCsolo does not find the correct tape.

Overwrite Same Tape Name or Blank Tape First, then Any Tape
Use this option if you want ARCsolo to overwrite any tape found in the drive.   If you select this tape option, ARCsolo checks to see if the tape in the drive is the one specified for the job.   If it isn't, ARCsolo checks to see if the tape is blank.   If the tape isn't blank either, ARCsolo reformats whatever tape it finds in the device and starts backing up files at the beginning of the tape.   The tape is reformatted with the name you provided in the Tape Name field (when specifying the job's destination) and a sequence number of one.

Timeout for First Tape
Use this option to specify the timeout for the first tape.

Additional Tape Options

If the backup job you submit requires more than one tape, ARCsolo needs you to provide some information on what to do.   Whether you have only one   device or several devices in the tape group, you need to specify which tapes ARCsolo can use when the job spans tapes.

Overwrite Same Tape Name, or Blank Tape
Use this option if you want ARCsolo to write to the tape in the device only if it has the same tape name (but a different tape ID) or if it is blank.   ARCsolo remembers the name and ID of the job's first tape. When the job requires an additional tape, ARCsolo checks if the new tape has the same name (but different tape ID) or if it is a blank tape.   As long as the ID is different, ARCsolo reformats the tape, giving it the same name and ID as the first tape.   The sequence number will be different.

Overwrite Same Tape Name or Blank Tape First, then Any Tape
Overwrite any tape found in the device (as long as it has a different ID from the first tape's ID).   All subsequent tapes are reformatted with the same name and ID as the first tape.   Only the sequence number will be different.

Note: Be careful when using this option (Overwrite Same Tape Name or Blank Tape First, then Any Tape)!   Neglecting to remove a full tape   when this option is selected will cause you to lose the data on that tape when ARCsolo reformats it.

Timeout for Additional Tapes
Specify timeout for additional tapes.

Verification Options

As an added measure of ensuring data integrity, ARCsolo provides you with two methods of verifying that the data you just backed up to the tape is reliable.   Since the verification options require performing another pass over the tape (which may be time consuming), ARCsolo, by default, does not perform either of these options.   However, it is a good idea to select one of these options to ensure the most dependable backups.

The job verification methods are:

- Scanning the files on the tape
- Comparing the files on the tape to the files on the disk

Note: By default, ARCsolo does not perform a verification function.

For more information:

Scan Tape Contents
Compare Tape to Disk

Scan Tape Contents

If you select Scan Tape Contents, ARCsolo checks the header of each file on the backup tape.   If the header is readable, ARCsolo assumes the data is reliable.   If the header is not readable, the Activity Log is updated with this information.   Of the two methods, this one is faster.

Compare Tape to Disk

If you select Compare Tape to Disk, ARCsolo reads blocks of data from the tape and compares the data, byte for byte, against the source files on the source machine.   This option is more time consuming, but it ensures that all data on the tape is exactly as it is on disk.   If ARCsolo finds a mismatch, the Activity Log is updated with this information.

Retry Options

The Retry options determine how frequently (if at all) ARCsolo will attempt to back up or copy open files. The file sharing options determine how ARCsolo shares the files with other applications when backing up or copying a file.

ARCsolo needs to know how to handle files when backing them up.   It needs to know two things:

- How to back up files that are already open by another process
- If ARCsolo gets to the file before another process, can other processes access it while it is being backed up

The types of options for accessing open files are:

- Open File Retry option
- File Sharing option

For more information:

Open File Retry Option
File Sharing Option

Open File Retry Option

If, during the backup or copy operation, any files were unavailable to ARCsolo because they were locked by another process (already opened and being used by another application), ARCsolo can attempt to back them up or copy them again by:

- trying again immediately, or
- trying again after the job

Note: You don't have to limit yourself to one selection here.   This option allows you to select none, one, or both methods.

Retry Immediately
If you select Retry Immediately (the default), ARCsolo will try to back up or copy the file again immediately after the first attempt failed.   If the file is still unavailable, this information is written to ARCsolo's Activity Log.   If the job finishes, and ARCsolo was unable to back up or copy some files, the job is labeled "Incomplete".

Retry After Job
If you select Retry After Job, ARCsolo will try to back up or copy the file again the number of times specified in the Retry Count field, every number of seconds specified in the Retry Interval field.   If the file is still unavailable after these attempts, this information is written to ARCsolo's Activity Log.   If the job finishes, but ARCsolo was unable to back up or copy some files, the job is labeled "Incomplete".

Number of Retries
This specifies the number of times you want ARCsolo to try to back up or copy the file.

Retry Interval
This specifies the period of time you want ARCsolo to wait between attempts.

File Sharing Option

When ARCsolo attempts to open a file to back it up or copy it, it needs to know whether you want subsequent users and processes to be able to access this file and, if they can access it, whether they can save data to it.   If the file is already open by another process and ARCsolo cannot open the file with the selection you make here, ARCsolo will then use the Open File Retry option (discussed on the previous page) that you specified to attempt to back up or copy the file again.

Note: If you use applications (such as mail) that are in operation 24 hours a day, you may want to choose one of the *Deny None* methods discussed below.   As long as no other process is writing to these files during the job, the backup will be consistent.

Use *Deny None* if *Deny Write* fails (the default selection)
This is the default option ARCsolo uses when accessing files.   ARCsolo attempts to place the file in *Deny Write* mode (which allows users to open, but not write to the file).   If ARCsolo can't do this (because the file is already open), ARCsolo places the file into *Deny None* mode (which lets users open and write to the file), and then backs it up .

Use Lock Mode if *Deny Write* fails
ARCsolo attempts to place the file in *Deny Write* mode (which allows users to open, but not write to, the file).   If ARCsolo can't do this (because the file is already open), it locks the file completely (prohibiting any user from opening or writing to the file).   This method ensures the most recent version of the file is backed up or copied.

Deny Write
Deny Write prevents another process from writing to the file while ARCsolo has it open.   A file can only be opened in *Deny Write* mode if it is not already open by another process.   This mode is the safest for backups, as no other process can write to the file during the backup job.   If, however, another process has the file open before ARCsolo gets a chance to open it, ARCsolo will not be able to open the file, and the file will not be backed up (unless you specified an Open File Retry option, which was discussed in the previous section).

Deny None
Deny None mode will allow another process to read or write to the file, regardless of whether ARCsolo opens it first or opens it after another process already has it open.   This method ensures that your files are up-to-date, although the file that was backed up or copied may not be the most recent version.

Operation Options

The Operation options (for Backup) determine related actions that occur during or after the backup, and the level of information that is recorded in the database.

There are several general options you can specify for your backup jobs.   These include:

- Not recording any information about the job into the ARCsolo database
- Ejecting the tape after the job is completed - this option functions properly only on tape devices that support this feature
- Deleting files from the source disk after they have been backed up

For more information:
Operation options
Database options

Operation options

Eject tape - ensure the tape is not accidentally used for another job
Set this option to have ARCsolo eject the tape from the drive after the job finishes.   This helps prevent any other job from overwriting information on this tape.

Delete files after backup - use this option with filters to groom your disks
Select this option to delete source files from the source machine after they have been backed up to tape. Use this option to perform disk grooming.   Set a filter to back up files that haven't been accessed for a certain period of time (say, 3 months or so), and then select this option to delete these old, unaccessed files from the source disk.   Refer to the Filtering Your Jobs section for more information about filters. The source files are deleted when the session is completed.   All deleted files are listed in the Activity Log.

Disable File Estimate
Before any file is backed up to tape, ARCsolo, by default, performs an estimate of how long the job will take.   Set this option on if you want ARCsolo to skip this function.

Compress Files
Compress files on backing up.

Database options

Record Detail Information
By default, this option is selected.   This is so all the information pertaining to the source and destination are logged in the database.   If you do not want details about this job recorded in the ARCsolo database, turn this option off.   You may want to do this when you have limited disk space, or if you are backing up the ARCsolo database.

Record Job and Session Information Only
Select this option if you want only job and session information logged in the ARCsolo database.

Disable Database Recording
Select this option if you don't want any information about this job logged in the database.   Select this option if you are backing up the ARCsolo database or if you have limited disk space.

> ***Note:***   You will have to submit a Merge Tape operation before you can use any of the database views to restore this data.   Or, you can restore data from this job using the "Restore by Tape Media" source view.

Log Options

Log options can be set for Backup, Restore, Compare, Scan, Copy, Count, and Delete jobs.

The Log options determine the level of detail that is included in the log report for the operation.   You can view the log report in the Job Queue window or Database Manager window (Job View).

Log All Activity
Record all of the activity that occurs while the job is running in the Job Log.

Log Summary Only
Record summay information of the job (including source, destination, session number, and totals) and errors.   This is the default selection.

Log Disabled
Do not record any information about this job in the Job Log.

Backup Local Option Screen

The Backup Local Option screen allows you to specify local options that apply only to a selected drive that is included in a job.   You can specify verification options and a session password for a selected drive.   This screen contains the following fields and buttons:

None:	No verification will be done on the data backed up from this machine.
Scan Tape Contents:	Scan the tape and check that the header for each file backed up from this machine is readable.
Compare Tape to Disk:	Read blocks from the tape and compare, byte for byte, the data on the tape against the files on this machine.
Session Password:	Enter a password for your backup job (optional).
OK:	Click this button when you are done.

Backup Wizard

The ARCsolo Backup Wizard allows you to design a backup operation by following easy step-by-step instructions.

To access the Backup Wizard, click the Backup Wizard button on the toolbar.

The Backup Wizard prompts you through each step necessary to create a backup job.   It asks you to:
- Select a source
- Select a destination
- Choose a full or incremental backup
- Specify a session password
- Choose basic backup options
- Submit the job

After completing these simple steps, your job is submitted as requested.

Restore basics

Manager Window

Restoring data back to your machines on the network is easy and flexible with ARCsolo
Each restore job requires a source and destination.   The files you select as your source will always come from a tape, and the place you select as your destination will always be a hard drive.

ARCsolo provides you with three methods for selecting the data you want to restore.   Two of these methods use information logged in ARCsolo's database, while the third method doesn't.   You choose the method that works best for you.

You also have several methods for restoring the data to the machine.   Start restoring data at a drive level or dive deeper into the machine's directory tree and specify a subdirectory that ARCsolo should start restoring to.   You can choose to recreate the entire path that was backed up, or only recreate the base directory level.

Make sure the Source
tab is selected...

...and choose the
source view you want
to use. In this case, it is
Restore by Tree.

Click the green box next
to an object to select it.

ARCsolo - [Restore - Untitled:2]

File Job Admin View Restore Window Tools Help

Source | Destination

Restore by Tree   Search   Version History

My Computer
  C:
    BG Help Compile
    BIN
    MSOFFICE
    Works
      ACTVJOB.BMP
      ADDRESC.BMP
      BKACTIV.BMP
      BJUR.BMP
      DJL.BMP

Tape Name   BIL_Workstation
Tape ID   8EEE
Sequence No.   1
Session No   16
Backed Up On   10/30/95 12:43:43
Source Path   C
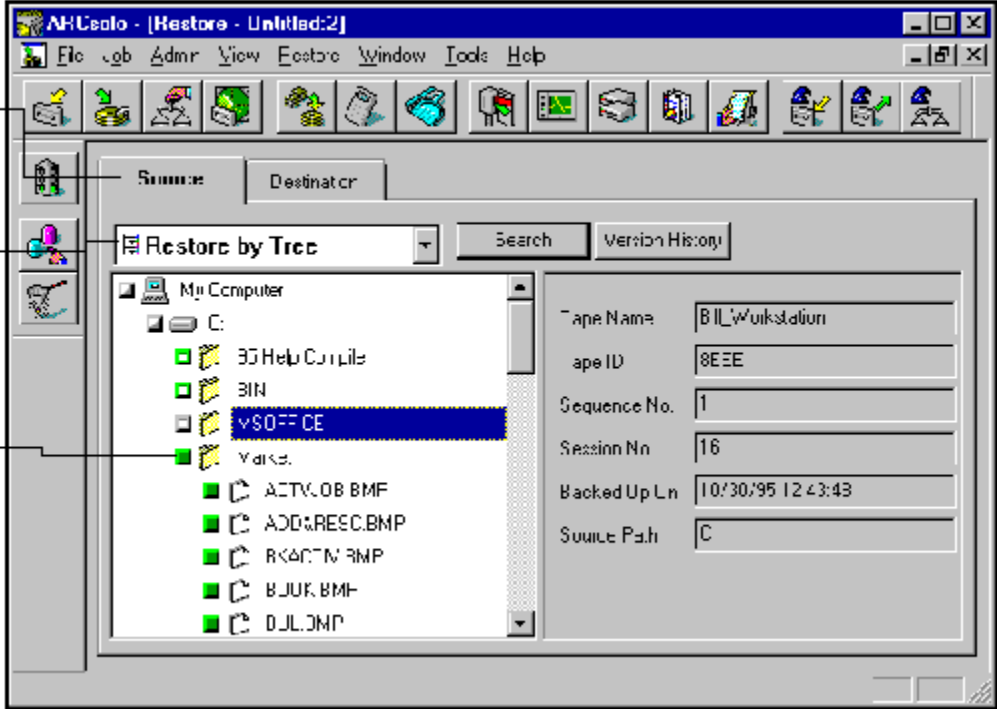
How to restore files

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The following steps outline a basic restore job - that is, using the default restore options to get back data that has been backed up to tape. These steps assume that your ARCsolo database is up-to-date and available. Although the following example uses the default "Restore by Tree" source view, the basic steps can be applied using any of the source views.

To perform a basic restore:

1. **Click the Restore button** from the **Quick Access bar.**
   The Restore Manager appears, with the default source view, "Restore by Tree", selected.

2. **Select the data you want to restore.**
   Click the Source tab and choose the view you want to use to select the source for your job. Then specify what you want to restore. Refer to Changing the source view for details on using a source view.

3. **Specify where you want the files restored to.**
   Click the Destination tab to select where you want to restore to. The option "Restore files to their original location(s)" is selected by default. When this option is selected, your files are restored to their original machine and path. If the original location is on a remote machine, you will be prompted to enter a valid username and password for the remote machine.

   Refer to the Software Basics section for details on how to use the Browser to select files and directories.

4. **Specify any options for the job .**

5. **Specify any filters for the job .**

6. **Click the Run/Schedule button to run the job.**
   The Session User Name and Password dialog box opens. Enter, change, or verify the username and password for the destination machine for each tape session. If a session password has been assigned, enter the session password as well. To enter or change the security information for a session, select the session and click the Edit button.

7. **Click OK to continue.**

8. **Click OK to submit this job.**

Note: If the tape(s) needed for the job is not in a tape device, ARCsolo will prompt you for the tape(s) that contains these files.

Changing the restore source view

•

Although the files that you restore will always come from a tape, the way you select these source files can vary.   ARCsolo provides you with the most convenient and thorough methods for finding the files you want to restore.   There are three methods, or views, by which you can choose your source files:

•   **Restore by Tree view -** Using its database, ARCsolo reconstructs a directory tree in the Browser of all machines, directories , and files that were backed up

•   **Restore by Tape view -** Using its database, ARCsolo displays all tapes used for a backup and the specified source for each session on the tape

•   **Restore by Tape Media view -** Place a tape in the tape device and select a particular tape session to restore

Note: The method you choose to select your source depends on what you know about the files you want to restore and the tape(s) you need to use.

The three available restore methods display the source information either by using the ARCsolo database or by reading what tape devices are currently attached to the ARCsolo host.   "Restore by Tree", and "Restore by Tape" use the database, "Restore by Tape Media" does not.

When using "Restore by Tree" or "Restore by Tape" source views, you are using the ARCsolo database. The information you use to select your source is based on all the backups made since you started using ARCsolo.   Unless you have purged or pruned your database, you should be able to restore all files from all backups you have performed with ARCsolo.

[Restore by Tree view](#)
[Restore by Tape view](#)
[Restore by Tape Media view](#)

Restore by Tree view

"Restore by Tree" is the default source view for the Restore Manager.   This view lets you restore a specific directory or drive.   This view displays a machine tree of files and directories that were backed up with ARCsolo.   If you have backed up something several times (the ARCsolo home directory, for example), it is displayed only once in the graphical tree.   By default, the latest version of a file is restored, but you can restore an older version by using the Version History feature.

Note: You can use the Search and Version History features when you are using "Restore by Tree" as your source view.

To Restore by Tree:

1. **In the Restore Manager, select *Restore by Tree* from the source view drop-down list.**
   The Browser displays a machine tree of the networks and machines that have been backedup by ARCsolo.

2. **Select the files you want to restore.**

Restore by Tape view

The "Restore by Tape" source view displays a list of all the tapes that ARCsolo has used to back up data. Selecting a tape displays a list of sessions on that tape and what was backed up for that session.   All information displayed is gathered from ARCsolo's database.

This source view is a good one to choose if you know which tape(s) you used for the backup, but you're not sure which session(s) contains the data you need to restore.

To Restore by Tape:

1. **In the Restore Manager, select *Restore by Tape* from the source view drop-down list.**
    A list of tapes that you have used for backups displays in the Browser.

2. **Expand the tree for the tape you want to restore from.**
    Double-click on the name of the tape that holds your data to display a list of sessions logged in the database for that tape.

    If you try to expand a backup session that has been pruned from the database, you will be asked whether you want to merge the pruned session.

3. **Select or expand the tree for the session that contains the files you need to restore.**
    If you only want to restore specific files or directories from a session, expand the tree for the session, and then select the files and directories.

4. **Repeat steps 2 and 3 for each session on the tape you want to restore from.**

Restore by Tape Media view

The "Restore by Tape Media" source view The Restore by Tape Media view allows you to restore complete sessions on a tape in a tape device.   All files in the session are restored to the destination, unless filters are added to the job.

Since this source view does not use the ARCsolo database, you cannot pick and choose files and directories you want to restore.   Unless file or directory filters are applied to the job, every file in the session you specify as the source is restored.

If you know the exact tape and session number to use, this source view is an effective and easy way of performing a quick restore.   This source view is also useful for disaster recovery, when the ARCsolo database is not available or the tape's history has not been merged into the ARCsolo database.

To Restore by Tape Media:

1. **In the Restore Manager, select *Restore by Tape Media* from the source view drop-down list.**
   ARCsolo will read directly from the tape devices and display your tapes in the Browser.

2. **Select or enter a tape name.**

3. **Specify the session number to restore.**
   In the *Sess.* field, specify the number of the session you want to restore.

Search

Use the Search feature to have ARCsolo quickly and automatically locate files and directories whose name or location you are unsure or unaware of.

Note: You can only use this feature with the Restore by Tree source view.

To use the Search feature:

1. **Click the Search button** [Search] **.**
    The Search dialog box appears.

2. **Enter the search criteria and click Search.**
    You can be as specific or general with your search pattern as you want.   Use an asterisk (*) or question mark (?) as the wildcard symbol, as necessary.   ARCsolo searches its database, and, if found, displays information that matches the search pattern you specified.

3. **Highlight the file you want and click the Go To button.**
    The Restore Manager reappears, as ARCsolo expands the directory tree and highlights the file.   At this point, you can select it for restoring.

Version History

Use the Version History feature to help you select the version of the file, directory, or drive you want to restore.

Note: You can only use this feature with the Restore by Tree source view.

To use the Version History feature:

1. **Select the drive, directory, or file you want to restore.**

2. **Click the Version History button** **.**
   ARCsolo searches its database and returns a list of all the backed up versions of this file, directory, or drive. From this list, you can select the version you want to restore.

   If you try to expand a backup session that has been pruned from the database, you will be asked whether you want to <u>merge</u> the pruned session.

Options for restore jobs

ARCsolo provides several types of advanced restore options.   They are:

- **Tape options -** specify tape options for the restore job such as the tape timeout period
- **Destination options -** specify destination options for the restore job such as how to create the directory structure
- **Operation options -** specify some general options for the restore job such as whether or not to include registry files
- **Log options -** allow you to determine the level of detail you want recorded into the Job Queue's Log

Tape Options

Timeout for First Tape
Period of time that ARCsolo waits for the first tape required for your restore job.   If the time expires and the first tape has not been provided, the job will fail.   By default, ARCsolo will wait five minutes.

Timeout for Additional Tape(s)
Sometimes, your data will come from several tapes.   By default, ARCsolo will not time out.   This means ARCsolo will continue to wait for you to provide any additional tapes required until you cancel the job.   Select this option to specify a timeout period ARCsolo should wait.   If you select this option, the default timeout period is 60 minutes.

Destination Options

The Destination options determine how the directory structure is created on the destination when files are copied or restored.   They also determine which files (if any) can be overwritten.

ARCsolo provides two destination options:

- How to create the directory structure on the destination
- How to handle files that may already exist on the destination

For more information:

Directory Structure
File Conflict Resolution

Directory Structure

Select the method ARCsolo should use to create directories on the destination that you select.   The default is *Do not create the base directories*.

Do not create the base directories
This option will not create the base directory on the destination path, but will create all subdirectories that reside below the source base directory.   A "base directory" is considered the last directory selected in the source path.

Create directories from the base
This option will create the destination path beginning from the base directory.

Create entire path from the root
This option will create the entire source path (except the root drive or volume name) on the destination. No files from any parent directories are restored.   Only the directory path to the base directory is created on the destination.

File Conflict Resolution

Select the method ARCsolo should use when there are files on the destination disk that have the same name as files being copied from the source.   The default is *Overwrite All Files*.

Overwrite All Files
This option will restore all source files to the destination regardless of conflicting file names.   Existing files on the destination will be overwritten by the files from the source.

Rename Files
This option copies the source file to the destination with the same filename but a different extension. The extension will maintain the first two characters of the original, but the last character will be 1, 2, 3..., depending on how many files ARCsolo has encountered with the same name.   Filenames without extensions will be renamed with extensions ".__0", ".__1", ".__2", etc.

Skip Existing Files
If you select this option, ARCsolo will not restore a source file if a file with the same name already exists on the destination.

Overwrite with Newer Files Only
If you select this option, ARCsolo will only restore source files whose modification date is later than the modification date of the file with the same name on the destination. Source files whose modification date is earlier will not be copied to the destination.

Confirm Overwrites
This option is only applicable when running an immediate job.   Before ARCsolo tries to restore the source file, you will be prompted to confirm that you want the file on the destination   to be overwritten.

Operation Options

There are several general options you can specify for your Restore, Compare, Scan, and Count jobs:

- Restore registry files
- Create empty directories

For more information:

[Operation options](#)
[Database options](#)

Operation Options

The following options are for Restore, Compare, Scan, and Count.   These general options determine related actions that occur during or after the job, and the level of information that is recorded in the database.

Restore Registry Files
Select this option if you want registry files restored to the machine.

Create Empty Directories
Select this option if you want to restore directories that have no files in them.

Search Screen

The Search screen allows you to specify a search pattern.   ARCsolo will search its database for all files and directories that match the pattern.   This screen contains the following fields and buttons:

Search for: Provide the search pattern.

Search: Click this button to start searching ARCsolo's database.

Go to: After searching the database, highlight an entry, and click this button to return to the Restore Manager with the entry selected.

Version History Screen

The Version History screen allows you to select a specific version of the file, directory, or drive to restore. This screen contains the following fields and buttons:

(List):   Select the version you want from the list.   Information such as the tape name and id, session number, source drive, etc., is displayed for each version.

OK: Click this button when you are done.

Session List Screen

The Session List screen lists the tapes you will need to restore the data you want.   This screen contains the following fields and buttons:

Enter Password: If a tape session has a password on it, highlight the tape, then click this button to enter the session password.

OK: Click this button when you are done.

Password Screen

The Password screen allows you to enter the tape session password, if required.   If the data was backed up with a session password, you need to enter the password here in order to restore it.   This screen contains the following fields and buttons:

Password: Enter the session password here.
OK: Click this button when you are done.

Restore Wizard

The ARCsolo Restore Wizard allows you to design a restore operation by following easy step-by-step instructions.

To access the Restore Wizard, click the Restore Wizard button on the toolbar.

The Restore Wizard prompts you through each step necessary to create a restore job.   It asks you to:
- Select a source
- Select a destination
- Specify the overwrite procedures
- Specify a session password
- Submit the job

After completing these simple steps, your job is submitted as requested.

Copy basics

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The copy feature allows you to copy (or move) files from one hard disk to another.   For example, you can run a copy job on your local machine to store files and directories on another machine that is going to be backed up to tape.   Or, you might want to copy files when your hard disk space is running low.

Use the ARCsolo Copy Manager to:

- Quickly and safely copy (or move) files and directories from one hard disk to another.
- Use filters to selectively exclude or include files and directories from copy jobs.
- Schedule a copy job.
- Create a script for a copy job.
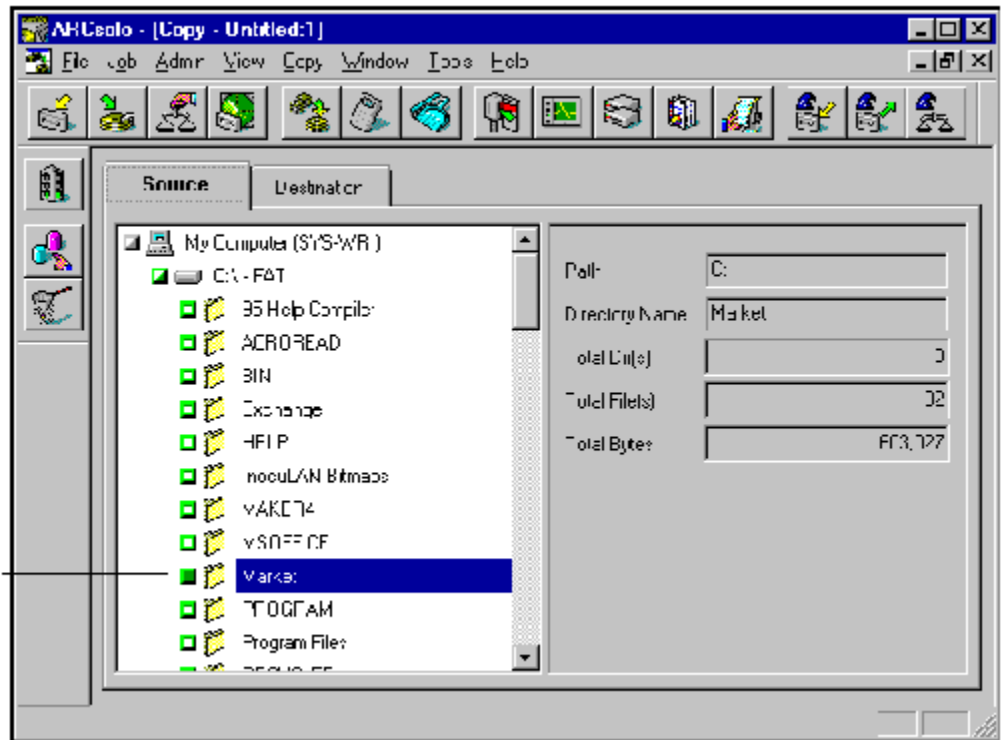
Click the box next to the "Market" directory to select it as the source.

How to copy files

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Following are the basic steps for performing a copy - that is, using the default options to copy files and directories from one hard disk to another.

1. **From the Quick Access bar, click the Copy button** .

2. **In the Source pane, select the files you want to copy.**
You can select only one drive or volume, but you can select mulitple directories or files on that drive or volume.   Refer to the Software Basics section for details on how to use the Browser to select files and directories.

3. **In the Destination pane, specify where you want to copy the files.**
Again, refer to the Software Basics section for details on how to use the Browser to select files and directories.

4. **Specify any options for the job** • .

5. **Specify any filters for the job** • .

6. **Click the Run/Schedule button** • **to run the job.**
The Security dialog box opens.   Enter or verify the username and password for the destination machine.

7. **Click OK to continue.**
The Run/Schedule dialog box opens.   This dialog box enables you to run the job now, or schedule the job for a later time.

To save this job to a script file, click the Save button in this dialog box.

8. **Click OK to submit this job.**

Options for copy jobs

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ARCsolo provides several types of advanced copy options.   They are:

- • **Methods options -** determine how copies will be performed
- • **Retry options -** specify the action ARCsolo should take if it comes across an open file
- • **Operation options -** specify some general options for the copy job such as whether or not to create a mirrored version of the source
- • **Destination options -** specify destination options for the copy job such as how to create the directory structure
- • **Log options -** allow you to determine the level of detail you want recorded into the Job Queue's Log
- • **Virus options -** scan files for viruses before they are copied

Operation Options

There are several general options you can specify for your copy jobs.   These include:

- Creating a mirrored version of the source
- Not recording any information about the job into the ARCsolo database
- Deleting files from the source disk after they have been copied

For more information:

Operation options
Database options

Operation options

Mirror
This option creates a mirrored version (an exact duplicate) of the source.   ARCsolo copies all files that you specify to the destination, and in the process, deletes any files on the destination that are not on the source.   As a result, your source and destination are always the same.
If you want to mirror a particular directory (for example, one you use constantly and must always have access to), you should use the Mirror option in conjunction with the Automatic Repeat Interval option (set when scheduling the job).   This way you will always have a current mirrored directory.
For example, if you specify an Automatic Repeat Interval of 15 minutes, and specify in the Destination Options dialog box to Overwrite with Newer Files Only, all files that have changed during the previous 15 minutes will be copied to the destination directory.   In this way, you will have a truly accurate mirrored directory every 15 minutes.

Delete Files
Select this option if you want to delete the source files after they are successfully copied to the destination.   Using this option allows you to move files from one location to another.

Create Empty Directories
Select this option if you want ARCsolo to create directories on the destination even if the source files or directories are empty, or, if after filtering, the directories will be empty.

Database options

The following database options are for Restore, Copy, Compare, Scan, and Count operations.

Record Job Information Only
Select this option if you want a record of this copy job logged in the ARCsolo database.   Session and file information are not kept in the database for copy jobs, only general job information is maintained.

Disable Database Recording
Select this option if you do not want this job recorded in the ARCsolo database.   You may want to do this when you have limited disk space.

Copying to WORM drives

A WORM (Write Once Read Many) drive is a storage device that uses an optical medium that can be recorded only once.   You can map to a WORM device in the same way that you would map any network drive.   But, because it is a write once device, if you schedule a full copy of your C drive to your WORM device each day, files can not overwrite older copies of themselves on the drive (the way they would if you copied a file from a diskette to your hard drive).   Instead, you will have to make separate full copies of your C drive in separate directories (similar to backing up files and appending the data to a tape).

Therefore, your copy strategy when using WORM devices might be to perform a full copy job once and then use either incremental or differential jobs on subsequent days.

Job queue basics

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Every time you run or schedule a job with the ARCsolo Manager, you submit it to the ARCsolo job queue. Information about all jobs (such as execution time, status, last result, and owner) is stored here. ARCsolo continuously scans the job queue for jobs that are ready to be executed.   The scanning frequency can be changed through the ARCsolo Server Administrator.

You can do the following from the Job Queue Manager:

- View general information on all jobs in the queue
- View detailed information on a selected job
- Add a job
- Reschedule a job
- Modify a job
- Stop an active job
- Delete a job
- Monitor an active job

View information on job selected in the status window.

Job Queue Manager toolbar

Status window

ARCsolo - [Job Queue:2]

File   Job   Admin   View   Job Queue   Window   Tools   Help

Status	Execution Time	Job Type
DONE	<Run Now>	Backup
DONE	<Run Now>	Count
DONE	<Run Now>	Count
DONE	<Run Now>	Backup
DONE	<Run Now>	Backup
DONE	<Run Now>	Backup
99%	<Run Now>	Backup
READY	11/03/95 5:00 AM	Backup
HOLD	11/03/95 5:00 AM	Backup
READY	12/01/95 5:00 AM	Restore
READY	12/01/95 10:00 PM	Count

Summary   Detail   Progress   Log

Job Type	Backup
Status	ACTIVE
Last Result	
Owner	WILLIAMC
Execution Time	<Run Now>
Submitted Time	11/02/95 12:54 PM

Descriptor

Source

My Computer\C:

Drag this bar to view additional fields in the status window.

How to use the job queue

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All job queue operations start from the Job Queue Manager.

To open the Job Queue Manager:

1. **From the Quick Access bar, click Job Queue** **.**
    The Job Queue Manager displays a list of all jobs in the queue.   Information about each job appears on its own line.

2. **To perform an action on a job, highlight it first.**
    At this point you can either select a function from the toolbar, or click the right mouse button to have a list of available functions appear, which you can choose from.

A job can have an Active, Ready, Hold, or Done status.   Active is a running job; Ready is a job waiting to execute; Hold is a suspended job; Done is a job with no repeat interval that has been executed.

Note: Select between each of the tabs to view different information relating to a job.

[Viewing general information about jobs](#)
[Displaying detailed information about a selected job](#)
[Adding a job to the queue](#)
[Rescheduling a job](#)
[Modifying a job](#)
[Stopping a job](#)
[Deleting a job](#)

Viewing general information about jobs

A job listed in the Job Queue with a *Done* status is a job with no repeat interval that has already been executed.   *Done* jobs remain listed in the Job Queue for a specified number of hours.   This is set up through ARCsolo's Server Admin feature.   A repeating job (a backup job that runs every Friday, for example) will not have a *Done* status after it has been executed.   Instead, it will have a *Ready* status (it is ready to be executed again next Friday).

The Last Result Field
The Last Result field tells you whether or not your executed job was successful.   And, if it wasn't successful, the Last Result field helps you figure out why the job may have failed.

What can be done if a job didn't complete successfully
If you determine that your job was not successful, you can use the information provided in the Last Result field to remedy the problem.   You can then resubmit the job to run.

Adding a job script to the queue

You can quickly submit a job to the queue by using a previously saved script.   A script is a job that you saved to a file.   It contains the original source, destination, option, and schedule information for the job.

Follow these steps to add a job to the job queue:

1. **From the Job Queue Manager, click the Add Job button** .
    The Add Job dialog appears.

2. **Select the filename for the script you want to submit to the queue.**
    The script that you select is added to the job queue.

Rescheduling a job

The Job Queue Manager makes it easy for you to quickly change a job's execution date, time, or status. This allows you to resubmit a Done job that is in the Job Queue.

Follow these directions to change execution information about a job:

1. **Highlight the job you want to change.**
   You can only change a job's execution date, time, or status if the job is not active.

2. **Click the Reschedule Job button** **.**
   The Reschedule Job dialog appears.

3. **Change the job status, execution date, and/or execution time.**
   Job status can be changed to "Hold" or "Ready".   "Ready" job status indicates the job will execute at the specified date and time.   A job with "Hold" status will not execute until you change the status to "Ready".   After clicking OK, the job is changed to the status, execution date, and execution time you specified.

Displaying detailed information about a selected job

Tab options:

You can view information on a single job in the job queue by selecting the job in the status window and clicking one of the following tabs:

Summary
Lists the information from each field in the status window for the selected job.   Also includes relevant source and destination information.

Detail
Displays job details, including the source and destination target(s) and tape statistics, such as sequence and session number.

Progress
Monitors the real-time status of an active job.   You can also see the status in the Status field on the left side of the Job Queue Manager.

Log
List information about jobs that have been executed.   The level of detail in this log is determined when you set up a job.   You can select to see all of the activity that occurred while the job was running or just the summary information (which includes source, destination, session number, and totals along with any errors that may have occurred).   You also have the ability to disable reporting.

Other options:

Printing Detail and Log information
To print detail or log information, click your right mouse button on the Detail or Log window, then select Print from the pop-up menu.   You can also use this menu to change the text font or to search for specific text.

Searching for text
To search for text on the Detail or Log window, click your right mouse button, then select Find from the pop-up menu.

Changing the font
To change the font type on the Detail or Log window, click your right mouse button on the window, then select Font from the pop-up menu.

Stopping a job

You can use the Stop Job button or the Delete Job button to cancel an active job.   However, if the job you are stopping is a job that repeats at regular intervals (this is determined when you create the job), you should read the following information to determine which button to use:

- **Stop Job button**

- cancels the active job and reschedules it for its next regular interval.

- **Delete Job button**

- cancels the active job and deletes it completely.   The job will not be rescheduled for its next regular interval.

To stop an active job:

1. **Highlight the active job you want to cancel.**

2. **Click the Stop Job button   .**

3. **Click OK to confirm.**

Modifying a job

Use the Job Queue Manager to modify a job already in the queue.   This way you can add options or additional sources to an existing job, without having to create a new job.

Follow the steps below to modify a job:

1. **Highlight the job you want to change.**
   You cannot modify an active job.   Only jobs with a Ready, Hold, or Done status can be modified.

2. **Click the Modify button** .
   The job that you originally created appears in its appropriate window, with the original source(s), option(s), and destination(s) selected.   For example, if the job is a backup job, the Backup Manager appears.   If the job is a restore job, the Restore Manager appears.

3. **Make the desired changes.**

4. **Re-submit the job by clicking the Run/Schedule button (as you would any other job.)**

Deleting a job

You can delete jobs from the queue, whether they are active, done, or pending.   Deleting jobs from the Job Queue Manager window will completely remove them from the job queue.   This means that repeating jobs will not be rescheduled.

Note: You may not want to use the Delete Job button if you are deleting an active job that repeats at automatic intervals (determined when you create the job).   The Delete Job button interrupts and removes the job completely from the queue.   As a result, the job is not rescheduled for its next automatic interval.   You will have to recreate the job if you did not save it to a script file.

To delete a job:

1.   **Highlight the job you want to delete.**

2.   **Click the Delete Job button** **.**
      After confirming, the job is removed from the Job Queue list.

Changing the way jobs are listed

When you first open the Job Queue Manager window, the jobs in the queue are listed in order of execution time.   At any time, you can change the way in which jobs are listed in the queue.   Jobs can be sorted by clicking any of the following fields:

- Status
- Execution Time
- Job Type

Sorting the job queue is for informational purposes only.   It does not affect the order in which jobs are processed.

To change the sort order, either:

Click on the field title in the status window, or

Click in the status window with your right mouse button.
Then select *Sort by* from the pop-up menu.   Select the field you want to sort by.

Open Job Script/Add Job Screen

The Open Job Script/Add Job screen allows you to open an existing script or add a job script to the Job Queue.   This screen contains the following fields and buttons:

Script Name: Select the job script you want to add to the queue.

List Files of Type: By default, *.asx will appear in this field, since ARCsolo scripts are saved with a .asx extension.

Directories: Select the directory path where the job script can be found.

Drives: Select the drive where the job script can be found.

Network: Click this button for network options.

OK: Click this button when you are done.

Reschedule Job Screen

The Reschedule Job screen allows you to change a job's status, execution date, or execution time. This screen contains the following fields and buttons:

Job Status: Select Ready or Hold. If you select Hold, the job will not take off until its status is changed in the Job Queue.

Execution Date: Indicate when this job should run.

Execution Time: Indicate the time this job should run.

OK: Click this button when you are done.

Device manager basics

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The Device Manager is informational as well as functional
The Device Manager displays information about the tapes and tape devices that are connected to your system.   You can format, erase, or retension tapes.   You can also change the compression mode for your tape drives, if they support compression.

Format
Erase
Retension
Compress
Eject

How to use the Device Manager

●

The Device Manager is the starting point for all tape and device monitoring and maintenance operations.

To access the Device Manager:

1. **Click the Device Manager button** **on the Quick Access bar.**
   The Device manager appears.

2. **To perform an action, first highlight an adapter, device, or tape, and then select from among the available functions on the toolbar.**
   See the Maintaining your tapes section for information on each of the available functions.

Getting information

You can view a variety of information about the tapes and tape drives connected to your system using the Device Manager.

The following type of information is available:

- general or detailed information about an adapter card
- general or detailed information about a tape device
- general or usage information about a tape in a tape device

To get information:

1. **Highlight the adapter card, tape device, or tape.**

2 **Click the appropriate tab to view more information.**

Maintaining your tapes

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You can perform the following maintenance tasks on your tapes:

- [Formatting](#)
- [Erasing data](#)
- [Retensioning](#)
- [Compressing data](#)   - this task can only be used if the tape drive supports tape compression
- [Ejecting](#)   from the tape drive - this task can only be used if the tape drive supports this feature

Note: Before you use these options, especially the destructive ones (formatting and erasing), make sure you have the right tape selected.

Formatting a tape

Format your tapes before you use them
Although ARCsolo automatically formats blank tapes during a backup, you can use this option to manually format your tapes.   Formatting writes a new label at the beginning of the tape, effectively destroying all existing data on the tape.   Low level formatting, as is required on most hard drives and some mini cartridge tape drives, is not required for SCSI tape drives.

Note: Use this option with care!   Once you format a tape, the data it contained (if any), and any job sessions associated with this tape, are gone permanently.

To format a tape:

1. **Insert the tape into a tape drive.**

2. **Highlight the tape or tape drive in the Browser.**
   In the left pane of the Device Manager, expand the directory tree under the tape device that the tape is in.   Then highlight the tape or tape drive.

3. **Click the Format button .**
   The Format dialog box appears.

4. **Enter a name for this tape and select a date you would like this tape to be put out of service.**
   The expiration date is a way of tracking how long a tape has been in service so you can stop using it before it reaches the end of its useful life.

   A tape's life is based on passes (the number of times the tape drive head "passes" over a given point on the tape).   For example, a backup without verification constitutes one pass, whereas a backup with verification constitutes two passes.   Tape manufacturers rate their tapes' useful lives from about 500 to 1500 passes.   After this point, the tape is more susceptible to errors.

   You should choose an expiration date based on how you will use the tape.   If you plan to use the tape a few times a week, you should set the expiration date to a year from now, or sooner.   If you plan to use the tape only once or twice a month, you can set the expiration date to two or three years from the current date.   When a tape reaches its expiration date, you will still be able to use it, but when you make a backup, for example, a note is made in the Activity Log that this tape is expired.

   If you are formatting a new, blank tape, the default expiration date is one year from the current date.

   If you are re-formatting a tape, the expiration date is the date you specified the first time the tape was formatted.   The tapes physical history (read and write passes, etc.) is also carried over.   These attributes will carry over even if the tape has been erased using the ARCsolo Erase tool.

5. **Click OK to start formatting the tape.**
   A message appears asking you to confirm formatting the tape.

Erasing a tape

Use this option to erase all data from a tape.   ARCsolo also erases all references to the contents of this tape (if any) from the database.   When and if you re-format this tape, its physical history (read and write passes, etc.) will be carried over.

Quick Erase vs. Long Erase
There are two erase options from which you can choose: Quick Erase and Long Erase.
A Quick Erase takes much less time than a Long erase because it only overwrites the current tape label. Although, technically, there is still data on the tape, the data is effectively gone without the tape label. Quick Erase is useful if you want to re-use ARCsolo tapes, but you don't have time to wait for a full tape erase.   A Long Erase completely removes all data from a tape.   It takes much longer than a Quick Erase, but the tape is considered blank, as if it were just formatted.   For security reasons, if you want to make sure that the data on a tape is gone completely, use Long Erase.

Note: Use this option with care!   Once you erase data on a tape, the data is gone permanently.

To erase a tape:

1. **Insert the tape that you want to erase into a tape device.**

2. **Select the tape.**
   In the left pane of the Device Manager, expand the tree under the tape device that the tape is in. Then highlight the tape.

3. **Click the Erase button** .
   The Erase dialog box appears.

4. **Select Quick Erase or Long Erase.**

5. **Click OK to start erasing data from the tape.**

Retensioning a tape

Computer tapes are similar to audio tapes in that the more you use them, rewinding and fast forwarding, the more the tape becomes uneven and loose on the spools. When a tape becomes unevenly wound, it is prone to errors, may jam, or worse yet, break. Use ARCsolo's Retension feature to make sure a tape is evenly wound and properly tensioned. Retension a tape especially if you are having trouble writing to it or reading from it.

Note: This option applies only to Quarter Inch Cartridge tapes. It does not apply to 8mm or 4mm Digital Audio Tapes (DATs).

To retension a tape:

1. **Insert the tape into a tape device.**

2. **Select that tape.**
   In the left pane of the Device Manager, expand the tree under the tape device that the tape is in. Then highlight the tape.

3. **Click the Retension button** **.**

4. **Click OK to start retensioning the tape.**

Compressing data on tapes

If your tape drive supports compression, you can tell ARCsolo to use it by turning it on. Normally, you will want to leave compression on. The only time you should turn it off is if you plan to use the tape in another drive that doesn't support compression. The drive that doesn't support compression will not be able to read the compressed data on the tape.

Note: You can only change compression when a blank tape is in the drive. This prevents the "mixing" of uncompressed and compressed data between sessions on a tape.

To turn compression on or off:

1. **Select the tape device that supports data compression.**
   In the left pane of the Device Manager, highlight the tape device. Click the Detail tab in the right pane to check that compression is supported by this device.

2. **Click the Change Compression Mode button** .

3. **Click OK to set the compression mode to Off (if it is On) or On (if it is Off).**

Ejecting tapes

You can eject tapes from ARCsolo's Device Manager, if your device supports this feature.

To eject a tape with ARCsolo:

1. **Select the tape device that you want to eject the tape from.**
    In the left pane, highlight the tape device.

2. **Click the Eject button** **.**
    The tape is ejected from the tape drive.

Database basics

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ARCsolo stores information about the jobs you have run, the tapes you have used for backups, and the devices you use for backups.

How is database information used in ARCsolo?
Database information helps when you restore files from tape.   The ARCsolo database stores information about every file and directory that has been backed up.   When you are looking to restore a specific file, ARCsolo's database helps you determine which tape to use.   This eliminates the time it would take to search through tapes looking for files.   ARCsolo's Reports Manager is another place where database information is used.   Information for the reports comes from the ARCsolo database.   The Reports Manager window allows you to view and print reports with this information.

What can you do in the Database Manager window?
You can display, sort, update, and delete database records in the Database Manager window.   For example, you can:

- Keep track of the location of your tapes
- Determine the session number of your most recent backup
- Determine if a tape should be retired
- View log information about jobs you have run
- Delete old records from the database

The Database Manager window also displays graphical information about the hard disk on your machine and the amount of space the database takes up.

Select the
database view
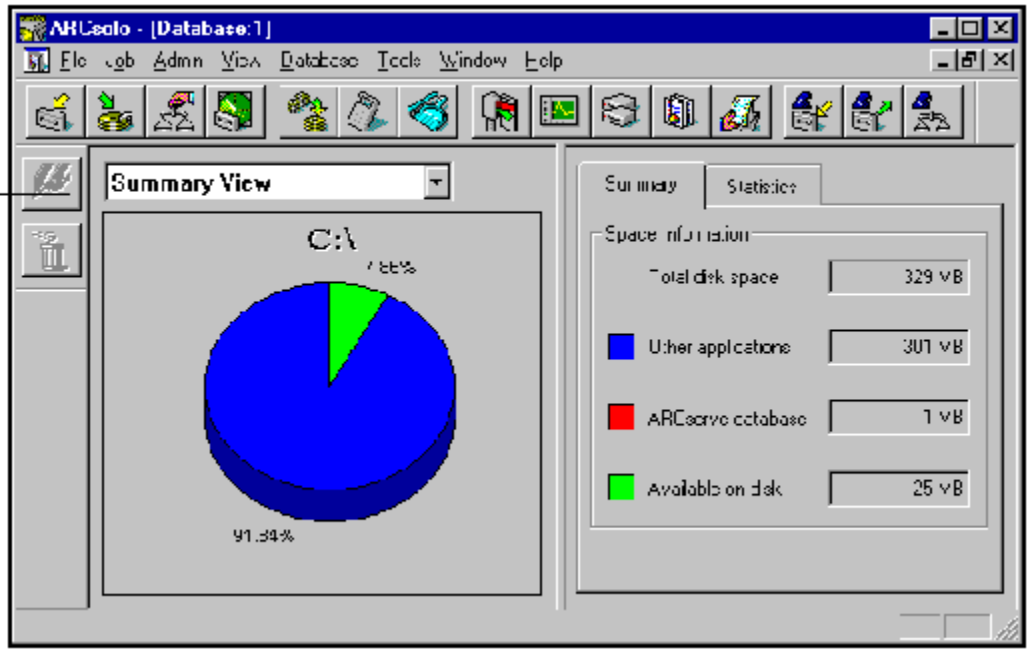
[How to use the database](#)
[Summary View](#)
[Job View](#)
[Tape View](#)
[Device View](#)

Summary View

The Summary View is displayed when you first open the Database Manager window.   This screen is informational only.   You cannot modify it.   It displays information about your machine's hard disk and the size of your ARCsolo database.

Note: If your database has grown very large, you may want to set ARCsolo to prune old records from the database.

Job View

The Job View window displays information about all jobs that have been processed by ARCsolo.

Each time ARCsolo runs a job, a record is added to the database.   This record contains basic information about the job, such as type of job, who ran it, when it started, when it ended, and its status (finished, incomplete, etc).

For backup jobs, session and file information are all recorded in the database.

You can view log information for each job.   In addition, for each backup job, you can see a list of the sessions that were created on tape and a list of files backed up for each session.

To view log information:

1.   **Highlight a job.**

2.   **Click the Log tab.**

To view session information for a backup job:

1.   **Highlight a backup job.**
     Session information is displayed in the *Sessions* section.

2.   **Highlight the session you want to know more about.**

3.   **Select the Session tab or the Files tab to see additional information about the session.**

Tape View

The Tape View window displays information about the tapes used with ARCsolo.   This includes information about formatting, how much the tape has been used since it was put into service, and number of errors (if any) that have occurred while ARCsolo was using the tape.

Each time a tape is formatted by ARCsolo, a new record is added to the database.

You can view additional details about a tape.   This includes how many errors ARCsolo has encountered while reading from or writing to the tape, how much data (total) has been written to the tape, and number of read and write passes ARCsolo has made over the tape.   In addition, you can see a list of the sessions that were created on the tape and a list of files backed up for each session.

Device View

The Device View window displays information about the tape devices used with ARCsolo.   This includes the type of device, vendor, SCSI ID, head clean count, and usage time.

To view information about a tape device:

1. **Highlight a tape device.**
    Session information is displayed in the *Sessions* section.

2. **Select the Statistics tab or the Error Log tab.**

Note: You will only see information in the Error Log if the tape drive has a critical error.

How to use the database

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All database operations start from the Database Manager window.

To access the Database Manager:

1. **Click the Database button** from the **Quick Access** bar.
   The Database Manager Window is displayed.   By default, you are looking at summary information for your hard disk (where ARCsolo is installed).

There are four database views from which you can choose.

- **Summary View -** A summary of the percentage of hard disk space being used by the database, all other files, and how much space is free (where ARCsolo is installed).
- **Job View -** A list of all jobs that you have run through ARCsolo including details about sessions and individual files.
- **Tape View -** A list of all tapes that you have used with ARCsolo including tape statistics and session information for each tape.
- **Device View -** A list of all devices you have used with ARCsolo including SCSI ID, device statistics, and errors.

Sorting records in a database
When you first open a Database window, the records appear in the following order:

- Job ID (Job View)
- Tape ID (Tape View)
- Adapter number (Device View)

You can sort the records by any field in the database.

To sort the records:

1. **Click on the field name on which you want to sort by.**

Deleting a record from the database
In addition to setting ARCsolo to automatically prune old database records, you can manually delete database records.   You may want to do this if you've replaced a tape device, for example.

To delete a record:

1. **Highlight the record you want to delete.**
   You cannot delete the last Job View record.

2. **Click the Delete button** .

3. **Confirm the deletion.**
   Make sure that this is the record you want to delete.

Modify Screen

The Modify screen allows you to keep track of the location of your tapes.   This screen contains the following fields and buttons:

Tape Name: This is the name of the tape you selected.
Tape ID: This id the ID of the tape you selected.
Sequence No.: This is the sequence# of the tape you selected.
Location: Enter a description of where this tape is kept.
Previous: Click this button to move to the previous tape.
Next: Click this button to advance to the next tape.
Update: Click this button when you are done.

Utilities basics

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ARCsolo offers several utilities that you can use to manage files.   The utilities are:

● **Recover Database -** overwrites your ARCsolo database files with a backed up copy of the database files.
● **Merge Tape -** merges information from tape into your ARCsolo database.
● **Scan Tape -** reports information about one or more tape backup sessions.
● **Compare -** compares the contents of a tape to files on a machine.
● **Count -** counts files on a machine.
● **Delete -** deletes files from a machine.

[Recover Database](#)
[Merge Tape](#)
[Scan Tape](#)
[Compare Tape](#)
[Count](#)
[Delete](#)

Recover database

The Recover option allows you to restore ARCsolo database files from tape to your ARCsolo database. (The ARCsolo database is backed up each time you back up your ARCsolo home directory.)   This option overwrites your existing ARCsolo database files with backup information from a tape.

Unlike the Merge Tape option, which appends database information from tape to your existing database files, the Recover Database option overwrites existing database files.

Why would you need to use the Recover Database option?
You could use the Recover Database option anytime you lose your ARCsolo database files, such as after a disaster like a fire, flood, or a machine crash, and you want to restore your files on a machine where you can create new ARCsolo database files.

Note: If you have multiple drives and one of them is performing a Recover Database job, and you want to send another job that would write to the database (such as Backup), disable writing to the database to avoid any problems with the Recover Database job.

[How to recover a database](#)

How to recover a database

To recover a database:

1. **Click the Recover Database button** **from the Quick Access bar.**

2. **Select** *Recover Database* **from the Methods combo box.**

3. **Select or enter a tape name.**
    If the tape you want to use is not currently in a tape drive, you must type the information into the *Group* and *Tape* fields.

4. **Click the Options button and specify which database session you want to recover.**

4. **Specify any options for the job** ● **.**

5. **Specify any filters for the job** ● **.**

6. **Click the Run/Schedule button** ● **to run the job.**

Recover Database Options

ARCsolo provides several types of advanced database recovery options.   They are:

- **Tape options** - specify tape options for the recover job such as the tape timeout period
- **Operation options** - specify some general options for the recover job such as whether or not to record the recover job into its database
- **Log options** - determine the level of detail you want recorded into the Job Queue's Log

Merge tape

This option allows you to take a tape that contains one or more backup sessions and merge the information from the tape into your ARCsolo database.   The database information from the tape will be appended to your existing database files.

Each time you run a backup job, ARCsolo records information in its databases about the machines, directories, and files that have been backed up, and the tapes that were used.   This allows ARCsolo to locate files whenever you need to restore them.   This database information is backed up whenever you back up your ARCsolo home directory.

If you have a tape that has a backup session that is not included in the ARCsolo database (the backup was created using ARCsolo on a different machine, for example), you can use the Merge Tape option to get the tape's information into the database in ARCsolo's home directory.

Unlike the Recover Database utility, which overwrites existing database files with database information from tape, the Merge Tape utility appends database information to your existing database files.

Why would you need to use the Merge Tape option?
You could use the Merge Tape utility if you need to restore files to an ARCsolo machine that you did not use to create the backup.   You could also use the Merge Tape utility if you pruned (deleted) information from your ARCsolo database that you now need.

[How to merge a tape](#)

How to merge a tape

To merge a tape:

1. **Click the Merge Tape button** **from the Quick Access bar.**

2. **Select** *Merge Sessions* **from the Methods drop-down combo box.**

3. **Select or enter a tape name.**
   If the tape you want to use is not currently in a tape drive, you must type the information into the *Tape* field.

4. **Specify which session(s) you want to merge.**
   If you do not know the session number, you can check the Activity Log or the Job View or Tape View windows in the database.   If they are not available, you can use the Scan Tape option to list the contents of the tape, including all session numbers.

5. **Specify any options for the job .**

6. **Specify any filters for the job .**

7. **Click the Run/Schedule button   to run the job.**

Merge Tape Options

ARCsolo provides several types of advanced merge options.   They are:

- **Tape options** - specify tape options for the merge job such as the tape timeout period
- **Log options** - determine the level of detail you want recorded into the Job Queue's Log

Scan tape

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This option gives you information about your tape backup sessions.   Each source that you select to back up is saved on tape as an individual session.   You can scan a single session or an entire tape.   Results of the Scan Tape job can be seen in the Job Queue (by clicking the Log tab).   The Log tab in the Options menu allows you to select the level of detail you will see in the Job Queue's Log.   You can select to see just summary information and any errors that occurred during the scan or you can select to see each file that was backed up as well as the summary information and any errors.

Why would you use the Scan Tape option?
Use the Scan Tape option to find out what is on a tape.
You would need to do this if you are trying to recover an ARCsolo machine and you need to find the most recent backup of the ARCsolo database so that you can restore it.   You could also use the Scan Tape option if you want a list of the files that were backed up.

ARCsolo - [Scan Tape - Untitled:1]

File Job Admin View Scan Tape Window Tools Help

Source

Method [Scan Sessions ▼]

| Scan Sessions |
| Merge Sessions |
| Recover Database |

Tape

Sess. [1] ☐ All Sess.

TAPES
   Bill_Workstation
   SQL Database

Device Information

Name TANDBERG TDC 4200

Config. Device:0=Board:0,Bus:0,SCSI ID:0,LUN:0

Tape Information

Name Bill_Workstation

Sequence 1   Write Protect No

ID 8EEE   Expiration Date 1/17/96

[How to scan a tape](#)
[How to merge information into the ARCsolo database](#)
[How to recover an ARCsolo database from tape](#)

How to scan a tape

To scan a tape:

1. **Click the Scan Tape button** **from the Quick Access bar.**

2. **Select *Scan Sessions* from the Methods drop-down combo box.**

3. **Specify which tape you want to scan.**
   If the tape you want to use is not currently in a tape drive, you must type the information into the *Tape* field.

4. **Specify which session(s) you want to scan.**
   Enter a specific session to scan or click to scan all sessions on the tape.

5. **Specify any options for the job •.**
   Options include specifying the level of detail to be included in the log report.

6. **Specify any filters for the job •.**

7. **Click the Run/Schedule button • to run the job.**

Scan Tape Options

ARCsolo provides several types of advanced scan options.   They are:

- **Tape options** - specify tape options for the scan job such as the tape timeout period
- **Operation options** - specify some general options for the scan job such as whether or not to record the scan job into its database
- **Log options** - determine the level of detail you want recorded into the Job Queue's Log

Compare tape

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This option allows you to compare the contents of a tape session to files on a machine.

Results of the Compare Tape job can be seen in the Job Queue (by clicking the Log tab) or the Database Manager (Job View).

The Log tab in the Options menu allows you to select the level of detail you will see in the Job Queue's Log. You can select to see just summary information and any errors that occurred during the scan or you can create a report that lists each file that was compared and indicates if there is any difference in the file name, size, date, time, or attributes.

Why would you use the Compare Tape option?
You could use this option after a backup to verify that the backup copied all of the files to tape without error.
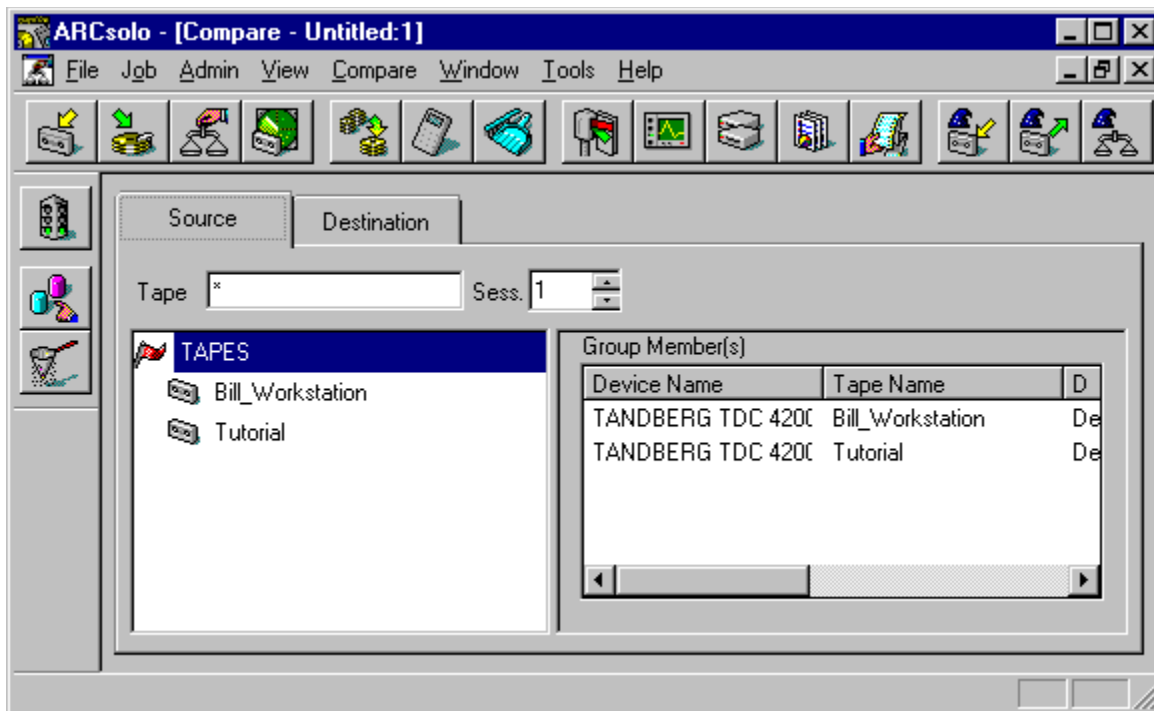
How to compare the contents of a tape

To compare the contents a tape:

1. **Click the Compare Tape button** from the **Quick Access** bar.

2. **Select or enter a tape name.**
    If the tape you want to use is not currently in a tape drive, you must type the information into the *Tape* field.

3. **Specify the session number you want to compare.**
    Enter the session number in the *Session* field.   If you do not know the session number, you can check the Activity Log or the Database Manager (Job View or Tape View). You can also use the Scan Tape option to list the contents of the tape, including all session numbers.

4. **Click the Destination tab.**

5. **Select the machine, directories or files that you want to compare against.**

6. **Specify any options for the job** ◆ .
    Options include specifying the level of detail to be included in the log report.

7. **Specify any filters for the job** ◆ .

8. **Click the Run/Schedule button** ◆ **to run the job.**

Compare Tape Options

ARCsolo provides several types of advanced compare options.   They are:

- **Tape options** - specify tape options for the compare job such as the tape timeout period
- **Operation options** - specify some general options for the compare job such as whether or not to record the compare job into its database
- **Log options** - determine the level of detail you want recorded into the Job Queue's Log

Compare Wizard

The ARCsolo Compare Wizard allows you to design a compare operation by following easy step-by-step instructions.

To access the Compare Wizard, click the Compare Wizard button on the toolbar.

The Compare Wizard prompts you through each step necessary to create a compare job.   It asks you to:
- Select a source
- Select a destination
- Submit the job

After completing these simple steps, your job is submitted as requested.

Count

This option allows you to count the number of files and directories on a machine.

Results of the Count job can be seen in the Job Queue (by clicking the Log tab).

The Log tab in the Options menu allows you to select the level of detail you will see in the Job Queue's Log.   You can select to see just totals and any errors that occurred or you can create a report that lists each file in every directory that was counted.   This includes the file name, size, date, time, and file attributes.

Why would you use the Count option?
You could use this option to estimate how many tapes you will need for a backup.

[How to count files on a machine](#)

How to count files on a machine

To count the number of files and directories on a tape:

1. **Click the Count button** **from the Quick Access bar.**

2. **Specify what you want to count.**
   You can select one or more drives or directories.

3. **Specify any options for the job** ◆ **.**
   Options include how detailed you would like the Job Queue Log/Job View Database Log to be for this job.

4. **Specify any filters for the job** ◆ **.**

5. **Click the Run/Schedule button** ◆ **to run the job.**

Count Options

ARCsolo provides several types of advanced count options.   They are:

- **Operation options** - specify some general options for the count job such as whether or not to delete directories
- **Log options** - determine the level of detail you want recorded into the Job Queue's Log
- **Virus options** - scan files for viruses before they are counted

Delete files

This option allows you to delete files and directories from a machine.   (Using filters, you can include or exclude files to be deleted.)

Results of the Delete job can be seen in the Job Queue (by clicking the Log tab).

The Log tab in the Options menu allows you to select the level of detail you will see in the Job Queue's Log.   You can select to see just totals and any errors that occurred or you can create a report that lists each file and directory that was deleted.

Why would you use the Delete option?
You could use this option to delete files that have not been used for a specific period of time.

[How to delete files from a machine](#)

How to delete files from a machine

To delete files from a machine:

1. **Click the Delete button** **from the Quick Access bar.**

2. **Specify what you want to delete.**
    You can select a drive, directory, or specific files on a machine.

3. **Specify any options for the job ●.**
    Options include whether you would like to delete directories that have had all files deleted, and how detailed you would like the Job Queue Log/Job View Database Log to be for this job.

4. **Specify any filters for the job ●.**

5. **Click the Run/Schedule button ● to run the job.**

Delete File Options

ARCsolo provides several types of advanced delete options.   They are:

- **Operation options** - specify some general options for the delete job such as whether or not to delete directories
- **Log options** - determine the level of detail you want recorded into the Job Queue's Log

Operation Options

Following are some general options that can be applied to your job.

Remove Directories
Select this option if you want the directories themselves to be deleted if all the files in those directories are deleted.

Database Options
These options decide whether ARCsolo will record the delete job in its database.   One of these options is always selected for delete jobs.   By default, the *Record Job Information Only* option is selected.   If you do not want this job recorded in the database, select the *Disable Database Recording* option.

Filter basics

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About filtering

Filters allow you to include or exclude files and directories from your backup, copy, or restore jobs, as well as from the utilities, such as count and purge.

For backup and count jobs, filtering can be performed on a per machine basis.   This means you can include a directory from one machine and exclude the same directory from another machine.

Exclude over include

Exclusions always take precedence over inclusions.   For example, if you add a File Pattern filter to include only files that have an *.exe* extension, and you add a Directory filter to exclude your *\system* directory, all *.exe* files in the *\system* directory will be excluded.

Include only

Specifying to "Include" files will result in a backup or restore containing only those files which satisfy the filter specifications.   For example, suppose in the source area you selected to back up your entire local hard drive, and you then set up a Directory filter to include files in the *\system* directory.   The result would be that ARCsolo would only back up files from your *\system* directory.   No other files would be backed up.

Available filters

You have the option of including and excluding files based on the following criteria:

- Specific file names or patterns
- Specific directory names or patterns
- File attributes (hidden, system, etc.)
- Files created, modified, or last accessed before, on, or after a specific date or within a date range

Click to include or exclude files or directories.

Select the type of filter you want to add.

Enter the filter criteria here. This field will vary depending upon the type of filter you are adding.

Click to add the filter.

Filter

Include ▼ File Pattern ▼ [   ] Add

Condition	Variable	Values

Modify

Delete

Filters you have added appear here.

Include/exclude files that match the specified pattern(s)
Use ';' as delimiter if multiple patterns are specified.

A brief explanation of the highlighted filter appears here.
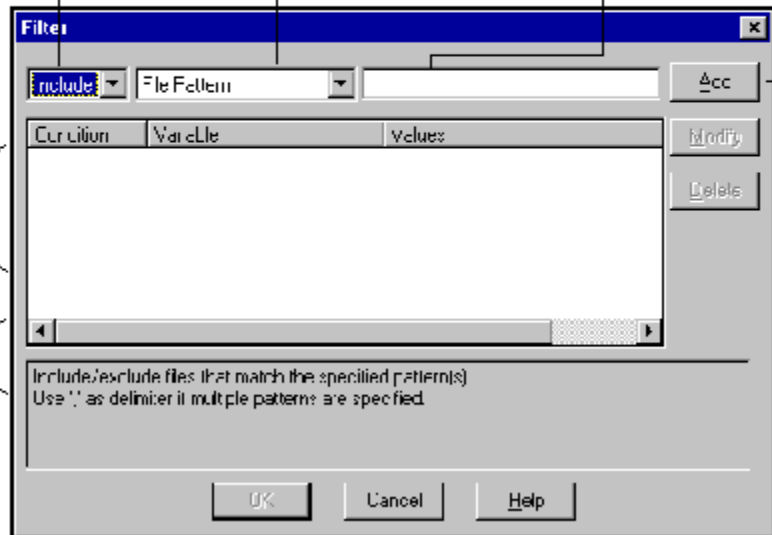
OK   Cancel   Help

File Pattern filter

Use a File Pattern filter to include or exclude certain files from a job.   You can specify a particular file name or you can use wildcards to specify a file pattern.

Directory filter

Use a Directory filter to include or exclude specific directories from a job. You can enter an entire directory name or provide a pattern that the directory name follows.

File Attributes filter

Use the File Attributes filter to include or exclude specific types of files from a job.

Types of file attributes
There are four types of file attributes you can choose from.   Select as many file types as you want.
- Hidden - Files not shown in a directory listing.   For example, IO.SYS is a hidden file.
- System - Files that are unique to the machine you are using.
- Read Only - Files that cannot be modified.
- Archive - Files whose archive bit is set.

ARCsolo uses EXACT match only
ARCsolo will only back up or restore the files that **EXACTLY** match the requirements you specify.   For example, if you want to run a backup job that includes hidden files and system files, you would have to add two File Attributes filters to the job: One with Include and System Files selected and another with Include and Hidden Files selected.   If you placed only one File Attributes filter on the job with Include, Hidden Files, and System Files all selected, ARCsolo would only back up files that have 'hidden' **and** 'system' attributes, not hidden files and system files.

File Modified/Created/Accessed filters

Use the File Modified/Created/Accessed filters to include or exclude files based on a specific date and time or a date range.

Filter types
There are three types of filters from which to choose:
- **Modified** - will include or exclude files last modified (changed) on this date.
- **Created** - will include or exclude files created on this date.
- **Accessed** - will include or exclude files last accessed (used but not changed) on this date.

The *Created and Accessed* filter types are only available for NTFS (NT File System) and HPFS (High Performance File System).

Filter criteria
There are four options from which to choose:
- **Before** - Files whose date matches, or whose date is earlier than, this date will be included or excluded.
- **After** - Files whose date matches, or whose date is later than, this date will be included or excluded.
- **Between** - You must specify two dates for this selection.   Files whose date falls between the two dates will be included or excluded from the job.
- **Within** - Selecting this option requires you to enter a number of days, months, or years to be used for the comparison (for example, *within* the past 12 months).   Enter a number between 1 and 250, inclusive.   ARCsolo will use the current date as the basis from which to count back.

Specifying dates
You can specify a date in two ways:
- Enter a specific date.
- Double-click in the date field to display a calendar to select a specific date.

How to apply filters

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Machine-level filters
Machine-level filters can be created for backup and count jobs.   These filters apply to one specific machine, not the entire job.   (A backup or count job can have machine-level and job-level filters for the same job.)   If you want to add a filter that applies to the whole job, refer to the 'Job-level filters' section below.

To apply a machine-level filter:

1.   Highlight the machine you want to filter.

2.   Click your right mouse button.

Security...
Option...
Filter...
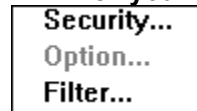
3.   Select *Filter*.
The Filters window appears.   In it, you will create your machine-level filters.   Refer to the 'Job-level filters' section below for information about the Filters window.

Job-level filters
Job-level filters can be created for backup, copy, and restore jobs, as well as for the utilities, such as count.   Job-level filters are applied to the whole job, not to a specific machine.

To apply a job-level filter:

1.   Click the Filter button • .
The Filters window appears.   In it, you will create all your job-level filters.

2.   Decide whether to include or exclude the files or directories.
If you select Include, only files or directories that match the criteria you specify will be backed up, copied, restored, counted, or deleted.   If you select Exclude, all files will be backed up, copied, restored, counted, or deleted EXCEPT for those that match the criteria you specify.

3.   Specify the filtering information.
Select the type of filter you want to add and enter the criteria (file pattern, directory, date(s), or file attributes) for that filter.

4.   Click the Add button.

Modifying and deleting filters

You can view the filters you've created by displaying the Filters window.   You can also change or delete a filter from within this window.

To modify a filter that has already been added to a job:

1. **Highlight the filter to modify.**
    The filter will move up into the entry section of the window, complete with the information that you originally entered.

2. **Make your changes to the filter.**

3. **Click the Modify button.**

4. **Click OK when done.**

To delete a filter:

1. **Highlight the filter to delete.**

2. **Click the Delete button.**
    The filter will be deleted from the list of applied filters for the job.

Scheduling jobs

When you have finished specifying your job requirements, you are ready to submit the job to the queue. This section describes how to schedule your job to run immediately or at a later date and time.

Note: Before you can specify scheduling information, you must have specified the source and, if required, the destination for your job.

To schedule your jobs:

1. **Click the Run/Schedule button** **.**
    This button appears on the toolbar in most ARCsolo Manager windows.   When you click it, the Run/Schedule dialog box appears.

2. **Select when you want the job to run.**
    If you want the job to run immediately, select the Run Now option.   If you want the job to run later and/or you want to specify a repeat interval for the job, select the Schedule option.

Note: Selecting *Submit on Hold* will submit the job to the queue with a *Hold* status.   The job will not take off until its status is changed in the Job Queue.

[Schedule option](#)

Schedule option

Select when you want the job to run.
If you want the job to run immediately, select the Run Now option.   If you want the job to run later and/or you want to specify a repeat interval for the job, select the Schedule option.

Specify the date and time you want the job to run
By default, the current date and time appear in the Start Date/Time fields.   Specify the date in the

MM/DD/YY format, and the time based on a 12-hour clock.   You can click the spin buttons to adjust the date.   To display a calendar to select a specific date, double-click anywhere in the Execution Date field.   The default entry method is 12-hour, but that can be changed in the International feature under the Control Panel.

Specify a repeat method (optional)
You can specify a repeat interval for a job once and then let ARCsolo handle submitting the job to the queue for execution.   This is especially useful when you are setting up a tape rotation scheme for your network.   Set up the backup job, specifying your source machines, destination group and tape, backup method, and filters, and then specify when the job should run.   The following types of Repeat methods are available:

Once
Every
Day(s) of Week
Week(s) of Month
Day of Month
Custom

Specify whether or not to submit the job on hold
Selecting *Submit on Hold* will submit the job to the queue with a *Hold* status.   The job will not take off until its status is changed in the Job Queue.

Once

By default, "Once" is selected.   This means the job is scheduled to run only once.

Every

This repeat method should be specified for a job that should run at regular intervals.

Day(s) of Week

Use this repeat method if you want the job to run on specific day(s) of the week.

Week(s) of Month

Use this repeat method if you want the job to run on a specific week and day of each month.

Day of Month

Use this repeat method for jobs that you want executed on the same date every month (say, the 15th of the month, or the last day of the month).

Custom

Use this method to create your own, customized repeat schedule for a job.

Creating scripts

Save your job settings like you'd save a file
You can save any type of job as a script.   The script will contain the source, destination, and options that you selected, as well as the schedule information.   It will also contain any filters you created to include and exclude files and directories.

Creating a script has the following advantages:
- You can re-use the same settings at a later time
- You can copy your settings to a different Windows 95 machine running ARCsolo for Windows 95
- You can quickly re-submit regularly executed jobs after a job has been accidentally deleted

To use a script, go to the Job Queue Manager and use the Add Job button.   When you specify the job script name all of the information that you set when you saved the job script will appear in the Manager window, including the files and directories and the scheduling information.

Follow these directions to create a script:

1. **Set up the job.**
    Select the source, destination (if required), and any options or filters.

2. **Click the Run/Schedule button** **.**

3. **Specify scheduling information for the job.**

4. **From the File menu, choose** *Save As***, or click the Save button in the Run/Schedule window.**
    The scripts dialog box appears.   This is where you will provide the name for the backup script.

5. **Give the script a name.**
    By default, ARCsolo scripts can be stored in the   ARCsolo home directory with a default extension ".asx".   You can, however, specify a different directory in which to save your script.

6. **Enter a description of the job (optional).**
    This can help you identify the correct script at a later date.

7. **Click OK.**

To use a script:

1. **Go to the Job Queue Manager.**

2. **Click the** *Add Job* **button.**

3. **Specify the script file name.**

Note: Scripts can also be saved by clicking the Save button in the Run/Schedule window.   In addition, scripts can be modified using the Open option in the File menu.

Filter Screen

The Filter screen allows you to include or exclude files and directories from your jobs.   This screen contains the following fields and buttons:

Add: Click this button to add a new filter to your job.

Modify: After making changes to a particular filter, click this button to save those changes.

Delete: Click this button to delete the selected filter.

Condition: Using the drop-down box in the upper-left corner of the screen, you can select to include or exclude files.

Variable: Using the second drop-down box, select the type of filter you want.

Values: Using the last two drop-down boxes, enter the criteria for the filters.   These fields will vary depending on the type of filter you are adding.

OK: Click this button when you are done.

Save Job Script Screen

The Save Job Script screen allows you to save your job settings in a script file.   This screen contains the following fields and buttons:

Script Name: Enter a name for the script.   By default, it will be saved with a .asx extension.

Directories: Specify the path for the script file.   By default, the script will be saved to your ARCsolo home directory.

Drives: Specify the drive you want to save the script to.

Network: Click this button to attach to a remote Windows 95 machine or NetWare file server.

Job Info: Enter a brief description of the job.

OK: Click this button when you are done.

Getting information from ARCsolo

ARCsolo has several features that can help you sort through all of the information available about your ARCsolo system and the jobs you have run.

Quick Status Manager

The Quick Status Manager offers two logs that provide a journal of activity within ARCsolo:

- Activity Log
- Tape Engine Log (you must configure the ARCsolo Server Admin in order to see this log)

Reports Manager

The Reports Manager offers several reports that contain information from ARCsolo's database.   These reports provide you with a convenient way of getting a hard copy printout of database information.   The following reports are available:

- Job Report
- Tape Media Report
- Tape Session Report
- Tape Session Detail Report
- Tape Device Report

Job Queue Log/ Reporter option

The Job Queue manager and Job View Database manager offer log information for all executed jobs. Before you submit a job, you can use Log tab in the Options menu to determine how detailed you want this information to be.

The remainder of this section explains how to use the Quick Status Manager and Reports Manager, provides a description of each log and report, and explains how to determine the level of detail you will see in the Job Queue's Log.

Report basics

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ARCsolo provides the following facilities for displaying logs and reports:

- **Activity Log:** Logs all ARCsolo activity.
- **Tape Log:** Logs all tape activity (for debugging purposes only)
- **Reports Manager:** Generates reports for from the ARCsolo database for viewing or printing. Generates reports on: Jobs, Tape Media, Tape Sessions, and Tape Devices.
- **Operation Logs:** Logs activity related to a specific job.

Activity Log
Tape Log
Reports Manager
Operation Logs

Activity Log

The Activity Log contains comprehensive information about the operations performed by ARCsolo.   It provides an audit trail of all ARCsolo activity, including every job that is run.

For each job, the log includes the following:

- Time the job started and ended
- Type of job
- Average throughput of the data
- Number of directories and files processed (backed up, copied, etc.)
- Job session number and Job ID
- Result of the job
- Any errors and warnings that occurred

You can scan this log every day to see if any errors have occurred.   You can also use it to find out a session number in case you need to restore a specific session.

To access the Activity Log:

1. **Click the Log button from the Quick Access bar.**
   The Activity Log is displayed.

Operation Logs

An Operation Log is generated for each job that is run by ARCsolo.   You can specify the level of detail in the log by choosing the Log options before you submit the job.

To configure the log options for a job:

1. **Click the Options button   in the open window.**
    The Options dialog box opens.

2. **Click the Log tab.**

3. **Select an option.**

- Log All Activity: Record all of the activity that occurs while the job is running.
- Log Summary Only (the default selection): Record summary information of the job (including source, destination, session number, and totals) and errors.
- Log Disabled: Do not record any information about this job.

You can view the Log report for a job from the Job Queue window or Database Manager (Job View).

To view the report in the Job Queue window, select (highlight) the job in the status window, and click the Log tab.

Tape Log

The Tape Log contains messages sent by the tape drives to ARCsolo.   This log is not generated for normal operation.   It is designed for debugging purposes only.   To generate a Tape Log, you must configure the Tape options for the ARCsolo Engine.

To view the Tape Log, click the Log button from the Quick Access bar.   If a Tape Log has been generated, a Log tab is displayed.   Click the Log tab.

Send to printer
Send to print file
View
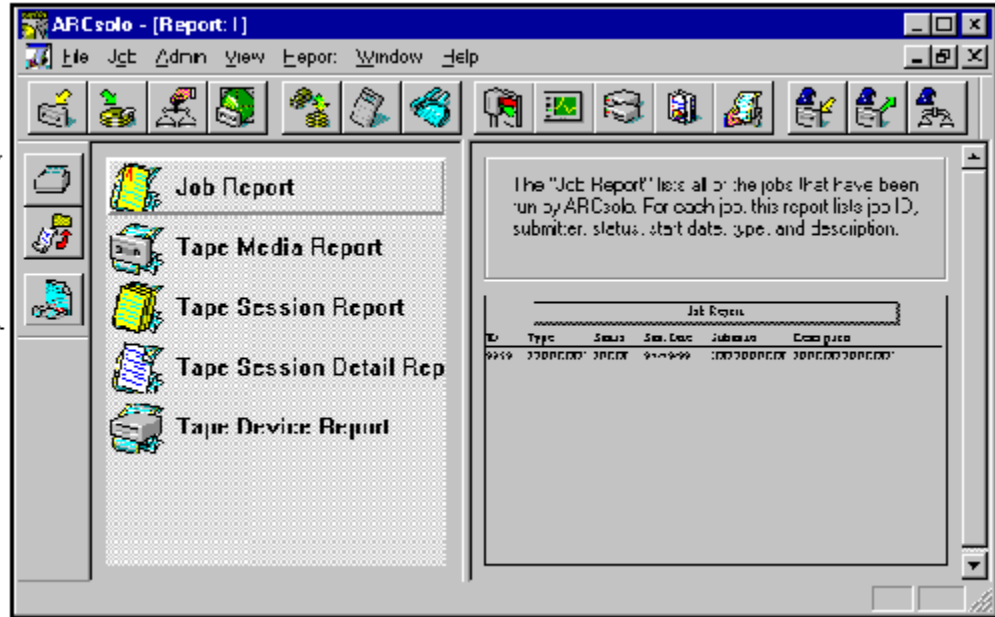
Using the Reports Manager

- •
- •

The Reports Manager offers several reports that contain information from ARCsolo's database.

To open the window:

1. **Click the Reports button** from the **Quick Access** bar.
    The ARCsolo Reports Manager window apppears.   This window displays a list of the reports that are available.

To print a report:

1. **Highlight the report you want to print.**
    You can also print a report that you are currently viewing.

2. **Click the Print to Printer button** .

3. **Select the print options you want.**

4. **Click OK.**

To print a report to a file:

1. **Highlight the report you want to print.**

2. **Click the Print to File** **button.**

3. **Enter a name for the report file.**

4. **Click OK.**

To view a report:

1. **Highlight the report you want to view.**

2. **Click the Preview** **button.**

3. **If applicable, select the tape, session, or device you want to view information about.**

4. **Click your cursor to enlarge the text on the report.**

Job Report
Tape Media Report
Tape Session Report
Tape Session Detail Report
Tape Device Report

Job Report

This report provides a brief listing of all jobs that have been run by ARCsolo.   It contains the information that is found in the Database Manager on the Job View window.   Each time ARCsolo runs a job, a record is added to ARCsolo's database.   This record contains basic information about the job.   When the job is completed, the record is updated to reflect the status and completion time of the job.

For each job, this report includes the following:

- Job ID number
- Job type
- Job status
- Start time
- Name of job submitter
- Job description

Why would you need to view this report?
You can view the report to see what jobs have been run the past few days.

Tape Media Report

This report provides information about every tape used with ARCsolo.   It contains the information that is found in the Database Manager on the Tape View window.   This report gives you a convenient way of getting a hard copy printout of your Tape View information.   When you go to view this report you will be asked to select a tape.

For each tape, this report includes the following:
- Tape name, ID, and sequence number
- Media type
- Usage time
- Creation, format, and expiration date
- Amount of data written to the tape
- Number of media errors
- Tape usage statistics

Why would you need to view this report?
You may need to view this report if you are experiencing problems with a tape.   This report can help you decide if it is time to "retire" the tape.

Tape Session Report

This report provides information about all of the backup sessions that are on tape.   (Each source you select to back up is saved on tape as an individual session.)   The report contains the session information that is found in the Database Manager on the Job View or Tape View window when you highlight a record and click the *Session* tab.   When you go to view this report you will be asked if you want the report to include all tapes or just one that you select.

For each tape session, this report includes the following:

- Session number
- Status
- Source selected
- Start time
- End time
- Session method
- Flags
- Total files/KB in the session

When you go to view this report you will be asked if you want the report to include all tapes or just one that you select.

Why would you need to view this report?
You can view this report to get a general idea of what is backed up on tape when you need to restore files.

Tape Session Detail Report

This report includes all of the information found in the Tape Session Report and also lists every file that was backed up in each session.   The report contains the session information that is found in the Database Manager on the Job View or Tape View windows when you highlight a record and click the *Files* tab.   When you go to view this report you will be asked to select a tape and a session from that tape.

Why would you need to view this report?
You can view this report if you need to know which files are backed up in each backup session.   This is useful when you need to restore files.

Tape Device Report

This report provides information about all of the tape devices you are using with ARCsolo.   It contains the information that is found in the Database Manager on the Device View window.   This report gives you a convenient way of getting a hard copy printout of your Device View information.   When you go to view this report you will be asked to select a tape device.

For each tape device, this report includes the following:
- Vendor
- Firmware revision
- SCSI ID
- Device type
- Last head cleaning date
- Head cleaning count
- Amount of usage
- Media errors

Why would you need to view this report?
You may need to view this report if you are experiencing problems with a tape device.   It can indicate if it is time to clean the heads, or if you have the wrong firmware installed.

Job Queue Log/Reporter option

The Job Queue manager and Job View Database manager offer log information for all executed jobs. Before you submit a job, you can determine how detailed you want this information to be.

The Log option allows you to determine the level of detail you will see in the Job Queue's Log.   You can select to see all of the activity that occurred while the job was running or just summary information and errors.   You also have the ability to disable reporting.

The Log option is available from the following Manager windows:
- Backup
- Copy
- Restore
- All utilities

To use the Log option:

1. **While in one of the Manager windows above, click the Options button** ● **.**

2. **Select the Log tab.**

3. **Select the option you want.**

4. **Click OK.**

Report Filter Screen

The Report Filter screen allows you to select which tape device you'd like information about.   This screen contains the following fields and buttons:

Report on all devices: Select this option to include all of your tape devices.
Report on selected devices: Select this option to pick a specific tape device.
(List):   Highlight the tape devices you want more information about.
OK: Click this button when you are done.

Report Filter Screen

The Report Filter screen allows you to select which tape you'd like detailed in the Tape Session Detail Report.   This screen contains the following fields and buttons:

Report on selected tape: This option is automatically selected.

(List):   Highlight the tape you want information about.   You will then be able to select a backup session from this tape.

OK: Click this button when you are done.

Report Filter Screen

The Report Filter screen allows you to select which tape you'd like detailed in the Tape Media Report. This screen contains the following fields and buttons:

Report on selected tape: This option is automatically selected.
(List): Highlight the tape you want information about.
OK: Click this button when you are done.

Maintaining your system

Always maintain current backups
The most important thing you can do to ensure   against data loss is to maintain current backups of all your Windows 95 machines.   If you do not have these backups, then ARCsolo is limited in its ability to recover against data loss or disaster.   Be sure to create a tape rotation scheme using different backup methods and scheduling as a means of maintaining current backups.   If something happens to your machine between full backups, then you can recover using the last full backup made and the most recent differential or incremental backup (which contains all the modifications to the data since the last full backup).

For a full backup, you should configure the backup job with the "Full (Clear Archive Bit)" method selected. Refer to Backing Up to Tape for details on backing up and creating a tape rotation scheme.

Update your Recovery disk after each full backup
If you use a combination of full backups and differential or incremental backups, it is sufficient to update the recovery disk after each full backup.   You can recover your machine by using the Recovery disk to restore to the last full backup, and then use ARCsolo to restore the most recent differential or incremental backup.

The following books will be useful in the following sections should you need to use ARCsolo to recover a Windows 95 machine:

- **Operating Systems Manuals -** If you need to install the Windows 95 operating system
- **ARCsolo for Windows 95 User Guide -** If you need to re-install ARCsolo on your machine

In addition, you should have the appropriate installation disks/tapes with you.

Recovering your machine without a Recovery disk

To recover your machine in the event that your Recovery disk is lost or damaged:

1. **Re-install the Windows 95 operating system.**
   Refer to your Windows 95 documentation to re-install the operating system.

2. **Re-install ARCsolo.**
   Use the ARCsolo for Windows 95 User Guide to re-install ARCsolo.

3. **Restore the most current ARCsolo database to the ARCsolo machine.**
   The ARCsolo database contains information about what has been previously backed up.   You will need to recover the latest version of your ARCsolo database so that you can restore the rest of the information on the host.

4. **Choose the "Restore by Tree" source view in the Restore Manager to select what data you want to recover.**
   Now that you have restored the database, use the "Restore by Tree" source view to display the data that was backed up from your machine.   Refer to Restoring Your Data for more information and specifics about using this option.

5. **Select the machine you want to recover.**
   Click the Destination tab in the Restore Manager and select the machine you want to recover the data to.

6. **Click the Options button to specify any destination options for the job ●.**

Note: If you are trying to restore the machine to the state it was in before it crashed, then you should:

●   Select a destination option that overwrites any conflicting files.   If you are unsure, you can choose to rename any files that exist on the machine.

●   Select the "Restore Registry" option.

7. **Click the Run/Schedule button ● to run the job.**
   ARCsolo will then tell you the tapes that you will need to recover the machine.

Recovering from a disaster

Use the Recovery disk to recover your computer in the event of a system failure.

To recover from a system failure:

1. **Shut down your computer.**

2. **Insert the Recovery disk.**

3   **Start the computer.**
    The computer will reboot from the Recovery diskette.

4. **Format the drive, if necessary.**
    Refer to your Microsoft Windows 95 documentation for information on formatting your hard drive.

5   **Type Recover.**
    You will be prompted for the recovery of each drive on your machine.   Follow instructions to recover all files.

Preparing a Recovery Disk

ARCsolo helps you to create a Recovery disk to be used in the event of a system failure.   You should create your Recovery disk immediately after installing ARCsolo, and then update the disk after each full backup.
The Recovery disk allows you to completely restore your machine from the latest full back-up in the event of a system failure.   (You do not have to re-install the operating system.)

To prepare a Recovery disk for your computer:.

1. **Create the Disaster Recovery disk.**
   Select the "Create Recovery Disk" option from the Tools menu.

   ARCsolo prompts you to enter or verify information about the SCSI adapter, including the path and filename for its 16 bit DOS driver, and SCSI parameters.

   ARCsolo then prompts you to insert a diskette.   ARCsolo reformats the disk (as a boot disk) and copies all recovery information to it.

2. **Update the Recovery disk after each full backup.**
   After each full backup, insert the Recovery disk in your local drive and choose *Update Recovery Disk* from the Tools menu.

   The Recovery disk stores the following information:
   - SCSI Adapter card information
   - Disaster recovery files: recover.exe and support files
   - Recover.dat file: contains the tape and session backup information for each drive on your machine.

Error Messages

This section contains a list of ARCsolo's error messages and what they mean.   In some cases, possible solutions to the errors will be offered as well.

ARCsolo's error messages are broken down into the following categories:

Job Engine error messages

Job Runner error messages

Tasks Engines error messages

Database API error messages

Database Engine error messages

Tape Engine error messages

Message Engine error messages

Miscellaneous error messages

Return Codes:

Database Error Codes (db_error_code)

Queue Error Codes (queue_error_code)

Database Error Codes (db_error_code)

2   Record not found.

3   Duplicate key.   You attempted to create or modify a record that would have resulted in a duplicate of a unique key value.

-900   Disk space falls below minimum requirement.

-2008 NCP internal error.   An internal error occurred within the NCP.

-2009 The session disconnected.   This generally indicates some kind of network error. Be sure that the network is still alive.   Then try your application again.

-2013 This indicates that you attempted to log in to the server too many times and ran out of sessions. Increase the maximum session limit using rdsadm.exe.

Queue Error Codes (queue_error_code)

11	Invalid queue.
12	Open failed.
13	Read failed.
14	Write failed.
15	Memory allocation failed.
18	Invalid queue job.
19	Create failed.
20	Invalid owner.
200	Invalid queue job type.
201	Invalid queue job signature.
202	Maximum jobs reached.

If your error suggests a media problem

1. Use a cleaning cartridge/tape to clean your tape drive(s).
2. Try a new tape.
   Maybe the tape is bad and you just need to use a new one.
   Always remember to use only the types of tapes recommended by the drive manufacturer.   Never use video tape.   These tapes have been shown to be unreliable for data.

If your error suggests a hardware problem

1. Power the drive off, then on.
    Turning the drive off, then on again may correct the problem.
2. Check the terminators on the SCSI bus.
    Are both ends of the SCSI bus terminated?
3. Check the cables.
    Do you have any loose connections?
4. Make sure the controller board is properly seated.
    You may have to re-seat the controller board.
5. Try a different tape.
    The tape may be the problem.   A new one should let you know.
6. Call the vendor of your tape drive.
7. As a last resort, power down the entire machine, and power back up.
    If the controller card was locked, only completely shutting off the computer will unlock it.   Do not warm boot.

Job Engine error messages

Error 1001
Error 1002
Error 1003
Error 1004
Error 1005
Error 1006
Error 1007
Error 1008
Error 1009
Error 1010
Error 1201
Error 1202
Error 1203
Error 1204
Error 1205
Error 1206
Error 1207
Error 1208
Error 1209
Error 1210
Error 1301
Error 1302
Error 1303
Error 1304
Error 1305
Error 1306
Error 1307
Error 1308

Job Runner error messages

[Error 2001](#) [Error 2002](#) [Error 2003](#) [Error 2004](#)

[Error 2005](#) [Error 2006](#) [Error 2007](#) [Error 2008](#)

[Error 2009](#) [Error 2101](#) [Error 2102](#) [Error 2103](#)

[Error 2104](#) [Error 2105](#) [Error 2106](#) [Error 2107](#)

[Error 2111](#) [Error 2112](#) [Error 2113](#) [Error 2114](#)

[Error 2115](#) [Error 2116](#) [Error 2117](#) [Error 2121](#)

[Error 2122](#) [Error 2131](#) [Error 2132](#) [Error 2133](#)

[Error 2201](#) [Error 2202](#) [Error 2203](#)

Tasks Engines error messages

Error 3001 | Error 3002 | Error 3003 | Error 3004

Error 3005 | Error 3011 | Error 3012 | Error 3013

Error 3014 | Error 3021 | Error 3022 | Error 3023

Error 3024 | Error 3025 | Error 3026 | Error 3027

Error 3028 | Error 3051 | Error 3061 | Error 3062

Error 3063 | Error 3064 | Error 3065 | Error 3066

Error 3071 | Error 3072 | Error 3073 | Error 3101

Error 3102 | Error 3103 | Error 3104 | Error 3105

Error 3201 | Error 3202 | Error 3203 | Error 3204

Error 3205 | Error 3301 | Error 3302 | Error 3303

Error 3304 | Error 3311 | Error 3312 | Error 3313

Error 3314 | Error 3315 | Error 3316 | Error 3321

Error 3401 | Error 3402 | Error 3403 | Error 3404

Error 3405 | Error 3406 | Error 3407 | Error 3408

Error 3409 | Error 3411 | Error 3412 | Error 3413

Error 3414 | Error 3415 | Error 3416 | Error 3421

Error 3422 | Error 3423 | Error 3424 | Error 3425

Error 3426 | Error 3431 | Error 3432 | Error 3441

Error 3442 | Error 3451 | Error 3452 | Error 3453

Error 3501 | Error 3502 | Error 3503 | Error 3504

Error 3511 | Error 3512 | Error 3521 | Error 3522

Error 3701 | Error 3702 | Error 3703 | Error 3704

Error 3705 | Error 3711 | Error 3712 | Error 3713

Error 3714 | Error 3715 | Error 3716 | Error 3717

Error 3801 | Error 3802 | Error 3803 | Error 3811

Error 3812 | Error 3813 | Error 3814 | Error 3815

Error | Error 3821 | Error | Error

3816 Error

Error 3825

3822 Error

3823 Error

3824 Error

Error 3831

3826 Error

3827 Error

3828 Error

Error 3842

3832 Error

3833 Error

3841 Error

Error 3854

3851 Error

3852 Error

3853 Error

Error 3861

3855 Error

3856 Error

3860 Error

Error 3871

3862 Error

3863 Error

3864 Error

Error 3901

3881 Error

3882 Error

3883 Error

Error 3921

3902 Error

3903 Error

3904 Error

Error 3934

3931 Error

3932 Error

3933 Error

Error 3942

3935 Error

3936 Error

3941 Error

Error 3962

3951 Error

3952 Error

3961 Error

Error 3971

3963 Error

3964 Error

3965 Error

3972 Error

3973 Error

Database API error messages

[Error 4001](#) [Error 4002](#) [Error 4003](#) [Error 4004](#)
[Error 4005](#) [Error 4006](#) [Error 4007](#) [Error 4008](#)
[Error 4009](#) [Error 4010](#) [Error 4101](#) [Error 4102](#)
[Error 4103](#) [Error 4104](#) [Error 4105](#) [Error 4106](#)
[Error 4107](#) [Error 4108](#) [Error 4109](#) [Error 4110](#)
[Error 4111](#) [Error 4112](#) [Error 4113](#) [Error 4114](#)
[Error 4115](#) [Error 4116](#) [Error 4117](#)

Database Engine error messages

[Error 5001](#)   [Error 5002](#)   [Error 5003](#)   [Error 5004](#)

[Error 5005](#)   [Error 5006](#)   [Error 5007](#)   [Error 5008](#)

[Error 5009](#)   [Error 5201](#)   [Error 5202](#)   [Error 5203](#)

[Error 5204](#)   [Error 5205](#)   [Error 5206](#)   [Error 5207](#)

[Error 5208](#)   [Error 5209](#)   [Error 5210](#)

Tape Engine error messages

[Error 6000](#) [Error 6001](#) [Error 6002](#) [Error 6003](#)
[Error 6004](#) [Error 6005](#) [Error 6006](#) [Error 6007](#)
[Error 6008](#) [Error 6009](#) [Error 6010](#) [Error 6011](#)
[Error 6012](#) [Error 6013](#) [Error 6014](#) [Error 6015](#)
[Error 6016](#) [Error 6017](#) [Error 6018](#) [Error 6019](#)
[Error 6020](#) [Error 6021](#) [Error 6022](#) [Error 6023](#)
[Error 6024](#) [Error 6025](#) [Error 6026](#) [Error 6027](#)
[Error 6028](#) [Error 6029](#) [Error 6030](#) [Error 6031](#)
[Error 6032](#) [Error 6033](#) [Error 6034](#) [Error 6035](#)
[Error 6036](#) [Error 6037](#) [Error 6038](#) [Error 6039](#)
[Error 6040](#) [Error 6041](#) [Error 6042](#) [Error 6043](#)
[Error 6044](#) [Error 6045](#) [Error 6046](#) [Error 6047](#)
[Error 6048](#) [Error 6049](#) [Error 6050](#) [Error 6051](#)
[Error 6052](#) [Error 6053](#) [Error 6054](#) [Error 6055](#)
[Error 6056](#) [Error 6057](#) [Error 6058](#) [Error 6059](#)
[Error 6060](#) [Error 6061](#) [Error 6062](#) [Error 6063](#)
[Error 6064](#) [Error 6065](#) [Error 6066](#) [Error 6067](#)
[Error 6068](#) [Error 6069](#) [Error 6070](#) [Error 6071](#)
[Error 6072](#) [Error 6073](#) [Error 6074](#) [Error 6075](#)
[Error 6076](#) [Error 6077](#) [Error 6078](#) [Error 6079](#)
[Error 6080](#) [Error 6081](#) [Error 6082](#) [Error 6083](#)
[Error 6084](#) [Error 6085](#) [Error 6086](#) [Error 6087](#)
[Error 6088](#) [Error 6089](#) [Error 6090](#) [Error 6091](#)
[Error 6092](#) [Error 6093](#) [Error 6094](#) [Error 6095](#)
[Error 6096](#) [Error 6097](#) [Error 6098](#) [Error 6099](#)
[Error 6100](#) [Error 6101](#) [Error 6102](#) [Error 6103](#)
[Error](#) [Error 6105](#) [Error](#) [Error](#)

6104 Error 6108 Error 6302 Error 6306 Error 6333 Error 6501 Error 6505

Error 6109 Error 6303 Error 6330 Error 6401 Error 6502 Error 6506

6106 Error 6300 Error 6304 Error 6331 Error 6402 Error 6503 Error 6999

6107 Error 6301 Error 6305 Error 6332 Error 6500 Error 6504

Message Engine error messages

[Error 7001](#) [Error 7002](#) [Error 7003](#) [Error 7004](#)
[Error 7005](#) [Error 7006](#) [Error 7007](#) [Error 7008](#)
[Error 7009](#) [Error 7201](#) [Error 7202](#) [Error 7203](#)
[Error 7204](#) [Error 7205](#) [Error 7206](#) [Error 7207](#)
[Error 7208](#) [Error 7209](#) [Error 7210](#) [Error 7211](#)
[Error 7212](#) [Error 7213](#)

Miscellaneous error messages

[Error 9001](#) [Error 9002](#) [Error 9003](#) [Error 9004](#)

Error 1001

1001 Unable to create the ARCsolo Job Queue. (HOMEDIR=directory, EC=queue_error_code)

Module:
Job Engine

Explanation:
The Job Engine was unable to create the Job Queue directory in the ARCsolo home directory.

Cause/Solution:
The ARCsolo home directory may be invalid. Check whether the home directory is a proper DOS format (8.3) directory. If applicable, check whether the drive letter in the home directory exists.

Error 1002

1002 Unable to register Job Engine service. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module could not register with the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 1003

1003 Unable to set service status for Job Engine. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module could not notify the Service Control Manager to reflect its current status.

Cause/Solution:
Check the ms_error_code.

Error 1004

1004 Unable to start service control dispatcher for Job Engine. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module failed to initialize with the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 1005

1005 Unable to open Service Control Manager. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to open a handle to the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 1006

1006 Unable to open Service. (SERVICE=service, EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to open a handle to the specified service.

Cause/Solution:
Check the ms_error_code.

Error 1007

1007 Unable to start Service. (SERVICE=service, EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to start the specified service.

Cause/Solution:
Check the ms_error_code.

Error 1008

1008 Unable to query service status. (SERVICE=service, EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to obtain status information from the specified service.   Examples of status information obtained from a service are:

SERVICE is...
    START PENDING
    STARTED
    STOP PENDING
    STOPPED
    PAUSE PENDING
    PAUSED
    RESUME/CONTINUE PENDING

Cause/Solution:
Check the ms_error_code.

Error 1009

1009 Unable to send control to Service. (SERVICE=service, EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to send control commands to the specified service.   Examples of control commands sent to a service are:
START, STOP, PAUSE, CONTINUE.

Cause/Solution:
Check the ms_error_code.

Error 1010

1010 Unable to set service security. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to set security information for
the specified service.

Cause/Solution:
Check the ms_error_code.

Error 1201

1201 Unable to create a Process object. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to spawn ASRUNJOB.
ASRUNJOB is used to run BACKUP, RESTORE, COPY, etc. operations.

Cause/Solution:
Check the ms_error_code.

Error 1202

1202 Unable to create a Thread object. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to create a Thread object.   Threads are created by this module to regularly scan the ARCsolo Job Queue for jobs ready to be executed and for Job Queue cleanup and maintenance.

Cause/Solution:
Check the ms_error_code.

Error 1203

1203 Unable to create an Event object. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to create an Event object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 1204

1204 Unable to initialize Security Descriptor. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to initialize a Security Descriptor.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 1205

1205 Unable to set Security Descriptor. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to change a Security Descriptor.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 1206

1206 Unable to create a File Mapping object. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to create a File Mapping object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 1207

1207 Unable to map view file. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to create a map view to a File Mapping object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 1208

1208 Unable to load Job Handler DLL. (DLL=file, EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to find, load, or register a task DLL file.

Cause/Solution:
Check the ms_error_code.

Error 1209

1209 Unable to free Job Handler DLL. (DLL=file, EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to free a previously loaded task DLL.

Cause/Solution:
Check the ms_error_code.

Error 1210

1210 Unable to get Job Handler entry point. (EC=ms_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to obtain or execute a Job Handler entry point. Each Task DLL that is registered with the Job Engine will set a task function entry point that is called when the ASRUNJOB process runs.

Cause/Solution:
Check the ms_error_code.

Error 1301

1301 Unable to get Queue information. (QUEUEID=queue_id, EC=queue_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to obtain information about the Job Queue.

Cause/Solution:
Check the queue_error_code.

Error 1302

1302 Unable to complete Queue maintenance. (EC=queue_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to start or complete maintenance on the Job Queue. Job Queue maintenance is run periodically to ensure that DONE jobs are cleaned up and any corrupt or invalid jobs in the Job Queue are fixed.

Cause/Solution:
Check the queue_error_code.

Error 1303

1303 Unable to get Job information. (QUEUEID=queue_id, JOBID=job_id, EC=queue_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to obtain information about a job in the Job Queue.

Cause/Solution:
Check the queue_error_code.

Error 1304

1304 Unable to get Job Handler information. (EC=queue_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to obtain Job Handler information.

Cause/Solution:
Check the queue_error_code.

Error 1305

1305 Unable to modify Job information. (QUEUEID=queue_id, JOBID=job_id, EC=queue_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to modify information for a job in the Job Queue.

Cause/Solution:
Check the queue_error_code.

Error 1306

1306 Unable to connect to the Tape Engine. (EC=tape_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to connect to the Tape Engine.

Cause/Solution:
Check the tape_error_code.

Error 1307

1307 Unable to get Device Group status. (DEVGROUP=group, EC=tape_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to get Device Group status from the Tape Engine.

Cause/Solution:
Check the tape_error_code.

Error 1308

1308 Unable to reserve Device Group. (DEVGROUP=group, EC=tape_error_code)

Module:
Job Engine

Explanation:
The JOBENG.EXE module was unable to reserve a Device Group from the Tape Engine.

Cause/Solution:
Check the tape_error_code.

Error 2001

2001 Invalid parameters. (PARAM=parameters)

Module:
Job Runner

Explanation:
The parameters passed to ASRUNJOB are invalid.

Cause/Solution:
ASRUNJOB can be passed:
    a) a script name
    or
    b) a queue ID and job ID
Anything else is invalid.

Error 2002

2002 Failed to load library. (FILE=file, EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot find the .DLL associated with this job.

Cause/Solution:
Check that the .DLL file is in the ARCsolo directory.

Error 2003

2003 Unable to get proc address. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot access the .DLL's functions.

Cause/Solution:
Check the error code.   The .DLL file may be damaged or belong to a different application.

Error 2004

2004 Unable to init application. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot start properly.

Cause/Solution:
Check the error code.   There may not be enough memory for ASRUNJOB to start.   Close any other applications and retry.

Error 2005

2005 Unable to init instance. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot start properly.

Cause/Solution:
Check the error code.   There may not be enough memory for ASRUNJOB to start.   Close any other applications and retry.

Error 2006

2006 Unable to find job file. (FILE=file, EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot find the job file.

Cause/Solution:
Check that the file is in the specified directory.

Error 2007

2007 Unable to read job file. (FILE=file, EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot read the job file.

Cause/Solution:
Check that the file is not damaged or is zero length.

Error 2008

2008 Unable to find job type. (TYPE=type)

Module:
Job Runner

Explanation:
ASRUNJOB cannot find the type associated with this job.

Cause/Solution:
Make sure the Job Engine is running.

Error 2009

2009 This trial copy of ARCsolo for Windows 95 has expired.

Module:
Job Runner

Explanation:
The trial version can only be used for a certain number of days after installation.

Cause/Solution:
Call Cheyenne Sales.

Error 2101

2101 Unable to allocate memory for thread info. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.   Close any other applications and retry.

Error 2102

2102 Unable to create thread. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot create a thread for the job.

Cause/Solution:
Check the error code.   There may not be enough memory to create the thread. Close any other applications and retry.

Error 2103

2103 Unable to get queue job. (EC=queue_error_code)

Cause/Solution:
ASRUNJOB is unable to find the job in the queue.

Module:
Job Runner

Explanation:
Check that the job has not been deleted from the queue.

Error 2104

2104 Unable to allocate memory for job. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory. Close any other applications and retry.

Error 2105

2105 Unable to load job. (SIZE=size, EC=queue_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB is unable to load the job from the queue.

Cause/Solution:
Check that the job has not been deleted from the queue.

Error 2106

2106 Unable to load script. (SIZE=size, EC=queue_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB is unable to load the script.

Cause/Solution:
Check that the script has not been deleted.

Error 2107

2107 Unable to get file size. (FILE=file, EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot find the size of the job/script file.

Cause/Solution:
Check the error code.   Check that the file is in the specified directory.

Error 2111

2111 No job specified.

Module:
Job Runner

Explanation:
Internal ASRUNJOB error.

Error 2112

2112 Unable to allocate memory for job control block. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.   Close any other applications and retry.

Error 2113

2113 Unable to allocate memory for filter control block. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.   Close any other applications and retry.

Error 2114

2114 Unable to allocate memory for report control block. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.   Close any other applications and retry.

Error 2115

2115 Unable to allocate memory for tape control block. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory. Close any other applications and retry.

Error 2116

2116 Unable to allocate memory for volume control block. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory. Close any other applications and retry.

Error 2117

2117 Unable to allocate memory for task control block. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory. Close any other applications and retry.

Error 2121

2121 Unable to create monitor. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot create the job monitor memory-mapped file.

Cause/Solution:
Check the error code.   There may not be enough memory to create the memory-mapped file. Close any other applications and retry.

Error 2122

2122 Unable to view monitor. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot create a view to the memory-mapped file.

Cause/Solution:
Check the error code.   There may not be enough memory to create the view of the memory-mapped file.
Close any other applications and retry.

Error 2131

2131 Unable to allocate memory for security descriptor. (SIZE=size)

Module:
Job Runner

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory. Close any other applications and retry.

Error 2132

2132 Unable to initialize security descriptor. (EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot initialize the security descriptor.

Cause/Solution:
Check the error code.   Check the account used by the Job Engine.   Setup creates a CheySystem account for use by the Job Engine. This can be checked by using the **Control Panel'**s *Service* and checking the *Startup* settings for the ARCsolo Job Engine.

Error 2133

2133 Unable to set access control list. (TYPE=access_type, EC=ms_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB cannot set the access control list.

Cause/Solution:
Check the error code.   Check the account used by the Job Engine. Setup creates a CheySystem account for use by the Job Engine. This can be checked by using the **Control Panel**'s *Service* and checking the *Startup* settings for the ARCsolo Job Engine.

Error 2201

2201 Unable to get job. (EC=queue_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB is unable to find the job in the queue.

Cause/Solution:
Check that the job has not been deleted from the queue.   Check the queue using the Job Queue manager.

Error 2202

2202 Unable to delete job. (EC=queue_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB is unable to remove the job from the queue.

Cause/Solution:
Check that the job has not already been deleted from the queue. Check the queue using the Job Queue manager.

Error 2203

2203 Unable to modify job. (EC=queue_error_code)

Module:
Job Runner

Explanation:
ASRUNJOB is unable to update the job in the queue.

Cause/Solution:
Check that the job has not been deleted from the queue. Check the queue using the Job Queue manager.

Error 3001

3001 Invalid job type.

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3002

3002 Invalid source disk. (DISK=disk)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3003

3003 Invalid source tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3004

3004 Invalid destination disk. (DISK=disk)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3005

3005 Invalid destination tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3011

3011 Source is not a disk. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3012

3012 Source is not a tape. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3013

3013 Destination is not a disk. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3014

3014 Destination is not a tape. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3021

3021 No valid source.

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3022

3022 No valid destination.

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3023

3023 No disk selected. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3024

3024 No tape selected. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3025

3025 Too many sources.

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3026

3026 Too many destinations.

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3027

3027 Too many disks. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3028

3028 Too many tapes. (NODE=node_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3051

3051 No database sessions found.

Module:
Tasks Engines

Explanation:
Recover database cannot find a database session on the tape specified.

Cause/Solution:
Try another tape.

Error 3061

3061 Unable to allocate memory for anti-virus control block.   (SIZE=size)

Module:
Tasks Engines

Explanation:
ASRUNJOB cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.

Error 3062

3062 Unable to find anti-virus DLL.   (EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASRUNJOB cannot find the AVH32DLL.DLL.

Cause/Solution:
ASRUNJOB cannot find the AVH32DLL.DLL.

Error 3063

3063 Unable to find anti-virus procedures.

Module:
Tasks Engines

Explanation:
ASRUNJOB cannot access the AVH32DLL.DLL's functions.

Cause/Solution:
The AVH32DLL.DLL file may be damaged or be from an earlier version of InocuLAN or ARCsolo.

Error 3064

3064 Unable to initialize anti-virus.   (EC=inoculan_error_code)

Module:
Tasks Engines

Explanation:
ASTASK was not able to initialize the anti-virus data.

Cause/Solution:
The AVH32DLL.DLL and/or VIRSIG.DAT files may be damaged or be from an earlier version of InocuLAN or ARCsolo.

Error 3065

3065 Unable to set anti-virus flags.   (EC=inoculan_error_code)

Module:
Tasks Engines

Explanation:
ASTASK was not able to set the anti-virus flags.

Cause/Solution:
The AVH32DLL.DLL and/or VIRSIG.DAT files may be damaged or be from an earlier version of InocuLAN or ARCsolo.

Error 3066

3066 Unable to load anti-virus data.   (EC=inoculan_error_code)

Module:
Tasks Engines

Explanation:
ASTASK was not able to load the anti-virus data.

Cause/Solution:
The AVH32DLL.DLL and/or VIRSIG.DAT files may be damaged or be from an earlier version of InocuLAN or ARCsolo.

Error 3071

3071 Unable to find advanced API DLL.   (EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASRUNJOB cannot find the ADVAPI32.DLL.

Cause/Solution:
Check that the ADVAPI32.DLL file is in the Windows directory.

Error 3072

3072 Unable to find advanced API procedures.

Module:
Tasks Engines

Explanation:
ASRUNJOB cannot access the ADVAPI32.DLL's functions.

Cause/Solution:
The ADVAPI32.DLL file may be damaged or be from an earlier version of Windows 95.

Error 3073

3073 Unable to logon as user.   (USER=user, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot logon as the specified user.

Cause/Solution:
Check the error code.   Check the user name and password specified in the Server Admin.

Error 3101

3101 Disk is full. (DISK=disk)

Module:
Tasks Engines

Explanation:
The specified disk is full.

Cause/Solution:
Delete any unnecessary files from the specified disk.

Error 3102

3102 Volume is full. (VOLUME=volume)

Module:
Tasks Engines

Explanation:
The specified volume is full.

Cause/Solution:
Delete any unnecessary files from the specified volume.

Error 3103

3103 Unable to access disk. (DISK=disk, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot access the specified disk.

Cause/Solution:
Check the error code.   The disk may have been dismounted or removed.

Error 3104

3104 Path is too long. (PATH=path)

Module:
Tasks Engines

Explanation:
The specified path exceeds the maximum allowed by Windows 95.

Cause/Solution:
ARCsolo allows for a 260 character path.   This includes the drive letter or network server and share names.

Error 3105

3105 Retrying file. (FILE=file)

Module:
Tasks Engines

Explanation:
ASTASK is retrying a skipped file at the end of the session.

Cause/Solution:
This is simply a note.

Error 3201

3201 Unable to connect to network drive. (DRIVE=network_drive, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot connect to the specified network share.

Cause/Solution:
Check the error code.   Check the user name and password specified in the job.   Does the user have the necessary access rights?

Error 3202

3202 Unable to list server drives. (SERVER=server, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot access the specified network server.

Cause/Solution:
Check the error code.   Check the user name and password specified in the job.   Does the user have the necessary access rights?

Error 3203

3203 Unable to list domain servers. (DOMAIN=domain, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot access the specified network domain.

Cause/Solution:
Check the error code.   Check that the domain server is active.   If your server is not a member of the domain, check that your domain has shared access to the other domain.

Error 3204

3204 No shares found on server.   (SERVER=server)

Module:
Tasks Engines

Explanation:
ASTASK cannot find any shares on the server.

Cause/Solution:
Check the user name and password specified in the job.   Check that the user has access rights to the server.

Error 3205

3205 No servers found in domain.   (DOMAIN=domain)

Module:
Tasks Engines

Explanation:
ASTASK cannot find any servers in the domain.

Cause/Solution:
Check the user name and password specified in the job.   Check that the user has access rights to the domain.

Error 3301

3301 Unable to find directory. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified directory.

Cause/Solution:
Check the error code.   Check that the directory still exists.   Check the user account being used has access rights to this directory.

Error 3302

3302 Unable to create directory. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot create the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3303

3303 Unable to remove directory. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot remove the specified directory.

Cause/Solution:
Check the error code.   Check that the directory is empty.   Check your access rights.

Error 3304

3304 Unable to open directory. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot open the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3311

3311 Unable to reset directory access date. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot reset the access date for the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3312

3312 Unable to set directory information. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the information for the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3313

3313 Unable to set directory owner. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the owner for the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3314

3314 Unable to set directory group. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the group for the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3315

3315 Unable to set directory access control list. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the access control list for the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3316

3316 Unable to set directory system access control list. (DIR=directory, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the system access control list for the specified directory.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3321

3321 Directories overlap. (SOURCE=directory, DEST=directory)

Module:
Tasks Engines

Explanation:
The two directories overlap.

Cause/Solution:
ASTASK cannot copy a source that overlaps the destination.

Error 3401

3401 Unable to find file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified file.

Cause/Solution:
Check the error code.   Check that the file still exists.

Error 3402

3402 Unable to create file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot create the specified file.

Cause/Solution:
Check the error code. Check if the file was opened by another user.   Check your access rights.

Error 3403

3403 Unable to delete file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot delete the specified file.

Cause/Solution:
Check the error code.   Check if the file was opened by another user.   Check your access rights.

Error 3404

3404 Unable to open file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot open the specified file.

Cause/Solution:
Check the error code. Check if the file was opened by another user.   Check your access rights.

Error 3405

3405 Unable to close file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot close the specified file.

Cause/Solution:
Check the error code.

Error 3406

3406 Unable to read file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot read from the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3407

3407 Unable to write file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot write to the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3408

3408 Unable to create unique file. (FILE=file)

Module:
Tasks Engines

Explanation:
ASTASK cannot create a unique file.

Cause/Solution:
ASTASK needs to create a unique temporary file.   Check if there are old temporary files in the specified path and remove them.

Error 3409

3409 Unable to replace the active file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot replace the active file the next time the machine is started.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3411

3411 Unable to reset file access date. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot reset the access date for the specified file.

Cause/Solution:
Check the error code. Check if the file was opened by another user.   Check your access rights.

Error 3412

3412 Unable to set file information. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the information for the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3413

3413 Unable to set file owner. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the owner for the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3414

3414 Unable to set file group. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the group for the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3415

3415 Unable to set file access control list. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the access control list for the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3416

3416 Unable to set file system access control list. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot set the system access control list for the specified file.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3421

3421 Unable to open the registry key. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot access the specified registry key.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3422

3422 Unable to save the registry key. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot save the specified registry key.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3423

3423 Unable to replace the registry key. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot replace the specified registry key.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3424

3424 Unable to create the registry key. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot create the specified registry key.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3425

3425 Unable to load the registry key. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot load the specified registry key.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3426

3426 Unable to restore the registry key. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot restore the specified registry key.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3431

3431 Unable to back up the event log. (KEY=registry_key, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot back up the specified event log.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3432

3432 Unable to replace the event log. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot replace the specified event log.

Cause/Solution:
Check the error code.   Check your access rights.

Error 3441

3441 Unable to open linked file. (FILE=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot open the specified linked file.

Cause/Solution:
Check the error code.   Check that the file exists.

Error 3442

3442 Unable to link file. (FILE=file, LINK=file, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot link the specified files.

Cause/Solution:
Check the error code.

Error 3451

3451 Unable to write stream ID. (FILE=file, ID=stream_id, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot write the stream ID for the specified file.

Cause/Solution:
Check the error code.

Error 3452

3452 Unable to write stream name. (FILE=file, ID=stream_id, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot write the stream name for the specified file.

Cause/Solution:
Check the error code.

Error 3453

3453 Unable to write stream data. (FILE=file, ID=stream_id, EC=ms_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot write the stream data for the specified file.

Cause/Solution:
Check the error code.

Error 3501

3501 Unable to add job to database. (EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot add a new job to the database.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3502

3502 Unable to add session to database. (EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot add a new session to the database.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3503

3503 Unable to add directory to database. (DIR=directory, EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot add the directory to the database.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3504

3504 Unable to add file to database. (FILE=file, EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot add the file to the database.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3511

3511 Unable to begin database backup. (EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot start the database backup.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3512

3512 Unable to end database backup. (EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot end the database backup.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3521

3521 Unable to begin database restore. (EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot restore the database.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.   You cannot restore the database while other jobs are using the database.

Error 3522

3522 Unable to end database restore. (EC=db_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot restore the database.

Cause/Solution:
Make sure the Database Engine is running.   This message may have been preceded by an error message from the Database Engine.

Error 3701

3701 Unable to connect to tape engine. (EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot connect to the Tape Engine.

Cause/Solution:
Make sure the Tape Engine is running.

Error 3702

3702 Unable to connect to group. (GROUP=group, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot connect to the specified group.

Cause/Solution:
Check the error code.   Check if the group is busy or in use.   Check if the group was deleted or renamed since the job was scheduled.

Error 3703

3703 Unable to open tape. (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot open the specified tape.

Cause/Solution:
Check the error code.   Check that the correct tape is in the drive.

Error 3704

3704 Unable to close tape. (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot close the specified tape.

Cause/Solution:
Check the error code.

Error 3705

3705 Unable to format tape (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot format the specified tape.

Cause/Solution:
Check the error code.   Check that the tape is not write-protected.

Error 3711

3711 Unable to open session. (EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot open a session.

Cause/Solution:
Check the error code.   Check that the tape is not full.

Error 3712

3712 Unable to close session. (EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot close the current session.

Cause/Solution:
Check the error code.

Error 3713

3713 Unable to read from tape. (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot read from the specified tape.

Cause/Solution:
Check the error code.   Check that the tape is in the proper tape drive.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3714

3714 Unable to write to tape. (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot write to the specified tape.

Cause/Solution:
Check the error code.   Check that the tape is in the proper tape drive.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3715

3715 Unable to read continuation block. (EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the continuation block.

Cause/Solution:
Check the error code.   This is not a critical error.   Some tape drives do not warn before reaching the end of media.

Error 3716

3716 Unable to write continuation block. (EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot write a continuation block to the tape.

Cause/Solution:
Check the error code.   This is not a critical error.   Some tape drives do not warn before reaching the end of media.

Error 3717

3717 Unable to goto cluster. (CLUSTER=cluster_number, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot go to the specified cluster on the tape.

Cause/Solution:
Check the error code.   This is usually a media error.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3801

3801 Invalid session header signature. (SIG=signature)

Module:
Tasks Engines

Explanation:
ASTASK has found an invalid session header signature.

Cause/Solution:
There may be a problem in the connection between the tape drive and the host adapter.   The tape may
be damaged or the tape drive's heads may need cleaning.

Error 3802

3802 Invalid file header signature. (SIG=signature)

Module:
Tasks Engines

Explanation:
ASTASK has found an invalid file header signature.

Cause/Solution:
There may be a problem in the connection between the tape drive and the host adapter.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3803

3803 Invalid file trailer signature. (SIG=signature)

Module:
Tasks Engines

Explanation:
ASTASK has found an invalid file trailer signature.

Cause/Solution:
There may be a problem in the connection between the tape drive and the host adapter.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3811

3811 Unable to read compressed sessions.

Module:
Tasks Engines

Explanation:
ASTASK has found a compression session.

Cause/Solution:
ARCsolo for Windows 95 cannot restore compressed sessions created by ARCsolo for DOS or ARCsolo for Windows.

Error 3812

3812 Unable to read Macintosh sessions.

Module:
Tasks Engines

Explanation:
ASTASK has found a Macintosh session.

Cause/Solution:
ARCsolo for Windows 95 cannot restore sessions created by ARCsolo for Macintosh.

Error 3813

3813 Unable to read UNIX sessions.

Module:
Tasks Engines

Explanation:
ASTASK has found a UNIX session.

Cause/Solution:
ARCsolo for Windows 95 cannot restore sessions created by ARCsolo/Open.

Error 3814

3814 Invalid session password.

Module:
Tasks Engines

Explanation:
The password specified by the user does not match the password on tape.

Cause/Solution:
Please enter the correct password.

Error 3815

3815 Invalid tape format code. (FC=format_code)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Error 3816

3816 Unable to read Directory Services sessions.

Module:
Tasks Engines

Explanation:
ASTASK has found a Directory Services session.

Cause/Solution:
ARCsolo for Windows 95 cannot restore Directory Services sessions created by ARCsolo for NetWare.

Error 3821

3821 Unable to find tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3822

3822 Unable to find tape. (TAPE=tape_name, SEQ=sequence_number)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified sequence of the tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3823

3823 Unable to find tape. (TAPE=tape_name, ID=tape_id, SEQ=sequence_number)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3824

3824 Unable to find this tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3825

3825 Unable to find this tape or a blank tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified tape or a blank tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3826

3826 Unable to find the first sequence of this tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the first sequence of the specified tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3827

3827 Unable to find the last sequence of this tape. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the last sequence of the specified tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group. The tape may be damaged or the tape drive's heads may need cleaning.

Error 3828

3828 Unable to find this tape or a blank tape. (TAPE=tape_name, SEQ=sequence_number)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified tape or a blank tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3831

3831 Unable to find any Cheyenne tape.

Module:
Tasks Engines

Explanation:
ASTASK cannot find a Cheyenne tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3832

3832 Unable to find a blank tape.

Module:
Tasks Engines

Explanation:
ASTASK cannot find a blank tape.

Cause/Solution:
Place the tape in one of the drives belonging to the active group.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3833

3833 Unable to find an unprotected tape.

Module:
Tasks Engines

Explanation:
ASTASK cannot find an unprotected tape.

Cause/Solution:
Make sure the current tape is not write protected.

Error 3841

3841 Unable to find session number. (TAPE=tape_name, SESSION=session_number, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified session on the tape.

Cause/Solution:
Check the session number and tape.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3842

3842 Unable to find file. (FILE=file, TAPE=tape_name)

Module:
Tasks Engines

Explanation:
ASTASK cannot find the specified file on the tape.

Cause/Solution:
Check the file name and tape.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3851

3851 Tape is full. (TAPE=tape_name)

Module:
Tasks Engines

Explanation:
This tape is full and cannot be appended to.

Cause/Solution:
Select a different tape or format a new tape.

Error 3852

3852 Tape has reached the maximum number of sessions. (TAPE=tape_name, SESSIONS=sessions)

Module:
Tasks Engines

Explanation:
This tape cannot store any additional sessions.

Cause/Solution:
Select a different tape or format a new tape.

Error 3853

3853 Session was truncated. (SESSION=session_number)

Module:
Tasks Engines

Explanation:
This session was truncated.

Cause/Solution:
This is not an error.

Error 3854

3854 Unable to repair session. (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK was unable to repair the last session on the tape.

Cause/Solution:
Check the error code.   The tape may be damaged.

Error 3855

3855 Unable to position tape. (TAPE=tape_name, EC=tape_error_code)

Module:
Tasks Engines

Explanation:
ASTASK was unable to position to the desired session on the tape.

Cause/Solution:
Check the error code.

Error 3856

3856 Tape has reached the maximum sequence number.   (TAPE=tape_name, SEQ=sequence_number)

Module:
Tasks Engines

Explanation:
This tape has reached the maximum sequence number and cannot span to an additional tape.

Cause/Solution:
Format a new tape.

Error 3860

3860 Unable to find directory/file. (CLUSTER1=cluster_number, OFFSET1=offset, CLUSTER2=cluster_number, OFFSET2=offset)

Module:
Tasks Engines

Explanation:
ASTASK was unable to position to the desired file on the tape.

Cause/Solution:
Check the error code.

Error 3861

3861 Unable to find directory/file: already passed it. (FILE=file)

Module:
Tasks Engines

Explanation:
ASTASK has already passed the desired file on the tape.

Cause/Solution:
Check the error code.

Error 3862

3862 Unable to find directory/file: names do not match. (NAME1=name, NAME2=name)

Module:
Tasks Engines

Explanation:
The name on the tape does not match the name given to restore.

Cause/Solution:
Check that the tape name and session number are correct.

Error 3863

3863 Unable to find directory: types do not match. (DIR=directory)

Module:
Tasks Engines

Explanation:
A file was found where a directory was expected.

Cause/Solution:
Check that the tape name and session number are correct.

Error 3864

3864 Unable to find file: types do not match. (FILE=file)

Module:
Tasks Engines

Explanation:
A directory was found where a file was expected.

Cause/Solution:
Check that the tape name and session number are correct.

Error 3871

3871 Invalid file stream ID. (FILE=file, ID=stream_id)

Module:
Tasks Engines

Explanation:
The stream ID on the tape is invalid.

Cause/Solution:
Check that the tape is in the proper tape drive.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3881

3881 Invalid file link ID. (FILE=file, ID=link_id)

Module:
Tasks Engines

Explanation:
The NTFS hard link cannot be restored.

Cause/Solution:
Check that the tape is in the proper tape drive.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3882

3882 Invalid file link size. (FILE=file, SIZE=size)

Module:
Tasks Engines

Explanation:
The NTFS hard link cannot be restored.

Cause/Solution:
Check that the tape is in the proper tape drive.   The tape may be damaged or the tape drive's heads may need cleaning.

Error 3883

3883 Unable to find linked file. (FILE=file, LINK=file)

Module:
Tasks Engines

Explanation:
The NTFS hard link cannot be restored.

Cause/Solution:
ASTASK cannot find the first file to link to.   Check that the file exists.

Error 3901

3901 Skip machine - Type not supported. (TYPE=type, MACHINE=machine_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Cause/Solution:
Check the script using the Detail tab in the Job Queue manager.

Error 3902

3902 Skip server - OS not supported. (SERVER=server_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Cause/Solution:
Check the script using the Detail tab in the Job Queue manager.

Error 3903

3903 Skip workstation - OS not supported. (WS=workstation_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Cause/Solution:
Check the script using the Detail tab in the Job Queue manager.

Error 3904

3904 Skip remote workstation - Not supported. (WS=workstation_name)

Module:
Tasks Engines

Explanation:
Internal ASTASK error.

Cause/Solution:
Check the script using the Detail tab in the Job Queue manager.

Error 3921

3921 Skip directory. (DIR=directory)

Module:
Tasks Engines

Explanation:
Skip this directory.

Cause/Solution:
ASTASK is skipping the directory.   Check for a preceding error.

Error 3931

3931 Skip file. (FILE=file)

Module:
Tasks Engines

Explanation:
Skip this file.

Cause/Solution:
ASTASK is skipping the file.   Check for a preceding error.

Error 3932

3932 Skip file - Too large. (FILE=file)

Module:
Tasks Engines

Explanation:
This file is too large and was skipped.

Cause/Solution:
ASTASK can optionally skip files larger than 2 GB.

Error 3933

3933 Skip file - Execute only. (FILE=file)

Module:
Tasks Engines

Explanation:
This file is marked for execution only and cannot be copied.

Cause/Solution:
NetWare files can be marked for execution only and cannot be backed up.

Error 3934

3934 Skip file - Migrated. (FILE=file)

Module:
Tasks Engines

Explanation:
This file is marked as migrated and should not be backed up.

Cause/Solution:
NetWare files can be marked as migrated and should not be backed up.

Error 3935

3935 Skip file - Registry file. (FILE=file)

Module:
Tasks Engines

Explanation:
This file is a registry file and cannot be compared.

Cause/Solution:
Registry files cannot be compared since they are active and normally change.

Error 3936

3936 Skip file - Event log. (FILE=file)

Module:
Tasks Engines

Explanation:
This file is an event log and cannot be compared.

Cause/Solution:
Event logs cannot be compared since they are active and normally change.

Error 3941

3941 Skip file - Marked as invalid. (FILE=file)

Module:
Tasks Engines

Explanation:
This file is marked as invalid on the tape.

Cause/Solution:
There was some error while backing up this file and ARCsolo marked the file as invalid.   This file cannot be restored with any degree of confidence.

Error 3942

3942 Skip file - Confirm overwrite selected for scheduled jobs. (FILE=file)

Module:
Tasks Engines

Explanation:
This file was skipped because the user selected the confirm overwrite option but scheduled the job.

Error 3951

3951 The directory cannot be found. (DIR=directory)

Module:
Tasks Engines

Explanation:
The directory on tape cannot be found on the disk.

Cause/Solution:
Check if the directory still exists.

Error 3952

3952 The directory attributes have changed. (DIR=directory, TAPE=attributes, DISK=attributes)

Module:
Tasks Engines

Explanation:
The directory attributes on tape do not match those on disk.

Error 3961

3961 The file cannot be found. (FILE=file)

Module:
Tasks Engines

Explanation:
The file on tape cannot be found on the disk.

Cause/Solution:
Check if the file still exists.

Error 3962

3962 The file attributes have changed. (FILE=file, TAPE=attributes, DISK=attributes)

Module:
Tasks Engines

Explanation:
The file attributes on tape do not match those on disk.

Error 3963

3963 The file contents have changed. (FILE=file)

Module:
Tasks Engines

Explanation:
The contents of the file on tape do not match those on disk.

Error 3964

3964 The file size has changed. (FILE=file, TAPE=size, DISK=size)

Module:
Tasks Engines

Explanation:
The size of the file on tape does not match those on disk.

Error 3965

3965 The file date and time have changed.   (FILE=file, TAPE=date&time, DISK=date&time)

Module:
Tasks Engines

Explanation:
The date and time of the file on tape do not match those on disk.

Error 3971

3971 Virus detected - File skipped.   (FILE=file)

Module:
Tasks Engines

Explanation:
A virus was detected in the specified file.

Cause/Solution:
The file has been skipped.   You may be able to cure the file with InocuLAN.

Error 3972

3972 Virus detected - File deleted.   (FILE=file)

Module:
Tasks Engines

Explanation:
A virus was detected in the specified file.

Cause/Solution:
The file has been deleted.

Error 3973

3973 Virus detected - File renamed.   (FILE=file)

Module:
Tasks Engines

Explanation:
A virus was detected in the specified file.

Cause/Solution:
The file has been renamed.   You may be able to cure the file with InocuLAN.

Error 4001

4001 Unable to create new process. (MODULE=file, EC=ms_error_code)

Module:
Database API

Explanation:
ARCsolo failed to create a process.

Error 4002

4002 Unable to initialize Security Descriptor. (MODULE=file, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4003

4003 Unable to set Security Descriptor. (MODULE=file, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4004

4004 Unable to create file mapping. (MODULE=file, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4005

4005 Unable to map view file. (MODULE=file, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4006

4006 Unable to open registry key. (MODULE=file, KEY=registry_key, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4007

4007 Unable to query registry value. (MODULE=file, KEY=registry_key, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4008

4008 Invalid registry value. (MODULE=file, KEY=registry_key, VALUE=registry_key_value)

Module:
Database API

Cause/Solution:
The registry value is invalid.

Error 4009

4009 Wait on object error. (MODULE=file, OBJECT=object_name, EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code. (258=TIME OUT)

Error 4010

4010 The disk is almost full.

Module:
Database API

Cause/Solution:
The free disk spaces reached the threshold.
The default threshold is 5MB, and it is configurable.
Delete unnecessary files

Error 4101

4101 Unable to login to database engine. (DATABASE=database_engine_name, EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4102

4102 Unable to open database. (DATABASE=database_name, EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4103

4103 Unable to put database in normal mode. (MODULE=file, DATABASE=database_name, EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4104

4104 Unable to insert a record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4105

4105 Unable to get job id. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4106

4106 Unable to add job record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4107

4107 Unable to update job record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4108

4108 Unable to get session id. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4109

4109 Unable to add session record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4110

4110 Unable to update session record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4111

4111 Unable to read session record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4112

4112 Unable to delete session record. (TAPE=tape_name, ID=tape_id, SEQ=sequence_number, EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4113

4113 Unable to delete detail record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4114

4114 Unable to add detail record. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4115

4115 Unable to register tape. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4116

4116 Unable to begin database backup. (EC=db_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 4117

4117 Unable to end database backup. (EC=ms_error_code)

Module:
Database API

Cause/Solution:
Check the error code.

Error 5001

5001 Unable to register Database Engine service. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module could not register with the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 5002

5002 Unable to set service status for Database Engine. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module could not notify the Service Control Manager to reflect its current status.

Cause/Solution:
Check the ms_error_code.

Error 5003

5003 Unable to start service control dispatcher for Database Engine. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module failed to initialize with the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 5004

5004 Unable to open Service Control Manager. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to open a handle to the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 5005

5005 Unable to open Service. (SERVICE=service, EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to open a handle to the specified service.

Cause/Solution:
Check the ms_error_code.

Error 5006

5006 Unable to start Service. (SERVICE=service, EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to start the specified service.

Cause/Solution:
Check the ms_error_code.

Error 5007

5007 Unable to query service status. (SERVICE=service, EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to obtain status information from the specified service.   Examples of status information obtained from a service are:

SERVICE is...
    START PENDING
    STARTED
    STOP PENDING
    STOPPED
    PAUSE PENDING
    PAUSED
    RESUME/CONTINUE PENDING

Cause/Solution:
Check the ms_error_code.

Error 5008

5008 Unable to send control to Service. (SERVICE=service, EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to send control commands to the specified service. Examples of control commands sent to service are:
START, STOP, PAUSE, CONTINUE.

Cause/Solution:
Check the ms_error_code.

Error 5009

5009 Unable to set service security. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to set security information for the specified service.

Cause/Solution:
Check the ms_error_code.

Error 5201

5201 Unable to create a Process object. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to create a Process object.   A process called RDS is created for all database processing.

Cause/Solution:
Check the ms_error_code.

Error 5202

5202 Unable to create a Thread object. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to create a Thread object.

Cause/Solution:
Check the ms_error_code.

Error 5203

5203 Unable to create an Event object. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to create an Event object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 5204

5204 Unable to initialize Security Descriptor. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to initialize a Security Descriptor.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 5205

5205 Unable to set Security Descriptor. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to change a Security Descriptor.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 5206

5206 Unable to create a File Mapping object. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to create a File Mapping object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 5207

5207 Unable to map view file. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to create a map a view to a File Mapping object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 5208

5208 Unable to load a DLL module. (DLL=file, EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to find, or load a DLL file.

Cause/Solution:
Check the ms_error_code.

Error 5209

5209 Unable to free a DLL module. (DLL=file, EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable to free a previously loaded task DLL.

Cause/Solution:
Check the ms_error_code.

Error 5210

5210 Unable to get function entry point. (EC=ms_error_code)

Module:
Database Engine

Explanation:
The DBENG.EXE module was unable get a function entry point.

Cause/Solution:
Check the ms_error_code.

Error 6000

6000 Error Formatting: [ARCsolo error description]

Module:
Tape Engine

Explanation:
If you get this error, it is usually due to the following:
1. An UDE (Unrecoverable Data Error)
2. Hardware error

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6001

6001 Error Erasing: [ARCsolo error description]

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6002

6002 Error Copying: [ARCsolo error description]

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6003

6003 Error Retensioning: [ARCsolo error description]

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6004

6004 Error Setting Compression: [ARCsolo error description]

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6005

6005 Device will not become ready - initialization required

Module:
Tape Engine

Explanation:
There is some problem with the tape drive.

Cause/Solution:
Power off the drive, then power back on.
Check the SCSI terminators.
Check the cables connecting your tape drives.

Error 6006

6006 Logical unit does not respond to selection

Module:
Tape Engine

Explanation:
There is some problem with the tape drive.

Cause/Solution:
Power off the drive, then power back on.
Check the SCSI terminators.
Check the cables connecting your tape drives.

Error 6007

6007 Logical unit failure

Module:
Tape Engine

Explanation:
There is some problem with the tape drive.

Cause/Solution:
Power off the drive, then power back on.
Check the SCSI terminators.
Check the cables connecting your tape drives.

Error 6008

6008 Device communication failure

Cause/Solution:
This is a [hardware error](#).

Error 6009

6009 Device communication parity error

Module:
Tape Engine

Explanation:
A SCSI parity error occurred.

Cause/Solution:
This is a hardware error.

Error 6010

6010 Track following positioning error

Cause/Solution:
This is a [hardware error](#).

Error 6011

6011 Error log overflow

Cause/Solution:
Rare Tape Hardware Error

Error 6012

6012 Write error - head sync error during write

Cause/Solution:
This is a [hardware error](#).

Error 6013

6013 Unrecovered read error

Module:
Tape Engine

Explanation:
A command failed because a tape read failed. Most likely due to bad media, but it could result from a hardware error.

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6014

6014 Uncorrectable block encountered during read

Cause/Solution:
This is a [media error](#).

Error 6015

6015 Error too long to correct

Cause/Solution:
This is a [media error](.).

Error 6016

6016 Too many permanent read errors - cannot re-synchronize

Cause/Solution:
This is a [media error](#).

Error 6017

6017 Incomplete block read (postamble not found)

Cause/Solution:
This is a media error.

Error 6018

6018 Recorded entity not found or basic <u>media error</u>

Cause/Solution:
This is a <u>media error</u>.

Error 6019

6019 Filemark or setmark not found

Cause/Solution:
Media Error or Tape Hardware Error

Error 6020

6020 End of data not detected - corrupt format

Module:
Tape Engine

Explanation:
This tape is bad.

Cause/Solution:
You can no longer use this tape.

Error 6021

6021 Block sequence error

Cause/Solution:
This is a [media error](#).

Error 6022

6022 Mechanical positioning error

Module:
Tape Engine

Explanation:
This is set whenever the drive has performed a mechanism retry in successfully completing a command.

Error 6023

6023 Servo - Mechanical positioning error

Cause/Solution:
This is a [hardware error](#).

Error 6024

6024 Positioning error detected by read, space, or locate

Module:
Tape Engine

Explanation:
The command failed to complete successfully, or the logical position has been lost.

Cause/Solution:
This is a [media error](#).

Error 6025

6025 Recovered with no ECC applied

Cause/Solution:
The system recovered successfully from a soft error while completing a command.

Error 6026

6026 Recovered with retries

Cause/Solution:
One or more frames has to be rewritten by the drive in order to complete a command successfully.

Error 6027

6027 Recovered with ECC applied

Cause/Solution:
The system had to use ECC to successfully complete a command.   This means that there was a bad block, but the drive successfully rewrote to another block.

Error 6028

6028 Mode select parameter error

Cause/Solution:
This is an internal error.   Please contact your reseller or Cheyenne Technical Support.

Error 6029

6029 Synchronous data transfer error

Module:
Tape Engine

Explanation:
An error has occurred between the controller card and the tape drive.

Cause/Solution:
Disable Synchronous transfer or negotiation.   Depending on the drive, you may have to alter the settings on the board.

Error 6030

6030 Invalid command operation code

Cause/Solution:
This is an internal error.   Please contact your reseller or Cheyenne Technical Support.

Error 6031

6031 Logical block is out of range

Cause/Solution:
Rare Tape Hardware Error

Error 6032

6032 Invalid element address - changer

Cause/Solution:
This is an internal error.   Please contact your reseller or Cheyenne Technical Support.

Error 6033

6033 Invalid field in CCB

Cause/Solution:
This is an internal error.   Please contact your reseller or Cheyenne Technical Support.

Error 6034

6034 LUN not supported

Cause/Solution:
LUNs (Logical Unit Number) are not supported by CSI.   Changers and stackers are supported.

Error 6035

6035 Parameter not supported - flash eeprom problem

Module:
Tape Engine

Explanation:
This is a firmware error.

Cause/Solution:
Call your tape drive vendor.

Error 6036

6036 Write buffer permanent value invalid

Cause/Solution:
Rare Tape Hardware Error

Error 6037

6037 Threshold parameters not supported

Cause/Solution:
Rare Tape Hardware Error

Error 6038

6038 Not ready to ready transition

Cause/Solution:
This is a hardware error.

Error 6039

6039 Power on reset occurred

Cause/Solution:
Someone powered-on, or reset the tape drive.   Another possibility is that power was lost.

Error 6040

6040 Parameters have changed

Cause/Solution:
Rare Tape Hardware Error

Error 6041

6041 Mode select parameters have changed

Cause/Solution:
Rare Tape Hardware Error

Error 6042

6042 Log parameters have changed

Cause/Solution:
Rare Tape Hardware Error

Error 6043

6043 Copy cannot execute - host cannot disconnect

Cause/Solution:
This is an internal error.   Please contact your reseller or Cheyenne Technical Support.

Error 6044

6044 Command sequence error

Cause/Solution:
Rare Tape Hardware Error

Error 6045

6045 Overwrite error on update in place

Cause/Solution:
Rare Tape Hardware Error

Error 6046

6046 Tagged commands cleared by another initiator

Cause/Solution:
Rare Tape Hardware Error

Error 6047

6047 Incompatible medium installed

Module:
Tape Engine

Explanation:
Incompatible medium installed

Cause/Solution:
Only use tapes that are approved by the tape drive manufacturer.

Error 6048

6048 Cannot read medium - unknown format

Module:
Tape Engine

Explanation:
An unknown tape format was used.

Cause/Solution:
Only use tapes that are approved by the tape drive manufacturer.

Error 6049

6049 Medium format is corrupted - DDS bad at group level

Module:
Tape Engine

Explanation:
This tape is bad.

Cause/Solution:
You need to use a new tape.

Error 6050

6050 Tape length error - too short to partition

Cause/Solution:
Rare Tape Hardware Error

Error 6051

6051 Saving of parameters not supported

Cause/Solution:
Rare Tape Hardware Error

Error 6052

6052 Sequential positioning error

Cause/Solution:
This is a [media error](#).

Error 6053

6053 Tape position error at beginning of media

Cause/Solution:
This is a [media error](#).

Error 6054

6054 Physical end of tape encountered-tape position error at EOM

Module:
Tape Engine

Explanation:
The tape drive failed to generate an Early Warning.

Cause/Solution:
This is a [hardware error](#).

Error 6055

6055 Reposition error

Cause/Solution:
This is a [media error](#).

Error 6056

6056 Read past of end of medium

Module:
Tape Engine

Explanation:
The tape drive failed to generate an Early Warning.

Cause/Solution:
This is a hardware error.

Error 6057

6057 Illegal bit set in identify message

Cause/Solution:
Rare Tape Hardware Error

Error 6058

6058 Device has not self configured yet

Module:
Tape Engine

Explanation:
This is a tape hardware error.

Cause/Solution:
It is not possible to send commands to the drive because mechanism tests are being executed.

Error 6059

6059 Internal ram or diagnostic failure

Cause/Solution:
This is a tape hardware error.

Error 6060

6060 Diagnostics failure. Vendor unique

Cause/Solution:
This is a tape hardware error.

Error 6061

6061 Unspecified fatal error

Cause/Solution:
This is a tape hardware error.

Error 6062

6062 Timeout error

Cause/Solution:
This is a tape [hardware error](#).

Error 6063

6063 SCSI Message error

Cause/Solution:
This is a tape [hardware error](#).

Error 6064

6064 Internal software (firmware) error.

Cause/Solution:
This is a [hardware error](#).

Error 6065

6065 Unexpected selection interrupt from hardware

Cause/Solution:
Rare Tape Hardware Error

Error 6066

6066 EDC error detected by port

Cause/Solution:
Rare Tape Hardware Error

Error 6067

6067 Select - reselect failure

Cause/Solution:
Rare Tape Hardware Error

Error 6068

6068 Unsuccessful soft reset

Cause/Solution:
Rare Tape Hardware Error

Error 6069

6069 SCSI parity error detected

Module:
Tape Engine

Explanation:
This is a firmware error.

Cause/Solution:
You can check the cables.   If the cables are ok, contact your reseller or Cheyenne Technical Support.

Error 6070

6070 Initiator detected error message received

Cause/Solution:
Rare Tape Hardware Error

Error 6071

6071 Invalid message error

Cause/Solution:
Rare Tape Hardware Error

Error 6072

6072 Command phase error

Module:
Tape Engine

Explanation:
Too many parity errors have occurred during an attempted Command phase.

Cause/Solution:
This is a [hardware error](#).

Error 6073

6073 Data phase error

Module:
Tape Engine

Explanation:
Too many parity errors have occurred during the Data-In and Data-Out phases of an operation.

Cause/Solution:
This is a [hardware error](#).

Error 6074

6074 Logical unit failed self-configuration

Cause/Solution:
This is a tape [hardware error](#).

Error 6075

6075 Overlapped commands attempted

Cause/Solution:
Rare Tape Hardware Error

Error 6076

6076 Write append error

Module:
Tape Engine

Explanation:
If a WRITE or WRITE FILEMARKS command fails because the append point was unreadable, this error occurs.

Cause/Solution:
This is a [media error](#).

Error 6077

6077 Write append position error - retry limit exhausted

Cause/Solution:
This is a [media error](#).

Error 6078

6078 Timer position error

Cause/Solution:
Rare Tape Hardware Error

Error 6079

6079 Erase failure

Module:
Tape Engine

Explanation:
When an ERASE command fails to erase the area specified.

Cause/Solution:
This is a [hardware error](#).

Error 6080

6080 Cassette fault

Module:
Tape Engine

Explanation:
This error occurs if the drive thinks there is something wrong with the cassette, such as the tape breaking.

Cause/Solution:
This is a [media error](#).

Error 6081

6081 Media load or eject failed

Module:
Tape Engine

Explanation:
The drive failed to load or eject a tape.

Cause/Solution:
This can be either a medium, or a [hardware error](#)

Error 6082

6082 Unload tape failure

Module:
Tape Engine

Explanation:
The drive failed to load or eject a tape.

Cause/Solution:
This can be either a medium, or a [hardware error](#)

Error 6083

6083 Media removal prevented

Cause/Solution:
Rare Tape Hardware Error

Error 6084

6084 Drive hardware error - servo or sensor

Cause/Solution:
This is a tape hardware error.

Error 6085

6085 Log exception

Cause/Solution:
Rare Tape Hardware Error

Error 6086

6086 Threshold condition met

Cause/Solution:
Rare Tape Hardware Error

Error 6087

6087 Log list codes exhausted

Cause/Solution:
Rare Tape Hardware Error

Error 6088

6088 Mode mismatched fixed - variable

Cause/Solution:
Rare Tape Hardware Error

Error 6089

6089 Excessive dryness

Cause/Solution:
The relative humidity is too low.

Error 6090

6090 Mode select failed because the tape is not at LBOT

Cause/Solution:
This is an internal error.   Please contact your reseller or Cheyenne Technical Support.

Error 6091

6091 Incorrect block length

Cause/Solution:
This is a hardware error.   Please contact your reseller or Cheyenne Technical Support.

Error 6092

6092 Fatal - Uncorrectable error

Cause/Solution:
This is a hardware error.

Error 6093

6093 Possible firmware error or catastrophic drive failure

Cause/Solution:
This is a tape hardware error.

Error 6094

6094 SCSI Bus Parity Error

Cause/Solution:
This is a tape hardware error.

Error 6095

6095 Formatted Buffer Parity Error

Cause/Solution:
This is a tape hardware error.

Error 6096

6096 [media error](#)

Cause/Solution:
This is a [media error](#).

Error 6097

6097 Error Counter Overflow

Cause/Solution:
The maximum number of retries has been exhausted.

Error 6098

6098 Tape Motion Error

Cause/Solution:
First, perform the steps for media errors, then perform the steps under hardware errors.

Error 6099

6099 Transfer Abort Error

Cause/Solution:
Rare Tape Hardware Error

Error 6100

6100 Tape Mark Detect Error

Cause/Solution:
This is a media error.

Error 6101

6101 Filemark Error

Cause/Solution:
This is a [media error](#).

Error 6102

6102 Underrun Error

Cause/Solution:
This is a media error.

Error 6103

6103 Write Error 1

Cause/Solution:
This is a [media error](#).

Error 6104

6104 Servo System Error

Cause/Solution:
This is a tape [hardware error](#).

Error 6105

6105 Formatter Error

Cause/Solution:
This is a tape [hardware error](#).

Error 6106

6106 Write Splice Error, Blank

Cause/Solution:
This is a tape [hardware error](#).

Error 6107

6107 Write Splice Error, Overshoot

Cause/Solution:
This is a tape [hardware error](#).

Error 6108

6108 No error bits are set

Cause/Solution:
Rare Tape Hardware Error

Error 6109

6109 Unable to initialize list. Possibly out of memory.

Cause/Solution:
Free up machine memory.   Close any open applications.

Error 6300

6300 Windows 95 SCSI PORT Error

Module:
Tape Engine

Explanation:
Problem with sending a SCSI command to SCSI device.

Error 6301

6301 Tape Engine Initialization Error

Module:
Tape Engine

Explanation:
Check error code.

Error 6302

6302 Tape Engine Running Already

Module:
Tape Engine

Explanation:
Tape Engine has already been started and is running.

Error 6303

6303 Communication Initialization Error

Module:
Tape Engine

Explanation:
Check error code.

Error 6304

6304 Unexpected SCSI Sense Code

Module:
Tape Engine

Explanation:
SCSI error, check error code.

Error 6305

6305 Problem with current SCSI port handle, forced to use the original port handle
ABSL:adapter_number/bus_number/scsi_id/lun

Module:
Tape Engine

Explanation:
Check error code.

Error 6306

6306 Can't open SCSI port handle ABSL:adapter_number/bus_number/scsi_id/lun

Module:
Tape Engine

Explanation:
Check error code.

Error 6330

6330 Tape S/an Thread Job Creation Error

Module:
Tape Engine

Explanation:
Check error code. Maximum number of jobs may have been reached.

Error 6331

6331 Tape Scan Thread Creation Error

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6332

6332 Changer Scan Thread Job Creation Error

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6333

6333 Changer Scan Thread Creation Error

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6401

6401 Changer drive is missing

Module:
Tape Engine

Explanation:
ARCsolo does not detect a changer drive.

Error 6402

6402 Session couldn't be repaired

Module:
Tape Engine

Cause/Solution:
This is a media error or a tape hardware error.

Error 6500

6500 Client connect to tape failed.

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6501

6501 Job denied: tape_error_code

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6502

6502 Find next session failed

Module:
Tape Engine

Cause/Solution:
This is a media error or a tape hardware error.

Error 6503

6503 Start session failed

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6504

6504 End session failed

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6505

6505 End job failed

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6506

6506 Suspend job failed

Module:
Tape Engine

Explanation:
Not enough resources.

Error 6999

6999 Unknown Error Code: tape_error_code

Error 7001

7001 Unable to register Message Engine service. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module could not register with the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 7002

7002 Unable to set service status for Message Engine. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module could not notify the Service Control Manager to reflect its current status.

Cause/Solution:
Check the ms_error_code.

Error 7003

7003 Unable to start service control dispatcher for Message Engine. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module failed to initialize with the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 7004

7004 Unable to open Service Control Manager. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to open a handle to the Service Control Manager.

Cause/Solution:
Check the ms_error_code.

Error 7005

7005 Unable to open Service. (SERVICE=service, EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to open a handle to the specified service.

Cause/Solution:
Check the ms_error_code.

Error 7006

7006 Unable to start Service. (SERVICE=service, EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to start the specified service.

Cause/Solution:
Check the ms_error_code.

Error 7007

7007 Unable to query service status. (SERVICE=service, EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to obtain status information from the specified service.
Examples of status information obtained from a service are:

SERVICE is...
    START PENDING
    STARTED
    STOP PENDING
    STOPPED
    PAUSE PENDING
    PAUSED
    RESUME/CONTINUE PENDING

Cause/Solution:
Check the ms_error_code.

Error 7008

7008 Unable to send control to Service. (SERVICE=service, EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to send control commands to the specified service.   Examples of control commands sent to service are:
START, STOP, PAUSE, CONTINUE.

Cause/Solution:
Check the ms_error_code.

Error 7009

7009 Unable to set service security. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to set security information for the specified service.

Cause/Solution:
Check the ms_error_code.

Error 7201

7201 Unable to create a Process object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to create a Process object.

Cause/Solution:
Check the ms_error_code.

Error 7202

7202 Unable to create a Thread object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to create a Thread object.

Cause/Solution:
Check the ms_error_code.

Error 7203

7203 Unable to create an Event object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to create an Event object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7204

7204 Unable to initialize Security Descriptor. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to initialize a Security Descriptor.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7205

7205 Unable to set Security Descriptor. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to change a Security Descriptor.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7206

7206 Unable to create a File Mapping object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to create a File Mapping object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7207

7207 Unable to map view file. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to create a map a view to a File Mapping object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7208

7208 Unable to load a DLL module. (DLL=file, EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to find, or load a DLL file.

Cause/Solution:
Check the ms_error_code.

Error 7209

7209 Unable to free a DLL module. (DLL=file, EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to free a previously loaded task DLL.

Cause/Solution:
Check the ms_error_code.

Error 7210

7210 Unable to get function entry point. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable get a function entry point.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7211

7211 Unable to create a Named Pipe object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to create a Named Pipe object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7212

7212 Unable to read from Named Pipe object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to read from a Named Pipe object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 7213

7213 Unable to write to Named Pipe object. (EC=ms_error_code)

Module:
Message Engine

Explanation:
The MSGENG.EXE module was unable to write to a Named Pipe object.   This is an internal error.

Cause/Solution:
Check the ms_error_code.

Error 9001

9001 Unable to allocate memory. (SIZE=size)

Module:
Miscellaneous error messages

Explanation:
ASTASK cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.

Error 9002

9002 Unable to allocate memory. (BLOCKS=blocks, SIZE=size)

Module:
Miscellaneous error messages

Explanation:
ASTASK cannot allocate the needed memory.

Cause/Solution:
Check the amount of available memory.

Error 9003

9003 Unable to execute command. (CMD=command, EC=ms_error_code)

Module:
Miscellaneous error messages

Explanation:
ASTASK cannot execute the specified command line.

Cause/Solution:
Check the error code.

Error 9004

9004 Unable to create message box. (EC=ms_error_code)

Module:
Miscellaneous error messages

Explanation:
ASTASK cannot create a message box.

Cause/Solution:
Check the error code.

Troubleshooting

This section contains what we've identified as some common problems that you might encounter while using ARCsolo.   Click on any of the following to see possible solutions:

- Trouble writing information to, or reading information from, tapes
- Experiencing slow backup and restore rates
- After installing ARCsolo, still have trouble seeing tape device(s)
- Having trouble with one of the tape devices

Most of the problems that you might encounter, especially if you are using SCSI host adapters, will be hardware related.   Therefore, the troubleshooting focuses on solving hardware and tape problems.

Two important points to consider when tracking down hardware problems are:

- Make sure your hardware is functional.   This includes the host adapter card, the cables, and the tape device itself.   If you can, test your hardware by connecting it to a system that you know works.
- Make sure the hardware is configured properly.   This includes setting the proper switches on the controller card (according to the manufacturer's instructions) and making sure the SCSI bus is terminated properly at both ends.

Trouble writing information to, or reading information from, tapes

Check the following:

- Since ARCsolo has been installed, has the tape device ever worked? If you haven't used the tape device, check the hardware configuration.
- Check all the board settings on the host adapter card. Check the firmware of the tape device. Is this firmware the latest update? Has it been certified by Cheyenne? Check the termination of the bus. The first and last device on the bus should be terminated.
- Clean the tape drive heads. Regular cleaning of tape drive heads is required if you want to get the most from your equipment.
- Check the brand of tape you are using. Only use manufacturer suggested brand tapes.

Experiencing slow backup and restore rates

When you restore or backup a remote Windows 95 machine, ARCsolo's performance drops, and the transfer rate is extremely low.

If ARCsolo seems to have a very slow restore or backup rate only on some devices, the problem could be due to the number of files on the device.

After installing ARCsolo, still have trouble seeing tape device(s)

Make sure that all cards, cables, and devices are connected properly. Check the following:

- If you installed a new card in your system before installing ARCsolo, make sure it is seated properly in its slot. If that doesn't work, try putting the card in a different slot.
- Make sure your SCSI bus is terminated properly. The general rule for terminating devices chained to a SCSI bus is that there must be two sets of terminating resistors, one at the beginning of the chain and one at the end. If you only have one device connected to your machine, then you have two devices on the SCSI bus; the host adapter card and the tape device. Both the host adapter card and the tape device should be terminated.
- Make sure each SCSI device in the chain has a unique ID number. If you have two tape devices attached to the SCSI bus, each with the same SCSI ID, chances are neither device will work. Set each device to a unique SCSI ID. Check the documentation that came with your hardware for information about changing the ID of the device.
- Make sure all the tape devices are turned on. Sometimes if one device in a chain is off, the others will behave erratically.
- Make sure your computer's power supply is up to the task. The more cards and peripherals you add to your machine, the more demands you place on the power supply.
- Make sure the jumper settings on your adapter board are correct. Check the documentation that came with the board to make sure the jumpers are set correctly for use with your hardware.
- Replace the cables you are using with ones you know are good. If the problem goes away, you know you had a bad cable.

Having trouble with one of the tape devices

If you are having trouble with one particular tape device, remove all other devices from the chain so you are working with just the one device.   Make sure the SCSI chain is terminated properly after you make these hardware changes.

Turn the tape device off, then on again.   Sometimes the device may be in a funny state, and you can straighten out by turning the power off then on again.

Adding objects to the machine tree

You can add objects to the machine tree that are unavailable when you set up a job.   For example, you can add a machine that is temporarily unavailable and schedule a backup/restore for the machine.

You can add the following types of objects to the machine tree:

- Microsoft Networks domains or workgroups, machines, or shares
- NetWare servers and volumes

To add an object to the machine tree follow these steps:

1. **In the Browser, click Microsoft Network with your *right* mouse button.**
    A pop-up menu is displayed.

2. **Choose *Add Object* from the pop-up menu.**
    The Add Object dialog box opens:

3. **Enter the Domain name and click Add.**
    A new Microsoft domain is added to this node of the machine tree.

Adding Preferred Shares to the machine tree

The Preferred Shares are a collection of your favorite backup shares.   (A share is a shared drive or directory.)   You can manually add individual share points to the Preferred Shares tree; the share point is remembered and displayed regardless of the status of the network connection.   This provides a quick access to commonly used shares on your machines.

This feature can be used to back up share points provided by other operating systems that are capable of creating "shares" in a Windows 95 network, such as UNIX NFS shares or OS/2 LAN Server shares.

This feature is also useful for users that frequently back up "shares" within a network, instead of "machines".   Shares are considered "named" short-cuts or aliases to machine drives and directories on the network.   Shares perform the same function as drive mappings, with the advantage of allowing the user to provide a descriptive name to the share.

To add a Preferred Share to the machine tree:

1. **In the Browser, click Preferred Shares with your right mouse button.**
    A pop-up menu is displayed.

2. **Choose *Add Object...* from the popup menu.**
    The Add Preferred Shares dialog box opens.

3. **Select a Network Provider.**

4. **Enter a share name in Uniform Naming Convention (UNC) format (e.g. \\MACHINE\SHARE).**

5. **Click Add.**
    The machine is added to the Preferred Shares tree.

6. **Repeat steps 3-5 for each machine that you wish to add.**

7. **Choose *Close* from the Control Menu when done.**

Virus Options

You can automatically scan for viruses during a Backup, Copy, or Count operation using the virus scanning options.

Enable Virus Scanning
Select this option to enable virus scanning.

Click here to see a [table](#) that describes the virus scanning options.

Option	Description
Skip	Do not back up the infected file.
Rename	Rename the infected files with the extension AVB. (If a file with the same name and the extension AVB exists, then extension AV1 is used, and so on.)
Delete	Delete the infected file.

Session User Name and Password

You can enter, change, or verify the username and password for the destination machine for each tape session.   If a session password has been assigned, enter the session password as well.

To enter or change the security information for a session, select the session and click the Edit button.

For more information:

Enter User Name and Password

Enter User Name and Password

Enter or modify the security information for the session you selected and click the OK button when you are finished.   To cancel this operation, click the Cancel button.