



TecSec DRM

About the Technology

In an effort to develop a highly trusted, secure workstation with encryption TecSec, Inc. developed a cryptography key management system called Constructive Key Management® (CKM®). Server based encrypted systems limited the networks' ability to achieve the growing need for scalability and operating efficiency. TecSec's cryptographic technology also provides end-to-end security that can now include a hard token where CKM is embedded in integrated circuits in smart cards.

The CKM Enabled® Smart Card carries RFID and logical access to PCs, functioning as a federating device, permitting ID Management for controlled access among various applications. The cardholder gains a mobile ID device, where permissions vary depending upon one's role and/or location. Keys are created on the fly and not stored. Different access permissions are assigned to objects as determined by the message originator, consistent with need to know and information sharing policy. Otherwise, only the enterprise owner can recreate keys. Information is highly granular and managed at the object level. Laptop content protection is one selected military application of CKM. Homeland Security (DHS) Advanced Research supports TecSec's Cyber Security solution in the nation's power grid, a HSPD 7 Critical Infrastructure solution. Treasury Department and the Center for Medicare/Medicaid Services employ CKM for laptop and workstation protection. This early Navy work has since been subsumed in the Net Centricity orientation of current Joint Global Information Grid (GIG) programs.

Military and Commercial Significance

TecSec's object management greatly expands the functionality of encryption through enforcement of information rights management. CKM provides a range of solutions, safeguards information, and selectively shares data within or outside of an organization. TECSEC'S reduced role for the server and heightened functionality at the workstation has brought a paradigm shift that provides role based access, at the object level, to anything digital that can be named, be it physical, logical, or functional.

APPLICATIONS

- DoD: Iraq - Biometrics recording and verification
- Joint Battle Center Lab- Coalition Information Sharing
- Joint Warrior Interoperability Demonstrations of Interface Applications
- Joint Emergency Management Framework
- SOCM/USAFAC: Operational & Coalition Forces Communication
- National Counter Terrorism Center -Multiple forms security on a common platform

About the Company

TecSec is a standards-based product and solutions company, which focuses on data management and information privacy and confidentiality. TecSec develops and sells information assurance through a cryptographic approach that enforces management's rules and standards of conduct. TecSec has greatly expanded the applications of cryptographic though its basic characteristics, assisted by a highly sophisticated key management system. The product life cycle of a new generation of cryptography and key management system requires protracted periods of development and testing. The SBIR program has been most helpful in this dedicated and lengthy process.