STRENGTHENING DATABASE PERFORMANCE

Problem:	Solution:
• Our Defense customer required specific application development • They needed maintenance support • No prevention of the loss of mission-critical information and intelligence	• We enhanced software functionality and automation • We hardened software security architecture minimizing data loss and unauthorized access • We were able to increase efficiency of information and intelligence querying and case management

Customer Challenges

Our Defense customer is responsible for the collection and secure management of information on detainees at DoD operated facilities. They required specific application development and maintenance support to enhance the functionality of their databases and prevent the loss of mission-critical information and intelligence.

AI Solution Features

AI's software engineers and database administrators worked with USSOUTHCOM software development teams to overhaul the application architecture, design, code base, and database structure. We supported the USSOUTHCOM team by modifying, normalizing, recreating and developing new database code and application architecture to work with many iterations of coding for new application releases. We assisted in the restoration of inoperative databases and successfully implemented their first ever Oracle-based enterprise logging database. Our comprehensive understanding of the innerworkings of the coding and workflow in the customer's application allowed our team to reverse engineer deteriorating database tables and identify relevant orphaned data. In addition to our application and database development support, our engineers provided training to include creating a 165 page custom training manual for the entire user base, including administrators, analysts and management personnel. We continually adjusted the training curriculum based on end user experience feedback and student critique.

Benefits to the Customer Mission

AI's application and database development support significantly enhanced intelligence collection and detainee case management capability. Key benefits included:

- A future-proofed design that facilitates expansion to up to 250K endpoints
- Successful virtualization of traditionally non-targeted items like Microsoft SQL, Exchange, and Oracle on Linux
- Reduced cost of physical infrastructure
- Greater workforce flexibility
- Rapid provisioning of secure, newly added IT machines and entities
- The availability of unclassified work outside of the physical campus environment