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## What Is Considered Best Practices In Terms Of Backup Vaulting (Offsite Storage) Frequency?

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There seems to be a belief that if you're a smaller shop or smaller business, you don't have a lot of data, and you don't need to send your data offsite very often. A lot of times, the decision to send tapes offsite is dictated, unfortunately, by the growing capacity of tape media. If you're backing up 100 gigabytes a week, it becomes embarrassing to a lot of folks to send that tape cartridge offsite because it's not full. So, a lot of companies have a tendency to want to fill that tape before they send it offsite -- which is a big, big mistake. Regardless of the size of the organization, there is an equal requirement to protect your data. Because you're a smaller company doesn't mean you can afford to go out of business. But unfortunately, there's this perception that tapes have to be filled up. From our perspective, we always say the best practice is daily. Again, this is closely tied with your recovery point objective (RPO).

If your RPO is 24 hours, meaning that I can afford to lose up to 24 hours worth of data (but no more), people say, "I'll back up every day and I'll be OK." That's true only if you send your tapes offsite every day. If you back up every night and you send your tapes offsite every week, you can lose up to a week's worth of data. People don't necessarily think about that. They think they're backing up every night; it's good, they're protected. But, should something happen to your entire data center, all of a sudden you're nightly backup is irrelevant and you're stuck recovering from the previous week's backups. Can you recreate this week of lost data? Maybe, maybe not.

It ties back into criticality of the data and potential losses. So, if you stand to lose a lot of money because you lost a week's worth of data, maybe it is worth buying more tapes and sending these tapes offsite daily as opposed to weekly. It's a very important concept that a lot of companies seem to sometimes mix up.

Also, you should never send your unique data copy offsite. That's another mistake. The problem here is we have a single copy. Best practices would dictate that you keep a copy onsite for quick access and quicker recovery, and you send a copy offsite for disaster recovery purposes. You should always have two copies of your tape; one onsite and one sent offsite. With the low cost of tapes today, I don't think it's worth neglecting.

Another important point when it comes to best practices with respect to tape and vaulting is the storage conditions. The trunk of your car is not a good vault -- especially if you live in Phoenix. When it heats up to 115 degrees Fahrenheit, your tapes may not be recoverable or readable. A lot of companies will try to store the tapes maybe to another location they have in an effort to save money. Sometimes it's also a security concern, because they don't want the tapes to be in someone else's hands, or they're afraid the tapes may be lost. They try to develop the vaulting process in house. There's nothing wrong with that, as long as the storage conditions at the other location are optimal in terms of temperature and relative humidity -- based on the tape manufacturer's recommendations.

At the risk of sounding like a broken record, this is where technology like backup data deduplication and more specifically, the replication part of it comes to the rescue one more time. If it is not practical or cost effective to

send partially filled tapes offsite (especially those 400GB native capacity ones), if the tape storage conditions at your other location are not optimal, or if you don't want your tapes in someone else hands, then maybe tape is not the best choice. Backup to disk with remote replication is likely the answer and, when combined with deduplication, is a cost effective alternative to tape.

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