## Supermicr. \*\*Supermicr.\*\*\*

## **Application Optimized Building Block Solutions**

## Supermicro Servers Help SoftLayer™ Deliver New Services and Promote Green IT

SDFTLAY=R<sup>™</sup> SoftLayer provides global, on-demand data center and hosting services from facilities across the U.S., utilizing servers from Supermicro. SoftLayer leverages best-in-class connectivity and technology to innovate industry leading, fully automated solutions that empower enterprises with complete access, control, security, and scalability.

> In recognition of its continued excellence, SoftLayer has earned a number of impressive industry awards, including HostReview's prestigious Top 10 Reader's Choice Award for 2008 and the Gartner Group's Magic Quadrant for "Web Hosting" and Hosted Cloud System Infrastructure Services (On Demand)" for July, 2009.

"Delivering world-class services on time, every time, requires an internal infrastructure that, up to now, simply did not exist in the market place. We have created a new model for the industry that combines scalable and flexible data storage with scal*able and flexible* application processing utilizing servers from Supermicro."

> -Nathan Day, SoftLayer CTO

#### **Growing business demands** flexibility

Supermicro's relationship with SoftLayer began in 2006. SoftLayer was searching for the latest server technology for their on-demand hosting service. The logical selection was Supermicro, and the reason was choice. SoftLayer chose two server models from Supermicro's broad product portfolio- the latest technology Intel® Xeon® based servers offering great value for high performance, and new architecture including high-speed FB-DIMM technology for maximum RAM performance, as well as PCI-E expansion for RAID applications, offering intensive processing power for SoftLayer's mission critical applications.

"We pride ourselves on consistently delivering best-in-class solutions to our customers," said Steven Canale, Vice

President of Sales and Marketing at SoftLayer. "Not only are these new systems lightning fast, but we've also made them affordable."

Additionally, SoftLayer announced that dedicated KVM over IP will come standard with all Supermicro servers. Other providers require customers to pay for this as a software upgrade service, but with SoftLayer, the dedicated KVM over IP was actually a free hardware upgrade.

"At SoftLayer, we strive to ensure our customer's needs are met and expectations exceeded," concluded Mr. Canale. "Combine these new offerings using Supermicro servers with SoftLayer's private network and customers get a world-class product line with complete control and remote management capabilities."

"The use of low voltage chips and high efficiency power supplies results in less heat and cooler servers - and cooler means faster." With Supermicro servers SoftLayer has *tripled the server* density of its data centers while reducing the overall need for power and air by focusing on high-efficiency low power equipment.

## **Expanding scope requires** high-efficiency

In 2007 the relationship between SoftLayer and Supermicro was enhanced with the addition of low power and high efficiency servers to SoftLayer's lineup.

"Low power used to mean low performance, but those days are long gone," said Sam Fleitman, Chief Operating Officer of SoftLayer. "We are now able to reduce the need for escalating power requirements while still being able to sustain maximum performance."

SoftLayer added new low voltage Intel® Xeon® and AMD Opteron<sup>TM</sup> processor based servers from Supermicro that use up to 40 percent less power and produce less heat, while utilizing new high-efficiency power supplies. The result was a very low power enterprise grade server capable of satisfying the most demanding needs. "As the servers get smaller, faster, and hotter, it becomes more challenging to keep the datacenter environment cool," said Mr. Fleitman. "The use of low voltage chips and high efficiency power supplies results in less heat and cooler servers - and cooler means faster." With Supermicro servers SoftLayer has tripled the server density of its data centers while reducing the overall need for power and air by focusing on high-efficiency low power equipment.

# Establishing new partnership directions through enhanced scalability

Most recently the relationship expanded into new directions when

SoftLayer significantly advanced its backend systems, massively upgrading its fully redundant data warehouse storage arrays and adding an application layer processing cluster to enable a Service Oriented Architecture (SOA). The data warehouse expansion included the installation of multi-petabyte storage arrays and, when launched, Washington D.C. facilities to serve as the backend data storage powering all of SoftLayer's on-demand service offerings. Servers from Supermicro provided the processing power for the new SOA infrastructure.

SoftLayer's SOA allows data to be captured, processed, and presented to users in a form chosen by the system administrator, delivering on the company's commitment to give customers total control. The architecture is highly scalable, with the capacity to process millions of transactions per hour across thousands of physical and virtual servers, as well as with any number of related services.

## **Enabling new services** with high ROI

SoftLayer's newest leading-edge cloud computing services are delivered over Supermicro's latest 1UTwin™ and 2U Twin² Intel Nehalem based servers. Performance was critical and power was the deciding factor in favor of Supermicro. The 2U Twin² with Redundant 1200W 93% high-efficiency Gold Level power supplies and optimized serverboards and cooling resulted in as much as a 30% performance per watt improvement over previous generations of server equipment. Since power was the single largest control-

permicro again came out the winner.

Together, these improvements accelerated deployment of new features and increased performance for all SoftLayer customers and allowed the conleadership in brond services to

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allowed the company to maintain its leadership in bringing new products and services to market.

"Delivering world-class services on time, every time, requires an internal infrastructure that, up to now, simply did not exist in the market place," said Nathan Day, SoftLayer Chief Technology Officer. "We have created a new model for the industry that combines scalable and flexible data storage with scalable and flexible application processing in partnership with Supermicro."

Supermicro delivery services make Green IT possible

Recently Supermicro made its first delivery of servers to SoftLayer under a new packaging program that reduces packing materials by 80%. The program was created through several months of close collaboration. "From the shipment of our first server in 2006, SoftLayer has actively recycled all its data center materials. But with our rate of growth, it was

essential we do even more," stated Joshua Rushe, Vice President of Operations at Soft-Layer." We looked for a way to go beyond recycling to actually reduce the production of unnecessary material. We hope this program sets a new industry standard that will help to diminish the total environmental impact of data

centers worldwide."

Supermicro's reduced packaging program with SoftLayer provides multiple environmental benefits. It eliminates more than 8 pounds of packing material per server, as well as the shipment of user manuals and unnecessary components, thereby greatly reducing the volume of materials produced or recycled. Moreover, these measures reduce the total shipping "footprint," enabling the same sized shipping containers to carry more units and reducing the amount of fuel consumed and carbon emissions produced when shipping. Packing and unpacking times are reduced, training times are reduced, and landfill costs are reduced

Based on United States Environmental Protection Agency (EPA) figures, Supermicro's new program with SoftLayer will save over 750 trees per year. "But this is only the beginning," said Mr. Rushe. "We continue working with key partners like Supermicro to create more ways to make data center operations as environmentally efficient as possible."

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SoftLayer always experienced low return rates on Supermicro equipment, translating into cost, time and complexity savings. Supermicro benefited also from the related reduced RMA costs and increased customer satisfaction.



#### **Key Supermicro Success Factors**

Besides features and price, a wide varitey of other key factors helped influence SoftLayer to select Supermicro as its key supplier for server systems infrastructure.

#### **Design Flexibility**

Supermicro was open to SoftLayer's requirements and was flexible in accommodating their needs. Because of this customer focus SoftLayer felt they were receiving the best, most optimized solutions from Supermicro.

#### Rapid order fulfillment

Since SoftLayer deployed its servers only when there was demand from their customers, they valued Supermicro's ability to quickly create and then ship new orders. Supermicro's flexible manufacturing and distribution system meshed well with SoftLayer's demand driven business model.

#### **Superior Quality**

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Supermicro is proud

to be a part of

Softlayer's highly successful strategy

and will continue

to develop products

to push the limit of

the hosting / cloud

computing market.

Todd Warner,

"what's possible" in

Director of Sales

### **Low Sparing and Training Costs**

The strong relationship between the two

companies created a sense of trust that persuaded SoftLayer to standardize on Supermicro as their server supplier. With fewer suppliers, SoftLayer could benefit from reduced sparing and training costs.

#### **Dual benefits from** Server Building Block Solutions®

A key benefit to Supermico's Server Building Block Solutions® is improved selection and choice. SoftLaver benefited from an additional, equally powerful advantage. They found they could replace Building Blocks that became outmoded with new state-ofthe-art components, allowing them to still utilize the rest of the system. This improved their abilty to get the most useage out of their key servers.

#### **Dependable Component Supply**

SoftLayer appreciates that components it purchases from Supermicro (CPUs, memory, HDDs, etc.) are consistently provided from the same suppliers, rather than what happened to be the cheapest at the time on the component spot markets. By reducing component variability, and thus improving server system consistency, SoftLayer can manage its inventories and reduce RMAs by using components from Supermicro.

#### Benefits to a Long and **Close Relationship**

As technology evolves and customer needs change, Supermicro and SoftLayer will continue to work more closely together because the mutual benefits are so substantial. High efficiency, leading edge technology servers from Supermicro will help SoftLayer deliver new services and promote Green IT.

