

Spin and Grin

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PlateSpin workload mobility solutions reduce the cost, complexity and risk of data center moves

> Your Data Center Has Got to Go.

It's time to pack. The decision has been made. You and your data center are hitting the road.

Perhaps you've outgrown your current facility. Maybe you've been on an acquisition binge and now it's time to consolidate. Possibly your firm is growing fastest in another geography with lower space and power costs. This move might take you across town, across country, or even across the globe, but whatever the reason, whatever the destination, it's your job to plan the move—and to execute it with an absolute minimum of risk and disruption.

We don't need to tell you that moving a data center is a complex process, littered with opportunities for expensive misadventure; success requires careful planning and surgical execution.

That's true if you plan to re-create your current environment by physically relocating all of your existing systems. It's even truer if, like many companies today, you see relocation as an opportunity to re-engineer your existing data center environment—to use virtualization and powerful new server platforms to consolidate servers, boost utilization, increase efficiency and reduce costs. Adding new technologies to an environment in motion can also add complexity and risk.

> Unified Workload Management Mobilizes the Data Center

Fortunately for anyone with a data center to move, breakthrough innovations in workload lifecycle management are opening the borders between physical and virtual systems, allowing effortless migration across physical servers on adjacent racks, or virtual ones in different hemispheres. The most powerful and comprehensive of these solutions are coming from PlateSpin, the newest strategic acquisition by Novell.

Workload Profiling and Portability technologies from PlateSpin liberate software from the underlying hardware, making it possible to stream complete server workloads—data, applications and operating systems—over the network, between any set of physical or virtual hosts, with a simple drag and drop operation. By providing greater

visibility into workloads and the way they use available resources, PlateSpin solutions bring greater flexibility and new efficiencies to the virtualized data center. Together, PlateSpin PowerRecon and PowerConvert provide a powerful, fully integrated solution for workload discovery, analysis, planning and portability that dramatically simplifies and accelerates data center moves, while reducing the associated labor requirements, costs and risk.

> Before You Make a Move: Discover, Analyze, Plan

Because you can't migrate what you can't locate, the first step in any data center move is a thorough inventory of all the servers running in your environment, and a detailed analysis of their resource utilization. PlateSpin PowerRecon remotely discovers server hardware and software assets across the entire data center—regardless of the diversity in virtual machines, operating systems and hardware platforms deployed. It surveys Windows, UNIX and Linux platforms, collecting detailed information on operating systems, applications and services, patch levels, CPU, memory, network and disk resources.

Because you can't understand resource consumption from a snapshot, PowerRecon tracks utilization over time to establish historical context, and then identify patterns and project trends. It imports system performance data directly from HP Operations Center and Microsoft Operation Manager (MOM), and it integrates with VMware VirtualCenter to illuminate and investigate the virtual environment.

When your current asset inventory and resource budget are complete, PowerRecon provides the industry's most advanced modeling, forecasting and planning capabilities for new data center planning.

Graphical reporting tools help you visualize execution requirements, accurately map them to required resources, then model alternate workload distributions to minimize contention while maximizing utilization. PowerRecon delivers all the tools and capabilities you'll need to ensure adequate floor space, power and cooling in your new facility.

> Move Your Facility Faster and More Efficiently

Once you've mapped the terrain and laid your course, it's time to make your move—as quickly, efficiently and economically as possible. That's where PlateSpin PowerConvert comes in. It's a powerful workload portability and protection solution designed to simplify and expedite workload migration across a local or wide area network, between any set of heterogeneous environments—virtual or physical. PowerConvert supports all leading virtualization solutions including Microsoft Virtual Server, Virtual Iron, VMware and Citrix XenServer, as well as multiple operating systems, hardware configurations and imaging technologies. It lets you move workloads at will between dissimilar hardware platforms and different virtual infrastructures.

The Live Transfer capability of PowerConvert lets you move workloads without taking the production environment down. It also enables live testing with no disruption to source systems, ensuring that workloads run as expected in the destination environment. Once testing is complete, PowerConvert's exclusive Server Sync provides a fast, efficient solution for long-distance migrations. By briefly shutting down the source to perform a final synchronization, it reduces the total volume of data that must be sent over the WAN. If no high-speed WAN exists, PowerConvert can capture the server images on a CD or USB drive that can easily be shipped to the new site and deployed.

PlateSpin's Two-part Recipe for Data Center Relocation

1. One part PlateSpin PowerRecon

- Remote server inventory collection
- System performance data import
- VMware VirtualCenter integration
- Rich data modeling
- Custom report creation and delivery
- Multiple data center support
- Enterprise-level scalability

2. One part PlateSpin PowerConvert

- Anywhere-to-anywhere workload migration
- Server Sync for effective testing and WAN migration
- Enterprise-class speed and reliability
- Live Transfer
- File and block-level replication
- Efficient image-based provisioning

> PlateSpin Helps Essent Merge Three Data Centers, Save EU€2 Million

Essent is a Dutch energy producer that supplies electricity, gas and heat to residential and business customers in the Netherlands, Germany and Belgium. In 2006, the firm undertook a major IT consolidation initiative to merge three geographically dispersed data centers

into a single central facility. The Business objectives included standardizing the IT infrastructure, reducing the physical footprint through virtualization, lowering TCO and reducing single points of failure.

Prominent among the systems to be relocated were 180 mission-critical servers supporting energy trading and production management applications for Essent's most profitable business unit. "We couldn't simply power down these servers and ship them to our primary data center by truck," explains Project Manager Marco Spoel. "The consolidation had to be completed with as little disruption as possible."

Other objectives included physical-to-physical (P2P) migration of 260 server workloads from HP to new IBM servers, and physical-to-virtual (P2V) migration of 50 workloads to a VMware virtual environment. In addition, the firm wanted virtual-to-physical migration capabilities for troubleshooting purposes, and for scaling the virtual environment should an application require it.

Following a proof of concept demonstration by PlateSpin Partner PQR, Essent purchased a combined PlateSpin PowerRecon and PowerConvert license package. PowerRecon was used to remotely monitor the three data center environments, compile server inventories and utilization metrics, and to identify virtualization candidates. The Essent team then used PowerConvert to perform all P2P and P2V migrations quickly, easily and with minimal business disruption.

"With PlateSpin we were able to migrate all our servers in one month with a team of less than eight people," says Spoel. "Without PlateSpin, it would have taken 25 people half a year. We saved EU€2 million on this data center consolidation alone, but the real savings are actually invisible. PlateSpin made it possible to complete our data center consolidation without any costly business disruption, and reduced the risk of such a large IT initiative to an acceptable level. Although it's difficult to put a price tag on business continuity, the value to our organization over time could easily be in the hundreds of millions of euros."

> Reduce Your Relocation Cost, Complexity and Risk

Together, PlateSpin PowerRecon and PowerConvert provide a comprehensive data center relocation and consolidation solution that includes integrated asset discovery, resource utilization analysis, planning, testing and migration management. It's the only solution that automates project assessment, planning and execution from start to finish. Organizations can use these innovative workload management solutions to dramatically increase the reliability, agility and responsiveness of their IT infrastructure while significantly reducing costs and risk. For more information on PlateSpin data center management and relocation solutions, visit www.platespin.com. **N**