EDCL

Enterprise Data Collection Layer

CDO Technologies, Inc.'s Systems and Technology Solutions division is the Integration Management Team for the Enterprise Data Collection Layer (EDCL) integration contract from the Air Force Automatic Identification Technology Program Management Office at WPAFB. CDO is leading this multi-phase, multi-year program as the primary integration point of contact and program coordinator.

CDO Technologies, Inc.'s Systems and Technology Solutions (STS) division is the Management Team for the Enterprise Data Collection Layer (EDCL) integration contract from the Air Force Automatic Identification Technology Program Management Office (AF AIT PMO) at WPAFB. CDO is leading this multi-phase, multi-year program as the integration point of contact and program coordinator.

EDCL provides a critical service-oriented architecture (SOA) layer that resides between the data collection devices at the point of supply chain events and the back-end Automated Information Systems (AISs) and enterprise data repositories. EDCL resides within the Global Combat Support System Air Force (GCSS-AF) enclave and leverages existing capabilities (such as secure authentication, user management, and system communication). EDCL components manage the business rules and communication between Automatic Data Collection (ADC) devices, networked systems, data, and processes.

This enables real-time information and event management.

Today, AIT capabilities are tied to specific operational systems. These custom applications typically require a server process near the point of use, are expensive to develop and maintain, and are not portable to other functional areas.

The vision for the U.S. Air Force is to manage and maintain all AIT—including Hand Held Terminal (HHT) applications—running as a service on the evolving GCSS-AF framework.

This EDCL architecture provides an effective transfer of data from ADC capabilities to legacy systems. The architecture enables use of the full range of AIT, including linear bar code, two-dimensional bar code, passive and active Radio Frequency Identification

(RFID), contact memory button, as well as specific AIT hardware (wireless HHTs, printers, RFID portals, light stacks, and motion sensors).
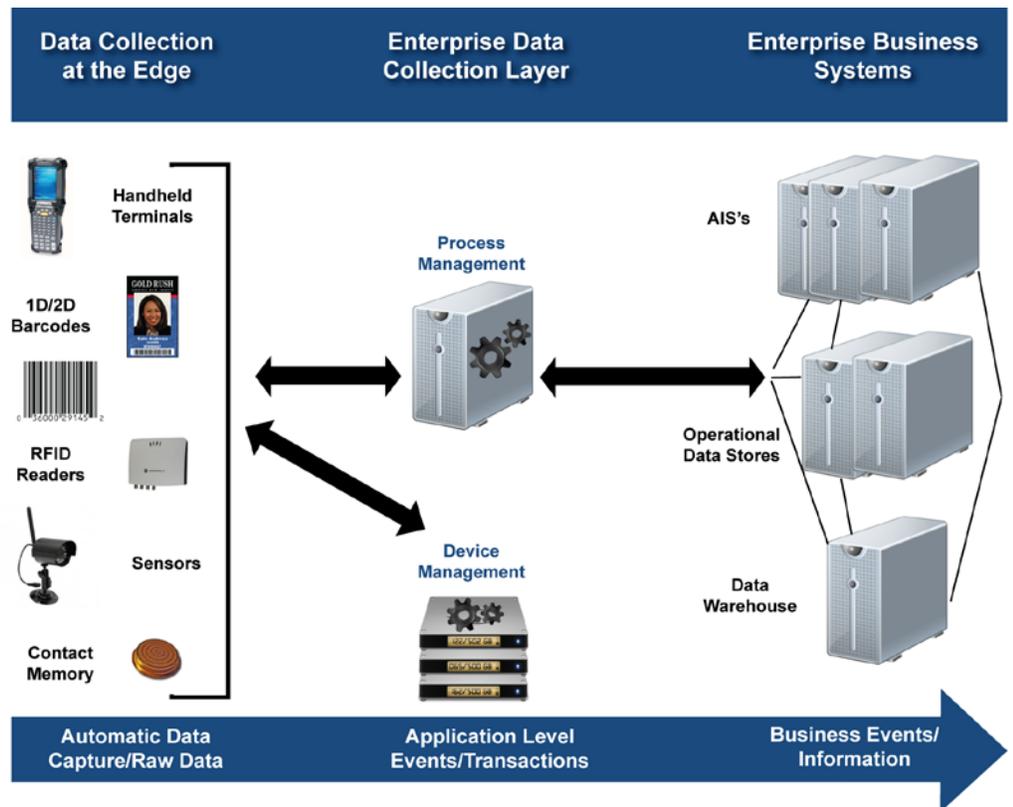
What drives the success of EDCL?

As a data collection point for U.S. Air Force AIT applications and devices

Device Management and Abstraction:
AIT Device Management requirements address the need to manage all AIT devices from one central location. EDCL will push capability, firmware, and configuration updates to all AIT devices in the EDCL framework. Device specifics will be abstracted, allowing technology refreshment, expansion, and swap-outs to occur with no impact to the applications hosted in EDCL.

Data Management
An Integrated Data Model (IDM) provides flexibility and support for automated data capture from AIT-enabled devices to and from AIS systems. The EDCL architecture leverages the IDM to abstract data management, common services, and data transport from individual AIT applications. This further standardizes common services for consumption by AIT applications at the device level. The IDM also standardizes data analysis, monitoring, and reporting.

Reference Data
Managing reference data is a critical process in an integrated database supporting multiple applications. EDCL provides efficient management of:

- Common reference data to minimize data duplication, while meeting the needs of each application integrator and implementation.
- Delivery of tailored reference data to multiple applications in support of disconnected operations, while reusing business logic where applicable.

Routing Rules

Defined data manage and routing rules, along with common AIT business rules in the EDCL architecture, allow AIT-enabled applications and devices to route and process data collected to and from legacy AISs. Each AIT application integrating into the EDCL architecture uses a standard set of routing, business, and data management rules.

Security and Profile Management
Security and profile management defines which EDCL capabilities are accessed by AIT application users. Roles and tasks associated with specific EDCL capabilities (e.g., maintenance, supply, transportation, etc.) are defined. Each AIT application migrating into the EDCL architecture uses a standardized set of security services.

Mobile Application Delivery
Mobile Application Delivery is a set of defined processes and business rules for the delivery of an application to the micro-browser on an AIT-enabled device. The defined processes include requirements for updating and maintaining an application on the device within the common security and profile management services. Store and forward is a critical feature of the mobile application. Users will not only be able to continue their business process when out of wireless range, they will also be able to operate in austere environments where network connectivity is limited.

Reusable Business Logic and Component Abstraction
EDCL's SOA layer exploits the ability to abstract components and business logic. A key to the architecture is the development of reusable business logic across all capabilities in EDCL. Each AIT application has standardized guidelines, so the individual application integrator has a roadmap into the EDCL framework. The further abstraction of capabilities allows the AIT integrators to easily consume services, reduce maintenance, and provide faster development and amalgamation of new capabilities.

The EDCL program is a strategic and key architecture supporting the U.S. Air Force consolidation of legacy information systems. This solution provides a critical Services Oriented Architecture (SOA) layer residing between ADC devices at the initiation of supply chain, asset tracking, and maintenance events.

CDO Technologies, Inc.
Corporate Headquarters
5200 Springfield Street
Dayton, OH 45431
www.cdotech.com

**For more information
please contact:**
Susan King
Director of Sales
(813) 908-6666
susan.king@cdotech.com