PlateSpin® Recon: Virtual Capacity Management and Consolidation Planning

Successful virtualization initiatives require considerable up-front planning to ensure maximum ROI. But it doesn’t end there. Because resource utilization changes over time, regular reassessment and management are required to maintain optimal efficiency. PlateSpin® Recon from Novell is a sophisticated workload analysis, planning and management solution that provides new levels of intelligence, visual analysis and forecasting for optimizing the data center.

PlateSpin Recon: A Clear and Concise Picture of Your Data Center

With broad, multiplatform support, PlateSpin Recon collects inventory and workload utilization statistics for a clear and concise picture of all the hardware and application services running in the data center, including how and when those resources are being used. PlateSpin Recon takes the guesswork out of complex server consolidation and capacity planning initiatives, and provides ongoing management of the real physical resources—and costs—of your virtual infrastructure.

Figure 1. PlateSpin Recon provides advanced scenario modeling, trending, forecasting and planning capabilities to take the guesswork out of data center initiatives. Use powerful what-if modeling to determine optimal combinations of hardware and virtual hosts to ensure maximum resource utilization.
With broad support for Windows, Linux and UNIX platforms and scalability to accommodate even the world’s largest data centers, PlateSpin Recon provides a true enterprise-scale workload analysis, planning and management solution.

Key Benefits

**Improve Consolidation Ratios with Comprehensive Workload Profiling**

Previously, data center managers had to rely on best guesses to identify underutilized physical servers and virtual hosts, and to allocate sufficient resources for current and future needs. The unique workload profiling in PlateSpin Recon tracks actual CPU, disk, memory and network utilization over time, on both physical and virtual hosts. Every server workload and virtual host has utilization peaks and valleys, and PlateSpin Recon can build consolidation scenarios based on interlocking these peaks and valleys. This capability minimizes resource contention and ensures higher consolidation ratios compared to other approaches that use only a single snapshot or record only peak usage. And higher consolidation ratios mean better use and longer life for your current hardware, and fewer new servers that you need to buy in the future.

**Extend the Capacity of Your Virtual Infrastructure**

Without effective management, virtual machines can rapidly proliferate, leading to poor resource utilization and an unwieldy infrastructure. The virtual capacity management capabilities in PlateSpin Recon find unused resources in virtualized IT environments, even when the virtualization platform shows 100 percent allocation. By reporting on the actual available resources, PlateSpin Recon from Novell enables allocated resources to be reclaimed and reassigned—to new virtual machines, or to other virtual machines that require more resources—deferring the need to purchase new hardware and maximizing the return on the investment in your current hardware.

**Increase Visibility across Multiplatform Environments**

With broad support for Windows*, Linux* and UNIX* platforms and scalability to accommodate even the world’s largest data centers, PlateSpin Recon provides a true enterprise-scale workload analysis, planning and management solution. Data can be aggregated from multiple PlateSpin Recon data collectors for centralized data warehousing, analysis and planning to accommodate larger enterprises. When combined with PlateSpin Migrate, the Novell® multiplatform workload migration solution, organizations gain a complete end-to-end solution with tightly integrated planning and execution for data center initiatives.

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Figure 2. PlateSpin Recon provides customizable graphical reporting to view and manage workloads and ongoing resource utilization. View summary workload sizing and power and cooling data or drill down to point-in-time granular levels using detailed tabular reports and time-series charts.
Key Features

Remote Data Collection
PlateSpin Recon remotely collects inventory and performance data with no need to physically touch data center servers. PlateSpin Recon features a run-once inventory collector, which gathers comprehensive server inventory data while performance data is collected regularly via standard OS instrumentation capabilities. You can also import utilization data directly from your existing monitoring tools.

Enterprise-level Scalability
Robust data collection, analysis and planning for all servers in the network puts PlateSpin Recon in a class all its own for large-scale data center consolidation projects. Data can be aggregated from geographically dispersed PlateSpin Recon data collectors for centralized data warehousing, analysis and planning, or to accommodate larger implementations.

Workload Analysis
The PlateSpin Recon Capacity Planning Module automatically analyzes the five critical dimensions of workload—CPU, disk, memory, network and time—across thousands of servers simultaneously, providing consolidation plans that maximize utilization while minimizing resource contention.

Planning
With PlateSpin Recon, you can automatically generate server consolidation plans based on detailed workload analysis to ensure the optimal fit between server workloads and virtual resources. You can also stagger multiple workloads evenly across virtual hosts and account for hourly peaks and valleys inherent in server utilization trends. The ability to use forecasted data ensures that plans are built to accommodate future growth.

Scenario Comparisons
PlateSpin Recon enables you to create multiple custom scenarios with user-defined target server specifications, including server templates or existing virtual machine servers, to create an optimal consolidation plan.

Rich Data Modeling
PlateSpin Recon helps you make better consolidation choices based on sophisticated analysis of resources, workloads and utilization trends. Tight integration with VMware* vCenter (formerly VirtualCenter) provides greater visibility into your virtual infrastructure, improving data center management and operations.

Workload and Utilization Forecasting
Predict future workloads and resource utilization based on historical trends to better plan for server consolidation and infrastructure growth, and enable more proactive systems management. Forecasting data on CPU, disk, memory and usage trends is presented in easy-to-read charts, reports and plans.

Resource Reclamation
PlateSpin Recon resource reclamation reports identify gaps between allocation and actual utilization. Minimizing these gaps maximizes the virtual resource capacity of the existing infrastructure, extending useful service life and postponing new hardware purchases.

Virtual Machine Performance Analysis
PlateSpin Recon can help you improve the performance of your workloads by identifying hidden configuration errors in virtual machines.

Power and Cooling Analysis
Compare and contrast potential power and cooling cost savings and ROI derived from different consolidation scenarios. Custom fields allow power and cooling requirements for major hardware platforms to be inputted and maintained in a central database, enabling organizations to analyze and cost-justify green computing initiatives.
Virtual Machine Growth Reporting
Run virtual machine growth reports to monitor the proliferation of virtual machines and avoid the administrative headaches associated with virtual machine sprawl.

Flexible Chargeback Reporting
Because virtualization creates a pool of computing resources, it can be difficult to manage and monitor how virtual resources are being used and by whom. PlateSpin Recon allows organizations to effectively allocate and share virtual resources across various business units and departmental owners. The flexible charge-back reporting capabilities in PlateSpin Recon improve virtual infrastructure management and financial accounting by allowing organizations to accurately calculate IT costs based on actual resource usage.

Custom Report Creation and Delivery
PlateSpin Recon allows you to define resource and workload parameters, and generate custom visual reports to accelerate data center assessments and server consolidations. You can quickly identify consolidation candidates based on resource utilization trends and compare workload characteristics before and after consolidation. Scheduled report delivery via e-mail or FTP ensures easy access to remote data and provides up-to-date information for decision making.

Flexible Data Capture and Export
PlateSpin Recon data can be easily exported to a number of formats including HTML, PDF, Word, CSV, Excel or images for flexible report creation. Raw data can be extracted directly from the database and delivered to business intelligence applications for advanced statistical analysis.

<table>
<thead>
<tr>
<th>Windows</th>
<th>Linux</th>
<th>Novell</th>
<th>UNIX</th>
<th>Hypervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 2008 Server (32 and 64-bit)</td>
<td>SUSE, Linux (32 and 64-bit)</td>
<td>NetWare, Solaris* (32 and 64-bit) SPARC AIX†</td>
<td>VMware Virtual Infrastructure</td>
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<td>Windows Vista* (32 and 64-bit)</td>
<td>openSUSE, (32 and 64-bit)</td>
<td>VMware ESX,</td>
<td>VMware Server</td>
<td>VMware Server</td>
</tr>
<tr>
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<td>Red Hat* Linux (32 and 64-bit)</td>
<td>VMware ESXi</td>
<td>Microsoft* Hyper-V</td>
<td>VMware Server</td>
</tr>
<tr>
<td>Windows XP Pro (32 and 64-bit)</td>
<td>Fedora* (32 and 64-bit)</td>
<td>Microsoft Virtual</td>
<td>Citrix* XenServer</td>
<td>Microsoft Virtual Server</td>
</tr>
<tr>
<td>Windows 2000</td>
<td>CentOS* (32 and 64-bit)</td>
<td>Solaris Containers</td>
<td>Virtual Iron</td>
<td>Citrix* XenServer</td>
</tr>
<tr>
<td>Windows NT 4.0</td>
<td>Ubuntu* (32 and 64-bit)</td>
<td>Solaris Containers</td>
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†Inventory and monitoring only

For complete platform support and specifications, please contact a PlateSpin sales representative.