



## INTRODUCTION

Welcome to the Spring 2011 Edition of UID Quarterly. A2B presents this newsletter as an educational service for those who oversee IUID in their organizations. We make every effort to bring you the latest developments and successes, thereby enabling you to utilize IUID to maximum benefit.

### What you'll find in this issue:

**UID Solution:** We present an IUID tutorial on WAWF registering of end item deliverables with complex embedded relationships.

**Beyond UID: Amazing ROI for Track and Trace:** Once your UID labels are in place, much of the cost of deploying Track and Trace methodology is already absorbed. Read this and start to imagine the efficiencies you can realize beyond mere UID compliance.



**Policy Office Update:** This policy document is a must for your review and your reference library.

**UID Comply!® and UC! Web™ User Group Meeting:** This March UID Forum event was the venue for highly engaged education and exchange of ideas.

**Educational Seminars:** Check out these upcoming dates for webinars on UID and Track and Trace.

**News From A2B Tracking:** Learn what has been happening at A2B during the last quarter.

## UID SOLUTION

### If you submit end item deliverables to the WAWF *You'll appreciate this quick review*

**By Jim Daniels, UID Comply!® and UC! Web™ Product Manager**

Submitting end items with complex, embedded relationships to the IUID Registry can be – well, complex. For that reason we thought it time to review the business rules for registering UIDs of new acquisition, end item deliverables through the Wide Area Workflow (WAWF). The reason for the complexity is this: Other than top level items and some embedded items at the child level, the WAWF is not set up to accept additional items within embedded relationships.

Wide Area Work Flow (WAWF) is the web based system developed for the DoD to handle transactions such as invoicing, acceptance, and receipt of goods and materials to various DoD entities. WAWF is also the preferred method for submitting UID information to the IUID Registry. Contractors supplying deliverables to the DoD are required to use WAWF for submission of electronic receiving and invoicing reports. Once acceptance of the items takes place, the UIDs are sent to the IUID Registry. But there are exceptions.

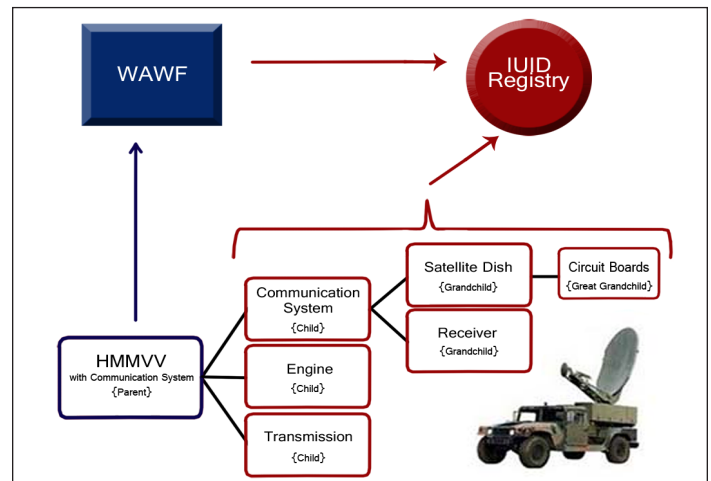
A delivered end item may in fact be composed of any number of embedded items, such as subassemblies, components and parts. Therefore the relationship between a parent and a child is hierarchical and there may be any number of parent/child relationships within any given item. We refer to these as parents, grandparents, great grandparents, etc. For example, Item A may contain Sub-Assembly B. However, sub-assembly B contains parts C and D. In registration to the IUID registry, Item A is a parent to sub-assembly B. So sub-assembly B would be registered pointing to Item A as its parent. However, sub-assembly B, which must have a unique item identifier (UII) because it is embedded in Item A, contains Parts C and D, so it is itself a parent.

Therefore, Parts C and D would be registered pointing to Sub Assembly B as their parent. The level of nesting is limited only by regulation.

### Timing Is Everything

Currently, the WAWF allows the reporting of IUID data on newly procured end items and 100 embedded children only. These will be sent to the Registry through WAWF. But this leaves a hole through which innumerable UIDs can fall as the other embedded components need to be hand entered. In effect, then, there are two places where UIDs of end item deliverables must be registered, the WAWF and the IUID Registry. When a top level item is registered through the WAWF and various children, grandchildren, etc are not, the timing of the submission also becomes critical. Simply put, children cannot arrive in the Registry before parents. Contractors stand to lose time, accuracy and prompt payment when this process is not managed correctly.

An example of this situation will help clarify the problem. Let's say that a manufacturer in Portland, OR is ready to deliver a Humvee



that is equipped with a communication system to an army depot in Alabama. The manufacturer would begin the delivery process by sending an advanced ship notice/receiving report to the WAWF. This alerts the WAWF that an item is about to be shipped. When the Humvee (which is the UID parent item) arrives at its Alabama destination, perhaps a week or two later, the receiver there accepts the item by submitting it to the WAWF. Once this transaction is complete, the Humvee is also submitted to the IUID Registry.

That sounds simple enough, but what about the valuable items which constitute the children, grandchildren and great grandchildren of the parent Humvee? In this one parent item there are three children: the communication system, the engine and the transmission. There are two grandchildren embedded in the communication system, the satellite dish and the receiver. And the circuit boards in the satellite dish are the great grandchildren, completing a four level IUID hierarchy. Since the WAWF accepts only the top level Humvee, these embedded items are not yet in the IUID Registry. But timing is crucial. As noted earlier, the children, etc. may not arrive in the Registry before the parent.

This leaves an important question: How will you know when the WAWF submission is complete? One option is to manually query the WAWF frequently, until the item is received. This may be a simple enough solution if there is only one parent item, or even a few. But what happens when there are hundreds of items, typically the case when manufacturers ship product? Another solution is to invest in a data management system that provides submission awareness. In that event the system would send a report when the WAWF submission is complete. Then the Humvee's embedded items may be submitted to the Registry, in strict adherence to MIL STD 130 business rules. When the final submission of embedded items is complete, the deliverable is complete.

While it is possible to accomplish this submission and registration process manually, manufacturers of end item deliverables will find that a system for the electronic transfer of files will mean greater accuracy while saving time and ultimately resulting in quicker payment on contracts.

(Note: As we go to press the WAWF is working on alternate means for registering complex relationships.)

## BEYOND UID: AMAZING ROI FOR TRACK AND TRACE

### UID – then what? ROI from deploying Track and Trace

Data Capture Institute, Inc.; May 2011

#### Introduction

Data Capture Institute has been tasked by A2B Tracking Solutions to estimate the return on investment (ROI) that organizations can expect when budgeting for tracking of items under their control. Tracking and tracing of items is the next logical step for those who are implementing UID and wish to maximize UID benefits while streamlining operations. For background, the Department of Defense adopted a Unique Item Identification (UID) program in 2004. UID obliges the DoD's large support community including the armed services and its contractors to mark and register their valuable property. No specific timetable has been given yet regarding the location or circumstances that would trigger event recording that is related to this property. It follows that each operating unit with responsibility for property will now begin to plan for data collection and analysis of item activity, in order to improve their operations and reduce costs for activities under their control.

A structure is needed to assist those who want to track and trace the property they manage. This begins with seeking background to determine return on investment (ROI). We will begin by stating several references and assumptions.

- » The FAA Bar Code Asset Tracking System (BCATS) piloted in 1996-2001 has scalable benefits that are valid for this analysis.
- » The MCI bar code marking and component tracking system (Scanman) was begun in 1995 and has scalable benefits that are valid for this analysis.
- » The Logistics Item Unique Identification Task Force study published in June 2010 has applicable benefits to the community exploring this tracking opportunity.

DCI designed the MCI Scanman system and consulted with MCI throughout the program implementation. DCI designed and implemented the FAA BCATS system under prime contract with the FAA. DCI was a member of the DoD Integrated Product Team that designed the UID program. From this unique involvement, we contributed to the ROI background and analysis for this field of work, which we share here.

#### Return on Investment (ROI)

ROI is traditionally defined as the "return" (incremental gain) from an action divided by the cost of that action. Gains from an investment are divided by investment costs. An ROI ratio greater than 0.0 (or a percentage greater than 0%) means the investment returns more than its cost. The higher the ROI, or percent of gain over cost, the better. A companion measure of a good enterprise investment is expressed as the payback period, or time (months or years) until the investment cost is recovered. The shorter the time for investment recovery time, the better.

The Logistics UID Task Force report predicts program costs of about \$7 billion and annual cost savings of about \$4 billion, equaling 57% ROI at program maturity. The MCI tracking system ROI was seen to be 35% when MCI gave suppliers the asset labels and rose to 80% when the suppliers of assets created and applied the labels. The FAA financial analysis showed a 75% ROI and an ultimate payback of 20 times cost, over 20 years. From the above range of asset tracking experiences we see an expected ROI of about 50%.

The return rate for an organization beginning now to control their UID marked items using modern track and trace technology, such as A2B's UC!Web™ software, would be much higher. The reason is this: In the three examples discussed above, the cost of labeling or marking assets was a large initial investment that reduced the payback and extended the investment recovery period. The assumption in this analysis is that item marking under the UID mandate has been already accomplished, or even paid for under a DoD sponsored cost recovery methodology. That being the case, the ROI should exceed 100% (full cost recovery)

within a year of expense. More exact analysis can be easily determined.

In cloud based software, with little or no user infrastructure expense, one can take an annual license cost, say \$10,000, and compare this to an incident of cost avoidance at that location. Using traditional inventory and reporting experience, and an example of items worth \$50,000 that are misplaced and/or misreported at that site during the year, the payback for deploying track and trace

software, would be \$40,000 per year, or 400% ROI per annum. The investment recovery time would be quite rapid, or one fifth of a year – less than two months.

Readers are invited to do some back-of-the-napkin analysis of their own, with the insight of a known facility. For a more rigorous and detailed analysis, Data Capture Institute will be pleased to respond to an invitation to visit and provide an exacting study and report.

[dcollins@datacaptureinstitute.com](mailto:dcollins@datacaptureinstitute.com)

## POLICY OFFICE UPDATE

The latest IUID Policy Document, [Acquisition/Procurement Guide for Unique Item Traceability Data Integrity Version 1.0](#), issued February 25, 2011 by the Office of the Director, Defense Procurement and Acquisition Policy, is a thoroughly useful guide. Intended as standard operating procedure (SOP) for users of automatic identification who are familiar with IUID, this document fills some knowledge gaps. For

example it tells, “what to do when you find a unique item identifier (UII) mark on an item of DoD property that: (a) is not compliant with DoD policy, or (b) is not registered in the DoD Item Unique Identification (IUID) Registry, or both.” We encourage UID Quarterly readers not only to review the document but to make it part of your IUID reference library.



## UID COMPLY!® AND UC! WEB™ USER GROUP MEETING AT UID FORUM

A2B's traditional UID Comply!® User Meeting and Breakfast was held on March 3rd during the Orlando UID Forum. Approximately thirty-five users of A2B's UID software and services shared their experiences and listened attentively as Product Manager Jim Daniels and President Peter Collins outlined the latest developments. These included A2B's mobile computing for UID compliance and UC! Web™ Track & Trace asset tracking software. The meeting was marked by active participation, enthusiasm and a desire to learn. As one participant put it, “This was the most productive time I spent at the Forum.”



## UID EDUCATIONAL WEB SEMINARS



In our quest to provide ongoing education to those who are implementing IUID and RFID we offer the following seminar series:

### IUID Web Seminars from Data Capture Institute

David Collins, President of Data Capture Institute, has been engaged by A2B to present a series of IUID Web Seminars as a non-commercial, educational service to those who are required to implement IUID.

David is considered by many to be the “father of the bar code industry” having led the original bar code project, KarTrack, for Sylvania in the early 1960s and later, in 1968, founding Computer Identics Corp, the first company to design and manufacture commercial bar code scanners. Over the years Collins and his team have overseen thousands

of bar code installations around the world. He is author of the popular 1992 book, “Using Bar Code – Why It's Taken Over” and is a frequent keynote speaker and automatic data collection seminar presenter. As a member of the UID integrated product team (IPT) he is uniquely qualified to respond to the questions and concerns of companies of all sizes, including large, multi-national enterprises as they grapple with UID implementation.

**Upcoming UID Web Seminar Dates** (Presented each day at 2:00 Eastern)

#### UID Seminar

Thursday, June 16th

#### Track and Trace Seminar

Thursday, June 2nd.

To register for any of these dates, email [pchasse@a2btracking.com](mailto:pchasse@a2btracking.com) or click this link: <http://www.uidsolutions.com/webinars>

## NEWS FROM A2B TRACKING

### Latest Press Releases

[A2B Tracking Solutions Inc. Releases UC! Web™ v1.5 - Latest Version Enables UID WAWF Submission 25-Apr-2011](#)

PORTSMOUTH, RI (April 25, 2011) - A2B Tracking Solutions Inc, the leading enterprise software and services provider in support of the US Department of Defense IUID (MIL STD 130) program is announcing release of UC! Web™v1.5 for submission of end items to the WAWF...

[A2B Tracking Solutions Wins Air Force Nuclear Tracking Contract Award 24-Mar-2011](#)

PORTSMOUTH, RI (March 24, 2011) - A2B Tracking Solutions President Peter Collins has announced award of a demonstration contract for the Air Force Nuclear Enterprise Tracking System (NETS) - solicitation number: FA9422-11-R-0002.

[A2B Tracking Releases UC! Web™ v1.4 for Web-based UID Compliance 28-Feb-2011](#)

PORTSMOUTH, RI (February 17, 2011) - A2B Tracking Solutions Inc, the leading enterprise software and services provider in support of the US Department of Defense UID (MIL STD 130) program is announcing release of UC! Web™ which enables location configuration management to as many levels as desired.

[A2B Tracking Tapped for AIM USA Roundtable at UID Forum 22-Feb-2011](#)

PORTSMOUTH, RI (February 22, 2011) - A2B Tracking Solutions has been chosen to moderate in the UID Supplier Alliance (USA) Roundtable discussions which is scheduled for Tuesday, March 1st, during the UID Forum in Orlando, FL...

[A2B Tracking Solutions to Host Users Breakfast at UID Forum 15-Feb-2011](#)

Portsmouth, RI (February 8, 2011) - A2B Tracking Solutions will host its third UID Comply!® and UC! Web™ User Meeting at a breakfast during the UID Forum, on March 3, at the Hilton Orlando, in Orlando, FL...

### Congressional Visit

Congressman David Cicilline, on the left, (D-RI), stopped by A2B's Portsmouth headquarters recently to meet with Peter Collins, above, and our staff and to learn about our UID work in support of Department of Defense. Congressman Cicilline was elected to fill the seat vacated by former Congressman Patrick Kennedy.



### A2B to Host Bar Code 50th Anniversary Party and Open House

On Monday, June 13th members of the Rhode Island Congressional Delegation as well as RI Governor Chaffee and a host of area military and business leaders will be on hand to celebrate the 50th anniversary of bar code technology. A press conference will feature David Collins, bar code industry founder and A2B Chairman, Senator Jack Reed (D-RI) and A2B President Peter Collins. The speakers are expected to address the enormous changes bar code has brought over 50 years as well as the efficiencies bar code and related technologies will enable in the future. Senator Reed will elaborate on the role Rhode Island is playing in the defense industry, and specifically on the importance of bar code in the military.

Following the press conference A2B will host an Open House where guests will visit our expanded headquarters, including the manufacturing, software development and UID field marking teams and their facilities.

### A2B Travels

NPMA - July 25-28, Las Vegas

A2B President Peter Collins will be speaking at the National Education Seminars of the National Property Managers Association on July 25th. His topic is UID Update - Get the Latest and Put it to Work for You!

