

4/27/00

## Managing a Tape Backup System

**PLEASE NOTE:** A blinking **Yellow Light** on the face of the tape device indicates an error. Errors **MUST** be cleared with the Cleaning Tape, per the description below.

### The following is suggested as policies for Daily tape backups:

There should be at least 12 tapes available, and a Cleaning Tape.

The twelve tapes include four tapes marked with Monday, Tuesday, Wednesday, and Thursday on both the tape cartridge itself and the protective box. Mark these tapes, and tape box, with the date they are first used.

There should be up to eight Weekly Tapes, marked Week1, Week2, Week 3, etc, dated with the first date used.

A standard 3.5" floppy disk box, without dividers, could be a good place to keep standard 4mm DAT tapes.

- 1) Backup tapes must be changed **EVERY DAY**, with the "Tape of the Day."  
(Friday's backup is with the numbered "Tape of the Week", described below.)
- 2) When a backup is completed, the software should **EJECT** it from the drive automatically. There should be an ejected tape **EVERY WEEKDAY MORNING**.  
If not, something is very wrong!
- 3) There is a tape for every day of the week but for **FRIDAY**- Friday is a numbered **WEEKLY TAPE**. **BEFORE** inserting Friday's weekly tape, place the Cleaning Tape in the machine for a cycle. The Cleaning Tape will eject automatically when cleaning is complete. (About 1 1/2 min.)  
**MARK** the record in the Cleaning Tape box with an "X" to indicate that it was used.
- 4) The **WEEKLY TAPE** is known by a number, which increments each week. (1-8 weeks is standard.)  
Keep a "Tape Calendar" near the server, and mark the number for each Weekly Tape every Friday.  
**USE THE RIGHT TAPE FOR THE WEEK**- Check the calendar, and use them in order.
- 5) On Monday Morning, the log file should be checked to confirm that the Friday (Weekly) backup was without errors. Send the new Weekly tape home with a responsible person, as an Off-Site Backup.  
On **TUESDAY**, the previous Weekly Tape (that had been sent home) should be returned to the tape box.
- 6) **ERRORS** can occur on the tape drive, ruining a backup. This is indicated by a **Blinking Yellow Light** on the tape drive itself. These error must be cleared before successful backups will resume!  
(Errors should be marked as a Failed Backup on the Tape Calendar.)

### TO CLEAR ERRORS:

**IDENTIFY** the fault by observing a blinking yellow light on the face of the tape device.

**RECORD** the **FAILED** backup by placing a slashing line across the Tape Calendar's date.  
(You may also want to append a short note "Data Error" to this date.)

**CLEAN** the tape device and clear the fault by inserting the Cleaning Tape, and letting it complete its cycle. **THIS SHOULD BE DONE THREE TIMES** after an Error.  
(About 1 1/2 minutes each time.) The tape will eject automatically after each cycle.

**CHECK** the inside of the Cleaning Tape case with "X" marks. Each time the tape is used (inserted and cycled) a box **MUST** be checked in the tape case. IE: Three cycles = 3 marks.

All new tapes should be **DATED** with the date that they are first placed into service.

No tape should be in service for more than a full year. (Old tapes are the most common source of tape errors.)

Daily Tapes should be replaced every 6 months- We suggest that you send old tapes home with a "responsible person" as an archive. This will also serve as an off-site 6 month backup.

Weekly Tapes should be replaced every full Year.

(Again, send them home with the batch of six-month daily tapes.)

### Save Money on Tape Media- Don't buy larger tapes than you need for Daily Backups.

A DDS Dat drive can use any DDS tape from a rating equal to or less than it's DDS number. Therefore, a DDS-4 tape drive (20/40 Gigabytes, with and without compression) can use DDS-3 (12/20), DDS-2 (4/8) and DDS (2/4) tapes. However, these tapes will only work to their rated capacity. Lower capacity tapes are less expensive. Plan your backup strategy, and buy the appropriate media for your needs.