



An Integrated Approach to the Delivery of Community Health Services

Tape Backup Information

The Importance of the Tape Backup Process

During the End of Day (EOD) processing, data from local sites is uploaded to the Central Office for processing. However, not all local data is uploaded during this process. For example, important information including assessments, case notes and employee security data, as well as program, provider and schedule data are not uploaded to the Central Office.

In order to provide a means for recovering this information should a server fail, sites are required to backup their local data to a tape. This process is a very important component of the Cornerstone system, and the only way to recover this local data. The following information will assist sites in successfully backing up their data.

Tape Backup Designee

Each site should designate an individual to be responsible for the tape backup process. To ensure the tape backup process is attended to consistently, a secondary designee should also be appointed to resume responsibilities in the absence of the primary designee. Both designees should be fully educated and trained in their responsibilities, and in the event that a tape backup issue occurs, the site's designee should be available to assist the Cornerstone Network Support technician is resolving the issue.

Tape Backup Confirmation Procedure

Each morning, the designee should confirm that the tape backup process ran successfully the previous evening. This confirmation is accomplished by locating the hard copy report produced by the tape backup software called Backup Exec. The report, which does not look like a typical Cornerstone report and does not have a report number, should be in the laser printer. The user should look for the message "Job Completion Status: Normal" on the last line of the report. If this message does not appear, the user should report the problem to the Cornerstone Call Center and local administrator. The tape backup confirmation report should also be filed and retained for verification purposes.

The designee should change the backup tape every morning, and each tape should be retained in a safe and secure location for at least one week before re-using it. Each agency should have a two-week supply of tapes (10 tapes) that are replaced each year. The designee should also ensure that the tape drive is cleaned once a week (usually Monday mornings). A new cleaning tape is good for approximately 50 uses, or an average of one use per week for a year.

Due to the importance of refreshing your tape supply each year, the site administrator should include the replacement cost of 10 tapes and a cleaning tape in the site's annual budget. While these items are usually very expensive if purchased at a local computer store, they can be purchased online from the Hewlett Packard web site at significant savings. Agencies that qualify for government rates can experience an even greater savings. In addition, sites may also want to explore other manufacturers of compatible DDS3 tapes (the tapes do not have to be Hewlett Packard brand).

Disposal of old Cornerstone Back-up Tapes

When a site replaces their backup tapes, the old tapes should be disposed of properly after the new tapes have completed a successful rotation. Since the backup tapes contain sensitive and confidential information, a permanent form of disposal is required. Cornerstone support staff advise that simply erasing these tapes does not guarantee the information has been completely and permanently removed. Instead, the designee should pull all of the tape out of the cartridge, then cut the tape in pieces with scissors, or dispose of the tape in a paper shredder. If an option to burn is available to the site, this is also acceptable.



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Troubleshooting

Even under normal usage, all equipment will eventually wear out. Consequently, on occasion, the tape drive itself will fail and need to be replaced. In order to determine this, it is imperative that site staff accurately check their tape backup and immediately report any problems to the Cornerstone Call Center. You should contact the Call Center if:

- you do not receive the printed tape backup report.
- the printed tape backup report does not state "Job Completion Status=Normal".
- a tape is stuck in the drive.
- a tape continually ejects.
- you experience any other problems connected with the physical workings of the tape drive.

Remember, the sooner it is determined that the tape drive has failed, the sooner a technician can be dispersed to your site to repair or replace the drive.

Tips

Following are additional tips to assist in the tape backup process:

1. Make sure you purchase the correct capacity DDS3 tape. The correct capacity tape will have the number **"DDS3 24GB"** printed on the label. Some tapes of incorrect capacity will fit into the drive and will work, but they do not have enough space to back up all of your data.
2. When new backup and cleaning tapes are purchased, write the date in marker on the tape label so you will know the age of the tapes and when they need to be replaced (one year later).
3. Before using a new tape, check the top end of the tape (the end that faces you when inserting into the drive) to ensure that the small white (or light gray) door is completely closed. Sliding this door completely shut will prevent a "write protected" error, since the tape can not be used if the door is not shut completely.
4. If a tape ejects itself from the drive immediately after being inserted, this indicates that the tape may be past its usage limit. Most every brand of tape has a 99 use limit, after which the tape will automatically eject within 60 seconds of being placed in the drive. As your tapes begin to reach their year limit, wait approximately one minute after inserting the tape before you leave to ensure the tape is still working properly.

Explanation of Common Tape Backup Errors.

Following is a brief explanation of the tape backup errors:

"SCSI Error"

This is the most common of tape backup errors. This error is usually caused by utility power fluctuations (sags and spikes) that occur at the same time your tape backup is trying to run. Since this problem is a result of unstable utility power throughout the state, there is no solution.

"No Tape Found" or "Tape Improperly Inserted"

This is also a common error, and usually occurs for one of two reasons. The most obvious reason for this error is that the designee forgot to insert a tape for that day. The other common reason for this error is when the tape auto-ejects because it has reached its usage limit. Other less common reasons for this error are if the designee mistakenly inserts the tape backwards, etc. To avoid this error, be sure to properly insert the tape into the drive, and wait a minute or two to make sure it does not auto-eject.

"Bad Tape"

As the message indicates, the tape is no longer usable. This error may be caused by a bad section of tape on the cartridge, a broken tape, or a broken tape case. If you try another tape and it works correctly, the tape was bad and should be properly discarded and replaced. However, this error does occur sometimes if the tape drive is dirty, and therefore it cannot read the tape. If you try another tape and still get the same message, this could be the case. Try using the cleaning tape a couple of times to clean the drive.



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“Dirty Drive”:

Usually prior to finding this error, the ‘clean tape light’ will be lit up on the tape drive. The designee then needs to run the cleaning tape until the light goes out. If the light does not go out, this indicates that the cleaning tape is no longer good and needs to be replaced. Should the tape drive head become permanently dirty, a new cleaning tape will not work; then tape drive will need to be replaced.

“Write Protected”

This error usually occurs if the small door on the top end of the tape cartridge is partially or completely open. This door serves as a protection device to ensure that your data cannot be written over, and it must be closed in order to work correctly. In most cases, the door is accidentally opened through normal use of the tape. Closing the door should correct the problem and make the tape usable again.

Cornerstone support staff continuously monitor tape backup errors for all sites. If a site does not experience a successful tape backup for three days in a row, Cornerstone support staff will attempt to assist the site in running a successful backup. If the tape backup was unsuccessful due to SCSI errors, Cornerstone support staff will clear the error and manually set the tape backup to run. If the tape backup was unsuccessful due to any other errors listed above, Cornerstone support staff are unable to manually run a tape backup on behalf of the site because action is required by site staff (i.e., inserting a tape, cleaning the drive, etc.). In these cases, Cornerstone support staff will attempt to contact the site and work with them to correct the issue and ensure a successful tape backup is achieved.

If you have any questions regarding the tape backup procedure, please contact the Cornerstone Call Center at toll-free 1-877-447-4221.