

# Virtual Tape Library

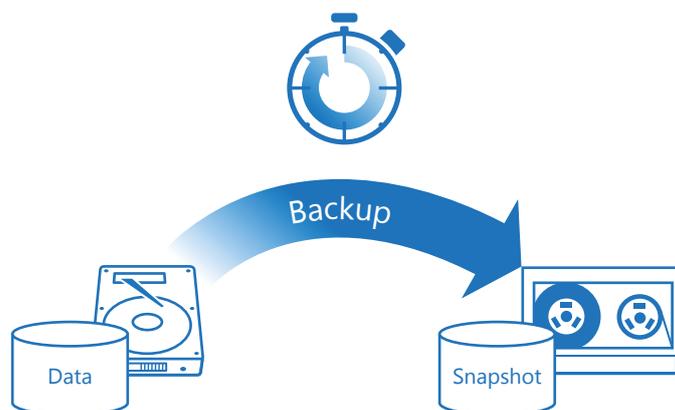
## INTRODUCTION

Tape is not dead and never will be. There are few reasons that keep it alive: cheap capacity, even comparing to modern high capacity SATA spindles, long-term vaulting capabilities, that can last for decades, and regulatory requirements that a lot of companies or organizations are forced to adhere to.

## PROBLEM

**Backup time doesn't fit the backup window** since the amount of data, that needs to be backed up, increases exponentially all the time. This is the main concern that traditional tape backup solutions have in common. Snapshots are taken when the system is under a light workload. Therefore if the backup time is longer than the backup window, the backup processes overlap with production workload, which results in two negative consequences:

- Significant downgrade of the systems performance;
- Risk remaining without a backup, leaving the data unprotected, and regulatory requirements violated.



*Backup to tape takes a lot of time*

## SOLUTION

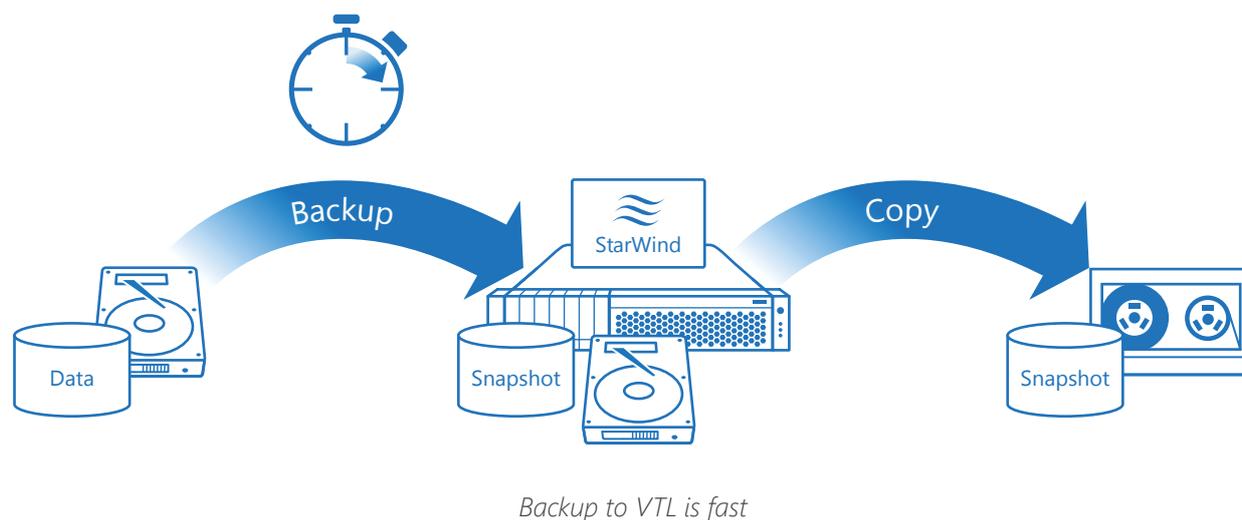
StarWind Virtual Tape Library (VTL) converts the inexpensive, high capacity SATA drives into virtual tapes, emulating real existing tape hardware.

**Backup window is significantly shrunk**, since VTL is utilizing the hard disks, which are faster comparing to traditional physical tapes. As the result the backups are taking less time and fitting the backup windows, so there's no risk of backup process to overlap with the production processes. As a result, the

performance of the production system is stable. The possibility of the backup process being interrupted is decreased, thus the backup will not be corrupted or lost. Using StarWind VTL brings beneficial side-effects:

- It allows **implementing Disk-to-Disk-to-Tape (D2D2T) backup strategy**. Thus, each chain of the backup process link will contain 1 copy of the data, which is 1 more in comparison with D2T strategy;
- It allows **implementing Disk-to-Disk (D2D) backup strategy**, thus the companies who are not under regulatory requirements, that are not forced to store backups on physical tapes or have no need to vault all data can benefit from really fast backup process;

**StarWind VTL preserves existing current infrastructure.** As the result there is no need to get rid of existing tape backup infrastructure since StarWind seamlessly integrates it into any running infrastructure by migrating from D2T to D2D2T backup strategy.



## CONCLUSION

StarWind VTL seamlessly integrates into existing infrastructure and allows the backup process to fit the backup window. As the result, it creates an additional snapshot copy, meets regulatory requirements, significantly decreases backup cost and keeps the performance of the system stable by increasing the speed of the backup process.