

## Question

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Explain manually executed media exchange operations.

## Answer

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Let's say that you are presently doing your backups to two drives. When the cartridge in the first drive reaches the end of the tape, your backup script file detects this situation and automatically switches to the other tape drive. This procedure may have been meeting your company's disaster recovery goals, but a sudden growth may easily cause you to exceed two tape cartridges, forcing you to do one of the following:

1. Run backups during the day.
2. Purchase a third tape drive.
4. Hire a person to work the graveyard shift for the sole purpose of replacing tapes.
5. Purchase a small tape library/autoloader.

But each of these choices presents its own complications:

1. The backup operation consumes a lot of network bandwidth, which a company cannot afford to have happen.
2. Purchasing a third tape drive is a short-term solution when considering the growth a company may be expecting.
3. Hiring an additional employee is not only an expensive proposition, but requires someone who is familiar with the process because future growth would require that person to accomplish twice-nightly backup procedures.
4. Existing backup software know nothing about tape libraries, which would require a company to either:
  - a. Purchase all new backup software (which is expensive, requires the development and testing of new procedures, and necessitates the training of personnel).
  - b. Purchase a robotics driver (which would involve writing a script file to automate existing manual tape handling and inventory procedures).

The decision to go with the library and jb driver package is a simple decision because it expands with your company's forecasted growth plan, accommodates a tight budget and requires no major changes to existing procedures.