

Wilden Pump



- Subsidiary of Pump Solutions Group (PSG)
- PSG – over 900 employees with 20 IT staff
- Wilden Pump – 250 employees with 6 IT staff
- Offices in US, China, France, Germany and India



Strategic Goal



- Build a unified network infrastructure and common DR framework
 - Integrate subsidiaries
 - Support centralized storage and disaster recovery



Current Storage Environment



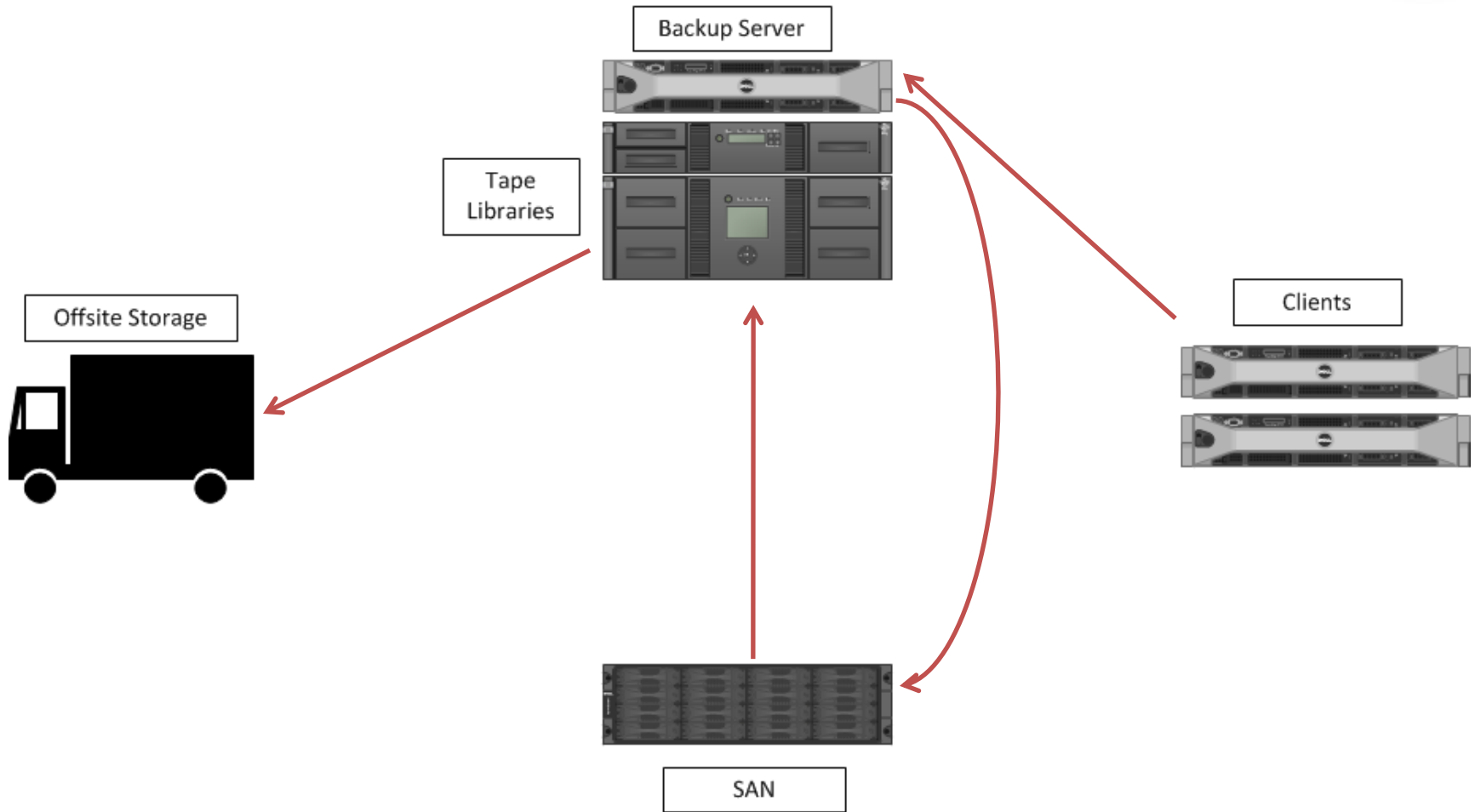
- Over 3TB of Data
- Exchange, Blackberry Enterprise Server(BES),SQL and file data.
- Backup Exec 2010
- Tape - HP MSL2024 and MSL4048
- SAN - HP and Equallogic
- Disk to Disk to Tape for Offsiting

Data Protection Challenges



- Can't keep up with data growth
- Forced to use DVDs for long term archival
- Administrative and monetary cost of tape infrastructure and media
- Need to monitor local disk space
- Major pain point is restore

Old Network



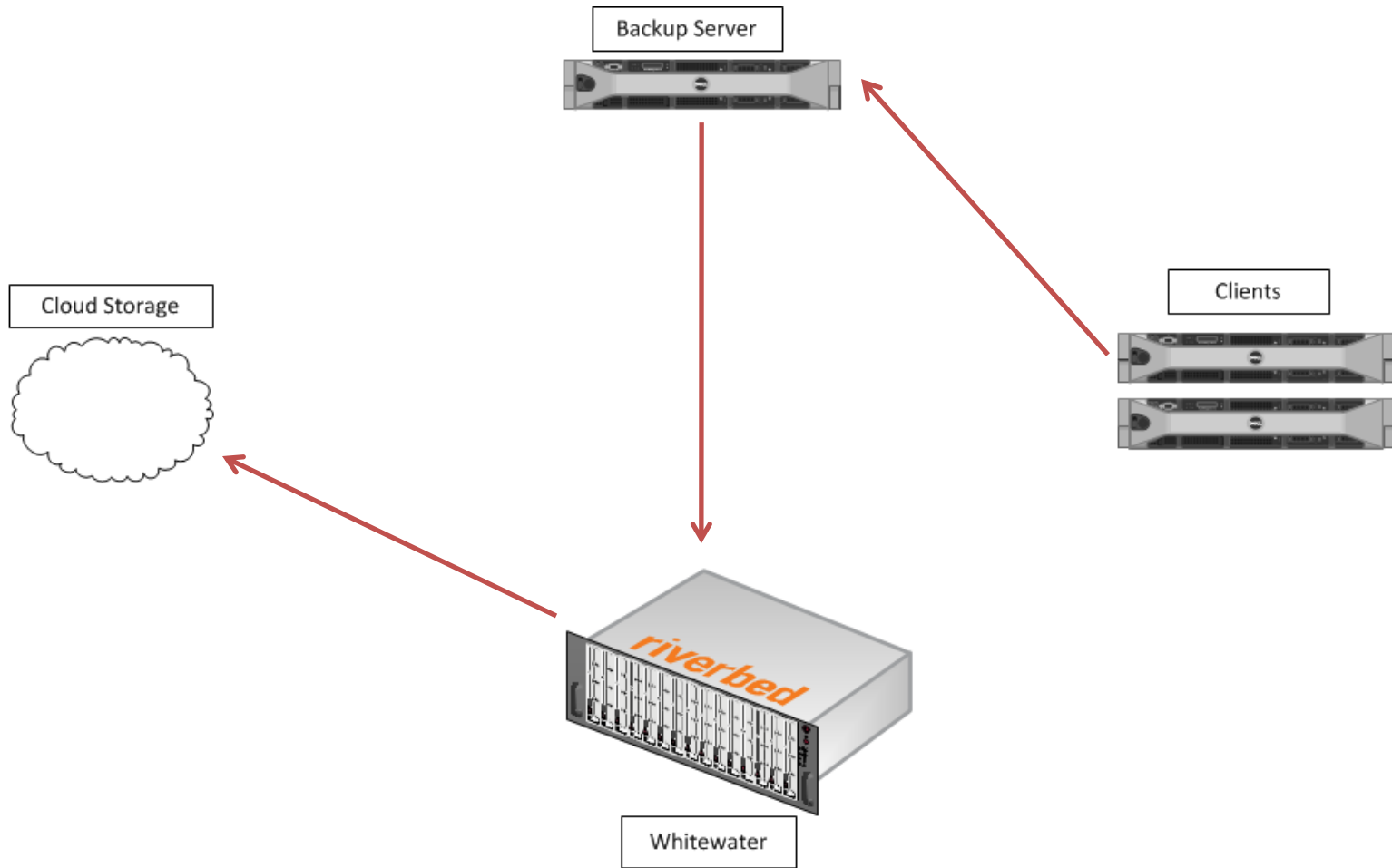
Whitewater Accelerators



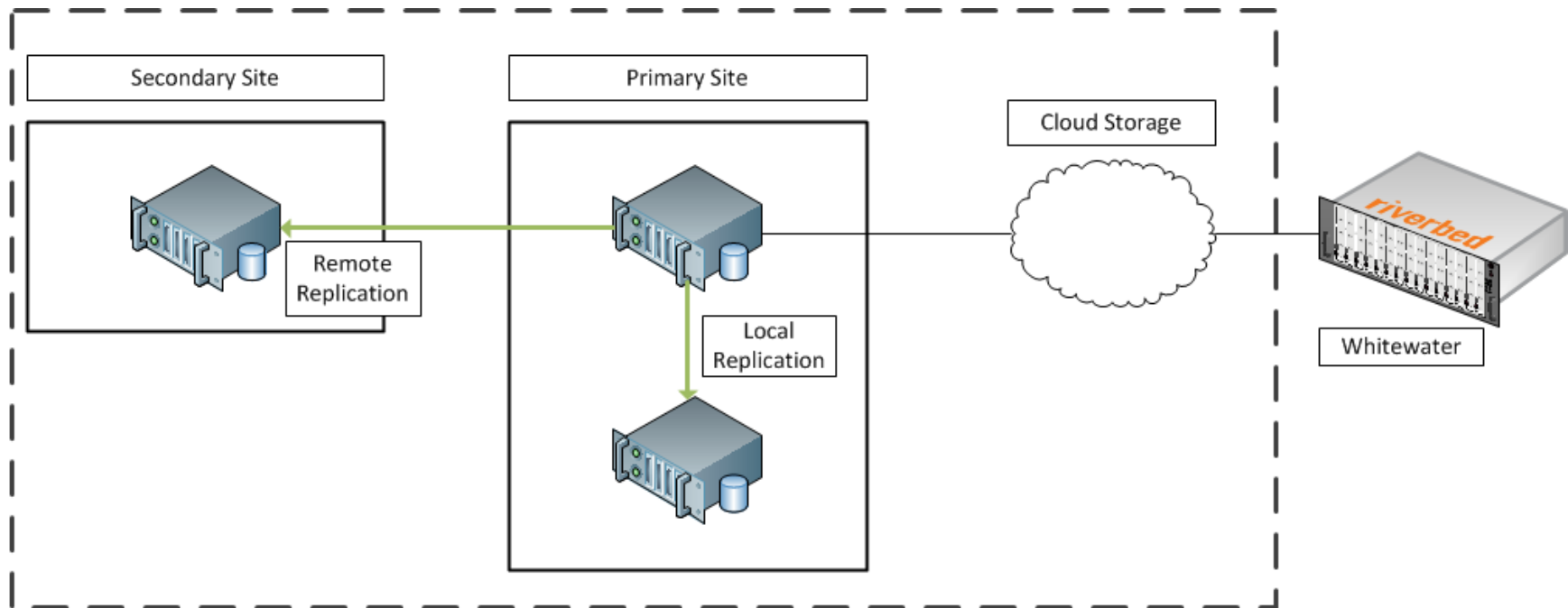
- Leverage public cloud
- “Pay as you go” model
- Key capabilities:
 - Data encryption in transit and at rest
 - In line deduplication
 - Optimization



New Network



Cloud Network – Back End



Cloud Storage Management (Whitewater)

Whitewater to the Cloud

Home Configure Reports Support Save

Cloud Settings Cloud Licenses CIFS NFS

Configure > Storage > Cloud Settings

Cloud Settings

Protocol Type: AT&T Synaptic Storage

Sub Tenant ID: abc123

Application ID: riverbedCSA

Shared Secret:

Hostname: storage.synaptic.att.com

Port: 443

Bucket Name: CSAdemo

Replication Scheduling

Pause Replication at: HH:MM:SS

Resume Replication at: HH:MM:SS

Suspend Replication

Bandwidth Limit Settings

Bandwidth Limit Interface: primary

Bandwidth Limit Rate: 40000 kbps

Enable Bandwidth Limit Scheduling

Start Time: 08:00 HH:MM

End Time: 18:00 HH:MM

Limit Rate: 0 kbps

Include Weekends:

Whitewater to local client(s)

Cloud Settings Cloud Licenses CIFS NFS

Configure > Storage > CIFS ?

+ Add CIFS Share - Remove Selected

<input type="checkbox"/>	Share Name	Local Path	Share Path	Read Only	Authentication Required	Comments	Allow All Clients
<input type="checkbox"/>	psg	/psg/	\\GT-CSA01\psg	No	No		No
<input type="checkbox"/>	rfs	/	\\GT-CSA01\rfs	No	No		Yes

+ Add CIFS User - Remove Selected

User Name

No users configured.

Whitewater Management (Server)



Backup Application

The screenshot shows a 'Devices - 542 Items' window. Under 'Device Pools', 'All Devices (GT-BACK01)' is expanded to show 'GT-BACK01', which contains 'Disk F', 'Disk G', 'Disk I', 'HP 3', 'Whitewater', and 'whitewaterz'. The 'Whitewater' folder is highlighted with a green box. Below this, the 'Whitewater' drive details are shown:

Media Label	
B2D001605	
B2D001604	
B2D001603	
B2D001602	
B2D001601	
B2D001600	
B2D001599	
B2D001598	
B2D001597	
B2D001596	
B2D001595	
B2D001594	
B2D001593	
B2D001592	
B2D001591	
B2D001590	

Below the drive list, the 'Whitewater' drive properties are shown:

General	
Name:	Whitewater
Status:	Ready
Path:	\\10.5.11.1\rf\BE2010demo

Backup-to-Disk file management	
Maximum size for backup-to-disk files:	10.00 GB
Allocate the maximum size for backup-to-disk files:	Disabled
Maximum number of backup sets per backup-to-disk file:	20

Backup Server drive map

Hard Disk Drives (6)			
Local Disk (C:)	Local Disk	79.9 GB	31.1 GB
New Volume (E:)	Local Disk	326 GB	305 GB
Backup1 (F:)	Local Disk	1.99 TB	311 GB
Backup2 (G:)	Local Disk	1.99 TB	296 GB
Backup3 (HP MSA LD10) (H:)	Local Disk	1.09 TB	303 GB
Backup4 (HP MSA LD2) (I:)	Local Disk	1.99 TB	1.43 TB

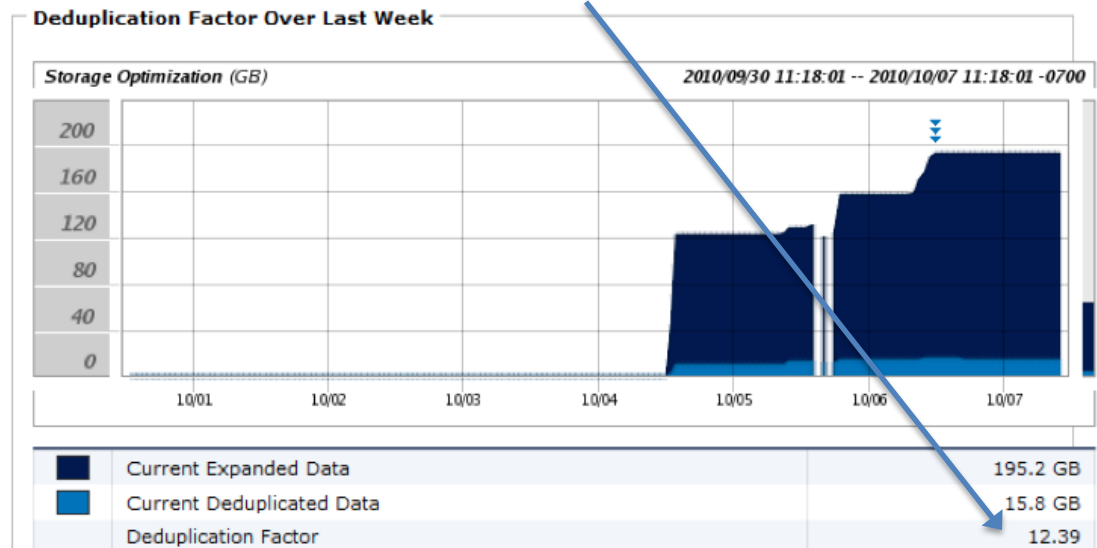
Devices with Removable Storage (3)			
Floppy Disk Drive (A:)	Floppy Disk Drive		
DVD/CD-RW Drive (D:) symantec	CD Drive	3.04 GB	0 bytes
HD DVD-ROM Drive (J:)	CD Drive		

Network Location (2)			
rf\ (\\10.5.11.1) (W:)	Network Drive	498 TB	496 TB



Riverbed Whitewater Performance

- Near unlimited storage in the cloud
- Easy installation
- High deduplication ratio – over 12x



Benefits of Whitewater Acceleration



- Cost of data protection reduced
- No more restoring from tapes
- Flexibility for DR
- Save up to 2hrs per day in administrative overhead



Cloud Storage Provider – Why?



- Cost benefits
- Redundancy Options
 - On-site mirroring
 - Replication to remote Data Center
- Integration (compatible with Whitewater)



“Learnings”



- Understand costs – current and future
- Not just for Backup!
 - Archiving/long-term storage
 - What else?
- Adopting new technology
 - Can simplify DR processes
- List the Benefits

“Gotchas”



- Make your list!
 - Compatibility
 - Goals



Questions?