

Reduce Energy Costs and Go Green with VMwareGreen IT Solutions and nlyte Software

The IT Power Crisis

Energy consumption is a critical issue for IT organizations today. Computing equipment has become increasingly dense, energy costs are on the rise and many datacenters simply lack the power or space IT services require. Industry analysts estimate the annual cost of powering a server will soon exceed its acquisition cost.

Underutilized desktop and server hardware is at the root of the problem. Desktops and servers run at average utilization rates of only 8-15 percent yet while idle consume nearly as much power as they do when active. Hardware capacity is typically over-provisioned because it is hard to adjust dynamically. The result is too much hardware that is highly inefficient at delivering IT services.

Consequently, many IT organizations are looking for solutions that can help them reduce their energy costs and consumption while at least maintaining service levels and responsiveness to the business.

Go Green with Virtualization

VMware solutions can help reduce energy costs from the desktop to the datacenter by right-sizing your IT infrastructure. More than 100,000 customers—including all of the Fortune 100—rely on VMware to reduce costs, increase IT efficiency and go green.

- Reduce energy costs by up to 80 percent
- Reduce the time to deploy new servers by up to 50 percent
- Prolong data center life by up to 5 years
- Help attain a power usage effectiveness (PUE) rating of 2.0 or less

Reduce Power Costs & Increase Resource Utilization

VMware virtualization gives you the power to right-size your IT infrastructure through server consolidation and dynamic load balancing across a pool of physical servers. By running 10 or more applications in virtual machines on a single x86 server, your IT organization can dramatically increase server utilization and reduce energy costs.

VMware® Distributed Resource Scheduler (DRS), a feature of VMware Infrastructure, continuously monitors capacity and resource requirements across your virtual infrastructure and ensures service levels while minimizing energy consumption. When excess capacity exists, VMware DRS intelligently consolidates workloads onto fewer servers without downtime or disruption and places unneeded servers on standby. When resources are required, VMware DRS brings powered-down hosts back online to ensure service levels are met.

VMware DRS allows IT organizations to right-size IT infrastructure in real-time and minimize power and cooling costs while delivering higher levels of availability and service to end users.

VMware Infrastructure has helped VMware customers reduce their energy costs and consumption by as much as 80 percent.

Improve Energy Efficiency for Corporate Desktop PCs

VMware solutions can also help you improve energy efficiency on the desktop. Many VMware customers are reducing their energy costs by using the VMware Virtual Desktop Infrastructure (VDI) solution to replace underutilized PC desktop hardware with thin clients that consume far less energy and do not need to be replaced as often.

With VMware VDI, administrators get the added manageability and control that comes with centralizing desktop images in the datacenter, while end users get convenient, flexible access to their own complete, customizable desktop.

VMware VDI extends powerful virtual infrastructure capabilities to the desktop, including dynamic workload balancing and distributed power management, which improve availability and efficiency.

Help Pay for Virtualization with Energy Efficiency Incentives

VMware virtualization is a proven solution for increasing energy efficiency, and many major utility providers now offer financial incentives for virtualization-based desktop and server consolidation projects. By participating in these incentive programs, you can achieve even greater financial savings and faster ROI with VMware virtualization solutions. Contact your local utility provider to find out if they offer financial incentives for virtualization-based consolidation projects.

Minimize Your IT Carbon Footprint

VMware virtualization solutions have a positive impact on the environment as well as the financial bottom line. Every server virtualized with VMware is equivalent to removing 4 tons of carbon dioxide (CO₂) from the environment or taking 1.5 cars off the road annually.

Learn More

To learn more about VMware solutions and products, visit <http://www.vmware.com> or call 1-877-4VMWARE.

The nlyte Data Center Performance Management (DCPM) suite



PARTNER PROFILE

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Overview

nlyte Software is a leading provider of data center infrastructure management (DCIM) solutions for intelligent capacity planning. The company helps improve the efficiency and management of data center assets and physical infrastructure with a complete performance-based suite that combines next-generation software, proven best practices, and unsurpassed expertise in data center management.

Key Business Needs

Today's data center management professionals face a number of challenges:

- Poor data center utilization (typically used at only 50% of peak performance)
- Inefficient business processes (typically weeks to months per task)
- Excessive energy consumption (typically 40% of data center cost)
- Inefficient use of space (more than 50% of enterprises see shortages in 2010)

Key Business Benefits

The most complete DCIM solution for intelligent capacity planning, the nlyte DCPM suite enables companies to optimally place data center assets to make the most efficient use of power, cooling, and space, resulting in a rapid return on investment.

Business Results

With the nlyte DCPM suite, companies can:

- Reduce data center operating costs by up to 20% annually
- Reduce the time to install new servers by up to 50%
- Extend data center life by up to 5 years
- Get the information needed to attain a power usage effectiveness (PUE) rating of 2.0 or less

Products

- VMware vCenter™ 2.5.0
- VMware GSX Server®, ESX®, and ESXi™ host systems

Simplify the management of physical and virtualized resources

Solution Overview

Today's data centers are highly complex and difficult to manage. This complexity combined with the rising cost of power leads to decreased efficiency and serious budget challenges. To improve operational and financial performance, companies need to tackle data center chaos with a solution that addresses both data center assets and the physical and virtual infrastructure.

With nlyte Software, you get the insight and best practices needed to visualize, control, and predict data center capacities including space, power and cooling. The nlyte DCPM suite is based on a set of best practice processes that enable you to automatically discover IT assets, visualize the physical and virtual infrastructure, model your move, add, change (MAC) initiatives, control data center processes and personnel, report on progress using an integrated business intelligence engine, and predict capacity resources well into the future.

The nlyte DCPM solution is integrated with VMware via the nlyte Integrator, a flexible framework that provides integrations to hardware and software applications. This integration includes the automatic discovery and monitoring of VMware virtual machines within nlyte, enabling you to manage your VMware virtualized environment in the same way you do your other data center assets and physical infrastructure. Data center managers get a single view across the entire data center infrastructure, so they can take control and optimize both the physical and virtual resources, reducing the complexity and cost of managing a data center.

Results

With direct integration to VMware vCenter Server, you can realize the value of the nlyte DCPM solution across both physical and virtual resources. These benefits include:

- Automatic discovery and monitoring of VMware virtual machines
- Single view across all physical and virtual servers and machines
- Reduced MTTR by quickly determining the rack location of the physical server the VMware virtual machine is running on
- Capability to report on the relationships between both physical and virtual resources and the business groups within an organization
- Increased control and optimization of both physical and virtual resources
- Reduced complexity and cost of managing a virtualized data center

