# DHS ICE ERO

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| **Agency Supported** | **Capabilities & Work Performed to Demonstrate Capability** |
| DHS U.S. Independent Cost Estimates (ICE) Enforcement and Removal Operations (ERO) | *Capabilities: Current State Assessment, Documentation, TS, Code and Configuration Rationales, Test Plans, Required, Tests, New/Revised SW Modules, Testing, Technical Advisory, Technical Change, Environment SW, Data Management:* We support 7.9k Law Enforcement Officers and ERO employee users in 200 domestic and 25 overseas locations. The applications we support use Biometrics as the primary identification means during the booking process, for reduced errors with person and encounter linking. The ICE ERO system collects information continuously, starting with biometrics from the alien booking process via the EagleBRS, and correlates information in the application portfolio we support. This includes assignments to detention centers, court events and hearings, logistics and transportation events, health records, food and meals served, and communications. The continuous data ingestion on aliens who violate laws leads to information that must be reconciled and visualized, according to an information architecture via various reporting methods.  We modernized and currently maintain the ICE ERO enterprise AWS-based applications portfolio that covers all aspects in the ICE ERO branch of handling aliens and their custody and communication at the Southwest Border. We handled ~9.4K Jira tickets and 13.4K story points and completed 130 releases (May to December 2022).  We develop, conduct, integrate and manage all testing needed to ensure production-ready development through our lean Agile test automation methodology by applying whole-team testing; continuous testing; combining Test-Driven Development (TDD) with in-sprint BDD testing to identify system-level defects, from a business flow level; Acceptance Test Driven Development (ATDD) to ensure that software behavior, at story and feature levels, meets customer/user expectation; create reusable version-controlled test automation scripts and test environment provisioning scripts using IaC; and cross-system testing, including upstream and downstream systems, testing middle tier (asynchronous) services, testing business processes, business rules, and business flows. As a part of the definition of done, stories cannot be closed until all functionality is met as described in the acceptance criteria, all unit tests are written as passed, code has been peer reviewed, and an automated functional test has been written for every acceptance criterion. This mandatory step empowers the government and development team by enabling them to run automated regression testing at any point ensuring newly added functionality doesn’t break existing functionality, meaning manual regression testing rarely finds defects and can be completed quicky and efficiently to ensure quality and on-time releases. |