The challenge: effectively tracking and maintaining assets

On military bases and in the many civilian government agencies, there are literally millions of assets that need to be tracked, managed and maintained — from IT assets, office and medical supplies, to equipment like munitions, tools and spare parts for trucks, tanks, planes and ships. Execution of timely maintenance and efficient inventory management are dependent upon timely and accurate asset tracking information. But when paper and pen are utilized to track assets, the result is a ‘triple touch’ of data that is not only very costly, but increases the opportunity for error.

Information is first handwritten on a form and subsequently entered into a computer. A serial number can inadvertently be written incorrectly, and handwriting can easily be misinterpreted when the paper forms are entered into the computer. And, since it can take days or sometimes weeks until data entry is completed, there can be a potentially dangerous lag time between when asset information is collected and when it is finally visible in your system. For example, if a tank is not visible and serviced in the required time interval, it could fail on the battlefield, affecting the safety of service personnel.

The solution: cost-effective real-time asset tracking solution

Regardless of the type of assets your agency needs to track, mobility can help automate and error proof the process, effectively minimizing administrative effort. Paper and pen are replaced with electronic forms that enable the automated capture of data through bar code scanning, drop down menus, checkboxes and more — right at the asset site. The automation reduces errors. Assets are tracked and visible in real time. And the triple touch of data is eliminated, improving efficiency and reducing labor requirements. As a result, assets are always available when needed, equipment is always properly serviced and agencies can achieve cost-effective compliance with Federal Accounting Standards Advisory Board (FASAB) asset accounting regulations.
Real-time asset tracking applications
In military and civil agencies, Motorola’s mobile asset tracking solutions streamline and improve the accuracy of the asset management process — regardless of the type of assets you need to track.

IT assets
Motorola technology can provide federal government agencies with real-time visibility into the location of each and every IT asset, as well as a full audit trail that documents every movement of that asset — all automatically. Fixed RFID readers in key entrance and exit points enable the automatic tracking of servers, hard drives, media tapes and other IT assets as they move throughout the building for routine maintenance and more. A complete inventory of even the largest data center can be completed in hours instead of weeks with a mobile RFID reader on a cart, a handheld mobile computer with integrated bar code scanning or a handheld bar code scanner. In addition, a handheld RFID reader can enable the rapid location of a specific asset, such as a laptop computer.

Administrative office building assets
In the office or on a base, there may be thousands of pieces of office equipment to track, from desks and chairs to conference room equipment, copiers, desktop and notebook computers, two-way radios, cell-phones and more. Tracking asset location can be as simple as pointing and scanning with a Motorola handheld mobile computer, or wheeling a cart with a mobile RFID reader through hallways and offices.

Evidence
A handheld mobile computer and compact mobile printer can enable the real-time bar coding of evidence bags right at the incident scene. When the bar code on the bag is scanned as it moves through the evidence chain, the result is real-time visibility and a documented chain of custody, improving accountability and ensuring that evidence can be quickly and easily located when it is needed. In addition, with locationing technology embedded in employee badges, agencies can track each person who moves the evidence ensuring proper chain of custody.

IT Asset Management
There are thousands of assets on the move in and out of the data center every day — assets that often contain highly sensitive classified information. Motorola technology can provide federal government agencies with real-time visibility into each and every IT asset, as well as a full audit trail that documents every movement — all automatically, without any human intervention.
Military supply distribution — the base-to-base military supply chain

Military bases are located all over the world, from permanent bases at home and abroad to temporary bases in theatre. To ensure that every base has the required inventory on hand to support the troops, RFID can automate the tracking of equipment and supplies in the military supply chain.

For example, throughout key distribution points personnel do not know the contents of the shipments they are processing. Contents could be as harmless as fatigues or as dangerous as munitions. Motorola’s non-incendive rated handheld mobile computers are ideal in this environment, providing the specifications required to allow personnel to safely collect and process information where hazardous materials are located.

As assets arrive at the various distribution warehouses, a quick scan of the bar code or RFID tag on the shipment provides instant visibility at the moment of arrival. The shipment is automatically identified and instructions for proper processing sent to the handheld mobile device, such as staging for put-away or cross-docking for immediate shipment.

The result is real-time asset visibility to ensure timely delivery of the right assets to any base, anywhere in the world.

The military base — fleet tracking and vehicle maintenance

From supplies, weapons, repair parts, commissary inventory and medical equipment to vehicles, aircraft and tanks, tracking this complex pool of assets requires many different types of forms. A multi-faceted mobile asset management solution can automate and error proof this diverse pool of base assets.

The scan of a bar code or direct part mark can automatically autofill available information — from the last maintenance date to a complete maintenance history. Since Motorola handheld mobile computers offer integrated GPS as well as a high-resolution color camera, personnel can supplement asset records with a geostamped photo that documents asset condition and location, ensuring prompt scheduling of any required maintenance or accurate identification of a part. Vehicle service history, schematics or parts catalogues can be accessed and viewed on site to expedite service and repairs.

In the warehouse, RFID and bar code scanning during the receiving and put-away process can provide the real-time asset visibility required to ensure that proper stocking levels of parts and other supplies are maintained and easy to locate when needed. And hardened Wi-Fi or RFID tags enable the real-time tracking of critical mobile assets within the base — from weaponry to personnel.
The benefits of real-time automatic data capture

The ability to automate the tracking of the diverse asset pool in federal government agencies delivers many benefits:

**Improved productivity**
The elimination of paper-based forms provides personnel with more time to complete more critical tasks per day. Precious time is no longer wasted on administrative paperwork.

**Fewer errors**
The elimination of the need to handwrite and re-enter handwritten information into a computer also eliminates the opportunity for costly errors, improving data integrity.

**Reduction of paperwork**
The substantial reduction of paperwork eliminates many associated costs — from the time required to complete, process and file paperwork to the filing cabinets and the space required to store the paperwork.

**Identification and re-deployment of excess equipment**
When purchase requests are received for additional assets, real-time global visibility of the entire asset base enables the identification of any unused assets that might be available at other locations. Asset utilization is maximized, while capital expenses are reduced.

**Automatic identification of lost and missing assets**
Instant identification of a lost or missing asset enables agencies to maintain and assign accountability, in turn reducing the opportunity for loss and protecting capital investments.

**Automatic identification of assets to be retired or replaced**
Instant identification of assets that have reached the end of their useful and intended lifecycle — from laptop computers to helicopters — enables prompt retirement and replacement, preventing the liability and risk associated with unplanned asset failure.

**Reduced total cost of ownership**
Integration of the asset management mobility solution with maintenance and inspection applications ensures that assets are properly scheduled for inspection and maintenance — and that maintenance is promptly and accurately performed. As a result, assets receive the right level of care at the right time, extending asset lifecycle and reducing asset TCO.

**Cost-effective regulatory compliance**
The automated capture of required information enables agencies to achieve cost-effective compliance with Federal Accounting Standards Advisory Board (FASAB) regulations — without adding process, people or cost.

Fleet tracking and vehicle maintenance

A quick scan of a bar code or direct part mark on a truck, tank or other vehicle enables personnel to instantly check maintenance history and schedule any required maintenance. And with integrated GPS and a high-resolution color camera, personnel can snap a geostamped photo that documents asset location (latitude and longitude), ensuring that military vehicles can be located rapidly when needed.
**Mobility at work in asset tracking**

Our comprehensive portfolio of asset management solutions are designed to automate the tracking of any type of asset in any type of environment — from individual buildings to large military bases to key distribution warehouses in the military supply chain. Motorola’s asset management portfolio includes:

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<th>Mobile Computers</th>
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<td>Handheld mobile computers provide the wealth of features and functionality required to streamline the asset tracking function. Features include the ability to scan any bar code — 1D, 2D and direct part marks (DPM) — read an RFID tag and snap a geostamped photograph of an asset (a photo that includes the asset latitude and longitude for proof of condition and proof of location). In addition, a variety of form factors are available, from Enterprise Digital Assistants (EDAs) to industrial class handheld computers and gun-style devices for intensive all-day scanning. Our handheld computers are built to meet the latest security requirements providing FIPS 140-2 Level 1 for enhanced security, certified to operate in hazardous locations and have been tested for Hazards of Electromagnetic Radiation to Ordinance (HERO)*.</td>
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<td>RFID infrastructure enables complete automation of asset tracking. Fixed RFID readers at entry and other key points, such as the loading dock or guard station, enable the automatic capture of information on RFID tags. As a result, assets such as trucks and shipping containers can be accurately tracked in real time without any human intervention. In addition, Motorola’s RD5000 Mobile Reader attaches to a cart, allowing personnel to take inventory in record time by simply rolling the cart up and down the aisles.</td>
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<td>Bar code scanners provide the ability to capture 1D and 2D bar codes as well as direct part marks with a single device. The need to purchase, manage and maintain multiple devices to accommodate multiple bar code symbologies is eliminated, providing agencies with a fast return on investment. Since one device does it all, capital and operational costs are reduced — and productivity is increased. Rugged designs ensures maximum reliability, while IP rated sealing protects against water and dust for reliable performance in harsh industrial conditions.</td>
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<td>Motorola offers the industry’s most comprehensive wireless portfolio, capable of delivering the real indoor and outdoor coverage required to extend wireless communications to every inch of your facility — including the largest military bases. Integrated support for multiple locationing technologies includes RFID, Wi-Fi locationing and Real Time Locationing Systems (RTLS), enabling the automated and cost-effective real-time tracking of virtually any asset inside the agency compound, from mission critical supplies to personnel and visitors. FIPS 140-2 and Common Criteria Evaluation Assurance Level 4 validation combine with Motorola’s best-in-class AirDefense wireless intrusion prevention system (IPS), providing the advanced security required in government agencies — including rogue detection and mitigation, intrusion detection, policy monitoring and compliance, forensic and incident analysis and remote troubleshooting.</td>
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<th>Centralized Mobility Management</th>
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<td>One of the biggest costs associated with a mobility solution is the ongoing daily management of the wireless infrastructure and mobile devices. Our family of powerful management solutions are built on a common platform, providing the tight integration required to create a single command center for end-to-end control over virtually every aspect of your mobility solution — from wireless LAN infrastructure to mobile devices and the applications and data resident on those devices. This easy to use comprehensive toolset drives management costs to a new low, delivering the peak performance and maximum end user uptime required to maximize the total cost of ownership (TCO) for your end-to-end mobility solution.</td>
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*Specific models and configurations*
Nearly 85 Years of Understanding the Needs of Government Agencies

Motorola seamlessly and securely connects people, assets and information to help both civilian and military agencies achieve true enterprise mobility. Our comprehensive portfolio expands the mobile edge by providing the devices, networks, applications and services you need to ensure that information is always available — and always secure — to support critical decisions anywhere, anytime. For nearly 85 years, Motorola has provided government with the most reliable and innovative wireless solutions that help to save lives and accomplish missions.

To learn more, visit: www.motorola.com/federal