

Converged Mainframe Solutions: Consolidating Your Data Across Processes and Platforms



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Discussion Topics

- “Converged” Defined
- About Luminex
- How Mainframe Data is Used
- Components of Converged Mainframe Solutions
- Features
- Benefits

“Converged” Defined

past tense of converge

verb | con·verge | \kən-ˈvərj\

From Merriam-Webster:

*“to move toward one point and join together;
to come together and meet”*

Luminex’s heritage and vision:

*“to bring disparate platforms and processes
together...”*

Luminex At A Glance

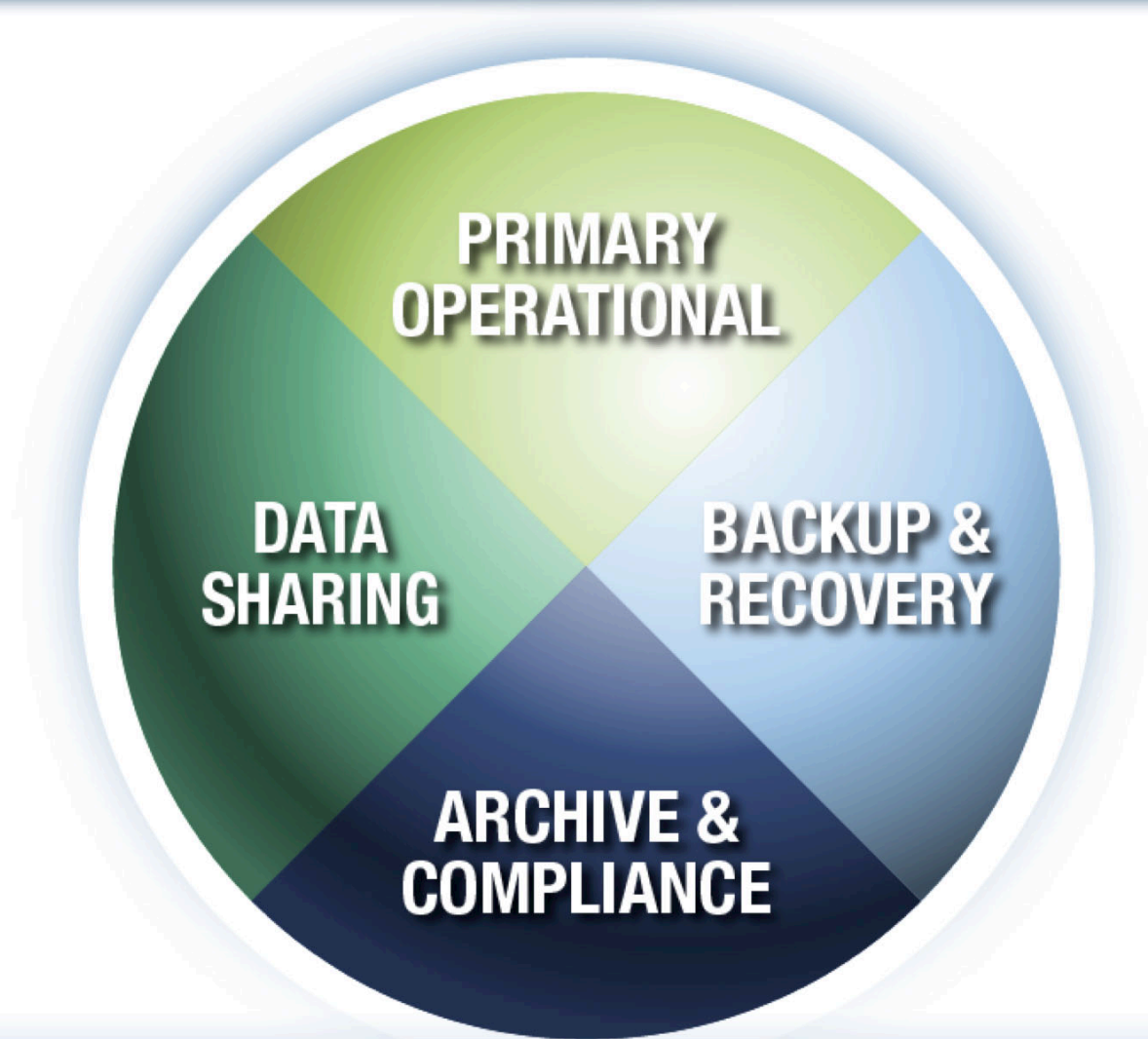
- Luminex is an enterprise-class solution vendor of mainframe virtual tape
- 25+ years delivering mainframe data solutions worldwide
- Installed in all major industries on 6 continents
- Solutions scale seamlessly from entry level to the most demanding multi-PB datacenters
- A leading provider of tape-less solutions for mainframes
 - No physical tape is required



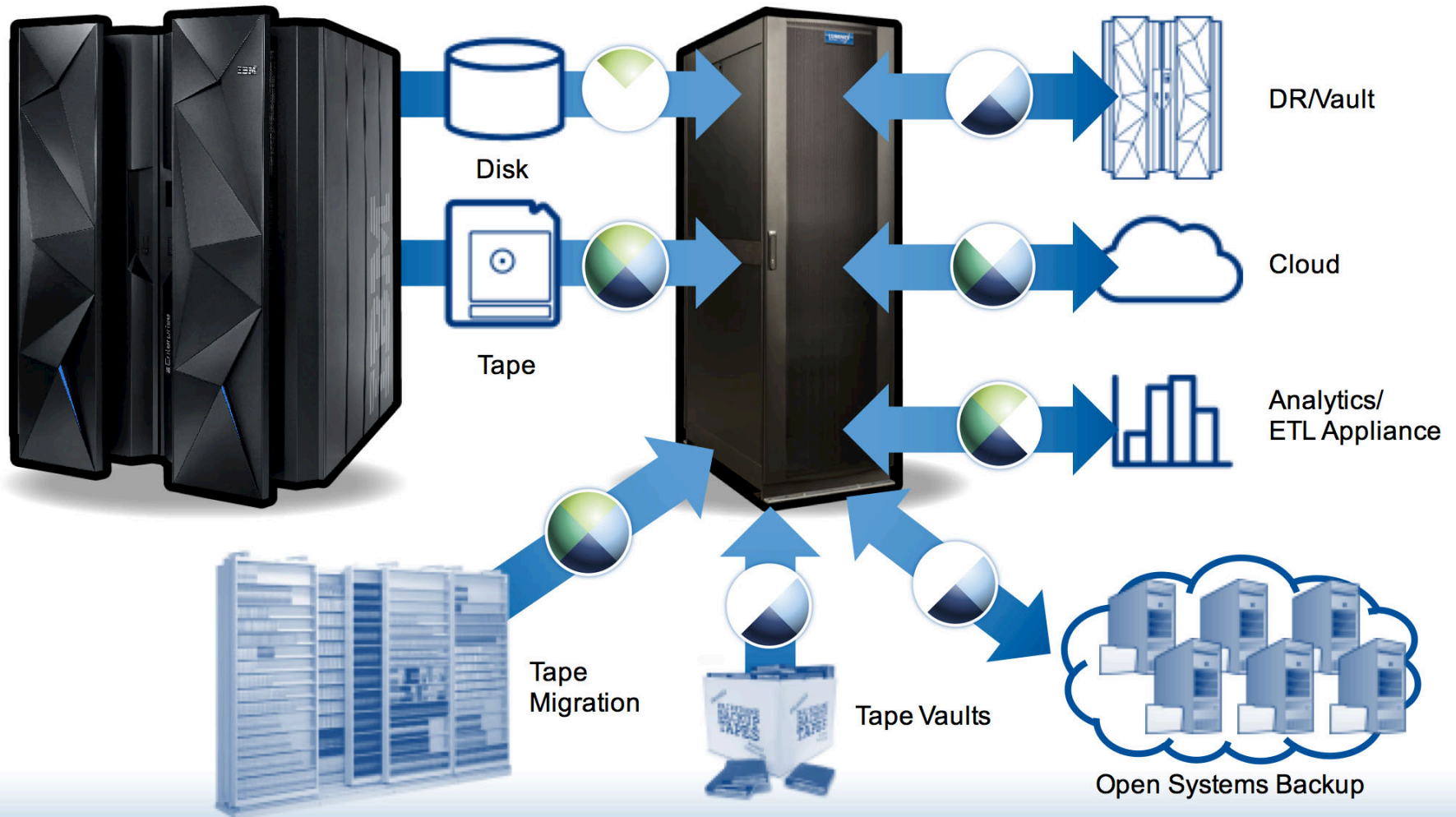
Luminex's Heritage of Converged Solutions

- 1987 – DWE: Mainframe report data on optical media
- 1996 – Channel (Bus & Tag and ESCON) for peripheral solutions
- 2003 – VB 3990: Mainframe DASD
- 2004 – Mainframe virtual tape
- 2005 – Channel (ESCON) OEM for mainframe host solutions
- 2011 – Channel (FICON) OEM for peripheral solutions
- 2012 – CloudTAPE: Cloud connectivity for virtual tape
- 2015 – P2V: Off-host physical-to-virtual tape conversion
- 2015 – MBI: Mainframe batch interface
- 2016 – T2S: Tier 2 ECKD DASD

How Mainframe Data is Used



Luminex's Vision of a Converged Mainframe Storage Environment



Luminex Converged Mainframe Solution Features

CGX: Virtual Tape Control Unit



CloudTAPE: Cloud Gateway



P2V: Off-host Physical-to-Virtual Tape Conversion



MBI: Mainframe Batch Interface for Off-host ETL



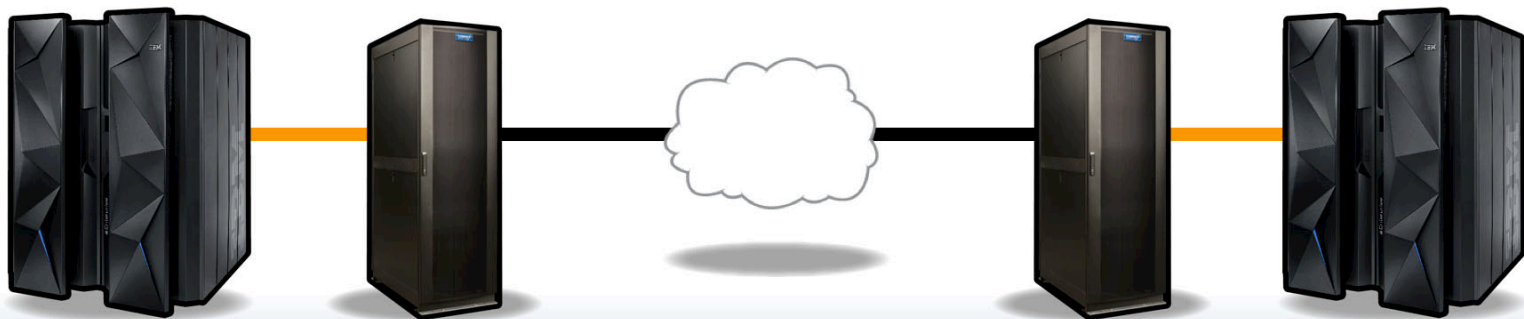
T2S: Tier 2 Storage ECKD DASD Controller



CGX: Mainframe Virtual Tape



- Industry-leading solution
- Control unit, emulating 3490 and 3590
 - Integrated storage, starting at 2U
 - Attached Fibre Channel or NFS storage
- Robust feature set addressing all performance and availability requirements



“Mainframe” Storage Systems?



- HDS HUS
- HDS VSP
- HDS AMS
- HDS HNAS
- IBM ProtecTIER
- IBM DS4000
- IBM Storwize
- IBM XIV
- HP 3Par
- HP StoreOnce
- EMC Data Domain
- EMC VNX
- EMC Isilon
- Oracle 4540
- Quantum DXi
- NetApp FAS
- NetApp E-Series
- NEC HydraStor
- Exagrid
- SoftLayer Object Storage
- Next??

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Converged by Luminex!

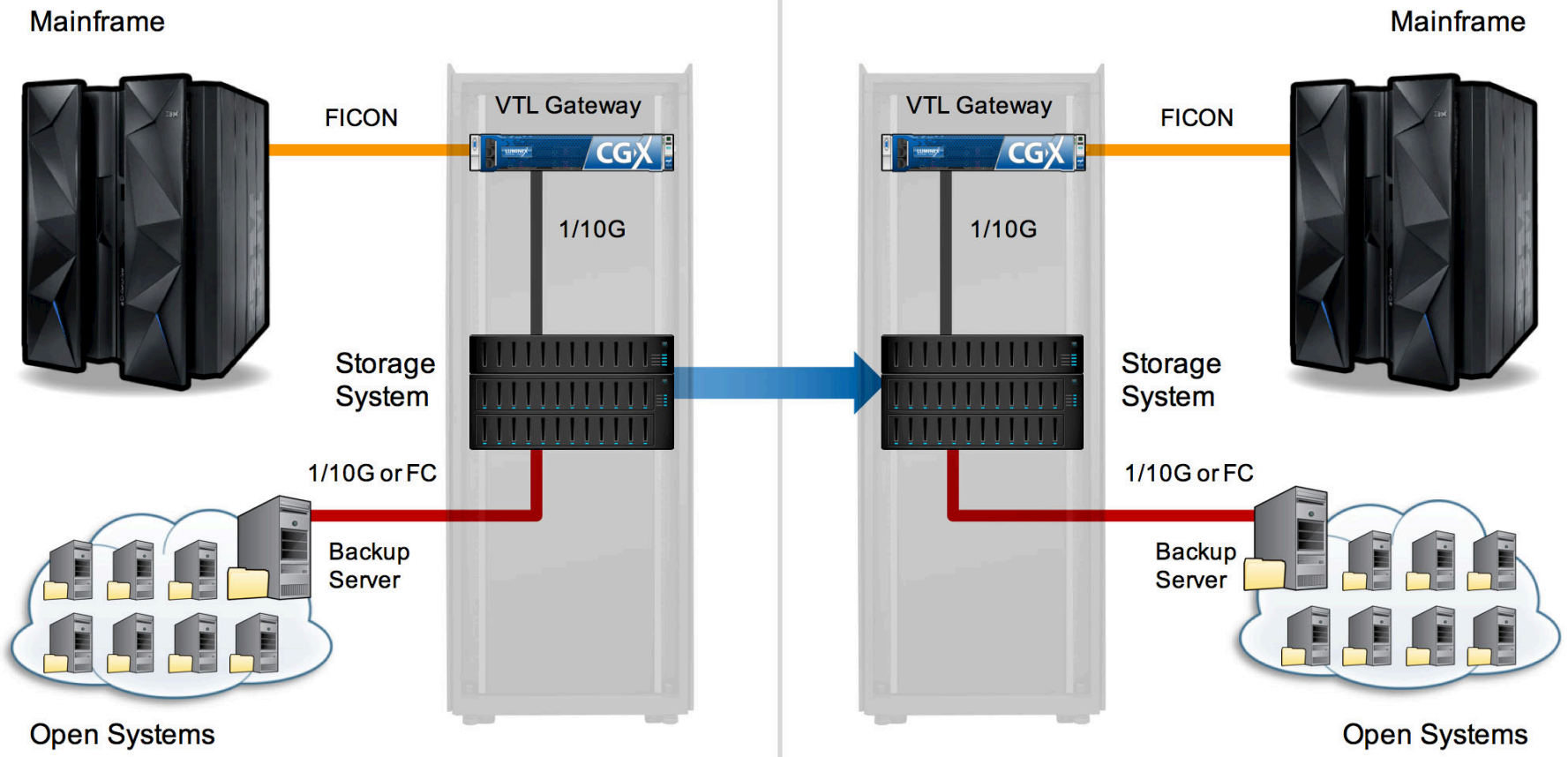
Converging Platforms for Virtual Tape

VTL Gateway/Direct Connect Configuration with DR Replication



Production Site

DR Site



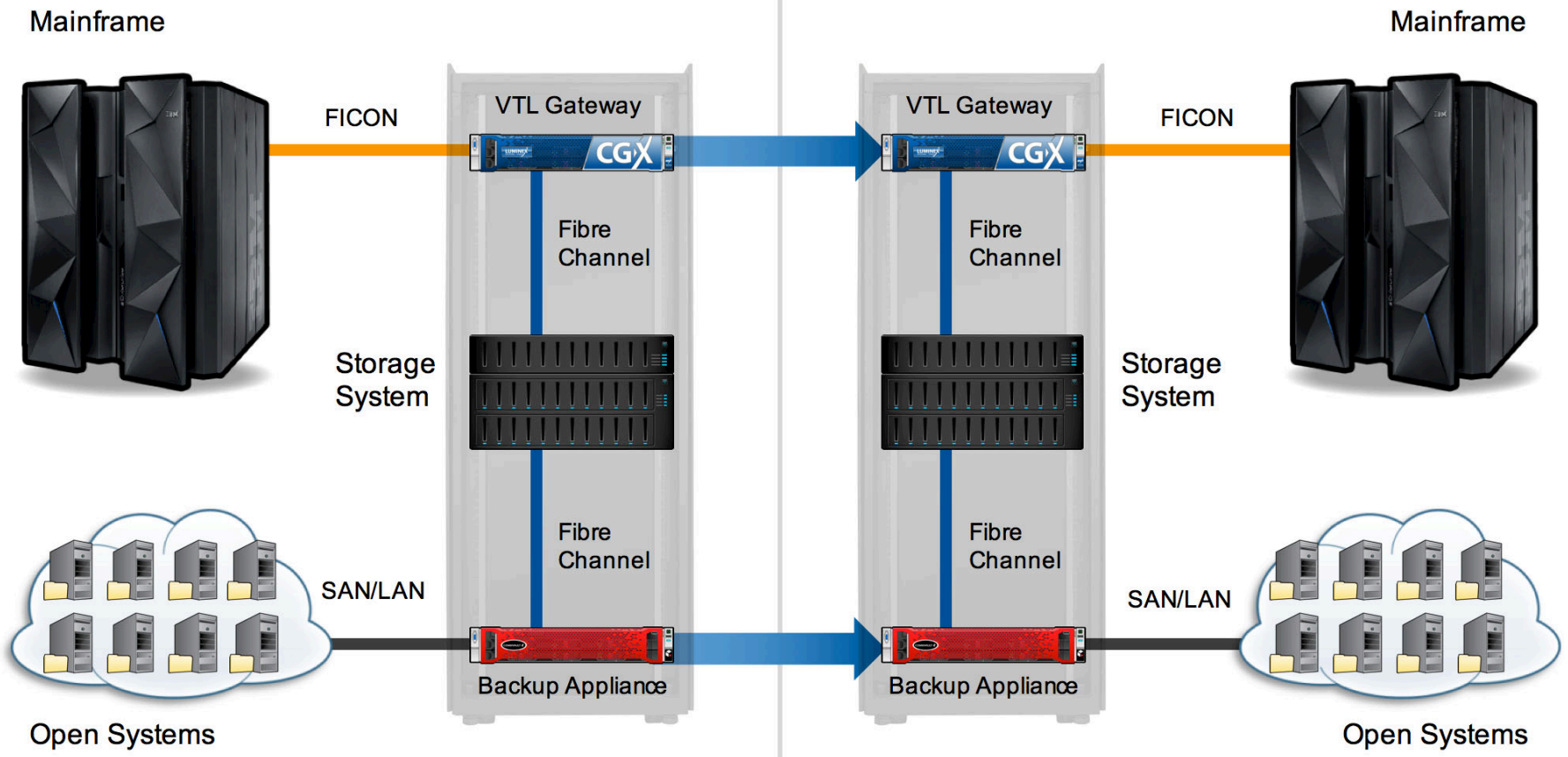
Converging Storage for Virtual Tape

VTL Gateway/Direct Connect Configuration with DR Replication



Production Site

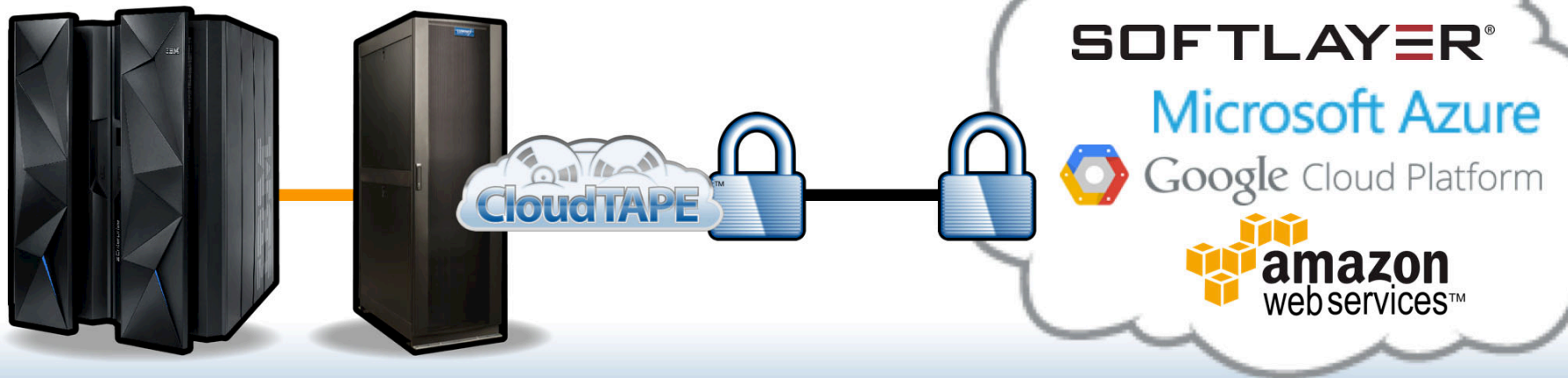
DR Site



CloudTAPE: Cloud Gateway



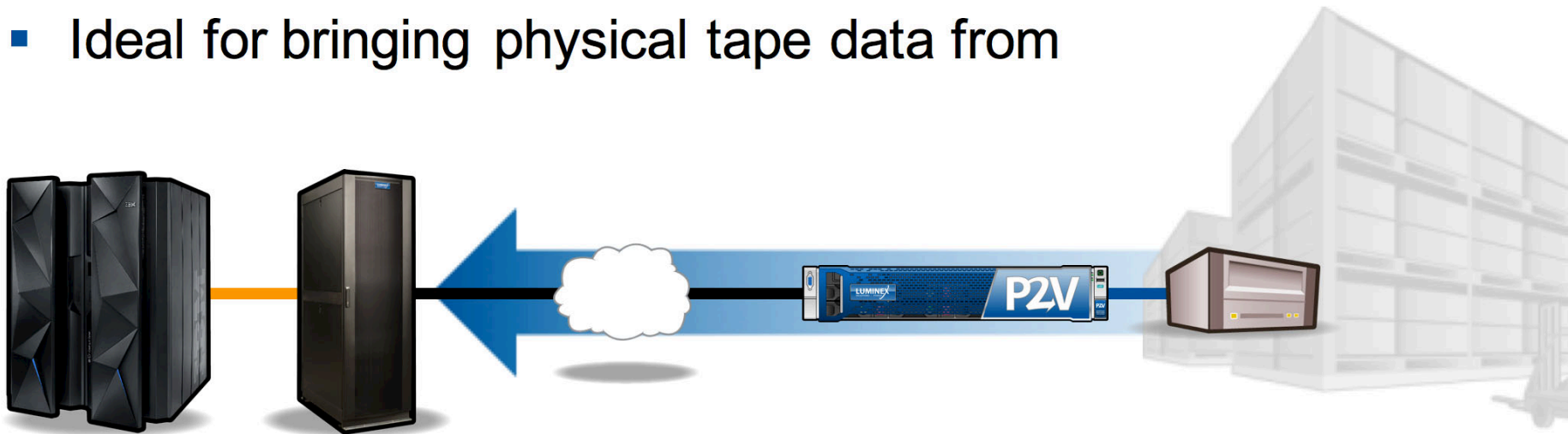
- Leverage private or public cloud services for tape archiving
 - Softlayer, AWS, Google, Azure, etc.
- Tape-to-Cloud storage tiering
- CGSafe encryption integrated



P2V: Physical-to-Virtual Tape Conversion



- Convert physical tapes to virtual tapes, on demand
- No mainframe intervention, completely off-host
- Local or remote ingest, anywhere an IP connection is available
- Ideal for bringing physical tape data from



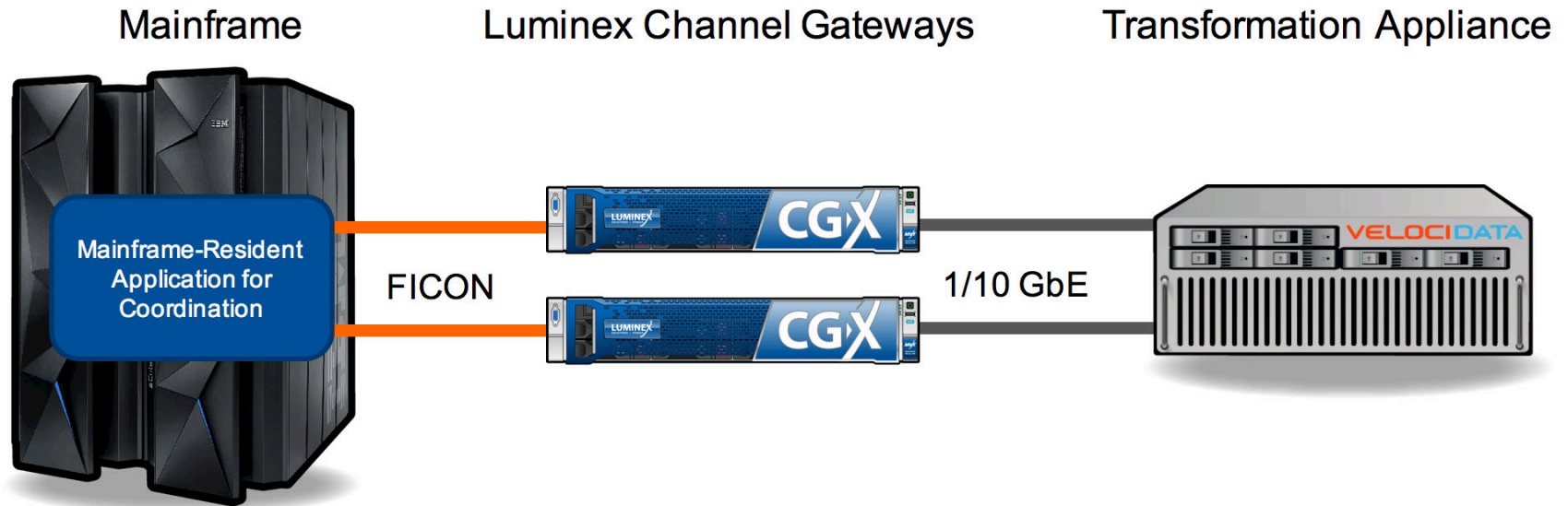
MBI: Mainframe Batch Interface



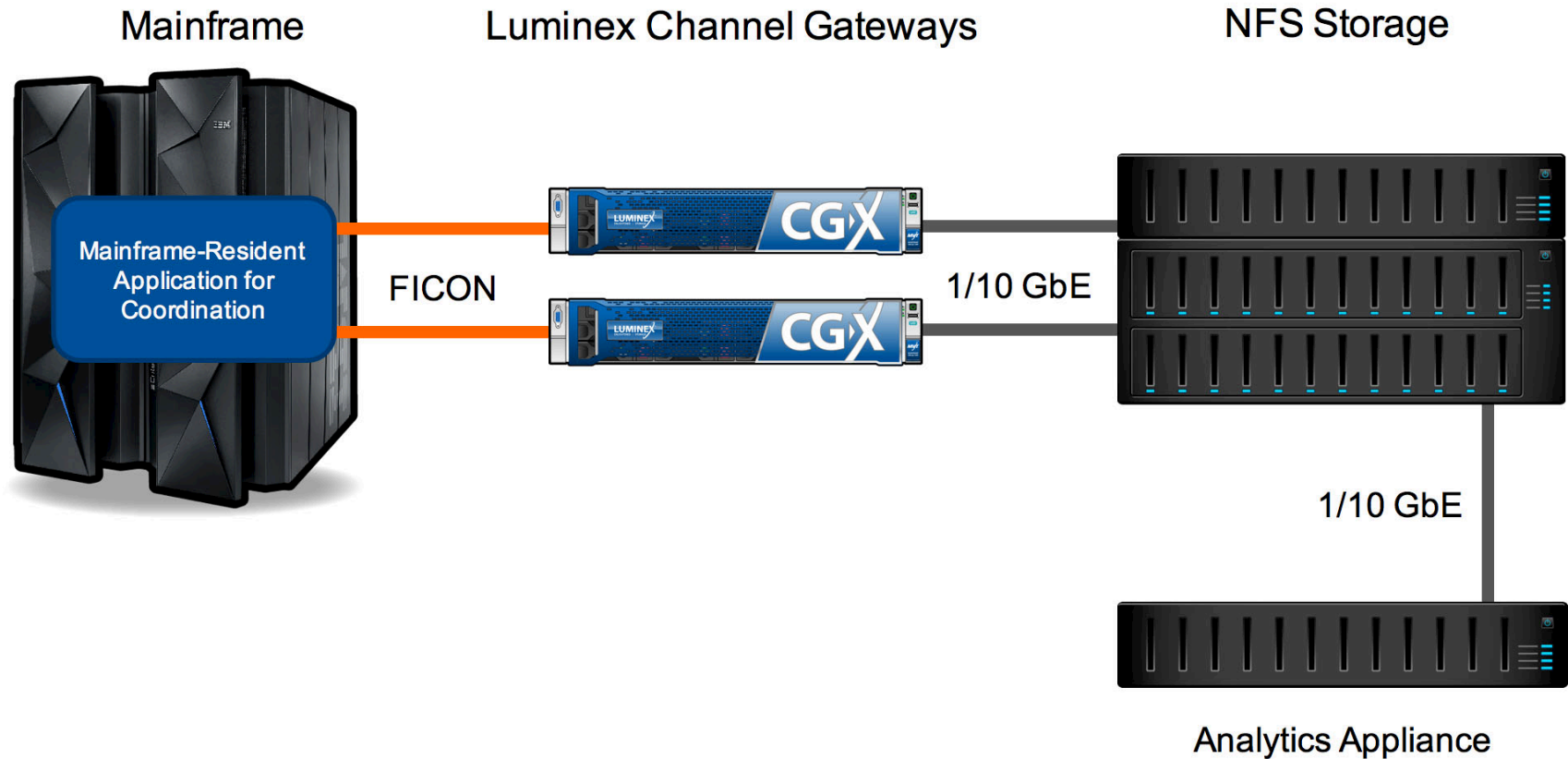
- Connect your mainframe data to Enterprise Stream Compute Appliances for high-speed, efficient data transformation and analytics
- “Big Data Meets Big Value Data”
Wednesday @ 3:15 PM
Oceanic 3



Data Transformation



Data Analytics



T2S: Tier 2 Storage for Mainframe



- DASD controller with flexible storage options
 - Integrated storage, starting at 2U of rack space
 - Attached Fibre Channel or NFS storage
 - Expanded memory, flash, SSD
- Early Adopter Program
 - Begins Q4 2015
 - Limited availability
 - Visit Booth #223 for more details

Benefits of Converged Mainframe Solutions

Enhancing the Value of Your Mainframe Investment



- Cost savings
 - One storage solution to acquire and manage vs. many separate systems
 - Configured to meet your existing needs, engineered to expand to your future needs
 - Reduce floor space and environmental expenses
- Simplified management... just one solution!
- Integration with ETL and analytics appliances
 - Exploit the value of your company's Big Data without the MIPS
- Future-proof, modular architecture
 - Eliminates "fork lift" upgrades
 - Easily add functionality, capacity or throughput

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