ManTech’s Material Automated Exchange (MAX)

Delivering Materials in a Secure Environment

ManTech delivers world-class enterprise IT and field operations support to Government customers around the globe. In order to increase customer satisfaction, drive down ticket times, increase cost effectiveness, and reduce travel, we have developed a secure supply kiosk meant to operate on premises within our customer’s facilities. This system, our Material Automated Exchange (MAX), puts everything from routine consumables (cables, toner, paper), peripherals (mice, keyboard), phones and even computers within easy, secure access even at remote locations. This level of self-help support also improves asset management, configuration management, auditing and security.

Today, in many organizations, end-users submit tickets for the most routine activities. For typical desktop devices users wait for a Tier 2 field service technician to deliver the service. For a centrally located organization, with dedicated personnel, this isn’t a big issue. For a globally dispersed enterprise, with offices operating CONUS and OCONUS, it’s not practical to have field service technicians at all sites all of the time. Additionally, the travel associated with deploying a technician to a remote site to replace a thin client is not cost effective.

In response to this need, ManTech has worked with a U.S.-based manufacturer to develop a secure, hardened supply kiosk to provide storage of materials and equipment at remote locations that is fully integrated into a cloud-based Information Technology Service Management (ITSM) suite. This allows on-site personnel to quickly solve minor tickets on their own, while dramatically reducing costs.

MAX Features

Secure –
- Two form factor (pin code, badge, and/or biometrics)
- Two Person Integrity (TPI)

Smart –
- ITSM Integration/Active directory
- Asset management & trend analysis (real time inventory awareness/automation)

Enabling –
- 24x7 mission and field support
- MAXimize use of resources

Expandable
- Multi form factor: configure in any shape and size
MAX Implementation

The MAX implementation process consists of multiple phases: engineering, deployment, and operations and maintenance. In each phase, we use a checklist-driven approach to ensure consistent, high-quality results for each MAX system:

- **Engineering**
  - Conduct a robust site survey and analysis of how the machine interacts with the customer’s internal/external networked environment.
  - Determine how the software will interact with the ITSM system associated with the helpdesk.
  - Determine how to feed asset and configuration information into the Asset Management System associated with the ITSM system.
  - Conduct verification and validation of the system for security accreditation purposes and update associated documentation.

- **Deployment**
  - Use the engineering information to customize the physical MAX system, including the exact specifications for the items in the vending and locker portions.
  - Work with the manufacturer to produce the machine and either test the machines at the factory or in our facility prior to deployment.
  - Receive the MAX system and configure it for use on the customer’s network.
  - Update documentation and transfer the device.

- **Operations and Maintenance**
  - Monitor the machine’s performance and perform periodic updates and patching.
  - Monitor usage trends to ensure the products available are actually the ones needed.
  - Replenish the machine and conduct audits, as inventory is depleted and reaches predefined levels.

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**Use Cases**

*End User* – The user submits a ticket to the helpdesk through regular channels (email, phone, text, instant message). If appropriate, the helpdesk personnel checks the inventory in the local MAX system to ensure adequate supplies are on hand. If so, the technician provides the end user with a ticket number and directs them to go to the machine. The ticket number is associated with the end users access badge. Once the badge is used at the MAX system, the product associated with the ticket is dispensed. The help desk can monitor the system’s delivery verification system to ensure the item has been dispensed. The end-user can now go replace the product and return the broken device to a return bin in the MAX system. Within minutes, the ticket is closed and the user is back to work – no matter where they are in the world.

*Privileged User* – The technician is working off of a ticket produced by the helpdesk and needs access to a part stored in MAX. Since the part is already on hand and does not need to be shipped or hand-carried, the technician can begin work immediately after arriving at the work location from an adjacent site. After a badge scan, the part is dispensed, generating an alert to the helpdesk personnel. The helpdesk remotely monitors the status of the task through health and status tools deployed to the customer’s network. Once the repairs have been made, the technician returns the defective device to the MAX system and leaves. The helpdesk closes the ticket. During a follow-up visit, a MAX logistician verifies inventory and disposes of the defective product following approved client procedures.

*Two-Person Integrity* – In some cases, where the vended product is controlled or high-value, two people need to be present to both obtain the product from the MAX system and perform the repair. In these cases, the product will not vend without two appropriately cleared personnel badge swipes. The technicians can then perform the repair and return the defective device for secure storage until it can be properly disposed. In these cases, all of the associated log information is stored in the ITSM system and available for follow-on audits.

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**LEARN MORE**
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