



**Hewlett Packard
Enterprise**



GTUG 2018

**Latest on NonStop Virtual
Backup Products**

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May 16, 2018

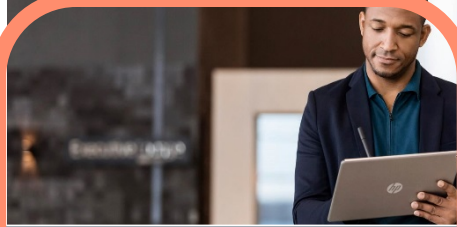
NonStop Enterprise Protection portfolio



Basic backup

Protect and recover data stored on the latest physical tape technology

NS LTO-6 Tape Drives



Protect and recover

Use the most sophisticated solution on the market to protect and recover data with Virtual Tape

HPE NonStop Virtual Tape Controller (VTC)

HPE NonStop Virtual Tape Repository (VTR)



Uptime all the time

Avoid any downtime or outages for your Mission Critical with uni- and bi-directional replication on multiple platforms

HPE NonStop Shadowbase Basic Data Replication

HPE NonStop Shadowbase Advanced Data Replication

HPE NonStop RDF



Data integration

Integrate islands of data in real-time, deliver new business services and operational intelligence

HPE NonStop Shadowbase Basic Data and Application Integration

HPE NonStop Shadowbase Advanced Data and Application Integration

HPE NonStop RDF

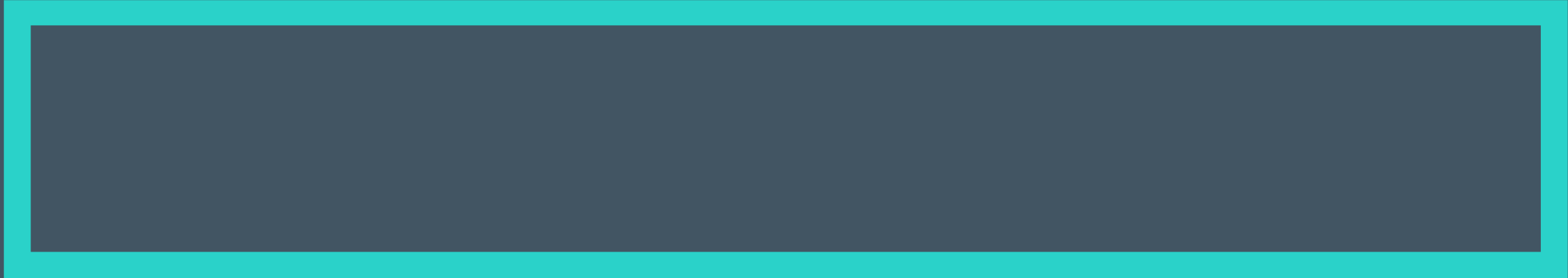


Data verification

Verify and compare data stored to ensure data integrity and recovery to achieve audit compliance

HPE NonStop Shadowbase Data Management Utilities

HPE NonStop Shadowbase Compare



The Architecture

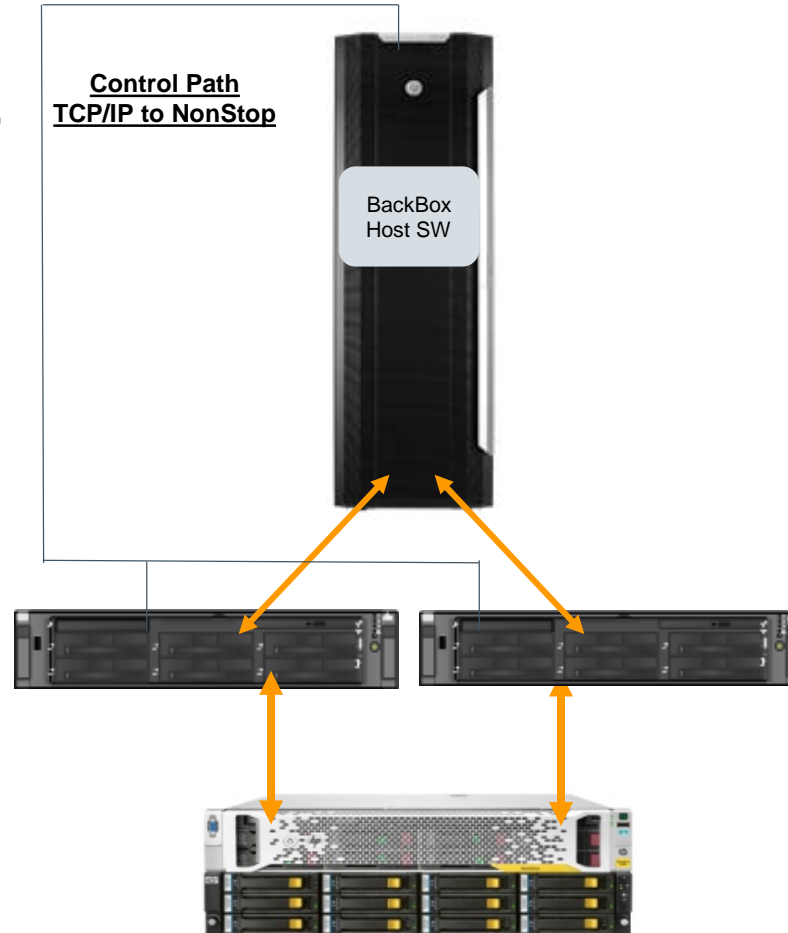
Host-Based Control

with Context-Free Controllers

NonStop

BackBox Host Software

- Domain Manager
- Event Extractor
- Metadata Catalog



Native NonStop Tools

- Mediacom, DSM/TC
- Backup/Restore
- TMFCOM
- BRCOM

HP NonStop BackBox VTC

HP StoreOnce



HP NonStop BackBox VTC

How it works

BackBox – NonStop Integration

– Integrated with DSM/TC & TMFCOM

- Virtual tapes are automatically cataloged & labeled
- Interlocks prevent accidental media deletion if not SCRATCH
- Captures catalog updates for DR
- Knows difference between volumes for TMF Online Dumps vs. Audit Dumps

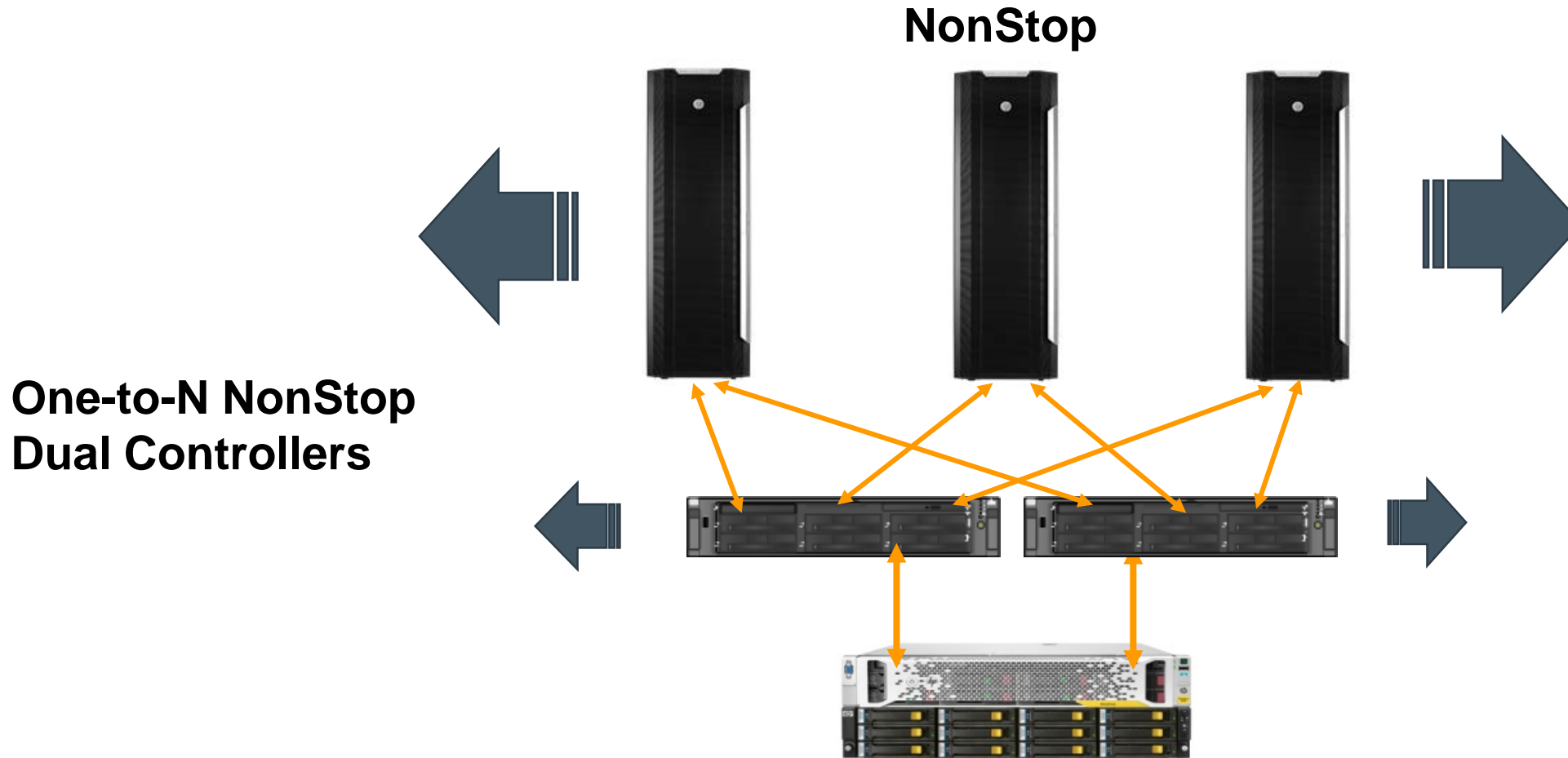
– Integrated with NonStop EMS

- All events logged there
- Tape mount requests intercepted
- Checks for missed requests

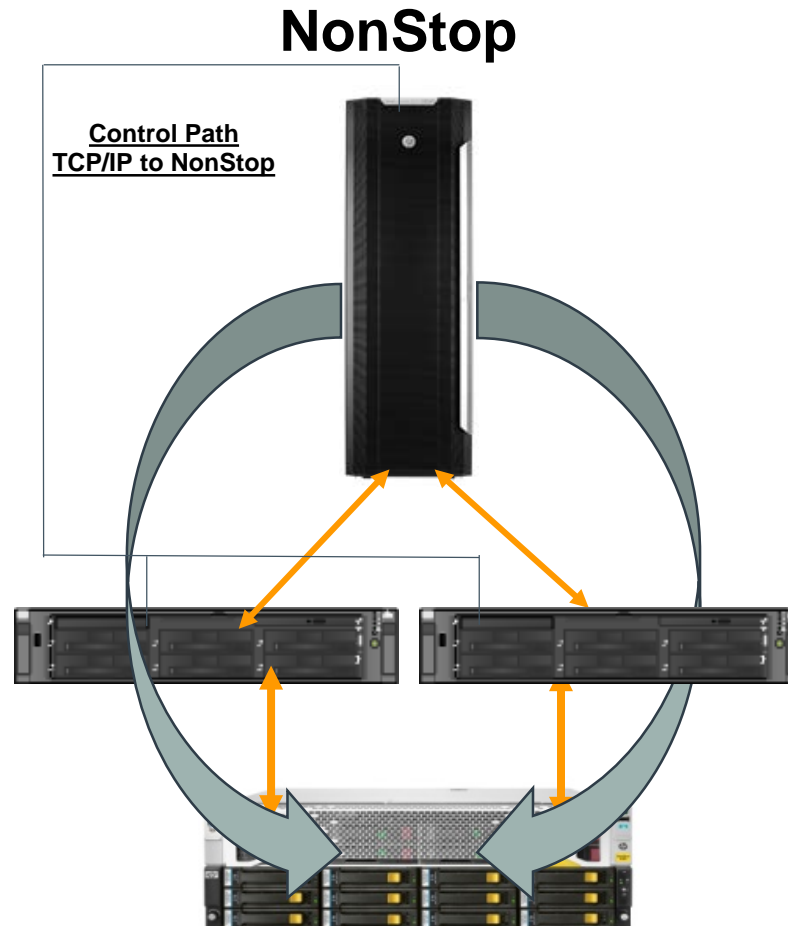
– Integrated with NonStop I/O subsystem

- Automatically discovers devices defined in SCF during VTC config

Common Solution for Small to Large configuration



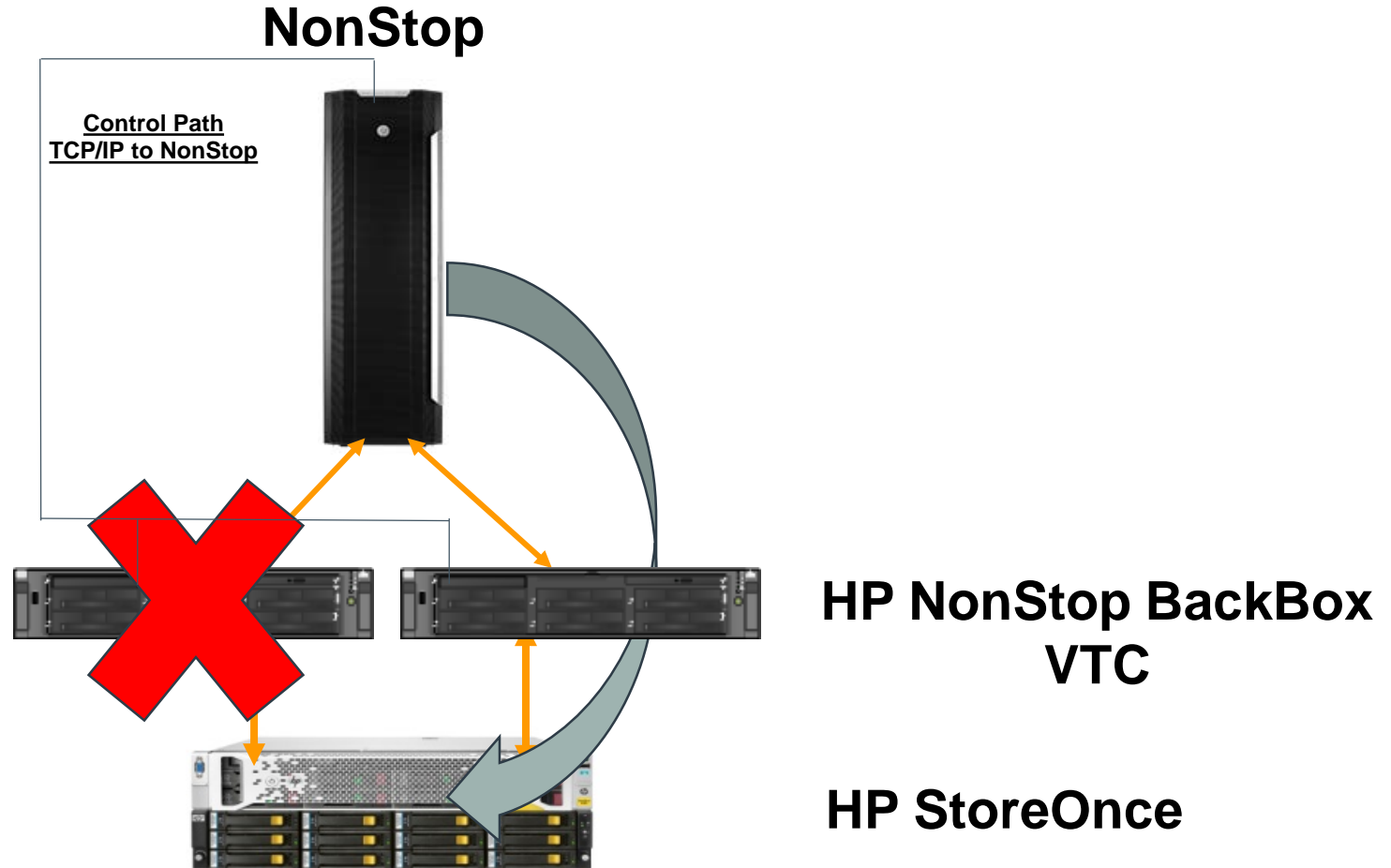
Parallelism = High Performance



HP NonStop BackBox
VTC

HP StoreOnce

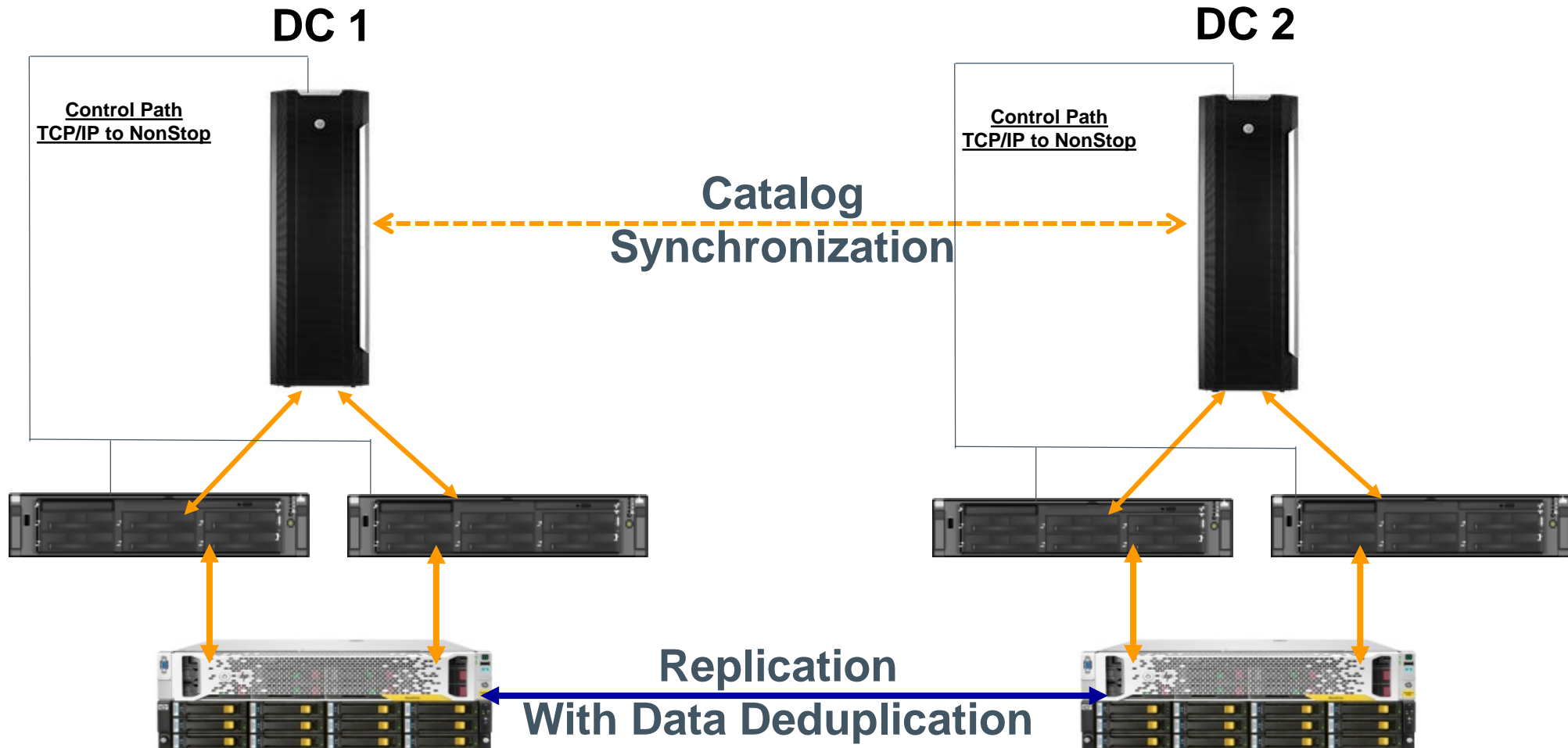
Fault-Tolerant without complexity



Backup Replication and Catalog Synchronization

Automatic between Primary and Secondary Data Stores

Automatic between DSM/TC instances



Advanced Data Store

Spare Pool - Stand-in storage when main storage is not available

DC 1

DC 2

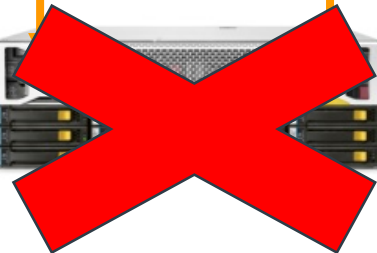
Control Path
TCP/IP to NonStop

Control Path
TCP/IP to NonStop

Catalog
Synchronization

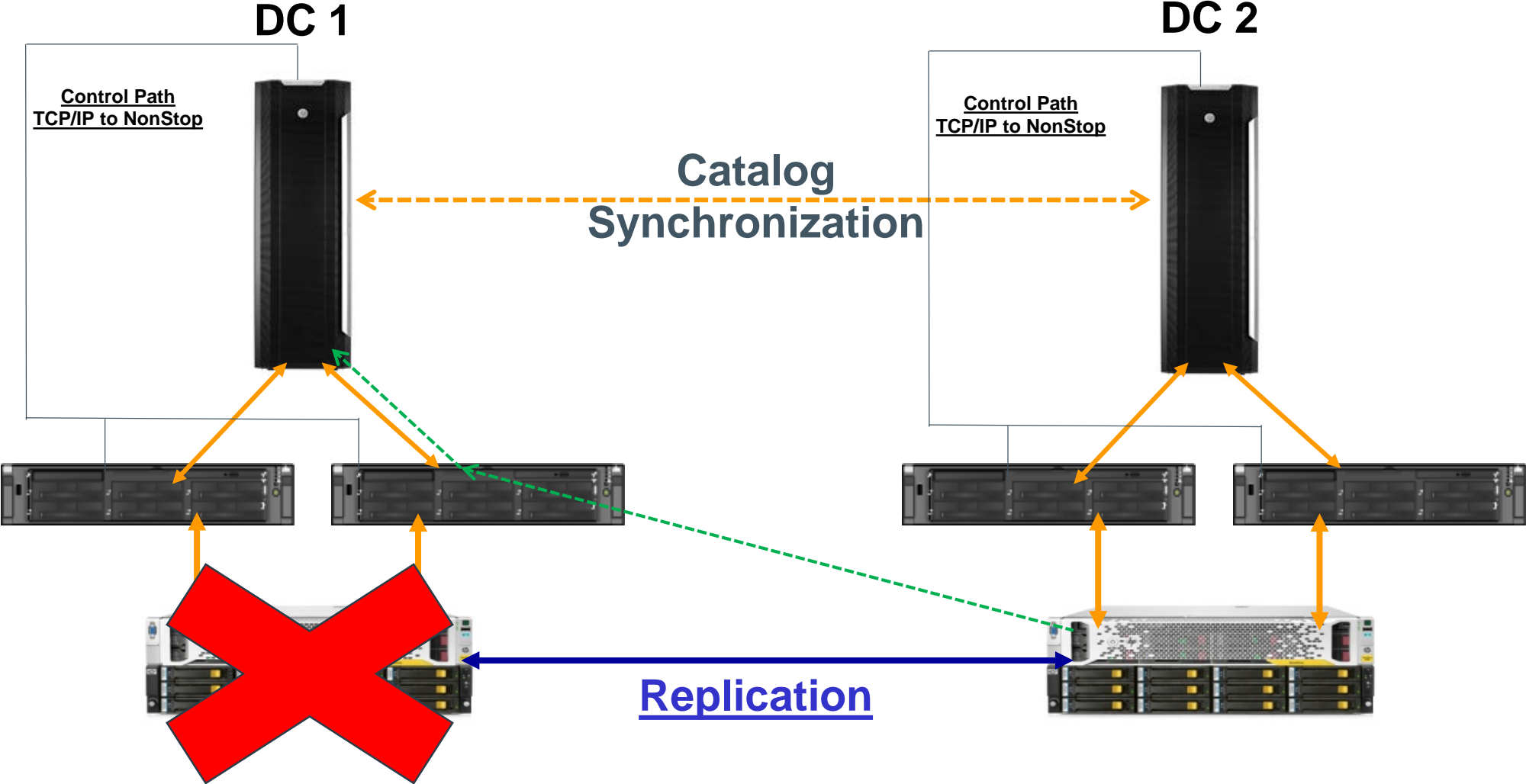
If Corporate storage
is not available,
Backup automatically
store to
an alternate StoreOnce storage

Replication



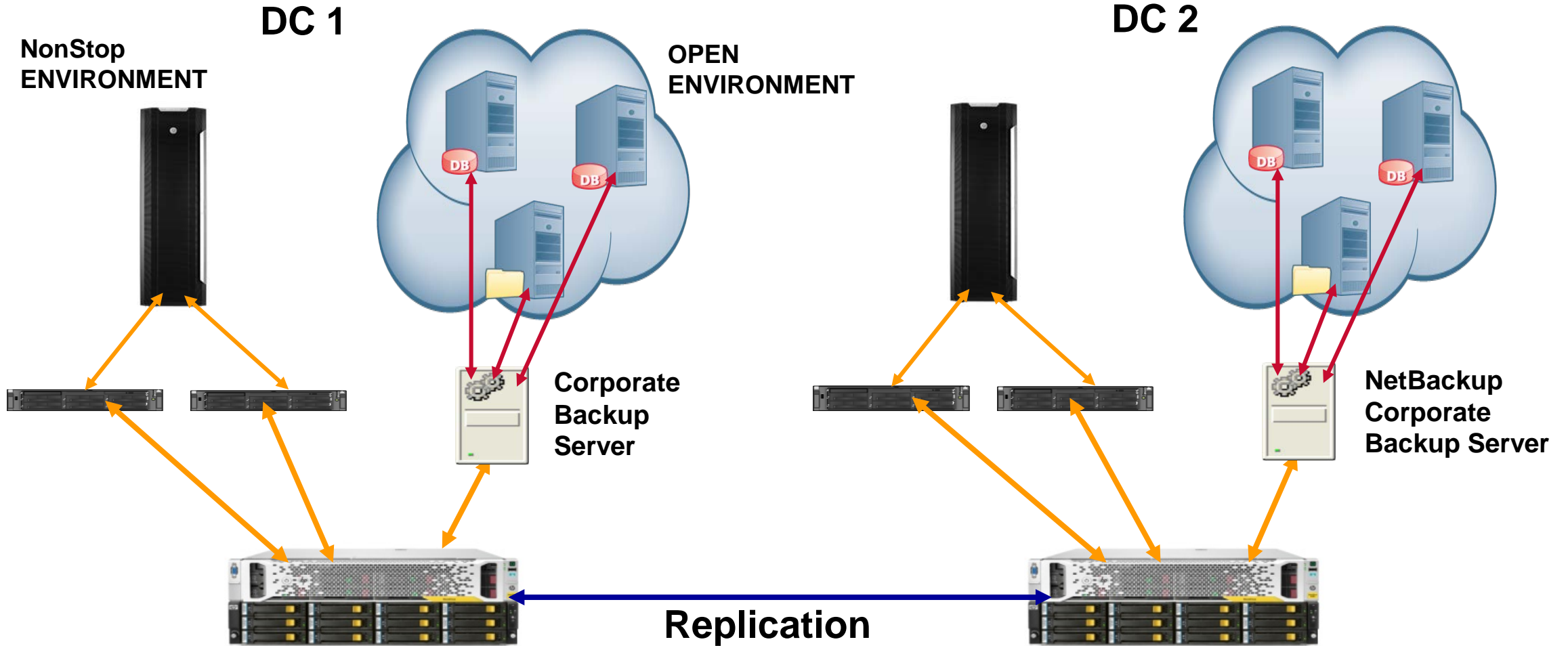
Advanced Data Store

Copy Pool - Restoring a file from remote storage



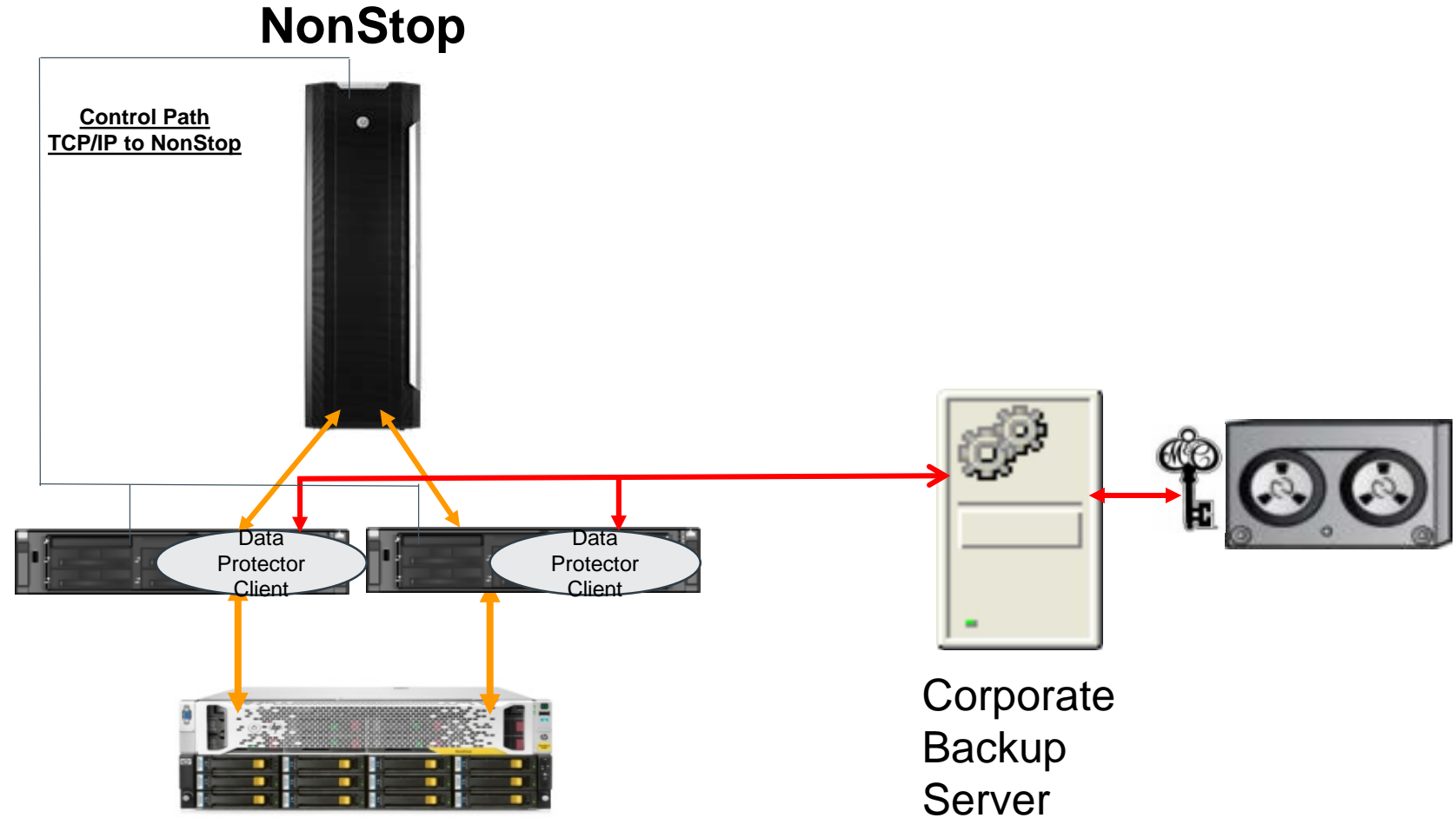
Storage Integration

Integrating NonStop with Corporate HP StoreOnce



Integration with Corporate Backup

Central archiving, encryption, tape vaulting





HPE NonStop BackBox LARGEBLOCK Support

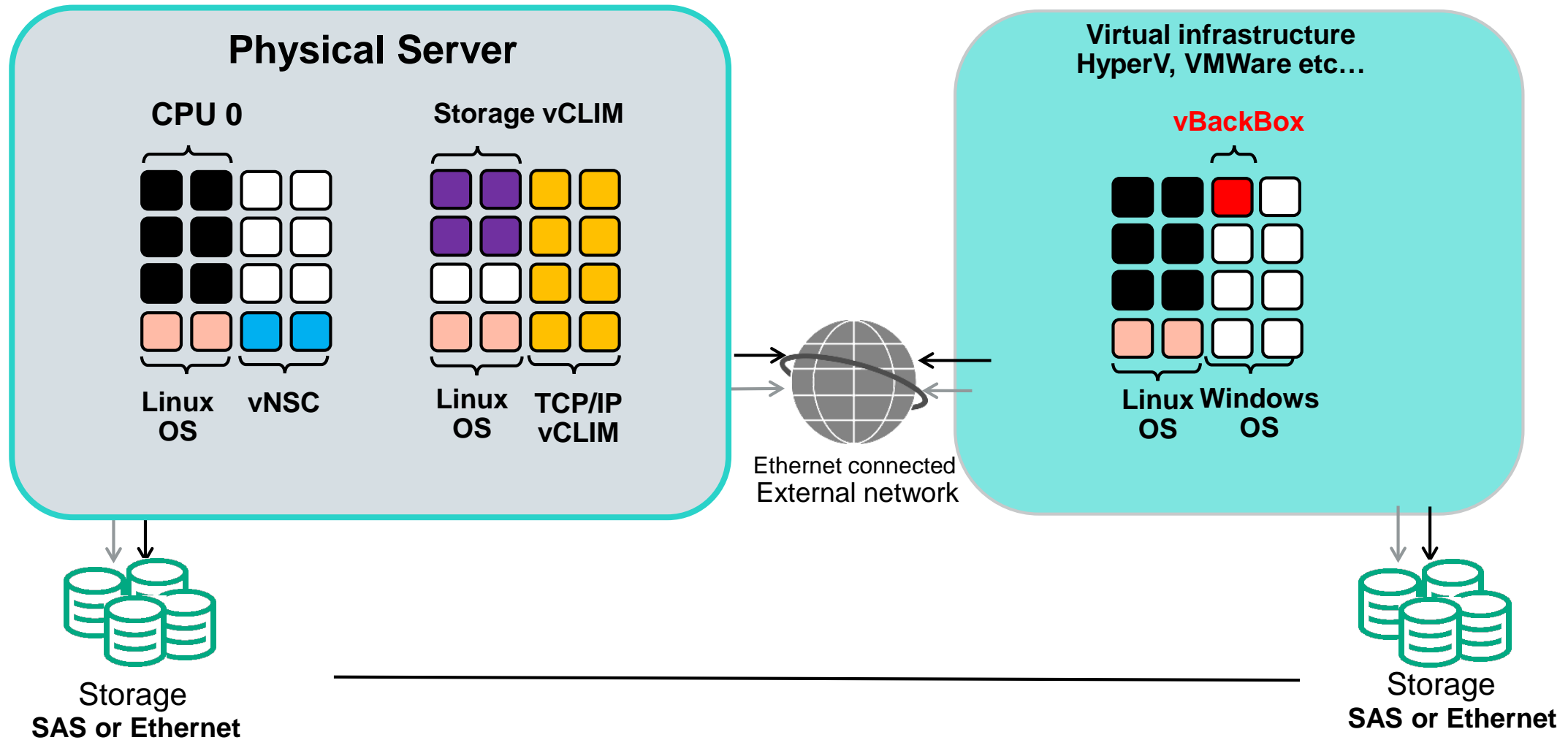
LARGEBLOCK support

- The VTC now support on both iSCSI and FC the LARGEBLOCK.
- BLOCKSIZE can be an even value in the **range 2 through 52, or 224, 448, 672 and 896**
- Note that this option also work with regular blocksize without having to be disabled.

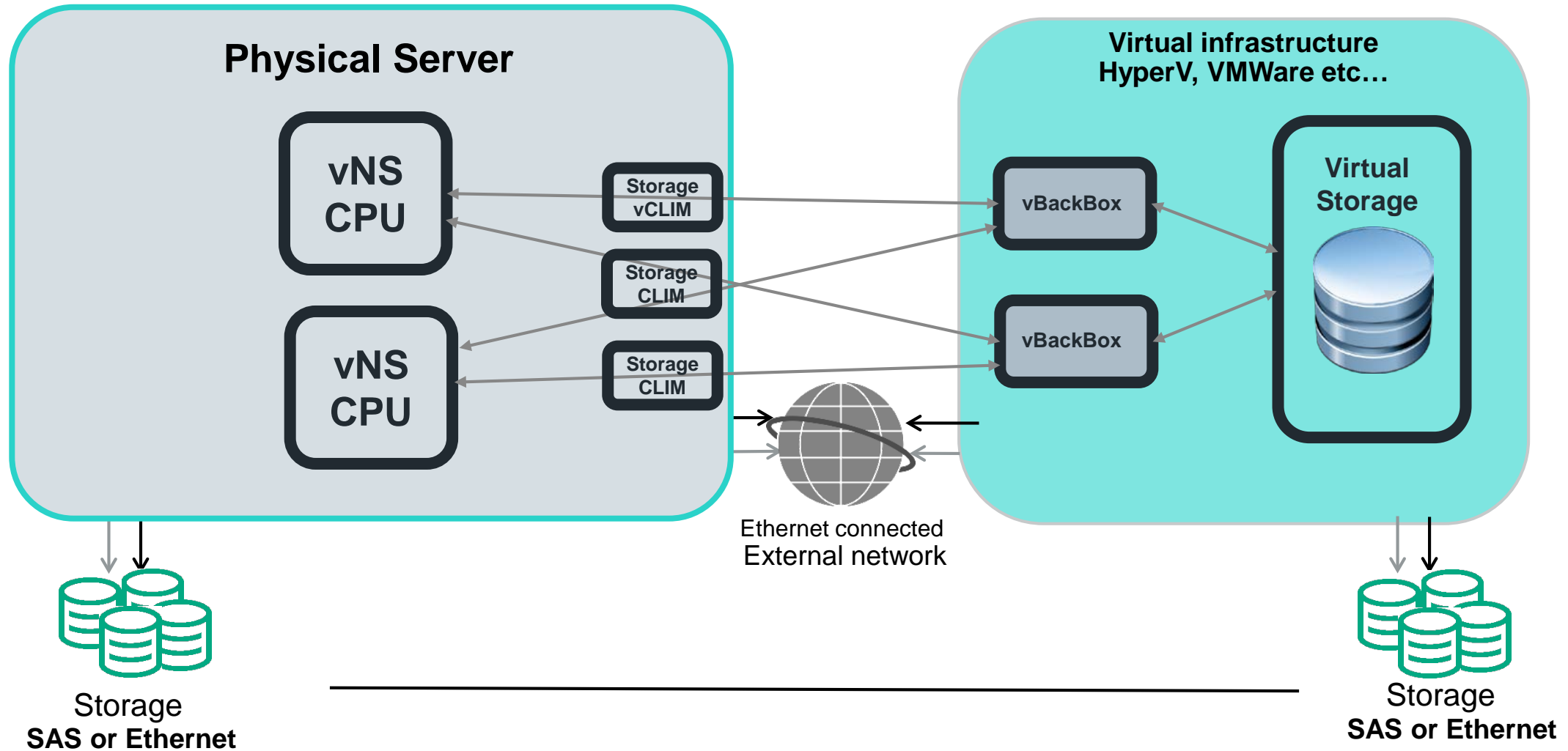


HPE NonStop Virtualized BackBox

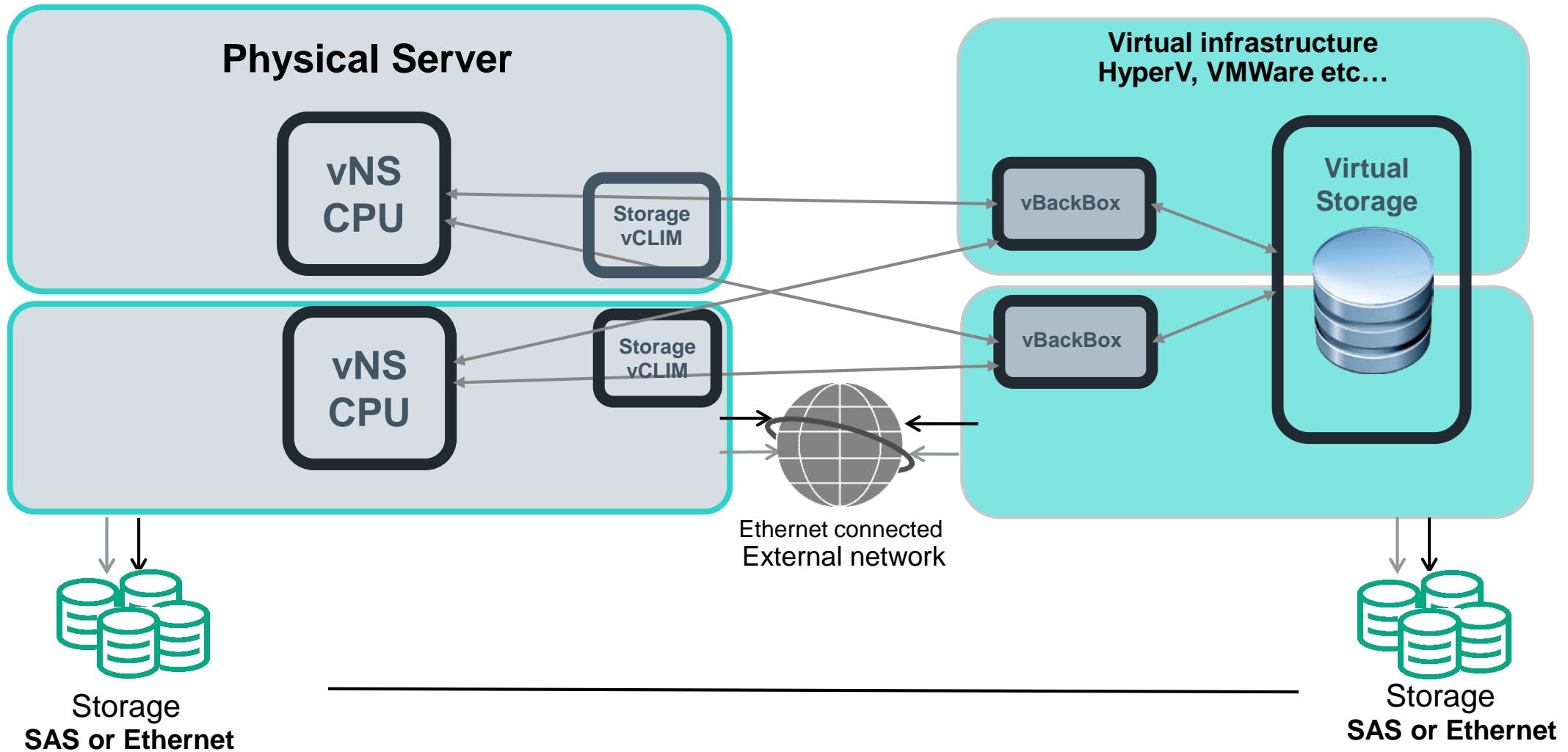
HPE Virtualized NonStop and Virtualized BackBox



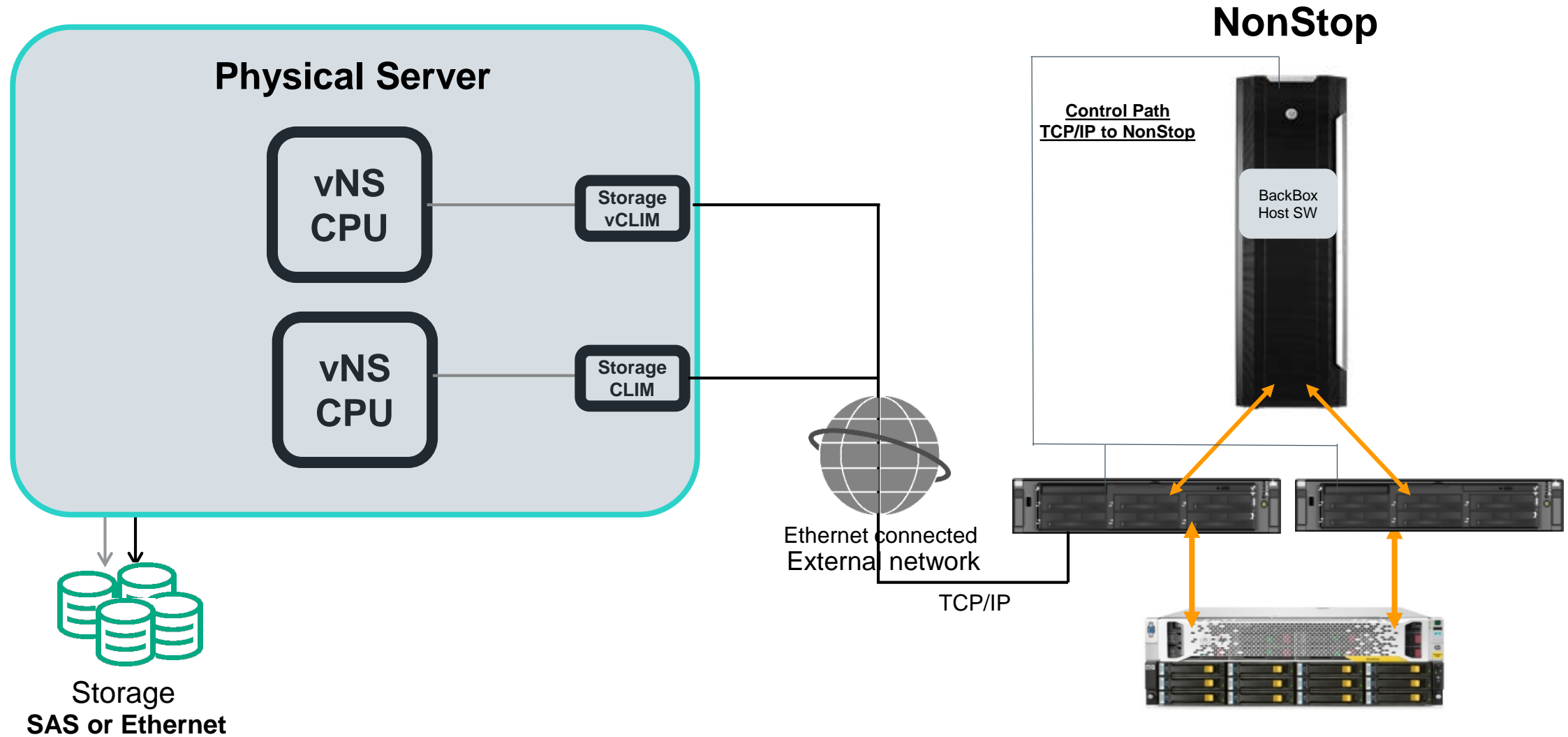
HPE Virtualized NonStop and Virtualized BackBox



HPE Virtualized NonStop and Virtualized BackBox



HPE Virtualized NonStop connecting to VTC



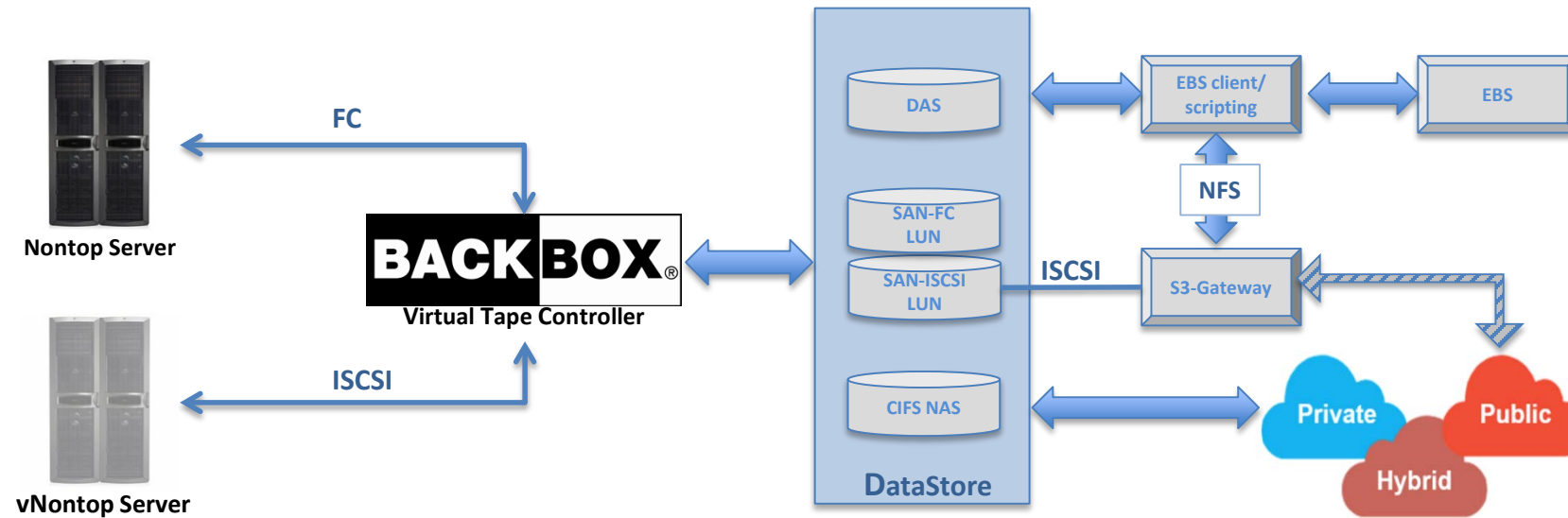


BackBox – CLOUD READY

BACKBOX® CLOUD READY

BackBox and vBackBox are now cloud-ready:

- ready to move to the cloud,
- ready to build cloud customized storage solutions,
- ready to transfer NonStop data to any type of storage,
- ready to restore, backup and recover directly in the cloud.





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Thank you
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