



## MKS Toolkit Case Study

# Navy First to Deploy Command and Control Systems on Windows

### NuTCRACKER Accelerates Windows Deployment of Mission Critical DOD Systems

The U.S. Navy announced a successful Operational Test of Joint Maritime Command Information System (JMCIS) software ported from UNIX platforms to Microsoft Windows. While fielding mission critical applications on Windows is becoming increasingly common in the private sector, this marks the first major deployment of tactical, command and control software by the Department of Defense on that platform.

The deployment is a crucial “first” for the Navy, its contractors, Microsoft, and MKS. It also is an important “first” in the world of UNIX application compatibility on Windows for the Federal Government. By using MKS Toolkit for Enterprise Developers (formerly NuTCRACKER) from MKS Inc., the Navy was able to meet its objectives in a fraction of the time and cost originally estimated and eliminated the need to rewrite the UNIX-based applications in order to deploy them on Windows.

“The Navy’s success with JMCIS is proof that NuTCRACKER is filling a growing requirement shared by many Federal agencies—the need to deploy cost-effective, mission-critical UNIX applications on the Windows operating system,” said Pete Hayes, General Manager, Microsoft Federal. “NuTCRACKER allows developers to add value to ported applications by providing direct access to Windows interfaces, including COM.”

“Microsoft and MKS enjoy a partnership that will bring long-term value to enterprise UNIX customers as the demand for Windows continues to grow,” said Steve Ballmer, Executive Vice President, Microsoft Corporation. “NuTCRACKER protects mission-critical UNIX software investments like JMCIS while fully leveraging the power of Win32 and COM. We’re working closely with MKS to ensure COM components based on existing UNIX code will be portable and interoperable across Windows and UNIX. Our companies provide a cross-platform solution that makes the Windows ROI decision a simple one for UNIX customers.”

The Lincoln Battle Group performed the test of JMCIS software developed by Space and Naval Warfare Systems Command (SPAWAR) in San Diego. Consulting organizations contracted by the Navy used NuTCRACKER to port two major command and control applications and deploy them on Windows NT while preserving a common code base with the installed base of UNIX systems. NuTCRACKER applications run natively on Win32, so the Navy avoided the integration roadblocks and performance bottlenecks inherent in POSIX subsystem-based solutions.

“This was an operational test of Navy command and control applications that epitomize the term mission-critical,” said MKS Chief Evangelist, Pat Higbie. “This wasn’t a planning study or a prototype. This was the real thing—a full-scale deployment on both shore-based and shipboard PC platforms. Once again it proved NuTCRACKER enables rapid, cost-effective porting of UNIX applications, so they run reliably in a true Windows environment. “

“The Navy needs to increase the productivity of its people,” said Captain Roger K. Hull, USN, JMCIS Program Manager for SPAWAR (PMW-171). “Deploying existing tactical applications, like JMCIS, integrated with COTS productivity applications on commodity hardware is essential in order for the Navy to fulfill its mission in the face of necessary force reductions.”

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