

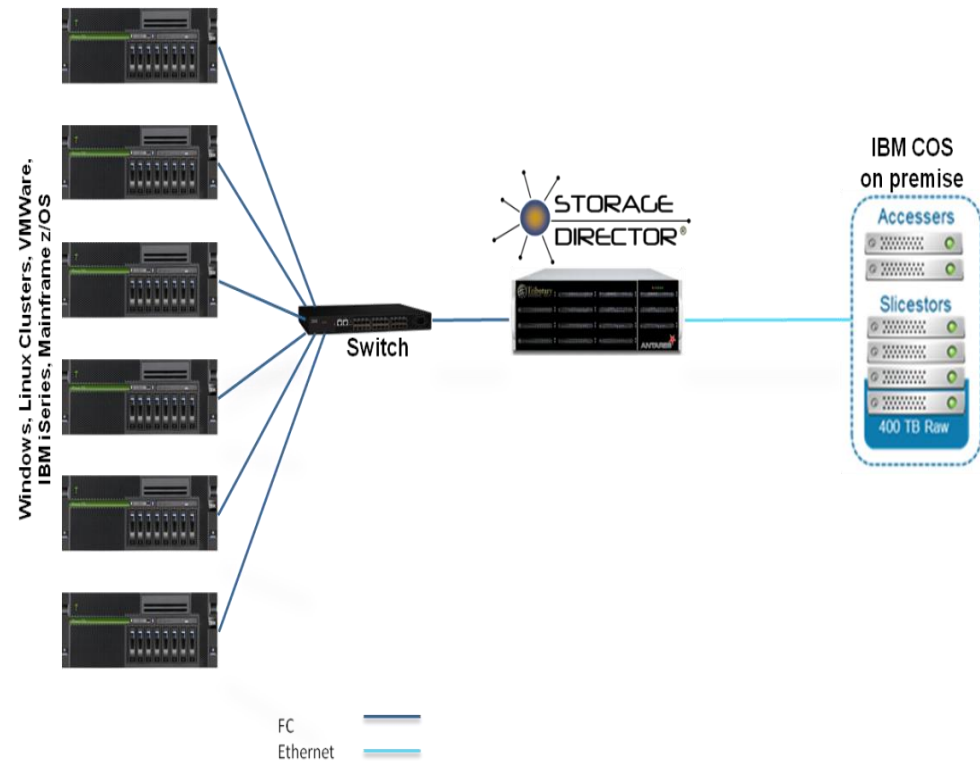
## **Tributary Cloud Object Storage**

is a web-scale platform that stores unstructured data — from petabyte to exabyte — with reliability, security, availability and disaster recovery without replication.

## Redefines availability, security and economics of data storage.

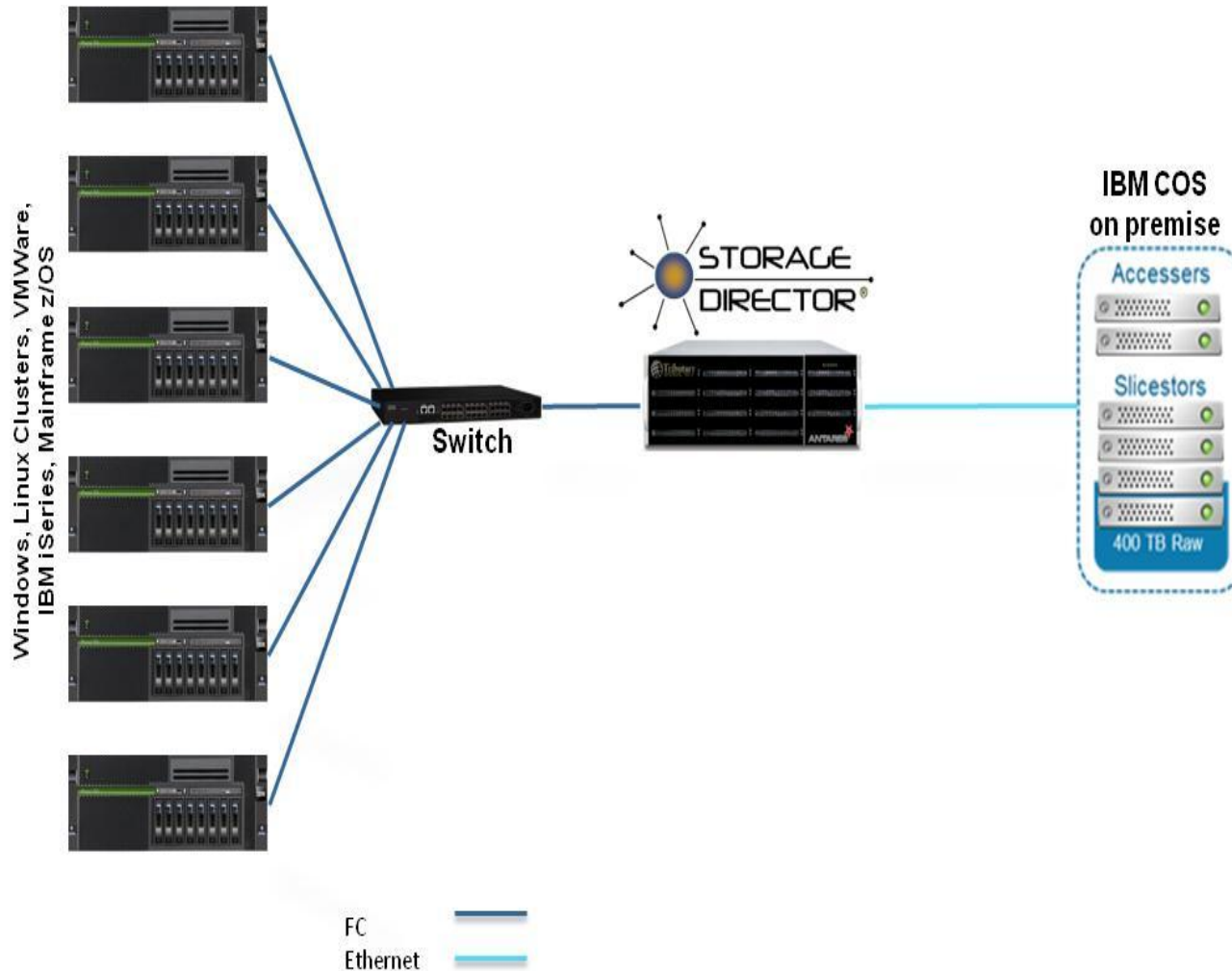
For data backup and archive environments with Data Domain presently, a performance front-end ingestion and caching solution called Storage Director can be configured

- Storage Director (SD) has rapid ingestion capabilities with caching
- SD will present a native target to Spectrum Protect
- SD will ingest data from Spectrum Protect, Commvault, NetBackup or Veeam at up to 10.4 GB per second (or 37.4TB an hour) and restore at speeds up to 9.6GB per second (or 34.6 TB per hour) per node
- Backup data will then be streamed to IBM cloud Object Storage post process for archive

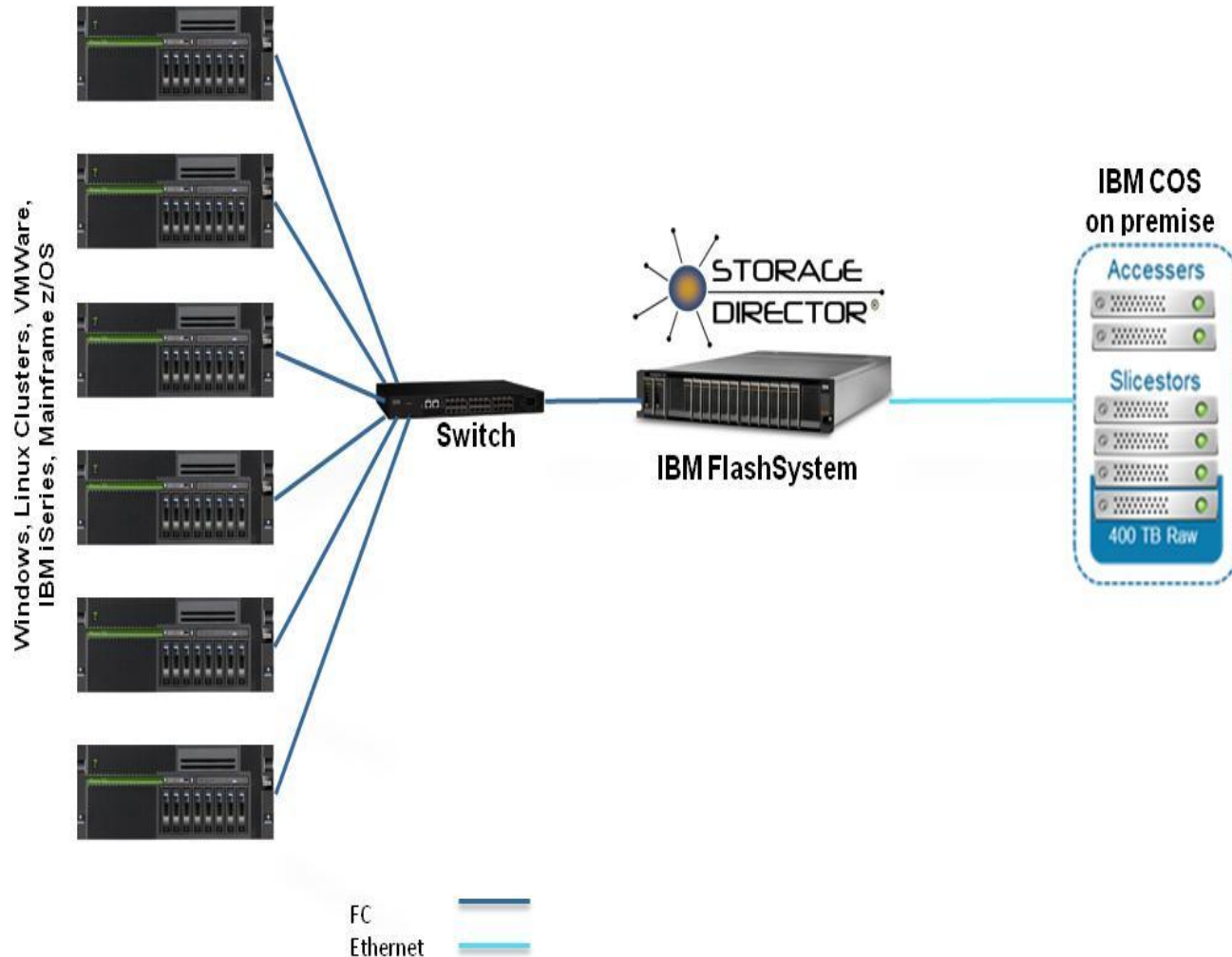


	IBM Cloud Object Storage + Storage Director (with Installation Cost)		Dell EMC Data Domain (NO Installation Cost included)	
Total Cost Hardware, Software, Installation, and 3 Yr., 24x7 support	1.4 PB Usable (with 4:1 compression)  349,552.60	2.0 PB Usable (with 4:1 compression)  \$554,552.60	1.0 PB Usable (with 10:1 dedup)  \$456,924	2.0 PB Usable (with 10:1 dedup)  \$933,538
Cost per TB	<b>\$249.68</b>	<b>\$277.28</b>	<b>\$456.92</b>	<b>\$466.77</b>
Cost per GB	<b>\$0.25</b>	<b>\$0.28</b>	<b>\$0.46</b>	<b>\$0.47</b>

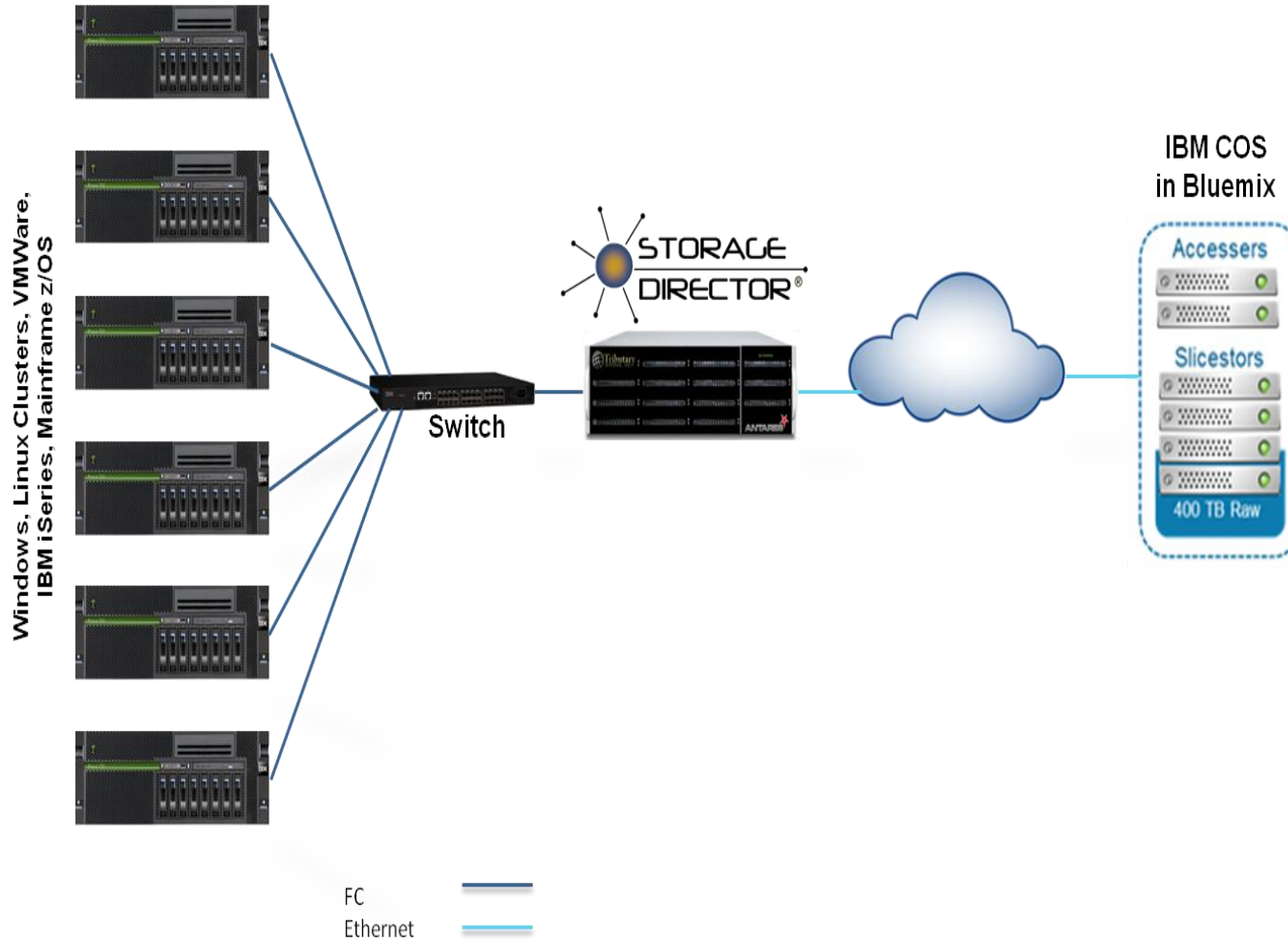
## Private or On-premise IBM COS with Storage Director



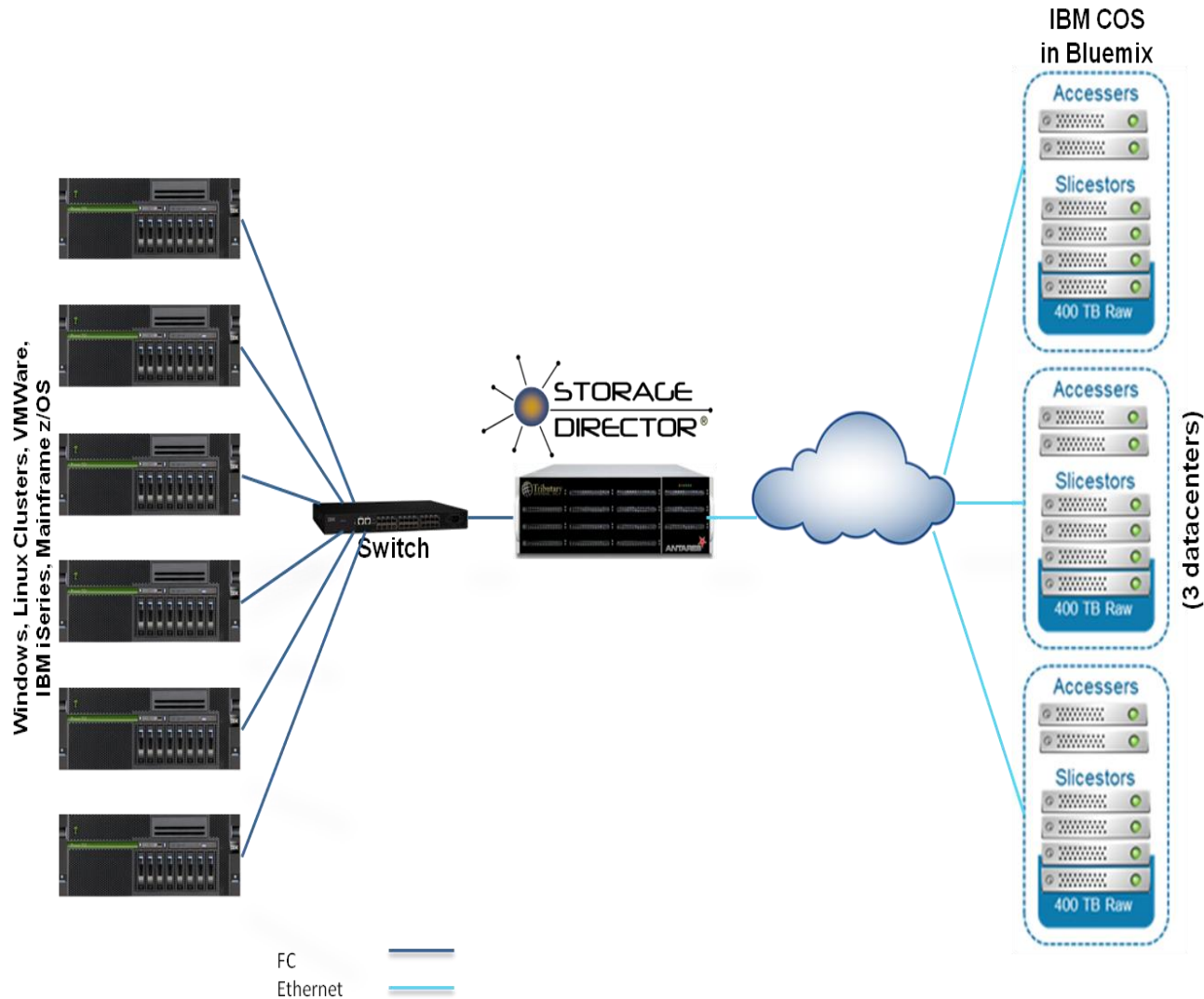
## Private or on-premise IBM COS with Storage Director on IBM FlashSystem

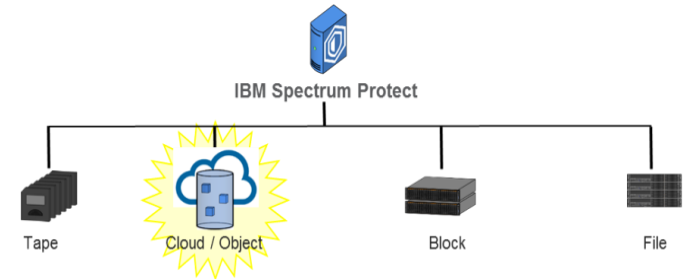


## On-Premise Storage Director with IBM COS in IBM Bluemix



## On-Premise Storage Director with IBM COS Cross Regional Bluemix





- Ideal for customers looking to reduce acquisition and operational costs over Data Domain storage
- Non-disruptive; works with existing backup infrastructure
  - No rip-and-replace
- Stop paying for de-dupe twice, in Protect and DD
- Shift storage spend to lower cost backup storage
  - More efficient disk utilization
  - Easier to manage across multiple sites with fewer dedicated resources
- IBM's continuing investment to deliver additional capabilities and customer benefits
- Leverage IBM Cloud Object Storage as common infrastructure to meet demands of other workloads
- IBM Cloud Object Storage with Storage Director increases Ingestion and Restore rates by 4x versus Data Domain

