

Utility Computing Ideas for the Navy



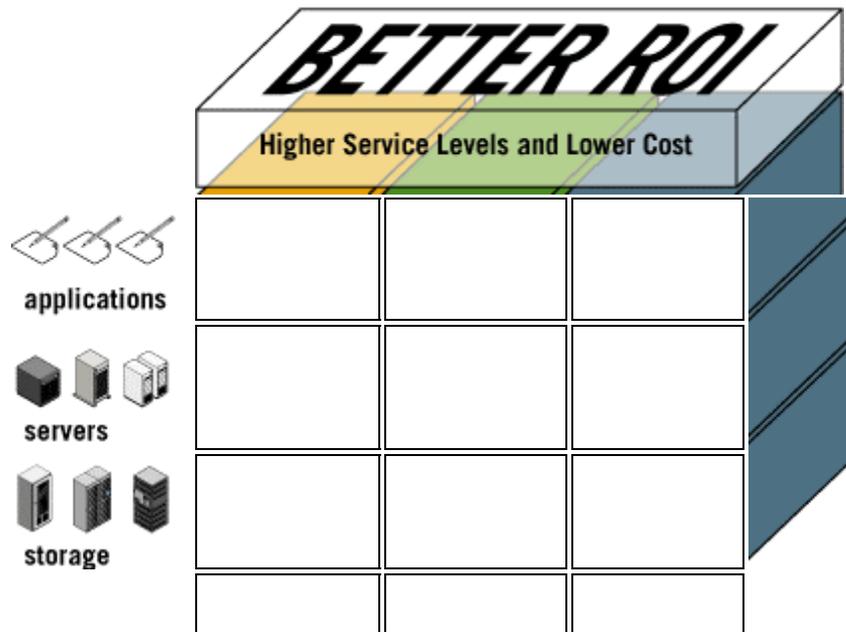
VERITAS Software

Just like previous computing models — mainframe, client/server, and the Internet, utility computing has emerged as the next step in the evolution of information technology (IT). In May 2003, VERITAS articulated a vision: to enable utility computing through software. Its executives laid out a roadmap for providing availability and performance of applications, and automation of IT operations. In November 2003, VERITAS announced products and enhancements that represent the first step in delivering on that strategy. In 2004, VERITAS is delivering on this utility computing vision.

Early adopters understand that integration of a new platform, protocol, or innovative concept into the technology mainstream requires not only a good idea, but also time, improvement, constant revision, and a dedicated and expanding user base. Industry-wide acceptance also requires developers and supporters who are sufficiently pragmatic and realistic and who understand at a deeper level what steps must be taken to ensure the product or concept's ultimate industry acceptance. Utility computing, the very-much-talked-about approach to IT administration, is following this same evolutionary track.

Like other successful computing models, utility computing is attractive for its simplicity, power and cost reductions. The utility computing model is based on a shift away from technology for technology's sake, and a shift towards aligning technology with business requirements. Away from proprietary approaches and towards interoperability and cross platform solutions.

Most vendors talking about utility computing are talking about hardware, proprietary software or outsourced services. The VERITAS vision of utility computing is unique. Through platform and operating system independent software, VERITAS gives the Navy the building blocks to create its own IT utility, without the threat of “vendor lock-in” or technology obsolescence.



The Building Blocks of Utility Computing

Availability

Backup

At the core of any strategy for utility computing is data availability; and availability of data starts with backup and recovery. VERITAS is the defacto standard in the Navy with its backup products. Whether its NetBackup, used on the NMCI network and other large enterprise programs or Backup Exec, its industry leading departmental solution, VERITAS products protect more Navy data than any other product in the marketplace. Both products lead the market in their particular categories and provide leading-edge technology to build upon. Whether its data on your enterprise server, departmental server or desktop, VERITAS provides assurance that it can be backed up and recovered if necessary.

Data Lifecycle Management

Closely related to backup, VERITAS also sees a growing demand for data lifecycle management with quick archive and retrieval capabilities. With the every increasing data retention and regulatory compliancy demands, the ability to quickly index and locate old data is becoming more important. By taking a more proactive approach, the Navy will be better able to manage its data. Right now, any inquiry made by Navy authorities results in a fire drill resulting in lost time and productivity and return sporadic results. Since most departments run VERITAS software today to manage their data backup, the VERITAS Data Lifecycle Manager is a simple extension to that existing backup process thus enabling indexing and retrieval of documents from historical backup tapes. Looking forward, your department or command can go on to establish full Navy-wide document retention policies.

System Availability / Disaster Recovery / Continuous Operations

In the area of system availability, there is the topic of disaster recovery and IT disaster prevention. 2003 saw a major grid outage in the Northeastern United States, a hurricane on the eastern seaboard, earthquakes in Japan, and major power failures in London and Italy. Disaster recovery remains a major concern for departments and commands of every size, because it presents a major threat to the safety of your critical data and the integrity of your operations.

VERITAS offers a wide range of solutions from simple vaulting of backup tapes (which is being done on NMCI data) to full site application failover utilizing data replication and clustering technology.

Entire data center applications and data can failover seamlessly to alternative sites in times of disasters with minimal impact to the user. VERITAS products integrate together providing the level of service required by any mission critical application. Navy customers can rest easy knowing their data and applications will survive when other technologies fail. VERITAS products and services can ensure that your IT infrastructure will survive virtually any disaster scenario.

Performance

Although, data and system availability is at the foundation of any utility computing strategy, it doesn't guarantee a usable system. The data and system can be available, but run very slowly due to application problems. User's productivity is severely hampered by painfully slow systems. With more and more applications becoming multi-tiered and more complex, the debugging of performance problems is becoming more difficult. Poorly performing applications can be as bad a problem as unavailable data or systems.

VERITAS has a product family that looks across the many tiers of an application, from the web server, application server, data base server or storage platform and enable IT professionals to detect, diagnose, and correct application performance problems often before end users even notice.

VERITAS can correlate data from every part of the system to determine the root cause of the performance problem and then recommend a course of action. With tools to manage availability and performance, guaranteed service levels can be delivered via the utility model with confidence.

Automation

It is vitally important for to automatically get the IT train back on the track when problems do occur. For automation, VERITAS offers tools that can provide the Navy powerful server and storage provisioning, allocation, and tracking functionality. VERITAS products inventories and stores all heterogeneous resources on your enterprise, then lets you automatically reallocate under-utilized servers into those areas where the need is required. Command Central software gives visibility across the entire enterprise into heterogeneous servers and storage systems vastly improving that ability to redirect resources when necessary. Virtualization software creates shared pools of storage and servers, driving up utilization levels and driving hardware costs down.

Cost Reductions

The best utility model not only provides a high quality of service but it also drives out cost from the infrastructure. VERITAS can help the Navy drive down IT costs by

- Commoditizing hardware - enabling end users to use less expensive storage where it makes sense and creating a level of competition among hardware manufacturers which will inevitably lower hardware acquisition costs
- Reduce the amount of hardware by driving up utilization rates and repurposing existing assets
- Automation – manage more IT assets with less people
- Improve Resource Management – by providing better management tools, the Navy can better manage the resources that it now has

Beyond the Building Blocks

While VERITAS provides all these software building blocks, it understands that implementing a complete utility computing model takes time and many carefully planned out steps.

To ensure implementation success, enlisting experienced professionals is often the key. VERITAS Global Services brings together experts in disaster recovery, storage management, education, and systems engineering to help you get maximum value out of your technology investment. In addition, VERITAS has close working relationships with many systems integrators including EDS, who can complement your in-house expertise by blending the product-specific expertise of VERITAS consultants with industry-specific and region-specific expertise of VERITAS partners.

The Navy is always looking for ways to save money and get better utilization out of its existing hardware. By implementing VERITAS software, Navy IT shops are now able to achieve these objectives.

VERITAS: Complete Utility Solution

As a concept, utility computing holds great promise the Navy. It can help leverage existing assets while the Navy strives to achieve its critical initiatives like NMCI and FORCEnet while improving data availability and application resiliency.

With time and a well-defined evolutionary path, utility computing can become the standard model for Information Technology inside of the Navy leveraging existing investments without the threat of being locked in by any vendor's proprietary technology.