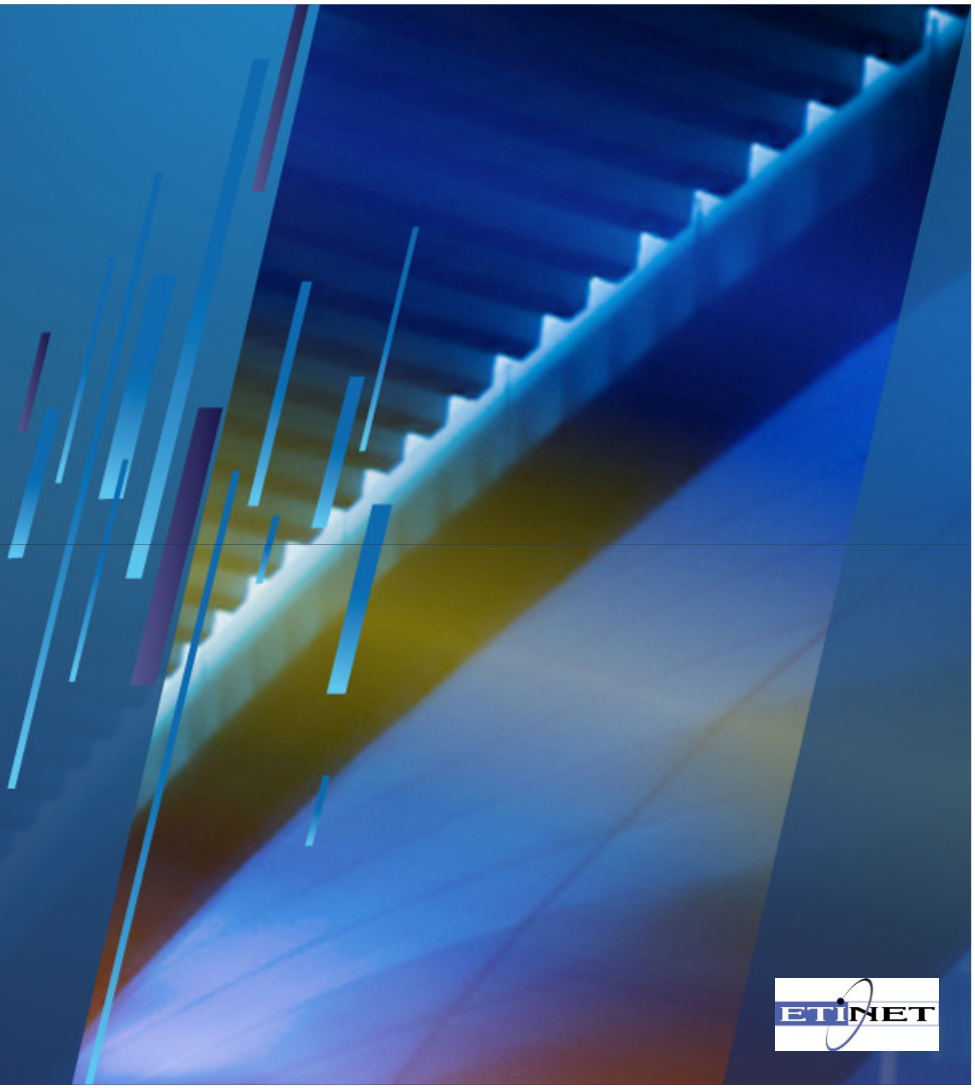
IMPLEMENTING CONVERGED INFRASTRUCTURE FOR IMPROVED AVAILABILITY

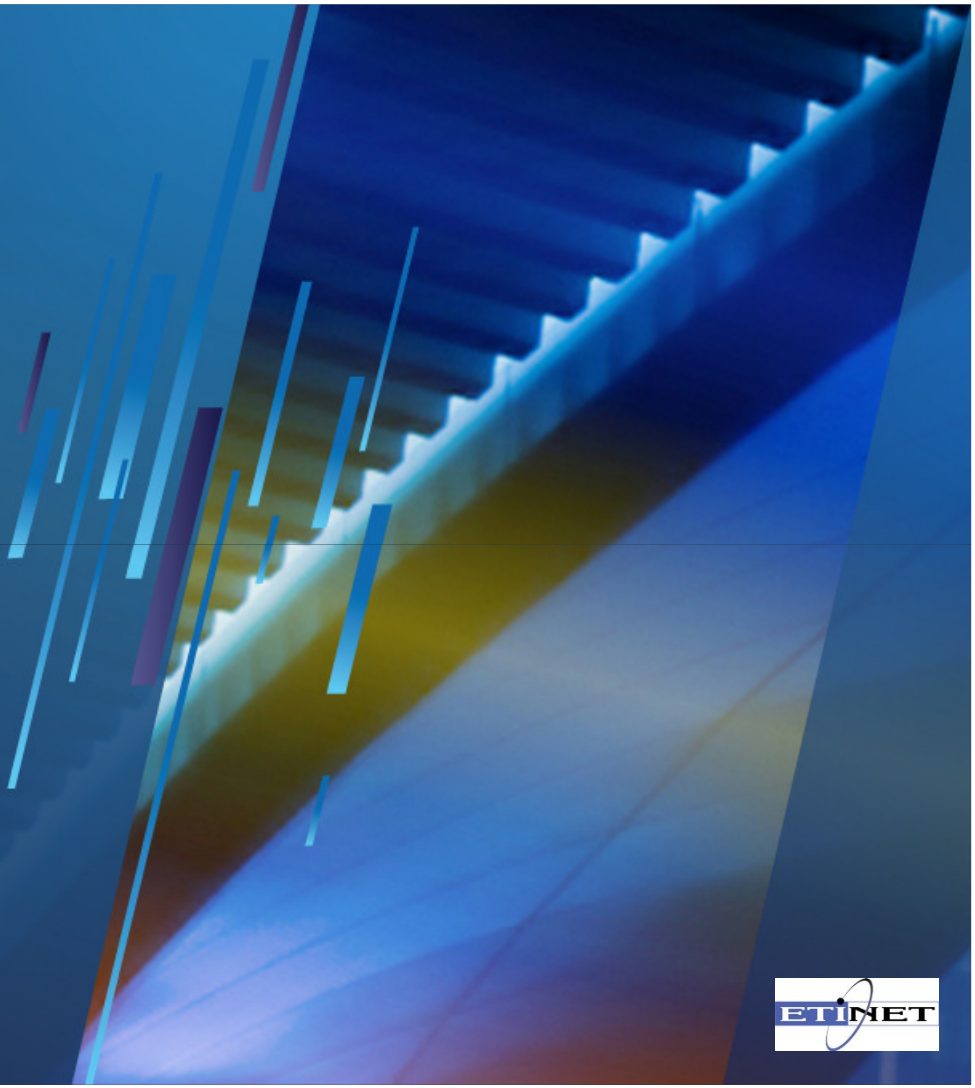
Mirko Buzolitch
Director of Field Operation
David Ross
Regional Director EMEA

AGENDA

- About ETINET
- HP Converged Infrastructure
- ETI-NET Integration
- BackBox News
- Q&A



ABOUT ETINET



- Montreal based : 35 Employees
- Worldwide Customers
- Enterprise solutions since 1988
  - Cross-platform file transfer – Tandem <=> IBM mainframe
  - Network backup and restore
  - Remote printing & job submission
  - State of the art virtual tape controllers
- Focus: “Tandem-to-Other” Integration
- Development Partner with IBM, HP, EMC²

European Customers

5

HP CONVERGED INFRASTRUCTURE

HP DISCOVER 2011
LAS VEGAS

“StoreOnce D2D is the HP backup product profiled as central to implementing the Converged Infrastructure Strategy.

Dave Donatelli,
HP EVP and GM Enterprise Servers, Storage and Networking
during his keynote presentation on the HP Converged Infrastructure,

HP D2D BACKUP SYSTEMS

Family comparison





D2D2500	D2D4106	D2D4112	D2D4312	D2D4324
HP StoreOnce deduplication				
HP StoreOnce enabled data replication				
Choice of NAS (CIFS/NFS) or VTL targets for backup applications				
1U rack-mount	2U rack-mount plus 2U upgrade kit	2U rack-mount plus 2U upgrade kit	4U rack-mount plus 2U upgrade kits	4U rack-mount plus 2U upgrade kits
2 and 4 TB raw capacity (1.5 and 3 TB usable)	6 to12 TB raw capacity (from 4.5 to 9 TB usable)	12 to 24 TB raw capacity (from 9 to 18 TB usable)	Scalable from 12 to 48 TB raw capacity (from 9 to 36 TB usable)	Scalable from 24 to 96 TB raw capacity (from 18 to 72 TB usable)
Speeds of up to 450 GB/hr*	Speeds of up to 800 GB/hr*	Speeds of up to 1.3 TB/hr*	Speeds of up to 2.4 TB/hr*	Speeds of up to 4 TB/hr*
Two 1 GbE Ethernet interfaces	Two 1 GbE Ethernet OR Two FC interfaces	Two 1 Gb Ethernet AND Two FC interfaces	Two 10 Gb Ethernet AND Two 8 Gb FC interfaces (also 2x1 GbE interfaces)	Two 10 Gb Ethernet AND Two 8 Gb FC interfaces (also 2x1 GbE interfaces)
Hardware RAID 5	Hardware RAID 6	Hardware RAID 6	Hardware RAID 6	Hardware RAID 6

THE KEY BENEFITS OF DATA DEDUPLICATION

1

Keep more data on disk - typically 20x more backup data

- Longer retention of backup data on less disk
- Improves service levels – access to data available on disk longer for faster response
- More efficient storage utilization – reduces cost

2

Network efficient replication

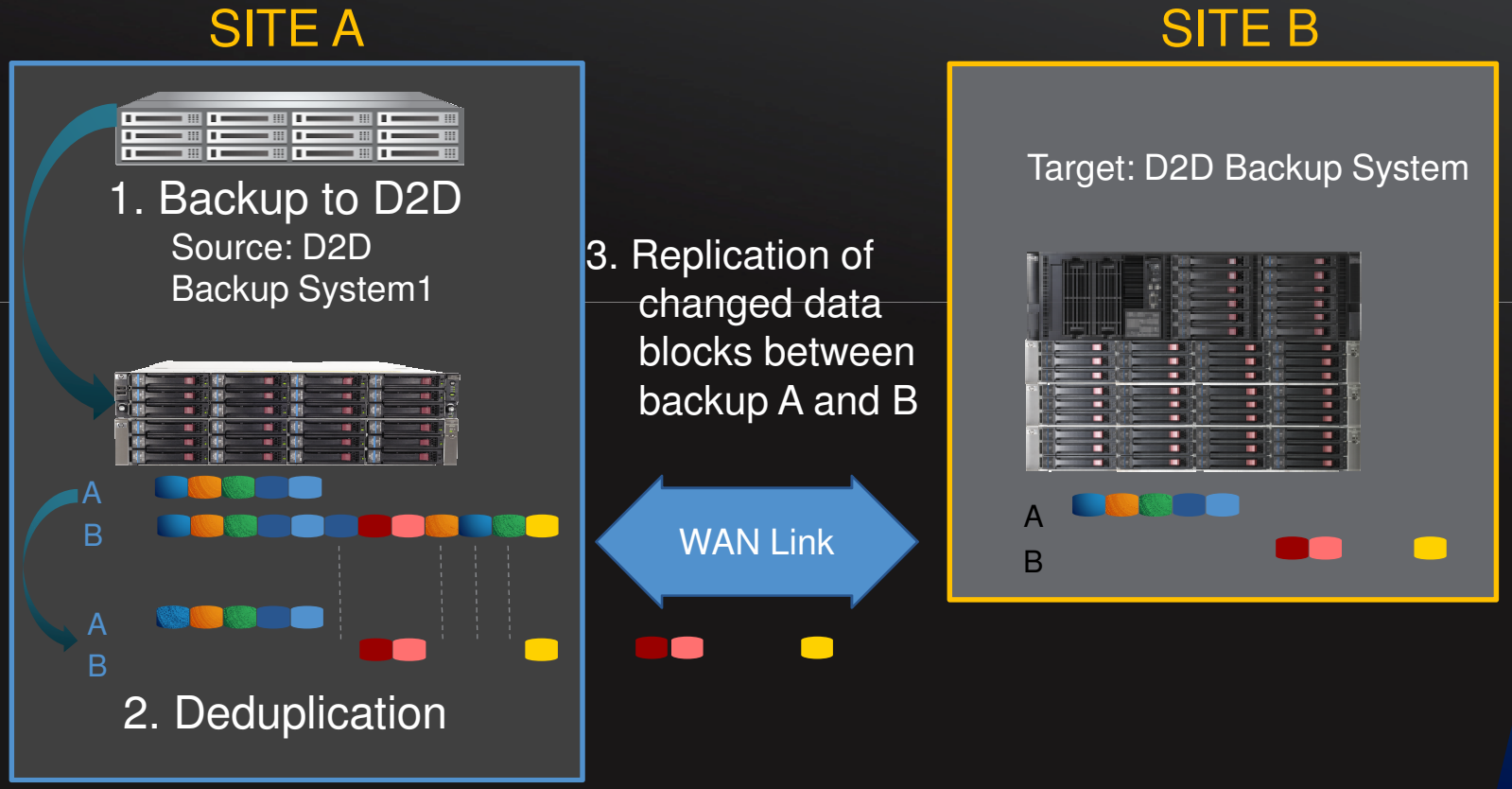
- Cuts the costs of data transmission through lower bandwidth lines
- Makes remote backup and disaster recovery more
- Reduces the overhead required at remotes sites

DEDUPLICATION: WHAT IS IT?

HP StoreOnce cleverly eliminates duplicate data to reduce the amount of backup data to be stored on disk by typically up to 20x

- Compares blocks of data against previously stored data
- A pointer is established if duplication found
- For normal business data sets, a deduplication ratio of 20:1 might be expected after a period of > 3 months
- HP D2D Backup Systems allow unique data to be compressed following deduplication and prior to storing to disk

DATA REPLICATION THAT IS NETWORK EFFICIENT



DEDUPLICATION SPEEDS REPLICATION

1st Full

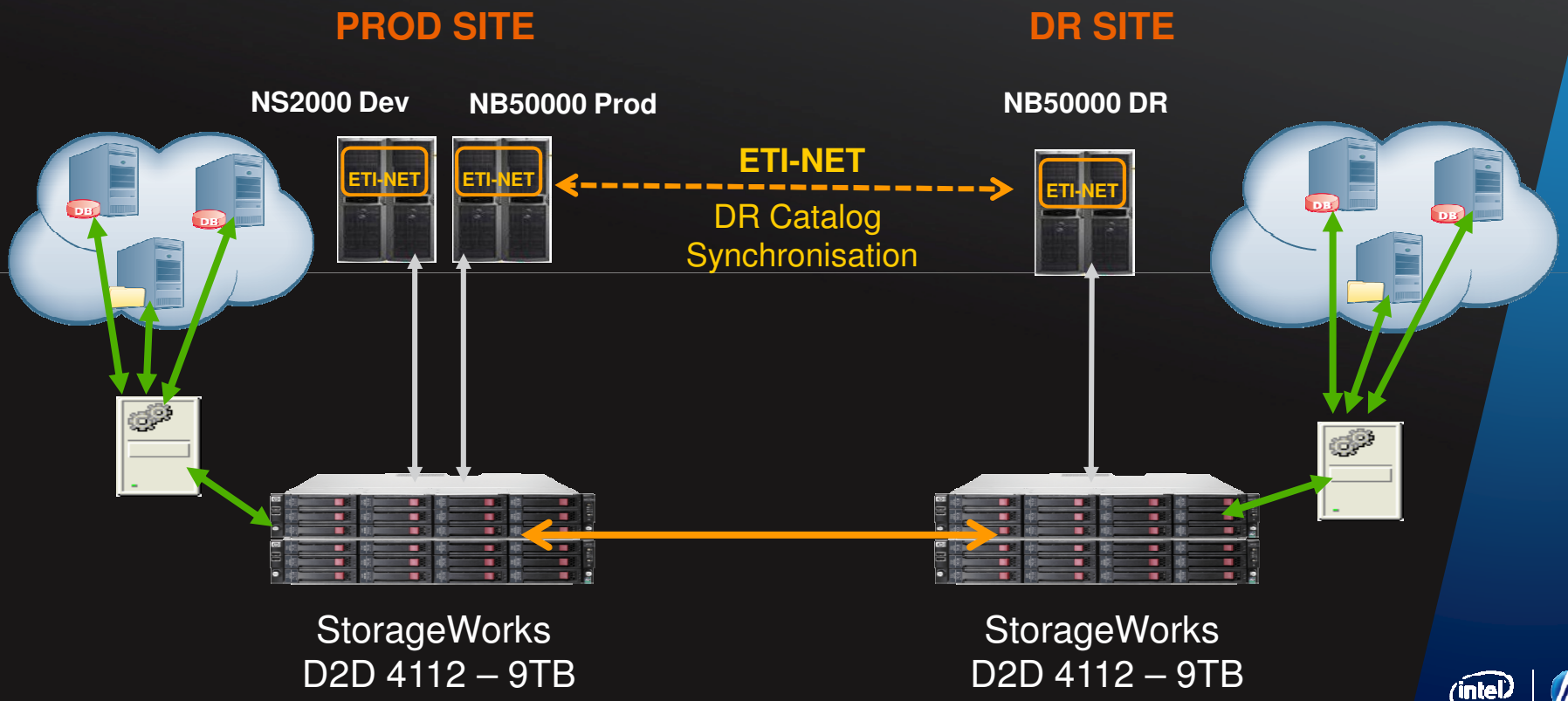
2.2 TB	compressed	1.46 TB	T1	96 Days 6 Hours 25 Minutes 49.1 Seconds
	(1.5X)		T3	3 Days 7 Hours 44 Minutes 28.49 Seconds
			100 Mbps	1 Day 11 Hours 40 Minutes 22.96 Seconds
			1 Gpbs	3 Hours 34 Minutes 2.3 Seconds

Other full

2.2 TB	compressed	0.3 TB	T1	19 Days 18 Hours 44 Minutes 45.43 Seconds
	(73X)		T3	16 Hours 23 Minutes 6.68 Seconds
			100 Mbps	7 Hours 19 Minutes 48.28 Seconds
			1 Gpbs	43 Minutes 58.83 Seconds


ETI-NET SOLUTIONS
FOR HP D2D
Customer experience
ETINET

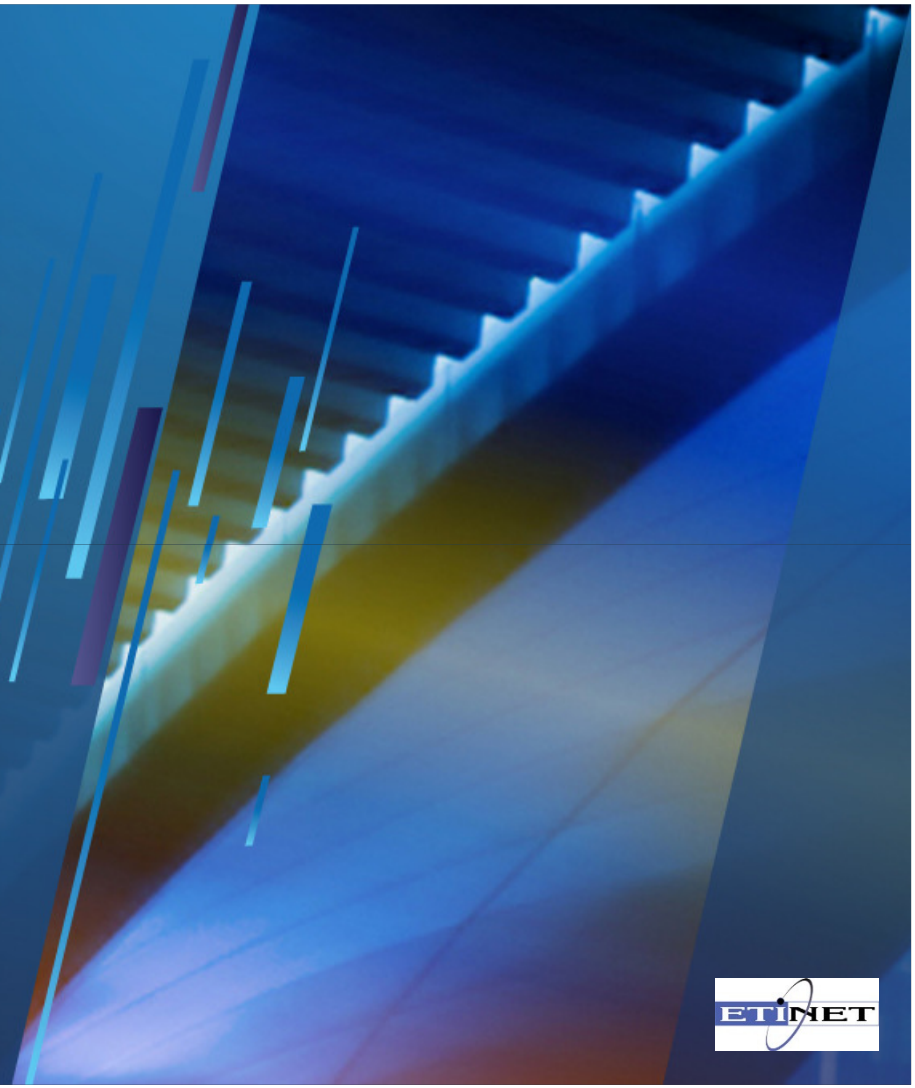
FINANCIAL INSTITUTION BACKPAK© VTL-D2D



ETI-NET BACKPAK© VTL-D2D-NONSTOP

On-Line Dump	DB Size	Compression Rate	Disk Space Used
First run	1.55TB	3.3:1	468GB
Second run	1.6TB	102:1	15.6GB
Third run	1.6TB	102:1	15.6GB
Fourth run	1.6TB	102:1	15.6GB
Fifth run	1.6TB	102:1	15.6GB
Average	**7.95TB**	**15:1**	**530.3GB**
Average – 10 runs	**15.95TB**	**26:1**	**608.4GB**

BACKBOX NEWS



INSTALLED BACKBOX CUSTOMERS BASE INCREASING ALL THE TIME

As of August 2011 we had
185 SCSI port installed
367 FC port installed and counting
In about 85+ data centers worldwide

Your are not alone!

NEW WITH 3.12 - ENCRYPTION

Volume Level Encryption Option for BackBox
Allows encryption of virtual tapes on systems supporting HP's VLE product.
Takes advantage of FIPS 140-2-certified HP Enterprise Secure Key Manager (ESKM) . NB System only

Next release : Implement Key Management Interchange Protocol (KMIP) standard from OASIS (HP is a member) to implement encryption on any host S, NS and NB

ETINET FORUM

- For info about new releases
- To ask for other user for tips about ETI solutions
- To tell other users about how you are using our solutions
- www.etinetforum.com
- mirko@etinetforum.com

Tack för din
uppmärksamhet även
om du bara vill komma
härifrån

Dave.Ross@etinet.com
Mirko.Buzolitch@etinet.com