Using Virtual Infrastructure as a Recovery Platform for Physical Production Servers



John Stetic

Director of Product Management and Services PlateSpin Ltd. john.stetic@platespin.com www.platespin.com





About PlateSpin

- Global independent software vendor, headquartered in Toronto, Canada
 - Customers and resellers in Europe, Asia Pacific, North and South America
- 2000+ satisfied customers, two lead products:
 - > PlateSpin PowerConvert
 - PlateSpin PowerRecon
- Experts in solutions for virtualized data centers
- VMware Technology Alliance Partner
- Microsoft Certified Partner



Partner









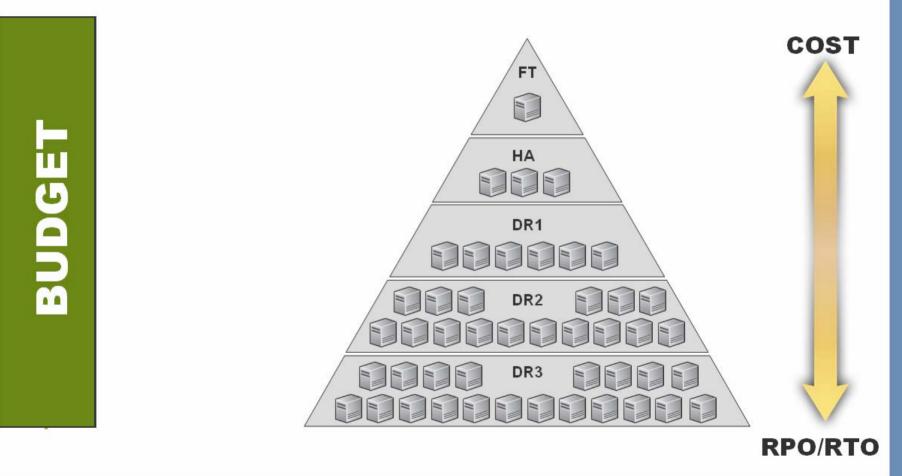


Overview

- The Availability Challenge
- The Options
- Virtualization as a Breakthrough Technology
- How it Works

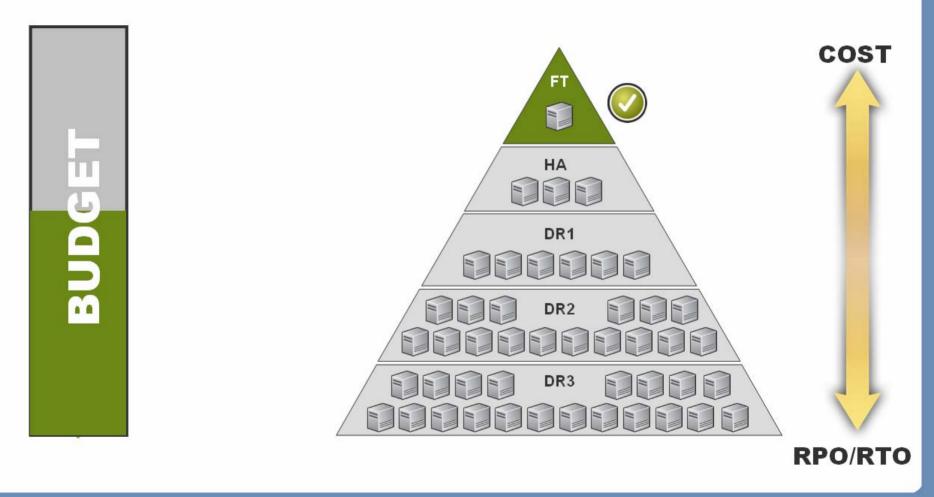




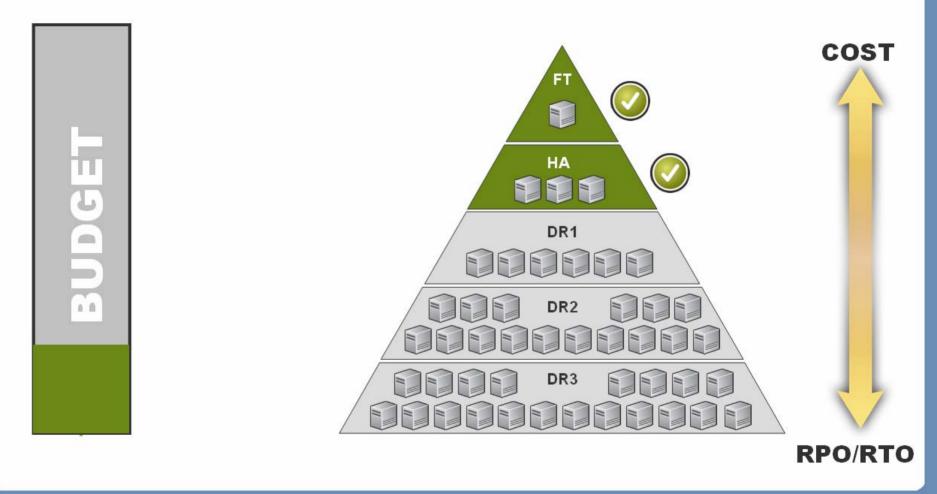




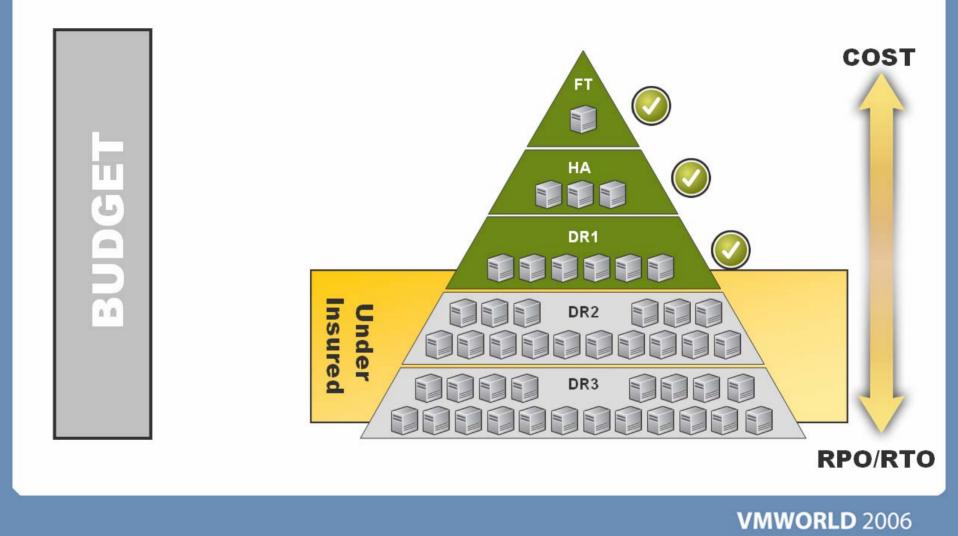




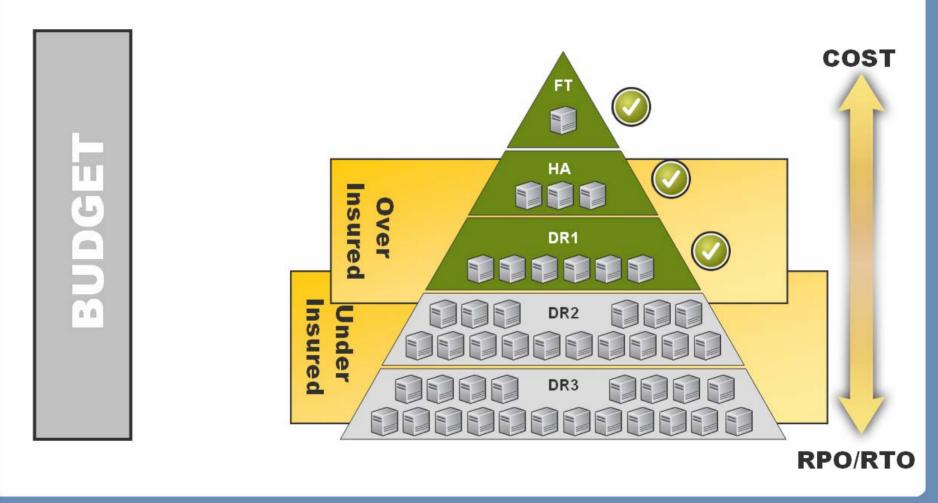








Allocating Budget





Solution Options

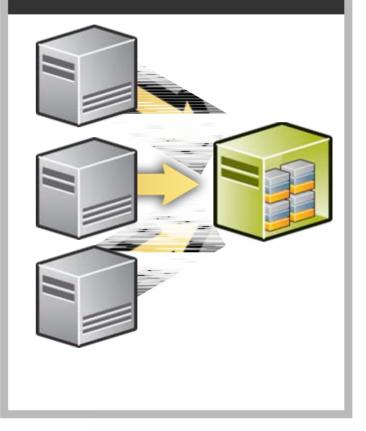
Se	olution	Notes	RPO/RTO/Cost		
	Server Clustering	Duplicate Hardware Complicated Setup	0 / 0 / \$\$\$\$		
	P2V Recovery	Consolidated recovery Power on recovery Touch less management	hours / min / \$\$		
	Disk Imaging	Limited Restore Flexibility Slow Staged Restore	24h / hours / \$\$\$		
	Tape / Manual Rebuild	Difficult to Administer Slow, Prone to Errors	24h+ / days / \$		



Benefits of Backing up to a VM

- Store backups in a run-able format
 - Reduce RTO
 - > Uniquely speeds DR testing times
- Highly portable and encapsulated backups
 - Simplify off site transport
 - Increase restore flexibility
- Maximize restore resources
 - Manage recovery service levels
 - > Over commit resources for cost savings

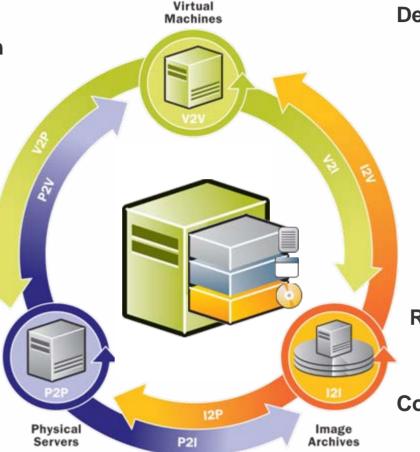
Consolidated Recovery Environment





PlateSpin's OS Portability Technology

- Server consolidation
- Recovery
- Hardware migration
- Test lab creation
- Provisioning



Decouple workload from host infrastructure

> Deploy or recover workload from archives and backups

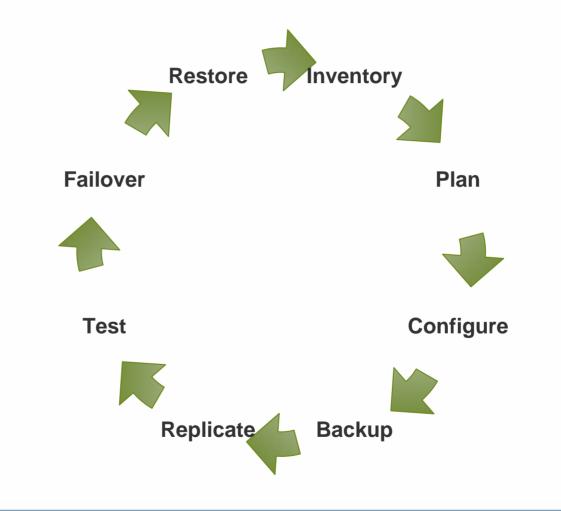
Peer-to-Peer, live and incremental workload movement

Reconfigure workloads dynamically

Connect, drag-and-drop, walk away



The Availability Life Cycle



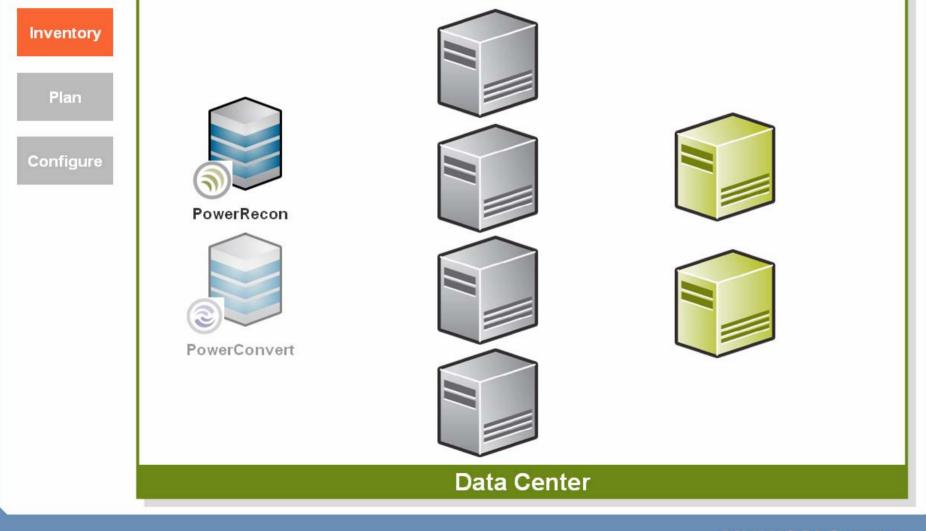


VMWORLD 2006

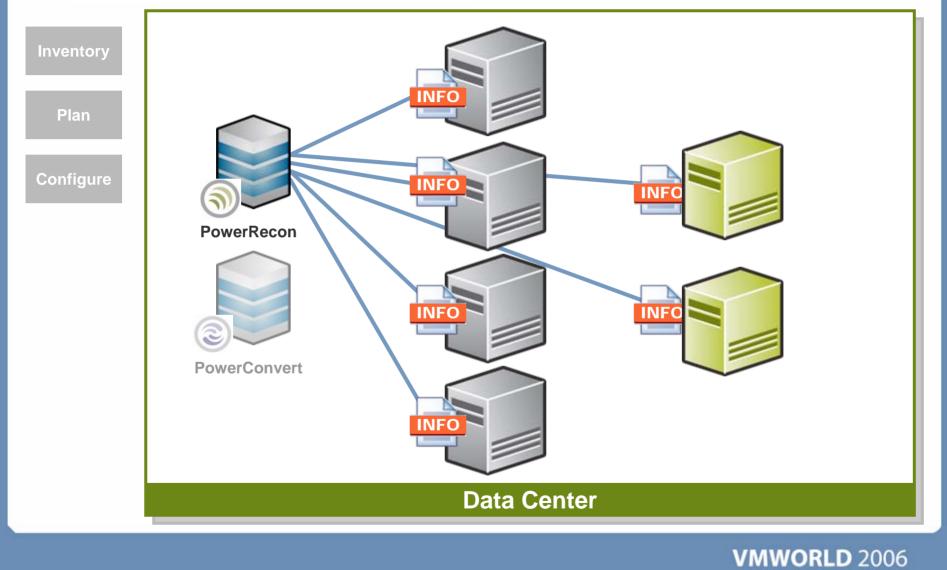
Bridging the Physical to Virtual Divide

- A one time manual conversion is not enough
 - Resource assignment
 - Automation and Auditing
 - Repeatability
 - Fail back
- PlateSpin's OS Portability Technology enables:
 - > Automatically deal with the reconfiguration of the low level OS
 - Configure OS settings
 - Alter and right size resources and networking for a viable warm standby
 - Restore back to physical servers

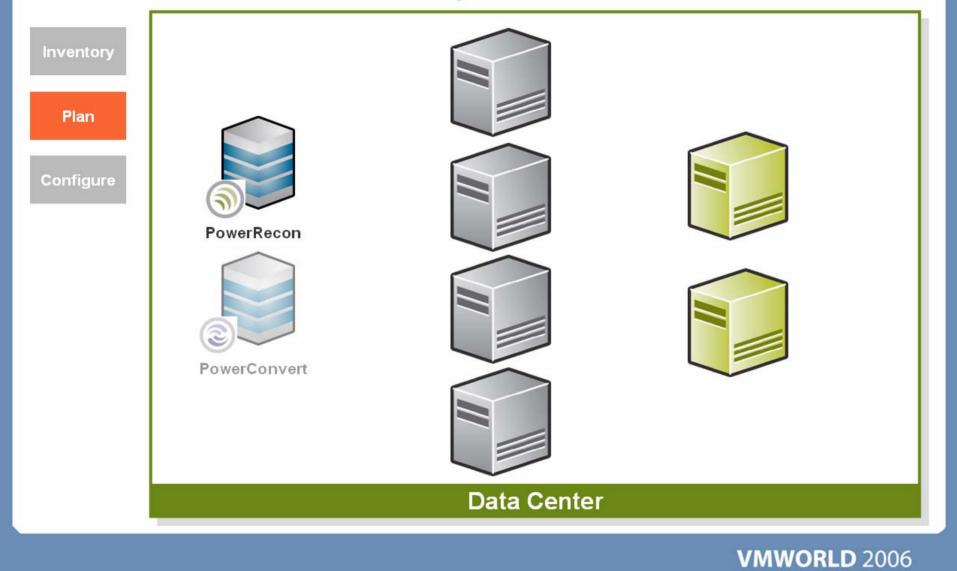




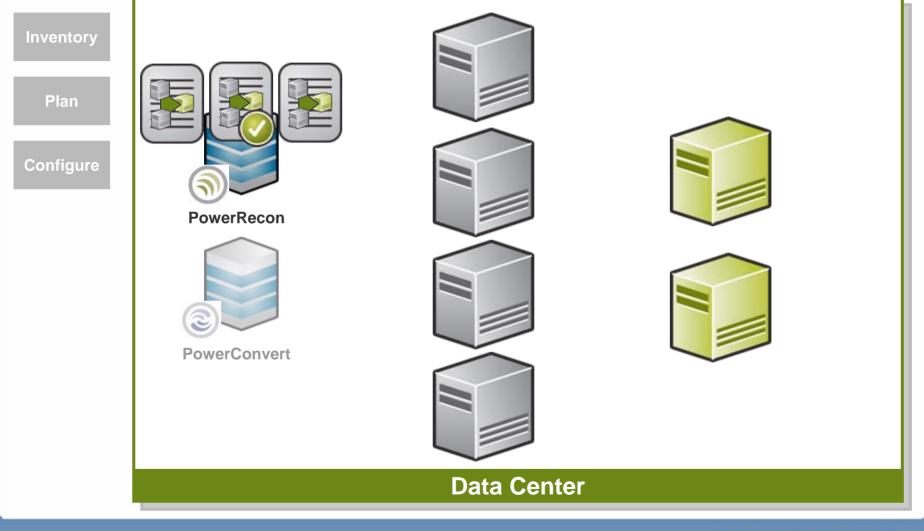




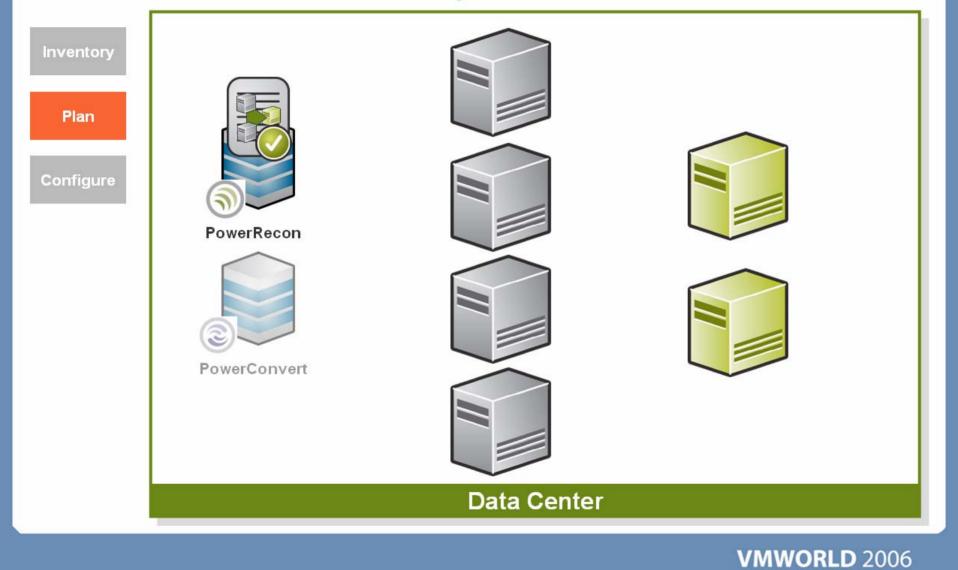
















Plan

Configure



PowerRecon



PowerConvert

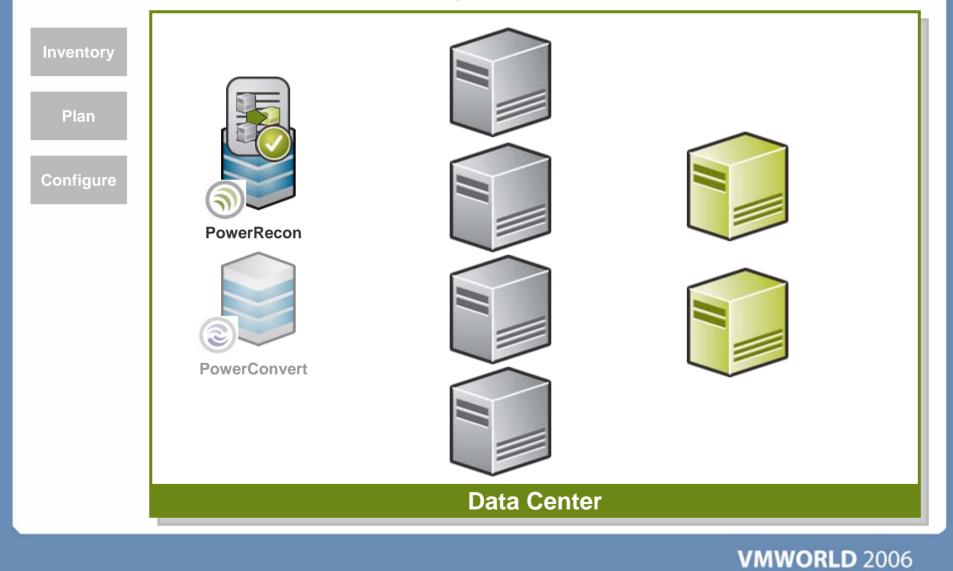




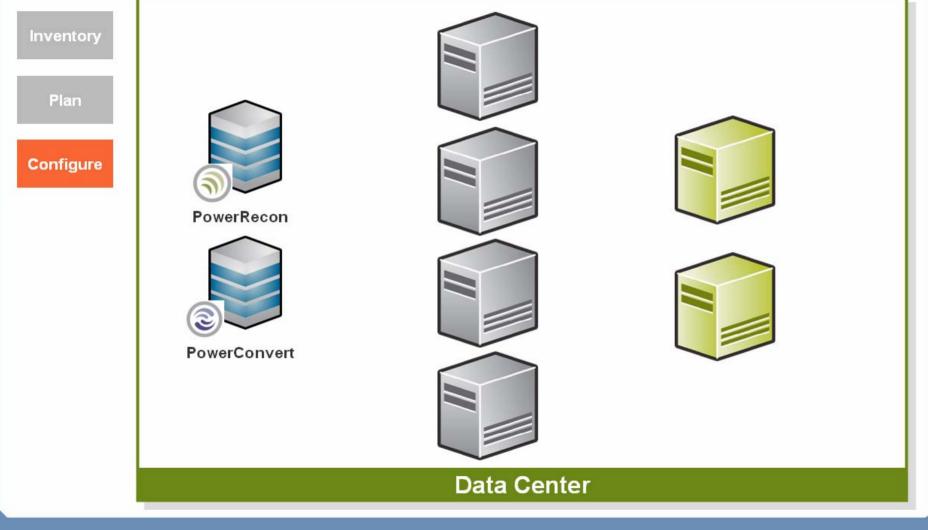




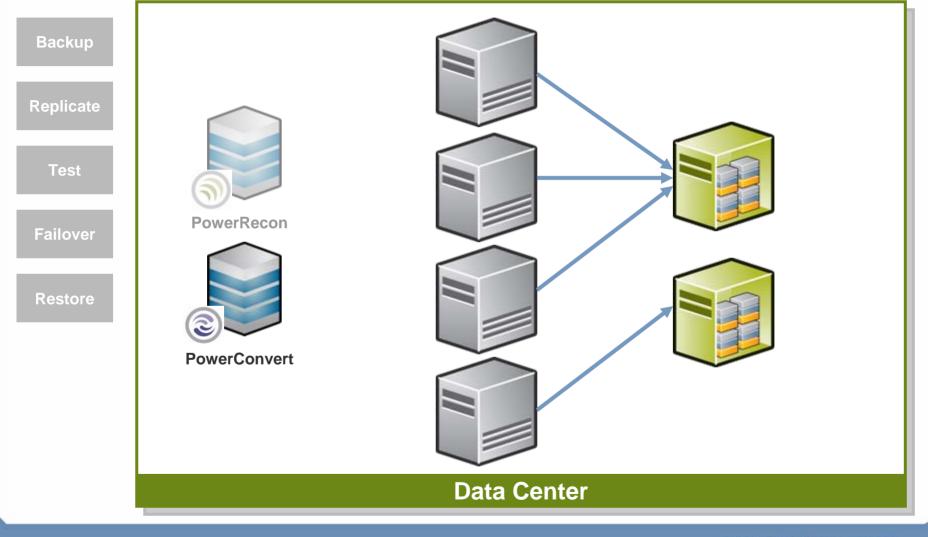




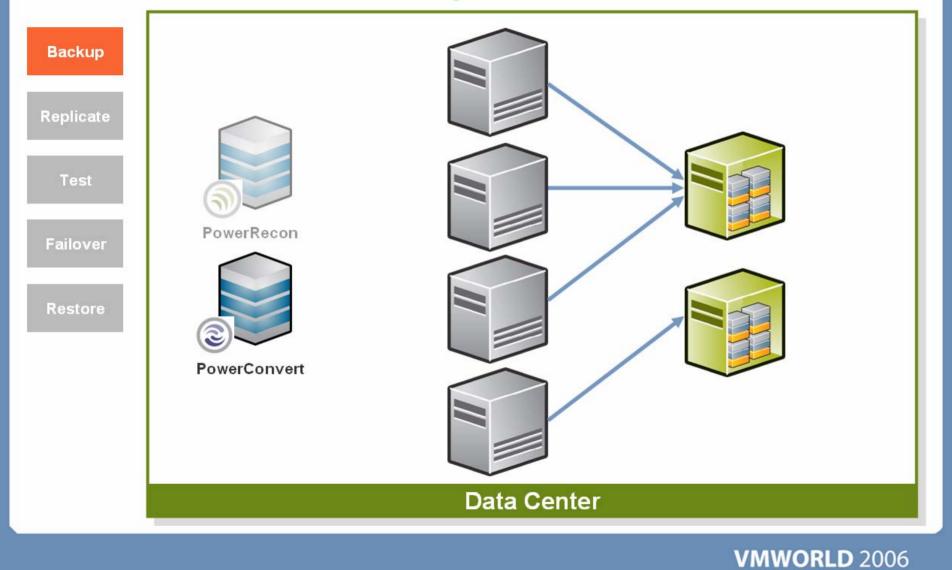




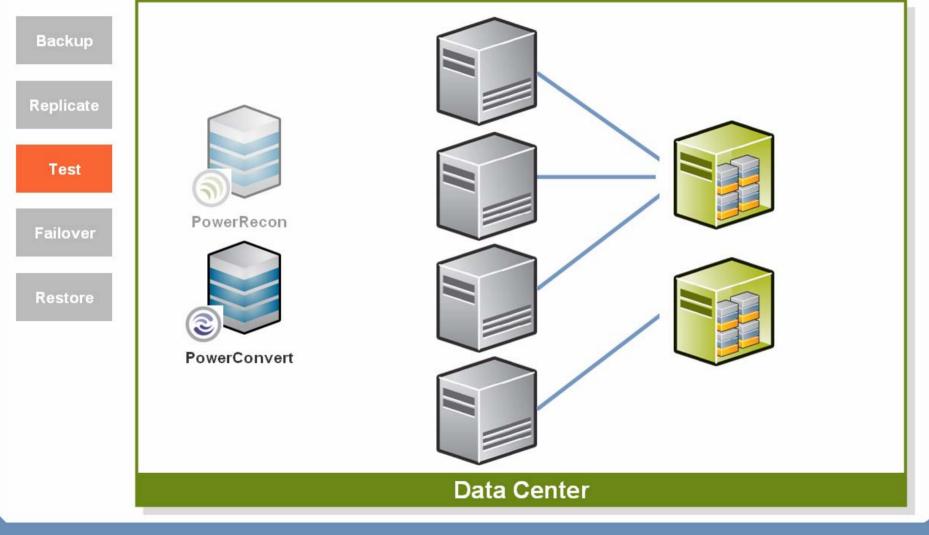




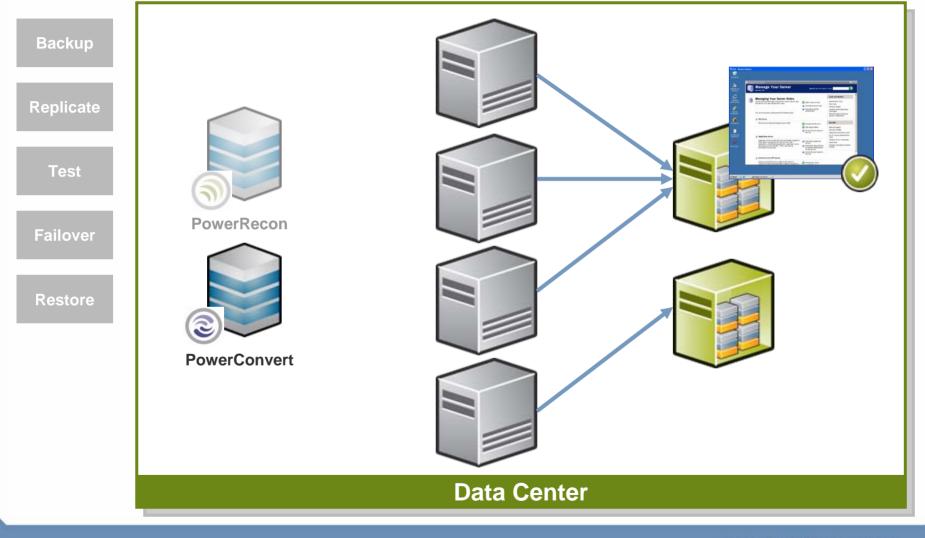




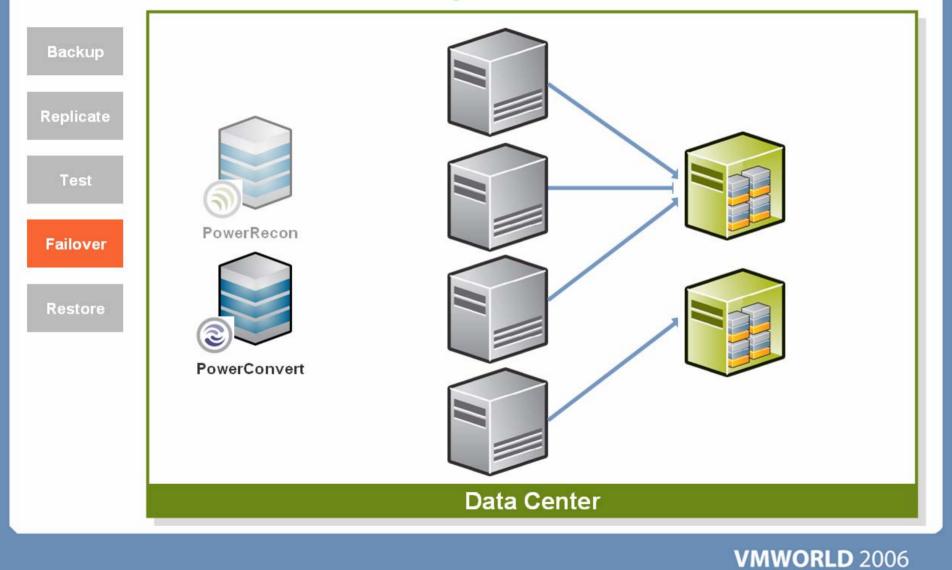




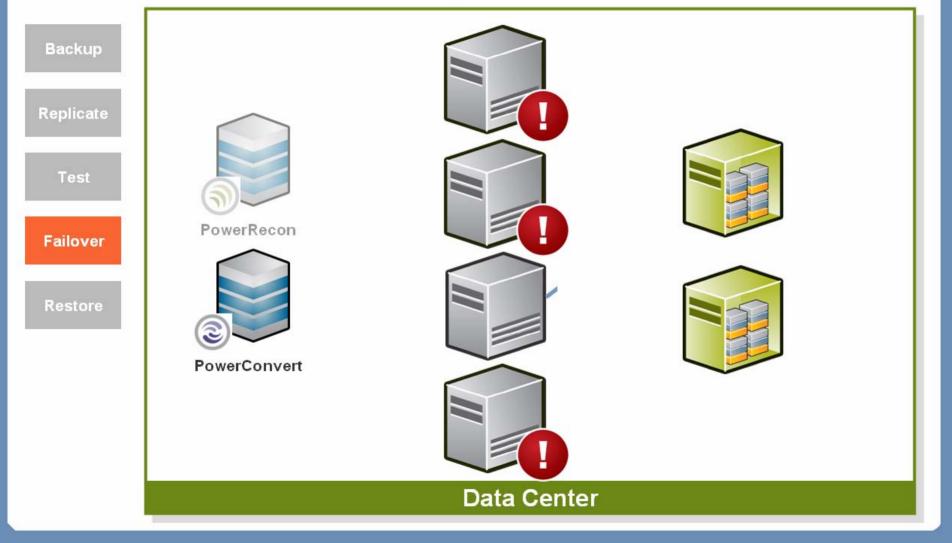




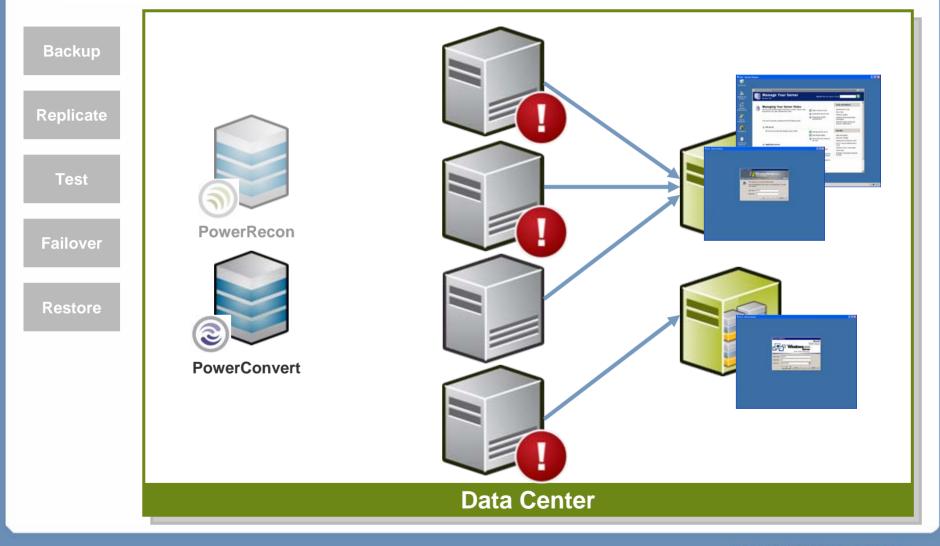




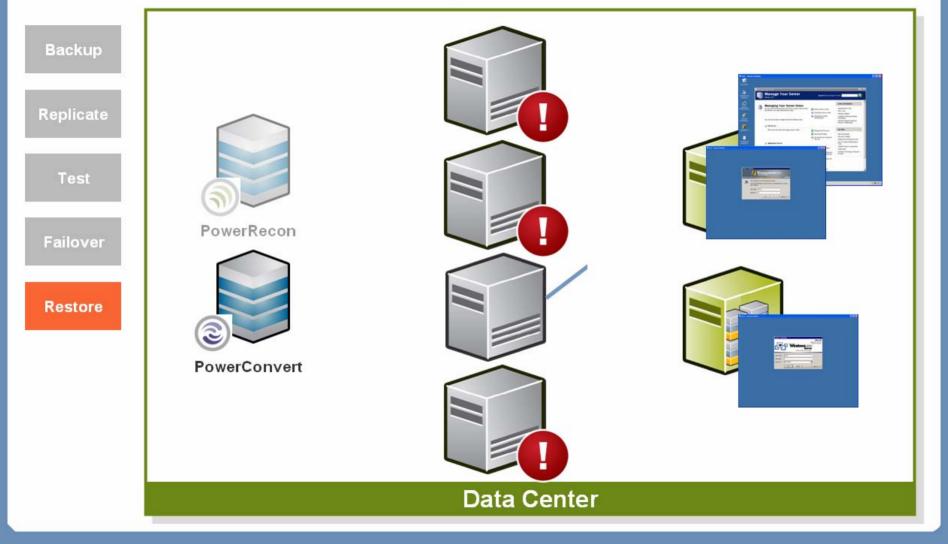




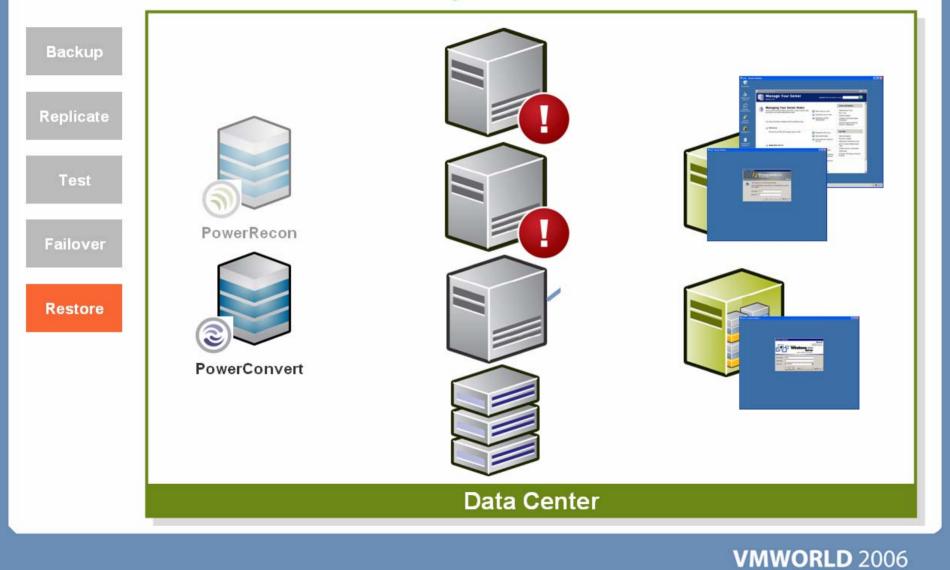




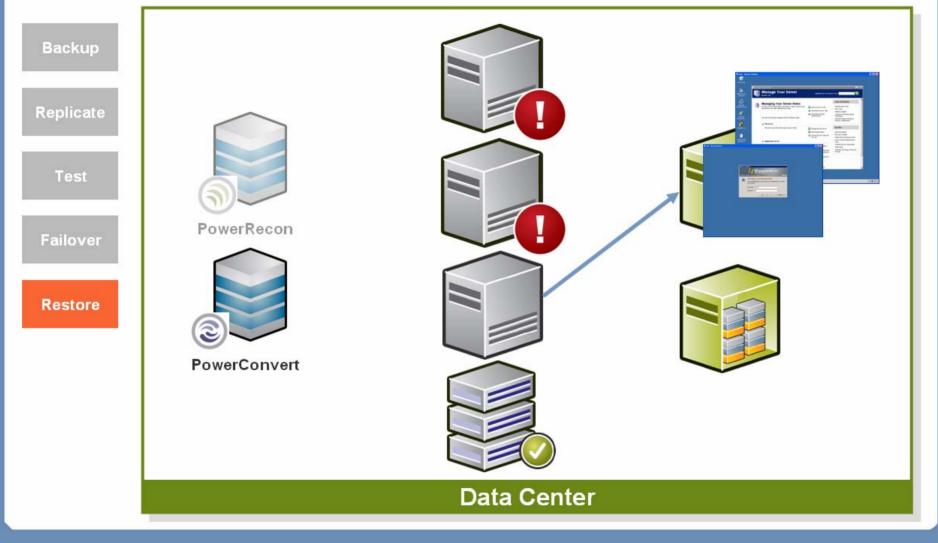




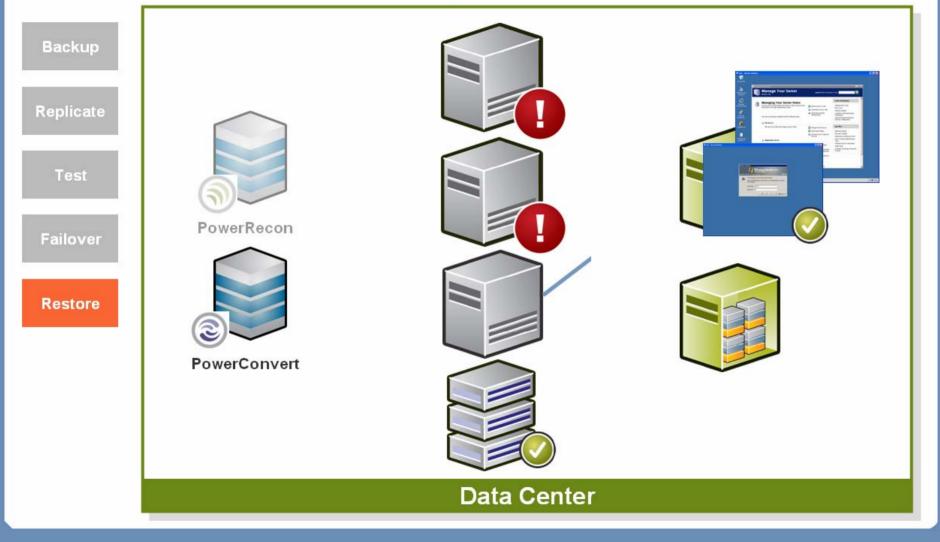




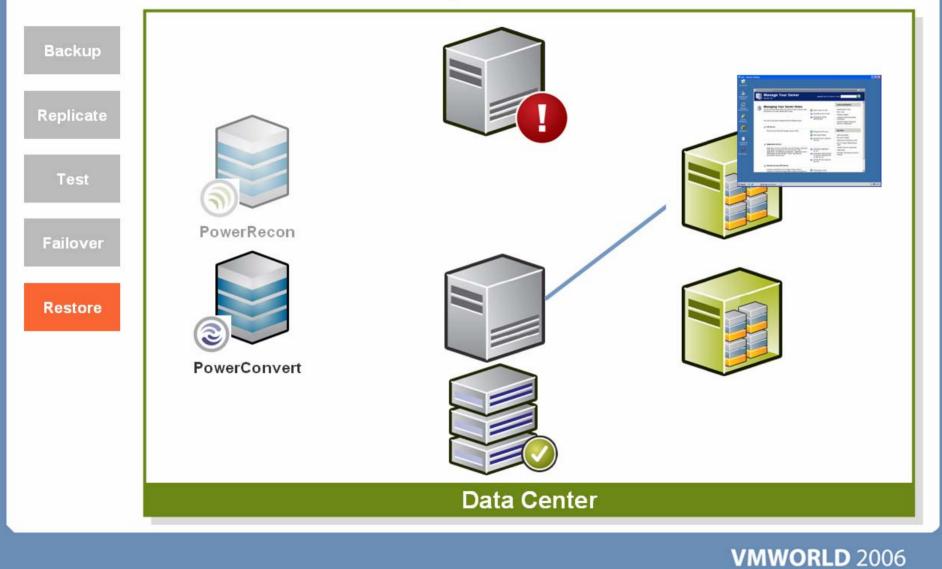




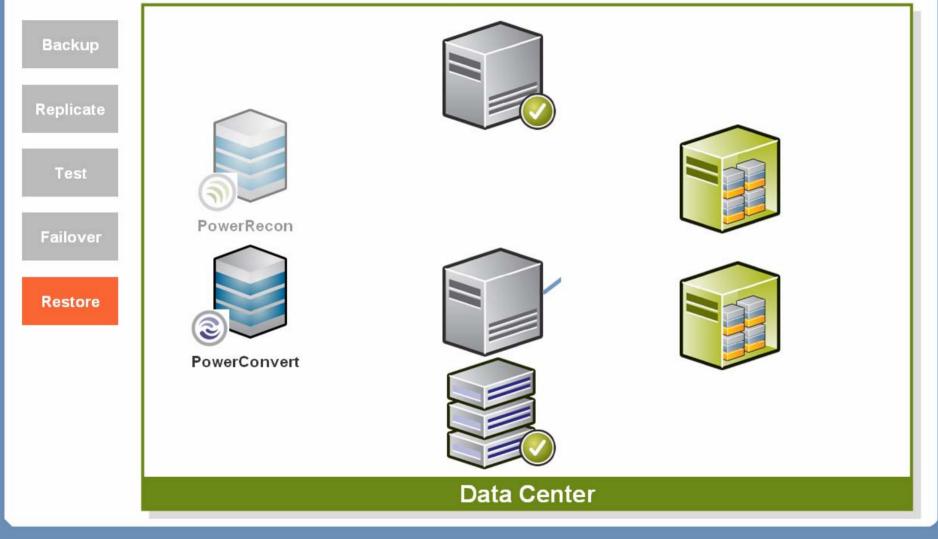




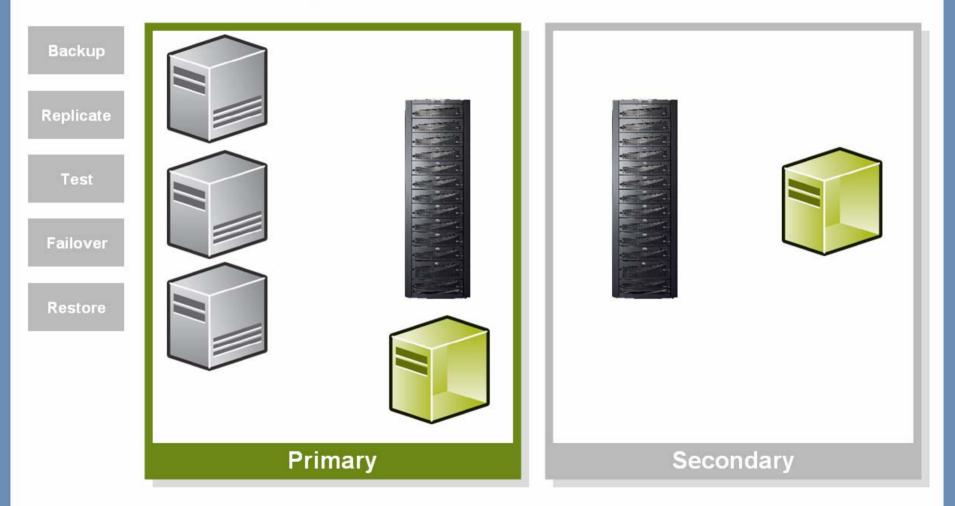




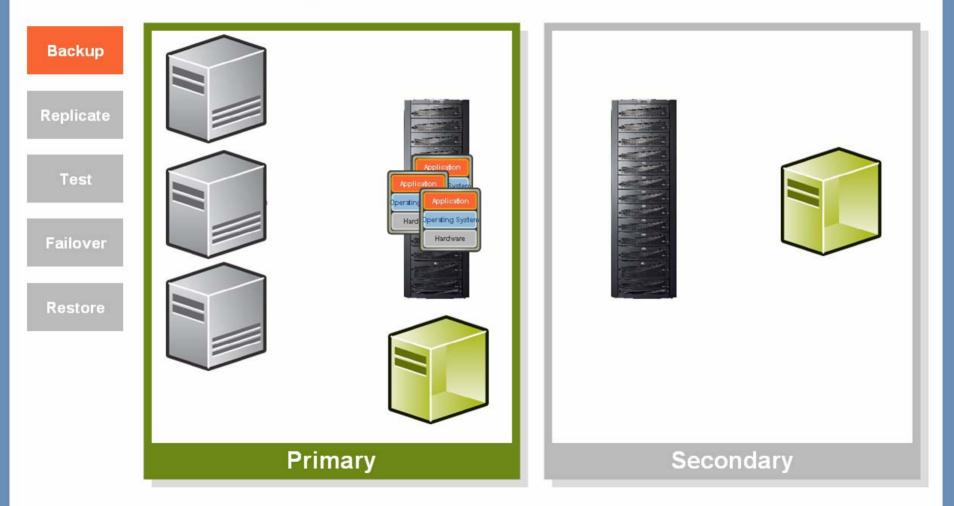




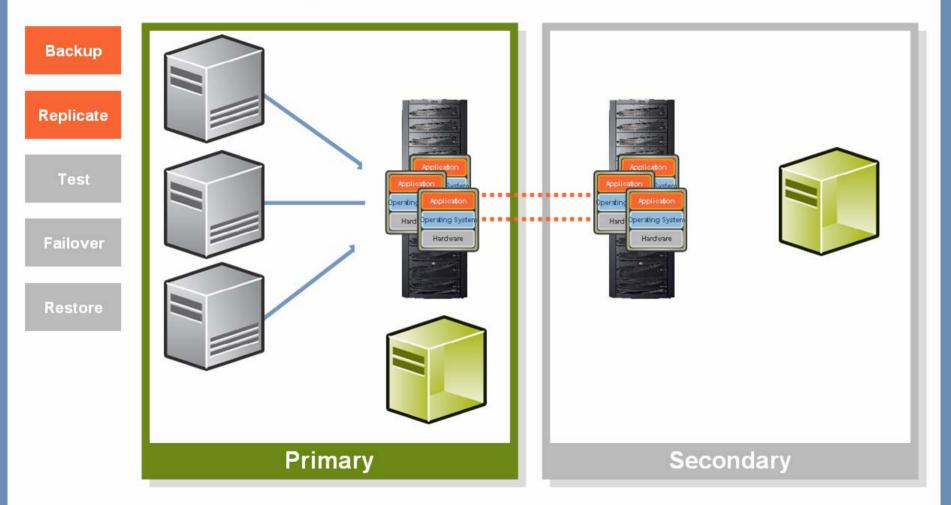




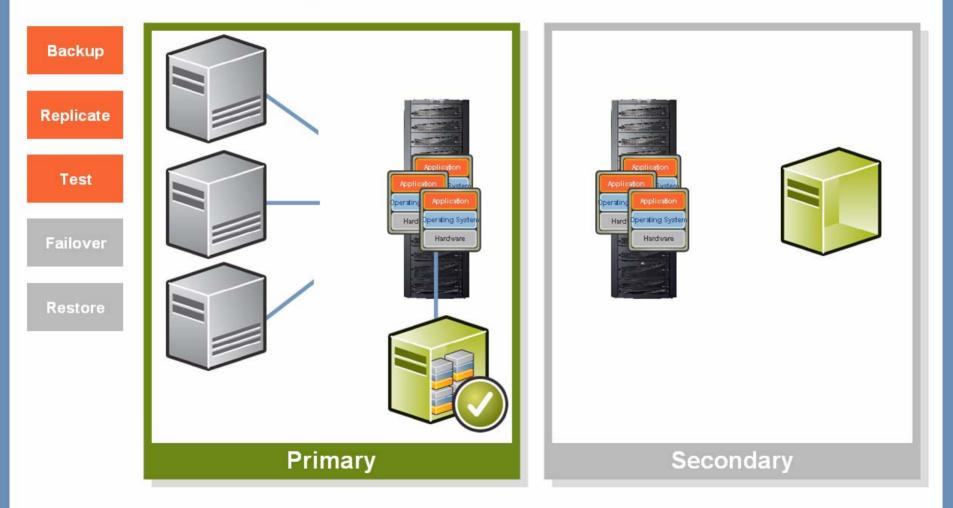




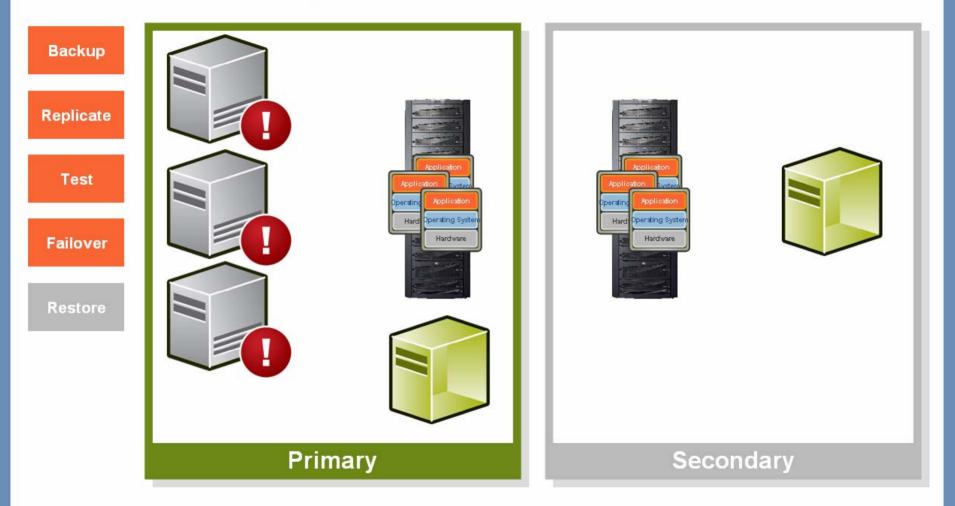














Demo Overview

Servers Configure Replication Job Run	Elle View Tools Actions H View Servers Jobs Details Servers		Group By S Group By S Host Name demo-esx253 DEMO-W2K3 demo-gsx demo-gsx DEMO-PC6 DEMO-IMAGES		Group By - 5 Host Name demo-esx253 DEMO-W2K3 demo-gsx	how
Replication Job	Servers Jobs Details		Host Name demo-esx253 DEMO-W2K3 demo-gsx DEMO-PC6	Operating System VMware ESX Server Windows 2003 Windows 2003	Host Name demo-esx253 EEMO-W2K3	Operating System VMware ESX Server Windows 2003
Replication Job	Jobs Details		demo-esx253	VMware ESX Server Windows 2003 Windows 2003	demo-esx253	VMware ESX Server Windows 2003
Replication Job	Details		🥃 demo-gsx 🔩 DEMO-PC6	Windows 2003	-	
	Details	*		Windows 2003		WINDOWS 2003
Run		*	DEMU-IMAGES	Windows 2003	DEMO-PC6	Windows 2003 Windows 2003
Run		^	DEMO-MSVS	Windows 2003 Red Hat Linux	DEMO-MSVS	Windows 2003 Red Hat Linux
	No selection		demo-suse9	SUSE Linux Windows 2000	demo-suse9	SUSE Linux Windows 2000
Replication Job			demo-sqlserv	Windows 2003 VMware ESX Server	demo-sqlserv	Windows 2003 VMware ESX Server
Test Recovery						
Run Full Recover Job	Server: http://localhost/PowerC		etwork: Sample Environment	User: PLATESPIN\johns	Jobs View: Updating[20]	Network Discovery: Enabled



Configuring a Job

Source	Server ARIG2KVM		l arget virtu	al Machine Server DEV-RECON1		
	DHCP Enabled Windows 2000(5.0.2195))	Cir.	DHCP Enabled VMware GSX Server(3.	2.0.14497)	
lect an item to v	view / edit its details:					
Job Con	figuration					*
👌 <u>General</u>	lob Configuration				×Introl ol	
Schedule	General Schedule	Credentials Notifications 1	Take Control		_	
Tredentia	Full Transfer					
Notificati	Run immediatel	k.				
🔈 <u>Take Cor</u>	C Run at a later ti	ime 10/12/2006 08:50:0	7 👻			
	Enable Incrementa	l Transfers				
🔄 VMwar	Incremental Transfer	-				*
Const	Recurrence Type:					
io <u>General</u>	Next Occurrence:	10/13/2006 00:00:00		<u>E</u> dit Schedule		
🛃 Netwoi	Help			K Cancel		*
Network						
Guest NIC	1	Map: 'DHCP Enabled (Local A To: DHCP Enabled on 'Autom		vork Adapter [Bridged]'		
눩. Operatin	ig System and Appli	cation Configuration				*
🔅 <u>Windows S</u>		No changes to service start up				
Live Transf	fer Source Services	Live Transfer is disabled, no s	ervices will be sto	pped		
				ave I 🖌 Start	_	

Recurrence Edi	tor	
Recurrence patter C Hourly Daily Weekly Monthly None	n E <u>v</u> ery 1 📻 week(s) Sunday Monday Thursday Friday	🗖 Tuesday 🗖 Wednesday 🗖 Saturday
Range of recurren <u>S</u> tart: 2006/1	ce	 ○ No end date ○ End after: 1 recurrences ○ End by: 10/12/2007 ▼
		OK Cancel



Managing Synchronization Schedules

💦 PlateSpin PowerCo	onvert											IX
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	Synchroni	ization S		🔽 🥎						- 🗆 ×	1	
View	Drag a column header here to group by that column.											
Servers	E Source		Contain	100 million (100 m	VM Name	11 million and 10 million and	Last Sync Date	Next Sync Date	Status		Operating System Jows 2000	
Jobs	ARIG	2KVM	DEV-RE	EV-RECON1 APPEORATE				10/13/2006.00:	Sched	cheduled	lows 2003	
Details						<u>F</u> ull Transfer Incremental						
ARIG2KVM			-									
Virtual Machine				<u>E</u> dit Schedule ⊻iew Log								
Memory: 384 MB			1									
Windows 2000					-	<u>P</u> ause Re <u>s</u> ume						
5.0.2195 Service Pack 4.0					Terminate							
Workgroup: WORI												
	<u>H</u> elp							<u>R</u> efresh		ose		
		1								111		
Server: http://localhost/p	owerconvert	Network:	Default	User: PLATESP	PIN\arig			Jobs View: F	Ready	Network D	iscovery: Enabled	

- Central management interface
- Audit history
- Manage contract and jobs

- Pause
- > Force
- > Edit
- > Delete



The Final Word

Virtual Infrastructure

Visibility and Planning

OS Portability

- The more workload that can be made available for the right price, the more resilient your datacenter can be
- Planning and testing are essential
- Simple planning and simple testing are the key to success

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