

Virtual Tape Replication Multi-Vendor Panel Discussion - LUMINEX

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Discussion Points

Why Replicate Virtual Tape?

- Improve disaster recovery capabilities
- Reduce physical tape in daily operations
- Eliminate physical tape security risks
- Disk-based virtual tape replication achieves these goals
- Deduplication can be useful to reduce WAN bandwidth and may be essential for the project to be cost-effective
- Operational choices include whether to replicate all tape data, or just backups?

Discussion Points

Focus on the Goal – RECOVERY

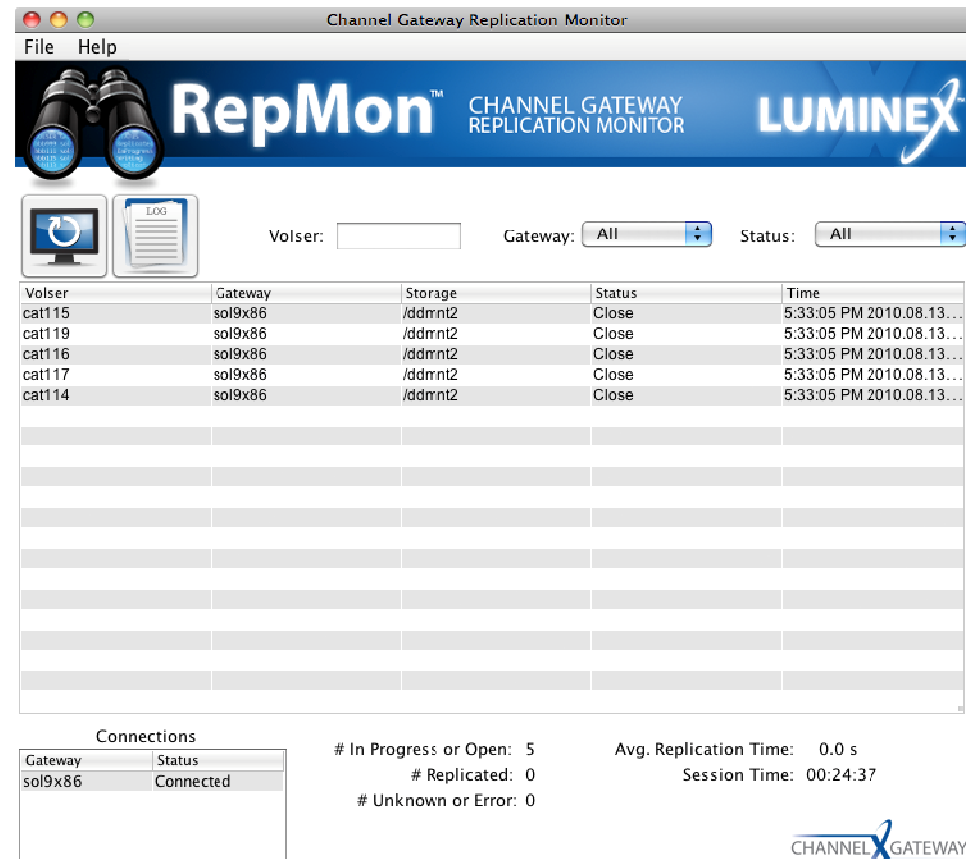


- The purpose of backup is for RECOVERY
- How current is my data? (RPO)
 - Getting data offsite quickly is important
 - Knowing what data can be recovered at the DR site and what data can't is important
 - ONLY Luminex provides the capabilities and insights to address this issue in a practical way - RepMon
- How fast can I recover it? (RTO)
 - No vendor can match Luminex Channel Gateway FICON recovery speeds
- Can I test Non-disruptively?
 - YES, with Luminex Channel Gateway



RepMon: Replication Monitor

- Identifies Write and Replication Status of Mainframe Tape Volsers
- Identifies if virtual tape data at DR is still consistent with the primary datacenter
- Provides visual and audit capabilities to confirm when backups reach DR



Volsers	Gateway	Storage	Status	Time
cat115	sol9x86	/ddmnt2	Close	5:33:05 PM 2010.08.13...
cat119	sol9x86	/ddmnt2	Close	5:33:05 PM 2010.08.13...
cat116	sol9x86	/ddmnt2	Close	5:33:05 PM 2010.08.13...
cat117	sol9x86	/ddmnt2	Close	5:33:05 PM 2010.08.13...
cat114	sol9x86	/ddmnt2	Close	5:33:05 PM 2010.08.13...

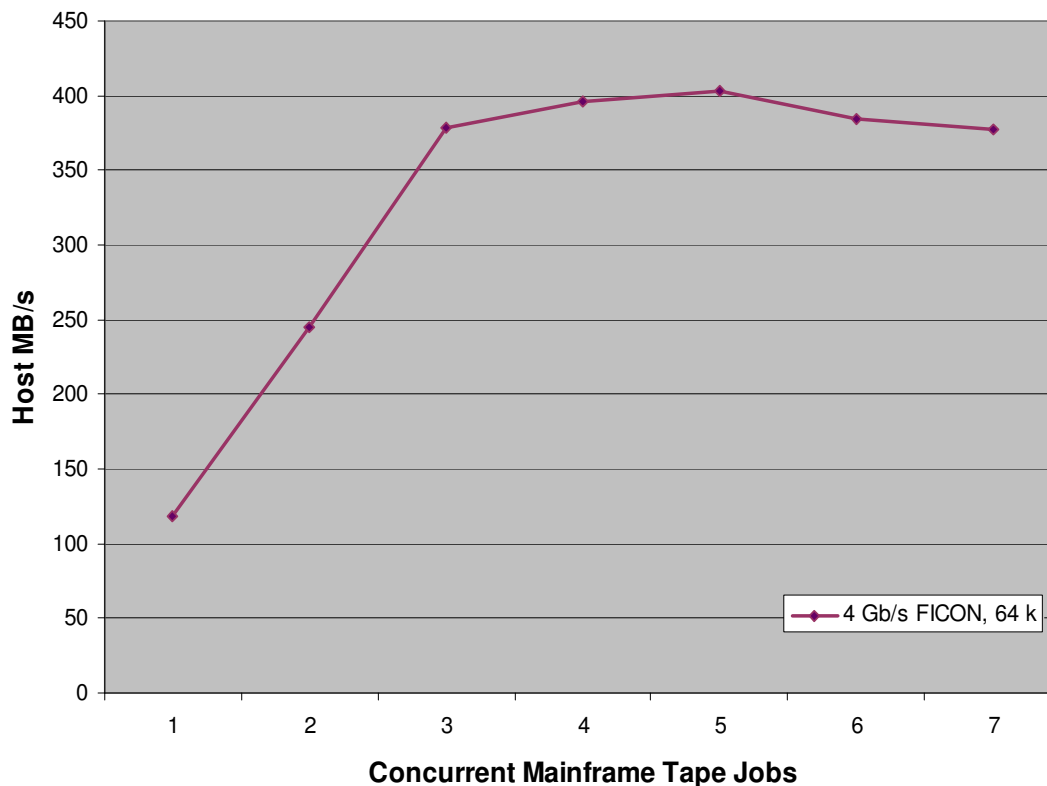
Connections	
Gateway	Status
sol9x86	Connected

# In Progress or Open: 5	Avg. Replication Time: 0.0 s
# Replicated: 0	Session Time: 00:24:37
# Unknown or Error: 0	

Channel Gateway Performance *Setting New Standards*

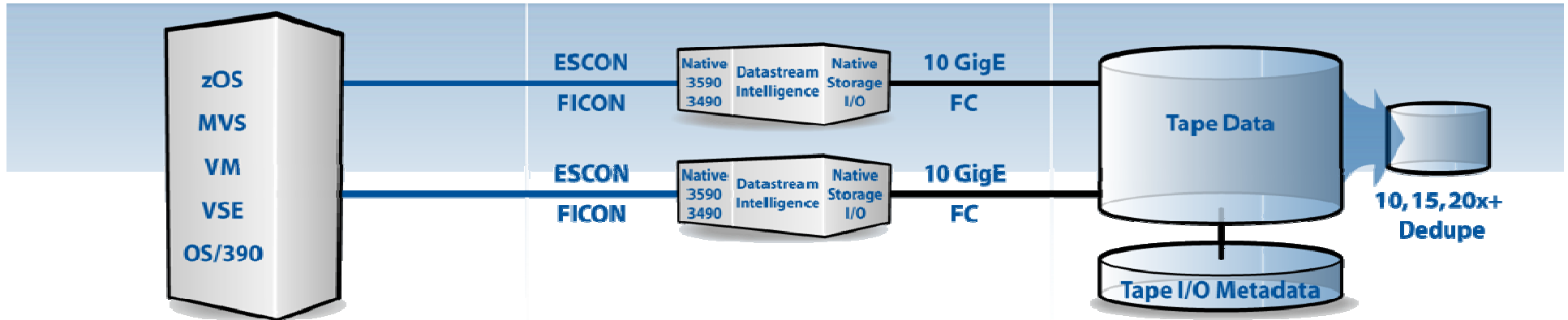


Channel Gateway Sustained Write Performance
1 FICON Channel



- True “wire-speed” FICON performance
- Even 8GB/s host FICON
 - “system optimizations” needed for host to saturate channel
- PROVEN 1.3 GB/s in 1U
- Take Your Own Test Drive!

DataStream Intelligence Maximizes Deduplication



Mainframe	Luminex Channel Gateways	Enterprise Storage System
<ul style="list-style-type: none"> Application transparent – non-intrusive No MIPS required zOS, MVS, VM, VSE and OS390 supported Works well with all major tape management systems SMS, MTL or Esoterics can be used 	<ul style="list-style-type: none"> Emulates 3480, 3490 or 3590 mainframe tape drives DataStream Intelligence optimizes deduplication Compression options Active – Active with NSPOF Dual PS, Fans & Mirrored OS No tape data on gateways 	<ul style="list-style-type: none"> NFS or FC attached Mainframe Tape Volumes stored as standard files Data Deduplication maximized Replication for backup and Disaster Recovery

LUMINEX Customers (Partial 1 of 2)


 CA	 NY	 FL	 MA	 MI	 TN
 CA	 NY	 FL	 MA	 MI	 TN
 CA	 CO	 FL	 AL	 MS	 US
 CA	 GA	 SC	 AL	 IL	 CN
 IT	 IT	 ZA	 ZA	 MX	 MX

 Replaced IBM
  Replaced StorageTek
  Replaced Other Storage Vendor

LUMINEX Customers (Partial 2 of 2)

 Bank of Tokyo NJ	 NEW YORK CITY HEALTH AND HOSPITALS CORPORATION NY	 HealthNow HealthNow New York Inc. NY	 MOOG NY	 ARAMARK PA	 DISA MO, PA, UT
 Allscripts™ NJ	 MASSACHUSETTS MA	 NORTHROP GRUMMAN VA	 Harris Teeter Your Neighborhood Food Market NC	 Winn-Dixie FL	 Henry Ford HEALTH SYSTEM MI
 IDAHO FARM BUREAU ID	 IDAHO POWER AN IDACORP Company ID	 IDAHO DEPARTMENT OF LABOR ID	 IDAHO OFFICE OF THE STATE CONTROLLER ID	 St Luke's ID	 STATE OF COLORADO 1876 CO
 LANDS' END WI	 AgriBank MN	 EISCO Industries, Inc. AL	 WELLS FARGO Dealer Services CA	 BOMBARDIER QC	 Círculo de Lectores ES
 BRITISH AIRWAYS UK	 John Lewis UK	 Sainsbury's UK	 PRT Puerto Rico Telephone PR	 EVERTEC. PR	 RZV DE

 Replaced IBM

 Replaced StorageTek

 Replaced Other Storage Vendor

Discussion Points

How do I Choose?



- References Matter. Demand Them.
 - Luminex continues to lead the industry transition to disk-based virtual tape.
- Solutions that Scale for YOU (not your neighbor or a vendor line card)
 - How will you migrate your existing tape infrastructure?
 - How will your operational needs addressed?
- What is the product and vendor Roadmap?
 - Luminex continues to Set New Standards in performance, features, and customer-driven functionality

Q&A?

Thank You

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