SUCCESS STORY

Peak Hosting

INDUSTRY Services: Managed Hosting

SOLUTION Modular Platform, Storage Management
   Hardware — Hitachi Adaptable Modular Storage 2500
   Software — Hi-Track® Remote Monitoring System

“Our Hitachi SAN fulfills, in a very tangible way, the difficult needs facing enterprises today. Peak Hosting’s customers are rightly able to focus on business goals, developing new products, and rolling out new features. Typical cloud users reverse engineer their applications, accommodating the performance vacuum and individual quirks of public clouds.”

Jeffrey Papen
Founder and CEO
Peak Hosting

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Peak Hosting Moves at Lightning Speeds to Deliver Customer Value, Performance and Scalability with Hitachi SAN

Peak Hosting is a top provider of managed hosting services, including Operations-as-a-Service and Peak Lightning in the CloudSM (the most powerful, fully managed server on the market today), to some of the world’s top Internet properties. Behind its AlwaysUp ArchitectureSM and 100% no downtime, no exception service level agreements (SLAs) is a Hitachi SAN solution, delivering unprecedented levels of performance, scalability and reliability.

Enterprise-level companies are facing a paradigm shift in how best to manage data and operations. Handling it all internally means costly infrastructure and even more expensive and difficult-to-find expertise. Historically, the prospect of outsourcing raised concerns for reliability, performance and cost efficiencies. The incredibly poor uptime reputation of public cloud offerings and commodity managed services providers often falls short of the expectations and capabilities that enterprises demand, especially as business grows.

Peak Hosting is completely different. For more than a decade, Peak Hosting’s ethos of “What’s the most we can do?” versus the industry’s “What’s the least we can get away with?” has kept its promise of alleviating the burdens for busy enterprises while delivering value and peace of mind.

The company provides comprehensive Operations-as-a-Service (OaaS) managed hosting and customized private cloud services to enterprise-grade clients. Peak Hosting is known for its unique ability to help companies design, implement, manage and scale outsourced production computing environments. Peak Hosting’s efforts allow companies to stay focused on critical core business. Its customers are among the world’s largest Internet properties, including MySpace, one of Facebook’s top developers AppBank, a social gaming site, and a very popular online dating site.

The Promise of Outsourcing Done Right

Some hosting providers exclude maintenance windows from their SLA uptime guarantees. Peak is readily succeeding with its AlwaysUp ArchitectureSM, which ensures that component failure won’t lead to service failure for a true 100% uptime SLA: no excuses, no exceptions. And recently, Peak’s Lightning in the CloudSM was launched as the largest CPU and RAM dedicated configuration available (64 CPUs and 512GB RAM), at an unprecedented value, and without the performance, cost and scalability issues of traditional public cloud solutions.

What is behind Peak’s success? Besides the company’s experienced staff and laser-precision focus on pleasing customers, Peak relies on a high-performance Hitachi SAN to meet its promise of premium enterprise outsourcing.

“We can add trays, scale volumes, repartition RAID groups, update code, swap out controllers and fix issues, all without taking the SAN offline. There’s redundancy at every layer of our architecture, so we can manage system maintenance without affecting customers or interrupting service. We are able to offer our AlwaysUp SLA because we have our AlwaysUp ArchitectureSM, which is built on a Hitachi SAN solution,” says Founder and CEO of Peak Hosting, Jeffrey Papen.

A Peek Inside the Data Center

Papen is outspoken when it comes to the virtues of Hitachi storage, citing its performance, redundancy, reliability and scalability as unparalleled in the managed-hosting industry. Unlike simple JBODs (just a bunch of disks) daisy chained from individual servers, Peak’s Hitachi SAN solution includes the built-in storage intelligence

"There's redundancy at every layer of our architecture, so we can manage system maintenance without affecting customers or interrupting service at any level. Peak Hosting delivers our 100% AlwaysUp SLA because our AlwaysUp ArchitectureSM foundation is built on Hitachi SAN solutions."

Jeffrey Papen
Founder and CEO
Peak Hosting
and highly scalable, robust hardware of Hitachi Adaptable Modular Storage 2500 and Hitachi Unified Storage 150.

“Daisy chaining JBODs off of a server is not an enterprise solution; it’s barely a stop-gap solution. The Hitachi storage delivers so much more than, well, storage. We’re using Hitachi wide striping to grow volumes in real time without taking customers offline. Performance is outstanding. We’re able to provide 32GB of front-side cache to boost both write-ahead and read-ahead performance,” Papen adds.

“Peak dedicates individual trays to customers. We never stripe multiple customers across the same storage trays, robbing them of the input/output per second (IOPS) their applications require. Enterprise customers using object stores and other public cloud storage solutions can expect, best case, hundreds of IOPS. The most popular Hitachi SAN tray configurations are 2TB nearline SAS and 600GB 15k SAS drives, providing 30TB and 2000 IOPS or 9TB and 3,000 IOPS, respectively. It’s unheard of cloud performance, with orders of magnitude greater speed at a fraction of the cost of public cloud storage. From a storage performance and volume perspective, nothing in the industry even comes close,” Papen elaborates.

Peak Hosting’s dedicated 2N 10 gigabit Ethernet (GbE) iSCSI network is completely independent of their public, private and out-of-band networks. Thereby, it eliminates any congestion or spanning-tree reconvergence issues typically found with shared iSCSI interfaces running concurrently, reading and writing simultaneously to four to eight 10GbE iSCSI Hitachi SAN controller targets. This capability underscores Peak’s ability to satisfy demanding customer requirements for throughput, low latency and high availability.

“Peak Hosting’s completely private 2N 10GbE iSCSI network allows us to scale at such unbelievable cost points that we never charge for SAN network access or data transfers. Consequently, Peak Hosting is able to provide far better performance with our 10GbE iSCSI than Fibre Channel, at a fraction of the cost. We can scale quickly without headache, and we are able to pass the value directly along to our customers,” Papen adds.

Hitachi software helps Peak Hosting proactively monitor and manage its SANs globally, checking SAN head and tray utilization to avoid bottlenecks, ensuring hardware is running optimally, and automating software upgrades. “Hi-Track® Remote Monitoring system preemptively moves data off failing hard drives before components fail, and proactively notifies Hitachi when any component reports errors. We’ve had Hitachi call us to let us know to open a ticket, and that they are showing up to swap a controller before it fails. They fixed it with no downtime, and no customer impact,” says Papen.

Benefits: Expertly Managed Data Operations and Hosting Services

Peak Hosting’s enterprise customers are reaping the benefits of expertly managed data operations and hosting with their Peak Total OperationsSM and Operations-as-a-Service.

“Enterprises need really fast storage for their operations to scale with, not hold back, their business. We know that has to start with a complete operations team of experts, delivering better network, server and storage architectures. With our Hitachi SAN, Peak Hosting engineers are able to deliver performance, scalability, reliability, staffing knowledge gap protection, and an ease of doing business. These are all the very things that cloud was supposed to do, but has yet to, deliver,” Papen reports.

“Regardless whether our customers are in vMotion or XenMotion environments, or need to scale applications beyond a single server’s direct attached storage capabilities, our Hitachi SAN fulfills, in a very tangible way, the performance vacuum and individual quirks of public clouds,” Papen explains.

Performance and scalability of the Hitachi SAN were integral to the success of Peak Lightning in the CloudSM. Their 64 core and 512GB of RAM facilitate performance and scalability that were not previously available in the industry, at any price. “Peak LightningSM and our Hitachi SAN have a symbiotic relationship. If I have outstanding CPU and RAM without this level of SAN capability, what have we really accomplished? Together, they are a perfect pairing for where we can take our services and what we can achieve for our enterprise customers’ complete compute, memory and data store requirements,” he adds.

Peak Hosting is soon expanding its own operations with a new data center in Virginia. There, the SAN will also be built on Hitachi storage, including Hitachi Universal Storage Platform®.

The reliability factor of Peak’s fully redundant data centers is central to its success, enabling everything from bi-coastal redundant SAN deployments to helping customers save money. Operations-as-a-Service provides subject matter expertise in all 17 disciplines of an operations team.

“There’s no longer the need for enterprise customers to retain and pay for multiple copies of data kept here and there, just to have a ‘psychological security blanket.’ Secure data storage in a simplified environment offers immediate and huge cost savings. And, because Peak Hosting has on-staff subject matter experts for design, implementation and ongoing maintenance to fill customer knowledge gaps, managers don’t need expensive SAN experts in-house. Peak Hosting’s Operations-as-a-Service really does manage ‘everything but your code,’ so our customers gain all the benefits of Hitachi’s SAN with none of the drama,” Papen concludes.