Using Virtual Infrastructure as a Recovery Platform for Physical Production Servers

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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
Overview

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

BUDGET

RPO/RTO

COST

VMWORLD 2006
Allocating Budget

BUDGET

COST

RPO/RTO

FT

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DR1

DR2

DR3

VMWORLD 2006
Allocating Budget

BUDGET

COST

RPO/RTO

VMWORLD 2006
Allocating Budget

BUDGET

COST

RPO/RTO

VMWORLD 2006
<table>
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<th>Solution</th>
<th>Notes</th>
<th>RPO/RTO/Cost</th>
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| Server Clustering              | Duplicate Hardware                             | 0 / 0 / $$$ $
|                                | Complicated Setup                              |              |
| P2V Recovery                   | Consolidated recovery                          | hours / min / $$ |
|                                | Power on recovery                              |              |
|                                | Touch less management                          |              |
| Disk Imaging                   | Limited Restore Flexibility                    | 24h / hours / $$ |
|                                | Slow Staged Restore                            |              |
| Tape / Manual Rebuild          | Difficult to Administer                        | 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
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

1. Configure
2. Plan
3. Test
4. Replicate
5. Backup
6. Failover
7. Restore
8. Inventory
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
PowerSolution - Recovery

PowerRecon

PowerConvert

Data Center
PowerSolution - Recovery

Inventory

Plan

Configure

PowerRecon

PowerConvert

Data Center

VMWORLD 2006
PowerSolution - Recovery

- Backup
- Replicate
- Test
- Failover
- Restore

Data Center

PowerRecon

PowerConvert

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PowerSolution - Recovery

Backup
Replicate
Test
Failover

PowerRecon
PowerConvert

Data Center

VMWORLD 2006
PowerSolution - Recovery

Backup
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Data Center

VMWORLD 2006
PowerSolution - Recovery

Backup
Replicate
Test
Failover
Restore

PowerRecon
PowerConvert

Data Center

VMWORLD 2006
Off Site SAN Replication

Primary

Secondary

Backup
Replicate
Test
Failover
Restore

VMWORLD 2006
Off Site SAN Replication

Backup
Replicate
Test
Failover
Restore

Primary
Secondary

VMWORLD 2006
Off Site SAN Replication

Backup
Replicate
Test
Failover
Restore

Primary

Secondary

VMWORLD 2006
Demo Overview

- Discovery
  - Servers

- Configure
  - Replication Job

- Run
  - Replication Job

- Test Recovery

- Run Full Recover Job
Configuring a Job

Peer-to-Peer Conversion Job

Source Server: ARIG2KVM
- DHCP Enabled
- Windows 2003 (5.0.2195)

Target Virtual Machine Server: DEV-RECON1
- DHCP Enabled
- VMware GSX Server (2.2.0.14457)

Select an item to view/edit its details:

- **Job Configuration**
  - General
  - Schedule
  - Credentials
  - Notifications
  - Take Control

- **Network**
  - Guest NIC-1
    - Map: DHCP Enabled (Local Area Connection)
    - To: DHCP Enabled on Automatic Bridged Network Adapter (Bridged)

- **Operating System and Application Configuration**
  - Windows Services
    - No changes to service start up mode
  - Live Transfer Source Services
    - Live Transfer is disabled, no services will be stopped

**Recurrence Editor**

- Recurrence pattern:
  - Hourly
  - Daily
  - Weekly
  - Monthly
  - None

- Range of recurrence:
  - Start: 2006/10/13 00:00:00
  - End by: 2007/10/13

**VMWORLD 2006**
Managing Synchronization Schedules

- Central management interface
- Audit history
- Manage contract and jobs
  - Pause
  - Force
  - Edit
  - Delete
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.

Come see a live demo at the PlateSpin Booth #635
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and return it to the room monitors as you exit the session.

The presentation for this session can be downloaded at

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