

SFD 15 - StarWind

*Anton

StarWind - pioneered SDS in 2003
Do SDS, HCI and storage, and VTL

Strict focus on SMB and enterprise ROBO

ROBO can be really remote - like a ship or oil rig - needs to be designed with a bunch of resiliency in mind

*Scott - VTL: Why it really matters?

Backups originated around tape "Tape: backup's best friend!"

Disks have come a long way in terms of capacity (and reduced cost)
Backup applications have (early on) struggled with speaking to disk

StorageTek invented VTL in the 90s. People then moved to using disk. The "dusk" of the VTL era

Object storage has become much more popular in the interim

It's hard to do file or block from object effectively

Tape or Tape-like mechanism for cold data - tape is still a lot cheaper than disk
Longevity
Can be stored offline
Streams at reasonably high bandwidth

Backups to object? Works well. Software is lagging behind in support though.

Object storage similar behaviour to tape
Non-blocking
Big IO
No random writes

The "dawn" of VTL is back

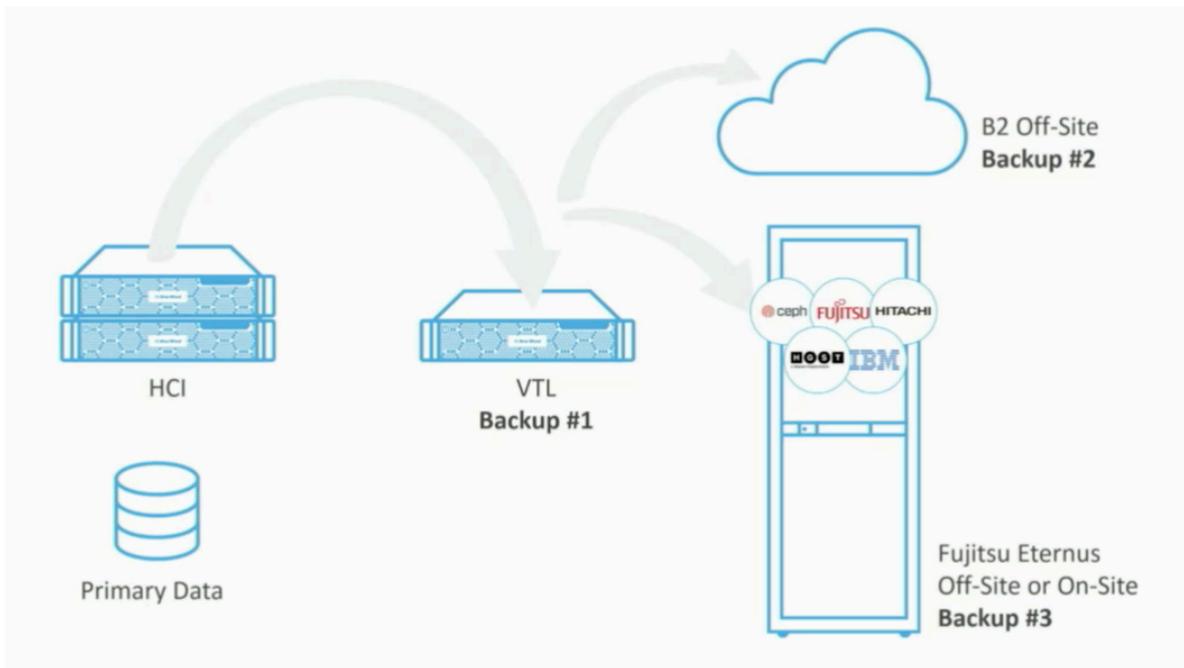
*Demo - Veeam to Backblaze via StarWind VTL

Support Amazon S3 and Glacier, Backblaze B2, will soon support Azure

*Max - Positioning

Maximum emulation - 128 Libraries, each of which have 96 tape drives

Positioning



3-2-1 - 4-3-2-1-0

3 Copies, 2 different media, 1 copy off-site

4 copies, 3 different media, 2 copies off-site, 1 click operations, 0 issues

HCI VMs -> VTL -> Local Copy to Archive tier in public cloud

ROBO HCI -> VTL -> Cloud

Event-driven to Proactive Support

Event-driven

- issue happens
- customer files support tickets
- support helps to resolve the issue

Proactive

- telemetry collected & analysed with AI
- failure pattern detected and logged
- support prevents an issue from happening

Turnkey appliance available

NL-SAS, 16 drives per appliance, 3.5" FF, roughly 120TB before dedupe

<https://www.starwindsoftware.com/starwind-virtual-tape-library-appliance>

VTL will remain "until backup applications (all of them) will learn all cloud and on-prem Object storage APIs ... or until all object storage will settle down on a single unified "standard" API."