



# MDMS UPDATE

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## FROM THE PROGRAM MANAGER

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This issue marks the completion of the first year of *MDMS Update*. It has always been our intent to keep Energy Managers and end users apprised of MDMS developments and improvements.

The MDMS enterprise is growing, and it is our pleasure to report the newest reporting installation: Anniston Army Depot in Alabama. Our report describes how several information technology issues were resolved in the effort to integrate the installation's more than 300 legacy meters from a UMCS to the MDMS enterprise reporting configuration.

The ability to tag MDMS records is the latest in the continuing effort to improve MDMS functionality. Read, on pg. 2, how tagging can help qualify, add and save information on meters and data reports.

The Army Corps of Engineers wants to meet the ongoing training needs of our Energy Managers. Page 3 announces the kickoff of a series of six online training webinars for Energy Managers and other MDMS users. The first webinar is slated for late November, and you will be notified

shortly of the exact date and time. Read upcoming issues of *MDMS Update* for particulars on future webinars.

The Army Corps of Engineers Huntsville Center, which manages the MDMS, will again participate in this year's Huntsville Energy Summit, conducted annually by the Energy Huntsville Initiative. The 2016 Summit will be held at the U.S. Space and Rocket Center's Davidson Center Tuesday through Friday, Nov. 15-16. Resource Energy Managers in particular will want to take advantage of special workshops scheduled for Nov. 17-18 that focus on key Army energy issues. There is no registration fee for federal employees, but with seating limited to 350, quick registration is a must.

We end this issue with the Sites Update and a short how-to on use of the MDMS Reports option.

As always your input is valuable, and we welcome your feedback at [usarmy.coe-huntsville.cehnc.mbx.armymeterhelp@mailmail.mil](mailto:usarmy.coe-huntsville.cehnc.mbx.armymeterhelp@mailmail.mil).

## NEWEST CONNECTED SITE: ANNISTON ARMY DEPOT

Anniston Army Depot became the newest addition to the MDMS system in late September as actions were completed to integrate its 347 existing meters into the MDMS. This was accomplished by connecting an MDMS gateway to an existing Utility Monitoring and Controls System (UMCS) server. MDMS team leader Phil Wendling described it as being a unique integration of an accredited UMCS. This UMCS is receiving meter data in 5-minute reporting intervals whereas the standard local server for meter data consolidation is designed for 15-minute interval reporting. "We started analyzing the existing UMCS configuration and programmed the MDMS gateway to accept the 5-minute interval data into the enterprise MDMS. The entire action was accomplished in a single day," said Wendling. It was a team effort. The Depot's Directorate of Information Management (DOIM) had already installed the required MDMS gateway. Now whenever new meters are connected to the Depot's UMCS, the meter data will be automatically incorporated into the MDMS enterprise.

Another challenge involved the migration of Anniston's network infrastructure to the Department of Defense's Joint Regional Security Stack (JRSS). The MDMS team interacted with third party IT points-of-contact to establish the proper IP addresses and worked through firewall and other communication issues. Wendling credited the Anniston Army DOIM team, including System Administrators, Network Administrators and Cyber Security team for their assistance in this transformation. "We got tremendous cooperation from DOIM, who were supportive and responsive to our requests and were by our side to assist us the entire day," he said. "DOIM had given us the database schema and two weeks worth of meter data that we were able to vet and integrate in-house prior to our visit, allowing us to complete the installation process in one day." (cont. on page 2)



## MDMS UPDATE

### NEWEST MDMS SITE (CONT. FROM PG. 1)



Jane Wade, DOIM Cyber Security Officer, said a major transformation challenge was design differences between our UMCS and the EEDRS systems used to connect to the MDMS. “We had to figure out how to present our UMCS system data to the MDMS system to allow that data to be imported,” she said. “That involved a number of team meetings to bring together DOIM and the Cyber Security Office with Directorate of Public works and the MDMS team.”

Regarding the migration of data to the MDMS, Wade said considerable time and effort had been required to document and implement the proper IT security features. Because this was an atypical situation, the transition required a formal Memorandum of Understanding between the Army Materiel Command (AMC) and the Office of the Assistant Chief for Installation Management (ACSIM). The MDMS team appreciates and applauds the perseverance and dedication of the Anniston Army Depot team to make this happen.

### RECORD TAGGING WITHIN MDMS

Arguably the most important functional improvement being made to MDMS is to give Energy Managers the ability to qualify, add and save information about buildings, meters and meter data reports. Tagging allows this. Got a faulty meter? Tag it to prevent that building’s meter data from being incorporated into other reports. Meter problem fixed? Enter the date when the meter data may again be included in other reports. Energy conservation project completed? Tag it with the project completion date to create a portfolio of before and after energy usage reports. Are plug loads the primary source of energy use dictated by the mission being performed in the building? Tag it as “operational energy.” Tenant occupied facility? Tag it for automated monthly billing (future functionality). You get the idea.

Tagging possibilities are limitless. But since our resources to create them are limited, we need your input as to priorities. The first priority is tagging faulty meter data so it can be quarantined from inclusion in aggregated meter data reports. This can also generate a ticket with the Army Metering Service Desk (AMSD). The party responsible to fix the meter data reliability problem will vary with the situation, but in all cases the AMSD will track the ticket status. Tagging a building and time frame corresponding to erroneous meter data is the logical first step in the application of Validating, Editing and Estimating (VEE) techniques to overwrite missing or erroneous meter data (planned future functionality).

Please provide feedback and suggestions on the following proposed business rules for the planned tagging functionality.

#### PROPOSED BUSINESS RULES

Offer three categories of tagging capability by Energy Managers who will be assigned system permissions to input and save data about individual buildings and other types of metered assets:

**A. Conditioning** tag will inform MDMS when to exclude (quarantine) faulty meter data from all reports other than its own individual meter data report. MDMS will require the user to select an applicable date range for the data exclusion to include 1) “all times,” 2) before a user selected date, 3) after a selected date, or between two selected dates.

**B. Categorizing** adds one or more descriptive tags by which to query and filter metered assets for generating reports, e.g., “reimbursable tenant facility,” “ESPC project,” etc.

**C. Informational tag** is text input that will appear each time anyone generates a meter data report specific to the tagged metered asset and which falls within the date range the user associates with the informational tag. The text input will NOT appear if the tagged metered asset is part of an aggregated meter data report.

Any or all three tagging types can be applied to a metered asset. Energy Managers with system permission can tag only metered assets belonging to their installation, or in some cases, to their Command. Similarly, Energy Managers can delete or edit their installation’s or Command’s tags, depending upon their system permission level, but not those of other installations or Commands.

(cont. on page 3)



## RECORD TAGGING WITHIN MDMS (CONT. FROM PG 2)

The identity of the tagger and date of each tag will be recorded and displayed in reports generated for the tagged asset. Tags will be visible to all users having permission to generate reports for the metered asset.

Energy Managers may add an informational tag about data that is imported from other databases, e.g., facility data from the Real Property Inventory, but are prevented from revising that data or changing how that data is used to generate MDMS reports.

### END OF PROPOSED BUSINESS RULES

Tagging for faulty meter data will give Energy Managers (and others) the ability to generate reliable aggregated (multiple building) meter data reports. In keeping with the MDMS full disclosure doctrine, aggregated meter data reports will include the number of buildings and the total square footage (SF) included versus excluded from the report as determined by tagging for meter data reliability. A known quantity sample of buildings with reliable meter data can be extrapolated upward to estimate total usage more accurately than simply summing good meter data with bad.

There are limits to what a system can and should do to detect and correct bad meter data automatically. For example, usage spikes that are 10 times normal can be automatically detected and flagged, but what about a usage spike that is nine times normal? At some point, eyeballs are required to ensure meter data reliability. We are working to make it easy for Energy Managers to detect, isolate and correct erroneous meter data. Applying VEE to correct faulty meter data can be time consuming. Sometimes all that is needed is to quarantine bad data so that other meter data reports are not distorted.

While this article focused on tagging for data reliability purposes, there are numerous other potential applications as indicated in the opening paragraph. Tagging can expand options for how data are queried, extracted and presented. Again, your input to the proposed business rules and suggestions for other uses for tagging are needed.

If you haven't logged into MDMS recently, please give it a try. Fast and reliable are no longer just goals — they're happening.

## ANNOUNCING MDMS TRAINING WEBINARS

The MDMS contractor, General Dynamics Information Technology, will conduct six webinar training sessions for Energy Managers and MDMS users November 2016 through August 2017. Although the main purpose of these webinars will be to provide training on MDMS, these sessions will also brief attendees on the planned new MDMS functions/features and solicit their input.

The seminar series kicks off Nov. 30. The target audience for this first training session will be CONUS-based Energy Managers representing IMCOM. OCONUS sites and other MACOMs will have their own sessions scheduled later. Separate sessions for Europe and Far East will be scheduled appropriate for their time zones. Exact dates and the target audience for each will be announced at the Army Meter Service Desk (AMSD) website: <https://army.deps.mil/NETCOM/EEDRS/SitePages/AMSD.aspx> and in upcoming issues of *MDMS Update*.

The training webinars will utilize the Army's Defense Collaboration Services (DCS) system. The link to the DCS session will be included in the MS Outlook meeting invite. DCS requires that your computer has the latest version of Java which can be downloaded at <https://www.oracle.com/java>



### DEFENSE COLLABORATION SERVICES (DCS)



## HUNTSVILLE ENERGY SUMMIT

Energy Managers interested in learning more about how the private sector interacts with Army energy needs should mark their calendars for Nov. 15-18. The 4th annual Huntsville Energy Summit at the U.S. Space and Rocket Center's Davidson Center in Huntsville, Alabama, will offer two days of keynote addresses, panel discussion, networking and four days of exhibits designed to broaden the energy manager's perspectives and knowledge base. The Energy Huntsville Initiative (EHI) is a non-profit organization formed in 2011 as an economic development initiative to promote the growing Huntsville energy industry. This year's Summit should set a new record for attendees and exhibitors, said EHI Executive Director Bill Carswell.



Attendees, he said, will notice the continued growth in the depth and quality of the speeches and presentations.

"Everyone should be pleasantly surprised at the quality lineup of participants that range from commercial, large and small government contractors, and government communities," Carswell said.

Immediately following the two-day Summit, the U.S. Army Corps of Engineers/Huntsville Center Energy Division will host a series of energy workshops for Resource Efficiency Managers on Thursday and Friday, Nov. 17-18. REMs will profit by learning more about

- Third Party Financing for energy projects
- The Energy Conservation Investment Program (ECIP)
- The Facilities Reduction Program
- Efficient Base Operations
- Success Stories
- Energy Information Management

Come visit the **MDMS Remote Service Desk *live*** during the four days of exhibits during both of these events.

Government employees may waive the normal \$125 Summit attendance fee. Register at <http://energyhuntsvillesummit.com/index.php/register/>

## MDMS SITES UPDATE

The MEDCOM meter network is growing. As of the end of September, three new MEDCOM sites have been added to the growing MDMS network, said MDMS Project Manager Rick Layne. The new sites are MEDCOM/West Point, MEDCOM/Fort Eustis, and MEDCOM/Fort Knox. All 51 meters added from these three sites report through the MEDCOM North Regional Command gateway at Fort Detrick.

This brings the number of MEDCOM sites to 20, with a total of 577 meters reporting through MEDCOM, and

Layne said additional meters are being added.

These 577 meters reporting through MEDCOM will soon be joined by additional meters, some of which now report through IMCOM. Layne said the goal is to have all meters reporting through their proper commands.

In addition to the newly added MEDCOM sites, in late September, Anniston Army Depot was brought online and is now reporting 347 new meters. Read more about this new development on pg. 1: *Newest Connected Site: Anniston Army Depot.*

## TECH NOTES: THE REPORTS OPTION

This is the second of six *Tech Notes* reports that explore the five major options within the MDMS menu bar. This instruction will focus on the second option, *Reports*.

Reports currently available include the Quick Reference Usage Report (QRUR) and Energy Usage Intensity (EUI) report. Additional reports are being developed, and you will be notified via *MDMS Update* when they are available.

The QRUR provides monthly usage per commodity (water, electricity or natural gas) for a facility or group of facilities. To generate a Quick Reference Usage Report from the MDMS dashboard page, click the QRUR drop down, add the facility or facilities, and add the time period. Then click the "Generate Report" button.

The Energy Usage Intensity report provides a measurement of facility energy use per square foot. A similar procedure is used to generate that report: designate the site and facilities for the report and add the time period. Then click the "Generate Report" button.

Completion of these steps will generate the report you have selected for the selected time period. Both the Energy Usage Intensity and the Quick Reference Usage Report can be exported to Excel if desired.