IUID and Dell

Supporting the Office of the Secretary of Defense

Figure 1. 2D Data Matrix

When Bob Smolinski accepted his position as the Office of the Secretary of Defense (OSD) IT Asset Management Branch Chief in December of 2005, he took on a difficult challenge – how to consolidate 14 different inventory tracking systems into one system that met all the department's needs. Until recently, each of the 14 different components maintained its own IT inventory and each had a different method for tracking assets. Some components used barcode systems, some had developed a unique numbering system, and a few of the smaller teams effectively "remembered" the distribution of equipment. Despite semi-annual audits by Washington Headquarters Services (WHS), the process lacked a uniform system to track the 38,000 reportable IT assets within and across components.

As soon as Smolinski understood the system requirements and challenges ahead, he immediately thought of IUID as the best solution. "I had attended a unique identification planning meeting in 2003 and had a basic understanding of the concept, but I needed guidance so I contacted the UID Program Office," Smolinski said.

IUID, or Item Unique Identification, is a system for distinguishing a single item from its identical counterparts through the use of an identifying mark or label. "IUID is ideal for these types of applications," says Rob Leibrandt, the Deputy Program Manager for IUID. "With IUID, identical items can be tracked and monitored individually. In this case, IUID will enable the staff to differentiate between monitors, towers, or other hardware that have the same appearance but may have different capabilities." After discussing the many benefits of IUID, Smolinski agreed with the PMO's assessment and began to implement IUID. Once IUID was determined to be the appropriate solution, Smolinski and his team immediately began to develop an IUID implementation plan. As Smolinski notes, because they were designing a new

system, the OSD team had unusual flexibility to choose the methods and technology that would best suit the application without having to consider multiple restraints. "We started from scratch. We had to establish everything - from getting a warehouse, trucks, and equipment to the procedures for getting IT assets into and out of the Pentagon," says Smolinski.

Next, the Defense Information Technology Contracting Organization (DITCO) began inserting the existing IUID clause into contracts, and Smolinski contacted several manufacturers to alert them to the new requirement, including Dell.

As Tim Solms, Dell's Regional Sales Manager for OSD, OCONUS Federal and Defense Medical business group states, "Dell builds every order to the individual customer needs and requirements." Because of this philosophy, Dell was eager to comply with this new requirement. Luckily, Dell already had experience with the 2D Data Matrix (a high density 2-dimensional matrix style mark) from previous customer requirements to apply company-unique asset tags (figure 1). However, unlike previous requirements that provide little to no direct value to a commercial entity such as Dell, the DoD strategy embraces manufacturer serialization approaches to create the unique item identifier and complies with international standards. This distinction has potential to provide tangible benefits to Dell with greater linkage and value from post-sale customer data.

As Dell began processing the IUID requirement and shipping finished orders to the DoD maintenance facilities, John Medici, a member of Smolinski's team, determined very quickly that the 2D Data Matrix was not IUID compliant. To correct the situation, Solms immediately assigned a Dell six person team to solve

IUID Benefits:

- Improves item acquisition, management, deployment and repair
- Enables asset visibility and traceability
- Provides greater business intelligence
- Improves system and equipment operational availability
- Lowers asset management costs
- Supports clean financial audits
- Increases productivity

the problem and re-label the erroneous markings. Within 72 hours of realizing the 2D Data Matrix was incorrect, Dell changed their process to better meet the OSD 2D Data Matrix requirements. Because of the dedication of Dell and other suppliers, OSD received many properly marked items in 2006. OSD ordered approximately 3,200 new PCs, 1,000 printers, 1,300 laptops, 1,200 monitors, and 300 scanners that were all delivered to the IT warehouse with the correct IUID mark.

OSD expects to keep receiving IUID compliant IT items in 2007 and beyond. Smolinski does not plan to mark most legacy items because IT inventory rotates relatively quickly. He estimates the majority of legacy inventory will circulate out of the current system in 3-4 years. As this happens, new orders filled by suppliers such as Dell will include the IUID 2D Data Matrix.

Smolinski, with the assistance of Medici, is also beginning to alter OSD processes to incorporate 2D imaging devices to capture the Data Matrix, decode the data symbol and pass the data to Remedy, where the data is then managed. Remedy is a software package that includes capabilities in change management, asset management, life-cycle inventory and workflow management. The software will assist the OSD in its efforts to track and properly manage all IT assets. Using this system will not only make these efforts easier to achieve, but will also reduce paperwork for technicians and expediting the repair process.

In 2007, OSD also plans to "provide imaging devices to the OSD IT support staff so they can use them to manage the assets in the offices they support. The imaging devices, which are in effect PCs, will also be able to download subsets of data or the entire database," states Smolinski. This will be particularly useful for the auditor, a

new position Smolinski established. With the increased data management enabled by IUID, the new auditor position will allow for continued and more rigorous auditing of DoD assets.

Smolinski's team, under the leadership of Sharon McCracken, is also currently working with the Defense Logistics Information Services (DLIS) UID office in Battle Creek Michigan to develop the capability to produce IUID compliant marks in-house and register those marks within the DLIS-hosted IUID Registry. Currently, reportable IT assets purchased with a credit card to fill urgent orders will not have a IUID mark. When this in-house system is complete, the team will be able to mark these assets and track them appropriately. In-house marking/labeling will also be used to mark those few legacy assets that remain after the phasing out of obsolete equipment is complete. It is this effort that will eventually allow for all assets to be marked and managed.

Once fully implemented, this IUID enabled Remedy system will enhance asset visibility management of IT assets within and across the DoD. IUID will provide the capability to maintain critical data about each item. Remedy will allow OSD IT Asset Management Staff to provide the infrastructure to manage both the information and the assets. This approach increases the level of item visibility to a level that the DoD has never attained before.

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