OVERVIEW
A DOD-affiliated hospital needed accurate insight to address SAN and VDI performance issues and meet federal funding deadlines. At WWT’s 2012 Geek Day, a hospital representative discovered the solution they needed in VMTurbo Operations Manager. The hospital not only quickly resolved their SAN performance issues, but VMTurbo’s patented Economic Scheduling Engine and Intelligent Capacity Planning provided multiple options to scale their current VDI pilot to five times its original size and accurately forecast budget requirements.

KEY RESULTS/BENEFITS
□ Manage, Control and Optimize SAN Performance
□ Improve Decision Making and Enable Accurate Budget Forecasting with Prescriptive Analytics
□ Streamline VDI Roll-Out
□ Meet Legislated EMR/EHR Guidelines
□ Enhance Mobility for Healthcare Providers
□ Improve Patient Care

ABOUT THE HOSPITAL
This established West coast military hospital provides outpatient and inpatient care for active-duty service members, retired military members and their eligible family members. Services include internal and family medicine, pediatrics, ENT (Ears, Nose and Throat), cardiology, pulmonary, audiology, urology, optometry, ophthalmology, gynecology, gastroenterology, allergy, obstetrics, dermatology, orthopedics, sports medicine, mental health, general surgery, nuclear medicine and emergency room services, which are available on a 24-hour basis.

DEPARTMENT OF DEFENSE (DOD) HOSPITAL

WWT and VMTurbo Help Military Hospital Enhance SAN Performance and Scale Virtual Desktop Infrastructure

CHALLENGE
A West coast military hospital was working hard to leverage consolidated storage as well as establish and support the rapid adoption of a Virtualized Desktop Infrastructure (VDI) in order to meet Federal Electronic Medical/Health Record (EMR/EHR) mandates, enhance mobility for its healthcare providers and improve overall patient care. However, SAN performance issues were making it difficult to share resources and virtual desktop latency was undermining the hospital’s ability to efficiently scale a VDI pilot from 200 to 1,000 virtual desktops.

While the hospital was using a third-party point tool, VKernel (now a division of Dell), in an attempt to address their SAN issues, visibility and control were lacking. Moreover, a delicate funding situation demanded absolute budget accuracy in determining forward-looking projections for hardware requirements. The hospital could only request funding once a year. If they underspent, SAN performance and VDI adoption rates would continue to suffer. If they overspent, the government could hold the agency personally responsible for misuse of U.S. public funds. The agency needed accurate performance analytics and additional insight into the specific critical resources required to optimize SAN performance and efficiently scale their VDI pilot.

Looking for expert insight and cutting-edge solutions, a senior hospital administrator attended World Wide Technology’s (WWT) 2012 Geek Day, a technology tradeshow featuring interactive workshops and demonstrations from the industry’s best-of-breed collaboration, mobility, security, data center and virtualization solution providers.

SOLUTION
WWT leveraged people, processes and a powerful partnership with VMTurbo to meet the hospital’s mission-critical demands:

People
WWT’s Geek Day (www.geekday.com) provided the perfect forum for the hospital administrator to discuss SAN and VDI challenges with experts. While there, he met with representatives from VMTurbo and learned about VMTurbo Operations Manager, an intelligent workload management solution for cloud and enterprise virtualization environments that would help the hospital get the most out of – and continue to expand – their virtualization deployment.

“While it is relatively easy to design and build a small VDI pilot environment, moving from pilot to production is hard. VMTurbo helps take the risk out of the process.” Jim McInerny, VP Sales, VMTurbo
Processes
While VMTurbo offers training and professional services support, neither were required for the hospital to deploy VMTurbo Operations Manager, an agentless virtual appliance that was fully operational and providing value within half an hour.

"Rather than just identifying performance issues, VMTurbo Operations Manager delivers prescriptive analytics and specific executable actions to address and resolve any contention points – and ensure that they don’t happen again, which, from an operational standpoint, is critical," said Yuri Rabover, VP Product Strategy for VMTurbo.

Using VMTurbo Operations Manager, the hospital discovered that the constraint affecting SAN performance was sizing at the application level, and they were able to resize Windows® applications in order to optimize their current SAN environment and assure optimal performance moving forward. Then they used the solution to evaluate their VDI environment’s current state and ran a simulation model to identify the specific hardware and service requirement options necessary to enhance VDI performance and achieve their user-adoption end goals.

Partner
As SEWP-clearance was required by the DOD-affiliated hospital, WWT’s partnership with VMTurbo was essential in this engagement. WWT has the clearance and authority to offer VMTurbo solutions to clients under the NASA SEWP IV Contract, a Government-Wide Acquisition Contract (GWAC) vehicle that offers advanced technology solutions to all federal agencies.

RESULTS
“WWT is committed to helping public and private sector healthcare agencies take full advantage of the freedom, agility, flexibility and shared resources that VDI can provide, whether by engaging with WWT’s Virtualization Practice or, as in this case, with one of our featured Geek Day partners,” said John Rohde, Healthcare Practice Manager, WWT. “As one of the primary goals of Geek Day is to bring together IT decision-makers with the latest and greatest technology solutions, WWT is extremely pleased that the hospital was able to receive the support they needed with WWT and VMTurbo.”

The hospital not only quickly resolved their SAN performance issues, but VMTurbo’s patented Economic Scheduling Engine and Intelligent Capacity Planning provided multiple options to support the quality-of-service levels required to scale their current VDI pilot to five (5) times its original size. The hospital was able to examine all of the costs associated with scaling their VDI using either 20 additional hosts or sandboxing a completely different hardware array, which would require eight (8) new boxes. The forecasting capabilities of VMTurbo’s Operations Manager showed them that, while the capital investment on the eight higher horsepower boxes would be higher initially, the software licensing costs across the net change of 12 boxes would accommodate the change in CAPEX payment within 18 months. With this insight, the hospital was able to understand the utilization of all key resources across their environment and accurately forecast budget requirements in time to meet funding deadlines.

"With the prescriptive analytics provided by VMTurbo Operations Manager, the hospital could calculate the outcome of their decisions prior to making the move, which gave them the confidence to execute change and to take action,” said Jim McInerny, VP Sales, VMTurbo. “Thus far, they’ve deployed 600 virtualized desktops, and they have the scalability and capability to continue to seamlessly scale as they move forward.”

"While it is relatively easy to design and build a small VDI pilot environment, moving from pilot to production is hard. VMTurbo helps take the risk out of the process,” said McInerny. Because they could look at all of the potential scenarios, outcomes and options, and know exactly what to expect and what they needed to achieve a desired outcome, we could help the hospital go from pilot to production in a much more prescriptive and reliable manner.”