

UNIQUE IDENTIFICATION (UID)



General Overview of Item Unique Identification (IUID) Requirements



Background: Item Unique Item Identification

- Objective: to physically distinguish one item of property from all others
- Why:
 - Baseline item (“pedigree”) data can be established & maintained
 - Better visibility regardless of platform or owner; items can be tracked over their lifecycle
 - Better accountability
 - Improved inventory accuracy
 - Increased productivity and efficiency



Background: Item Unique Item Identification (cont.)

- “UID” Unique Identification – the “big picture” concept of uniquely identifying items, people, sites, location, organizations, etc.
- “IUID” – Item Unique Identification – the ability to physically distinguish one item of personal property from another
- “UII” – Unique Item Identifier – the system of physically marking an item; and resulting string of numbers resulting from decoding the mark.

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Background: Item Unique Item Identification (cont.)

- Product Identification by groups and classes has existed since the 1930s
- Has its roots in the grocery industry, where store managers wanted a way to track and maintain large inventories of perishable goods
- After decades of experimentation, the familiar “barcode” was born (1971)



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Background: Item Unique Item Identification (cont.)

- IUID is the next step, moving from product identification to **item** identification



The "Mark"
-A 2-D data
matrix that can encode up
to 3116 characters from the
256 byte ASCII character set

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How is the IUI Created?

The IUI Is Derived From Discrete Component Data Elements

Coded in the Data Matrix:



Enterprise Identifier = 0CVA5 (CAGE Code)
Original Part Number = 1234
Serial Number = 674A36458

The ISO assigned Issuing Agency Code (IAC) can be derived using the Enterprise data qualifier. The IAC for CAGE, is "D":

| UUI Construct 1 | UUI Construct 2 |
|--|---|
| <i>If the Serial Number is Unique within the Enterprise Identifier</i> | <i>If the Serial Number is Not Unique within the Enterprise Identifier but is Unique within the Part Number</i> |
| DOCVA5674A36458 | DOCVA51234674A36458 |



Examples of Direct Part Marking



Labels and Direct Marking on item surface.



laser additive, laser subtractive, ink jet, dot peen, chemical etch, etc.



Source: Rolls-Royce, Nat Russhard

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IUID Implementation Includes...

MARK



Symbology

Process Controls



Standards Compliance

DATA CAPTURE



Image Capture

COMMUNICATE



Electronic Data Interchange

... a comprehensive system of hardware, marking devices, hand-held imaging devices, and software that collects and uses IUID information.

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Did you know?

- Item UID is covered by an ISO standard—ISO 15459
 - DoD brokered an agreement between the three existing part-marking standards: 1) EAN/UCC; 2) air transport Association (airlines/FAA); and 3) ISO
- IUID is Dept. of Defense policy
- IUID is international
 - December 2007. NATO published its standardization agreement—unique item identification now defined as an ISO 15459 compliant data matrix mark

From aircraft parts to golf clubs and even contact lenses, the use of unique item tracking seems limitless.

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Acquisition Policy

- **Policy memorandum released on July 29th 2003 established IUID as a mandatory DoD requirement on all solicitations issued on or after January 1, 2004 ([DFARS 211.274-1](#))**
- **IUID is required for all property items delivered to the Government if:**
 - **The item's acquisition cost is \$5,000 or more;**
 - **The item is serially managed, mission essential, or is controlled inventory, regardless of cost;**
- **IUID is also required for any DoD serially managed subassembly, component or part embedded within an item--and the "parent" item in which it is embedded**

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Acquisition Policy (cont.)

- **Exceptions.** The contractor is not required to provide DoD unique item identification if:
 - The items, as determined by the head of the agency, are to be used to support a contingency operation or to facilitate defense against or recovery from NBC or radiological attack;
 - A Determination and Finding concludes that it is more cost effective for DoD to assign, mark and register the item
 - Item is acquired from a small business concern or,
 - Its a commercial item acquired under FAR Part 12 or Part 8.

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IUID Registry

- The IUID Registry is the authorized repository of an item's pedigree data, including:
 - Description
 - Owner
 - Original acquisition cost
- Purpose: distribute IUID and pedigree information to DoD users
 - Provide single point of reference for DoD tangible items that have assigned Unique Item Identifier
- Data submittal
 - By Wide-area Workflow
 - XML or flat file through GEX
 - Manually via IUID Web Entry Site at <http://www.bpm.gov/iuid>

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Government-furnished Property (GFP)

- Reporting GFE to the Registry
 - GFE (>\$5,000)
 - GFE (<\$5,000 if: serially managed, controlled, mission essential, sensitive)
- GFE= Special Tooling, Special Test Equipment, Equipment
- Excludes: reparable, contractor acquired property, material, etc.
- No marking requirement

See <http://www.acq.osd.mil/dpap/dars/dfars/changenotice/2008/20081124/E8-27779.htm>



Any Questions?

<http://www.acq.osd.mil/dpap/pdi/uid/index.html>