

Optimizing Technology for Complex, Global Missions

TOTAL RESOURCE MANAGEMENT SYSTEMS ENGINEERING SUPPORTS
KBR'S ASSET MANAGEMENT TECHNOLOGY

Challenges: KBR needed to optimize their asset management technology and ensure that deployment risks were all but eliminated while facing the following challenges:

- Constant changes in system and application configuration
- Myriad of technology platforms
- Low bandwidth, high latency telecommunications
- The requirement to seamlessly integrate with other enterprise applications

Objectives: KBR engaged TRM consultants to:

- Establish performance baselines during pre-production and production stages of the solution deployment
- Ensure on-going compliance to Service Level Objectives and Agreements for application availability and performance
- Proactively monitor and manage the system
- Rapidly detect and resolve system and network problems

Results

Using technology optimization strategies, performance monitoring software tools and on-the-ground technical support, TRM helped ensure that KBR:

- Had End-to-End application performance and quality management
- Had critical data consolidated to one application, with 1,200 users spread across 5 different time zones
- Met and often exceeded their aggressive schedule and demanding requirements

Diverse, Global Assets and Missions

KBR Kellogg, Brown and Root (KBR) is a leading global engineering, construction and services company and the world's largest government defense services provider. Its mission is to provide on-demand support services to the U.S. Department of Defense across the full military mission cycle, from contingency logistics and field support to operations and maintenance on military bases.

Imagine the asset management and technology infrastructure needed to support military assets around the world. Picture the complexities of supporting Fort Knox (a veritable city with roads, buildings, power plant and facilities); Kosovo (tent cities with asset lifecycles longer than the actual mission) and war zones like Iraq (with transient, theater assets and highly geographically dispersed assets).

Under the LOGCAP contract, this is exactly what KBR does, and then some. LOGCAP (Logistics Civilian Augmentation Program) is a U.S. Army initiative for peacetime planning for the use of civilian contractors in wartime and other contingencies.

Strategic and On-the-Ground Technology Support

Due to the complex nature of KBR's mission and the underlying enabling technology, KBR reached out to Total Resource Management to ensure the optimization of their asset management technology, Maximo®. The requirements for this technology are intense, considering these mission-critical activities where lives can be at stake. Maximo supports the wide variety of asset classes used in defense logistics and is one of KBR's most mission-critical applications. Downtime or poor performance could result in significant cost increases to KBR's operations and could affect the potential readiness of the Department of Defense.

KBR's Maximo application was required to work across global locations; support multiple languages; track material movements across war-time theaters and provide unique data about service management, tactical and non-tactical vehicles and facilities, as well as production and linear assets. Most importantly, there had to be seamless integration between the U.S. Army, U.S. Marine Corps and other commercial applications like ERP systems, HR systems and RFID.

As the key technology implementer, Total Resource Management (TRM) incorporated business technology optimization strategies and system engineering

expertise to mitigate risks up-front and throughout the entire lifecycle of this global enterprise deployment. TRM delivered technology asset management strategies and technical, on-the-ground support in a tightly integrated fashion that leveraged sophisticated software tools and methodologies within a two-phase framework of application delivery and application management.

Results

With the aggressive schedule and demanding requirements of the LOGCAP contract, TRM consultants were able to help KBR optimize their asset management technology with end-to-end application performance and quality management. All of their critical data was consolidated to one application, with 1,200 users spread across five different time zones.

“We were so confident in the process that we knew TRM could provide us with guidance even in the most dangerous military deployments.”

Mario Sotelo, Operations Manager, KBR

One of the world's most complex IT environments

The diverse requirements of a global logistics support network resulted in a challenging IT environment with a myriad of technology platforms and constant changes in the system and application configurations. Additionally, the underlying network, with different means of connectivity and different owners and operators, added to the complexity of the system. TRM system engineers developed the strategy to make sure that the asset management technology was fully optimized, both pre- and post-production. They helped KBR evaluate, select, tailor and optimize their technology assets using application delivery and application management software products and best practices that were assured to effectively work within the KBR enterprise.

Performance and Monitoring Tools from Mercury™

TRM consultants recommended and implemented performance benchmarking and monitoring tools for KBR's asset management technology. These included:

Mercury LoadRunner™, to aid in capacity planning, including:

- Application and System Benchmarking
- Diagnostics
- Tuning

Mercury SiteScope™ and Business Availability Center™ (BAC), for end-user performance monitoring during post-production, including:

- System Benchmarking
- Measuring
- Reporting
- Diagnostics
- Monitoring and alerting

These tools enabled performance baselines to be established throughout the entire Software Development Lifecycle. Software and system optimization tools continually work within the system to proactively monitor performance issues and prevent outages, ensuring ongoing compliance to Service Level Objectives and Agreements.

The TRM/KBR team was able to rapidly detect and resolve system and network problems. In terms of overall technology management, this approach allows for universal communication of performance data across all levels of the organization. Additionally, it can establish and maintain credibility with the executive leadership and user base to ensure application adoption and full usage, resulting in the best return on technology investments.

As Mario Sotelo, Operations Manager for KBR, noted, “TRM was comprehensive and provided the guidance and visibility of information for us to make good decisions now and in the future. We were so confident in the process that we knew TRM could provide us with guidance even in the most dangerous military deployments.”

About Total Resource Management

Total Resource Management (TRM) is focused on improving the asset and operational performance of organizations through the effective use of information technologies. TRM is an IBM Premier Business Partner with over fifteen years; experience delivering asset and service management solutions based upon IBM Maximo. TRM supports clients across a wide range of industries, including government, defense, cities, facilities, energy, utilities, transportation and life sciences. TRM is based in Alexandria, Virginia and has business centers across the U.S. For more information, visit www.trmnet.com or call 703-548-4285.