



MDMS UPDATE

~ METER DATA MANAGEMENT SYSTEM ~



US Army Corps of Engineers®

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FROM THE PROGRAM MANAGER

By Michael Ott, MDMS Program Manager, USACE—Huntsville Center

Welcome to our June - July 2019 issue of the Meter Data Management System Update (MDMS), designed to keep you informed on the growth and latest developments of the Meter Data Management System and the Army Metering Program.

The MDMS User Outreach team continues to provide expanded training opportunities for more advanced users, while periodically repeating the basic sessions for new users as well. New user requests continue to come in, as well as requests for reactivating inactive accounts. For more on this topic, see the article below.

Network interruptions and outages continue to be a concern for Army Leadership, as well as local DPW and Energy Managers alike. The "Checking Meter Status" training session continues to be well-attended, with Energy Managers asking how to get help in troubleshooting longtime offline meters. We have once

again provided the article on page 2, "Troubleshooting Army Meter Network Outages" to help.

New modules continue to be added to MDMS to further enable troubleshooting and analysis for our users. On pages 3 and 4, you will find the latest new functionality that has been rolled into MDMS: the AEWRS FYTD Comparison Report, the Plug Load Comparison Report, and the Knowledgebase page with a Videos option to provide easy access—directly from MDMS—to all the pre-recorded training sessions.

As always, our mission is to improve the MDMS experience for end users. Your input is valuable, and we welcome your feedback via the Army Meter Service Desk (AMSD) at: usarmy.coe-huntsville.cehnc.mbx.armymeterhelp@mail.mil



Michael Ott, Program Manager, MDMS USACE—Huntsville Center

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MDMS TRAINING AND OUTREACH CONTINUE

The MDMS User Outreach team conducted 35 MDMS Training Webinars throughout June and July with various topics: Basic Overview, Benchmarking, Setting Up Dashboards, Customer Billing, Checking Meter Status, Understanding & Troubleshooting System Overrides, Evaluating the Energy Use Intensity (EUI) Report, Understanding the Aggregated and Monthly Usage Reports and the Monitoring Commissioning (MCx) Process. Most of these sessions were heavily attended with anywhere from 22 to 44 attendees participating.

The team also provided many one-on-one training sessions with individual sites/installations to provide deep-dive instruction on configuring dashboards, component benchmarking specific buildings and analyzing their results, non-reporting and unassigned meters, as well as building overrides. Several of the component benchmarking sessions identified multiple buildings with meter multiplier issues where the factor was off by anywhere from four to 1000.

Many of these one-on-one sessions were a direct result of discussions during one of the training webinars or information provided to the local shops as a result of a training webinar (i.e., Checking Meter Status,

Understanding & Troubleshooting, System Overrides, etc.). In addition, user access requests continue to come into the AMSD. During the months of June and July, 37 MDMS accounts were either created or reactivated. If you need your account reactivated or have personnel that need a new account, please continue to send those requests to the AMSD.

To do this, go to: <https://mdms.army.mil/> and select the "I Accept" button on the first screen, indicating that you are accessing a U.S. Government Information System. On the next screen, select the "MDMS Access Request (CAC Required)" link found under the "Sign in using your CAC" button. This will require your CAC card. Once you have entered your CAC card pin successfully, the MDMS User Access Request form will appear. Fill out this form accordingly and then select the "Submit Request" button to submit your request to the AMSD. We will take it from there!



Meter Data Management System



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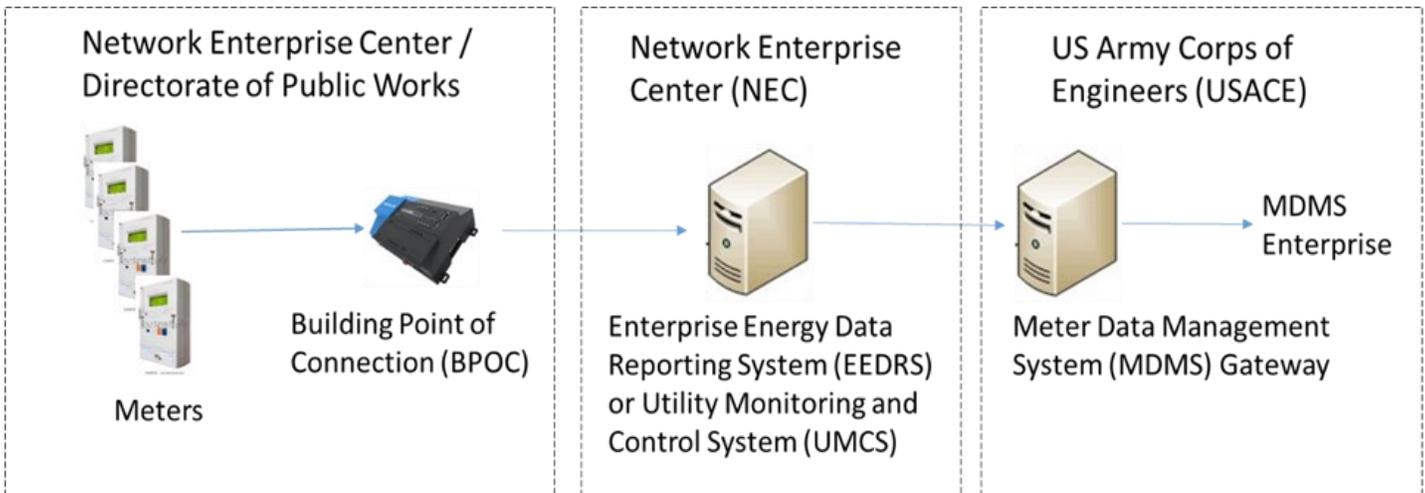
TROUBLESHOOTING ARMY METER NETWORK OUTAGES

Maintaining the Army's meter network requires a team effort. This article provides tips on how the Installation Energy Manager can assist the troubleshooting effort and expedite the restoration of meter data reporting to the Meter Data Management System.

The data source for MDMS is a locally hosted server used to consolidate meter data for transfer to the MDMS gateway. That server is called the Enterprise Energy Data Reporting System (EEDRS). At some installations, a Utility Monitoring and Control System (UMCS) server functions as the meter data source for the MDMS gateway.

Analogous to a three-link chain, the Directorate of Public Works (DPW), the Network Enterprise Center and the Corps of Engineers each have operations and maintenance responsibility for their respective parts of the Army's network that connects a building's meter to the

If the outage is associated with the MDMS data source and the MDMS Gateway server cannot communicate with the EEDRS/UMCS, the status on the meter status roll-up will show "MDMS operational." No recent meter data available from data source." If you see this for your site, check to see if meter data is reporting to the EEDRS or UMCS after the "Most Recent" date/time stamp shown in MDMS. You can check this by logging into the Energy Manager's EEDRS/UMCS workstation. If meter data exists at a later date than MDMS, the MDMS contractor has the action to investigate, troubleshoot and resolve the MDMS Gateway server and/or its interface with the EEDRS. If the EEDRS has also stopped recording meter data about the same time as shown within the MDMS meter status dashboard, the problem most likely resides within or downstream from the EEDRS. Although the NEC has



enterprise MDMS. Cybersecurity requirements limit each party's access and visibility for troubleshooting the source of a network failure to their respective area of O&M responsibility. The DPW Energy Manager can assist the troubleshooting effort and by doing so, help expedite the restoration of meter data reporting to the MDMS.

The first indication for a meter outage is obtainable from the Meter Status Roll-up report within MDMS. This report is found on the Network Status page, accessible from the main, green navigational pulldown menu. By clicking on the site name, the Meter Status Roll-up page provides drill-down capability to each meter that is assigned to a site.

This drill-down capability quickly identifies which meters are off-line and includes the "Most Recent" date/time stamp. Note: This drill-down report is called the Meter Status Details and can be launched separately from the same Network Status page.

When looking at the "most recent" date/time stamp, there are some important deductions that can be made. Typically, when all or most of the meters at a site share the same "most recent" date/time stamp, the connection failure is associated with the MDMS gateway or its data source.

system admin responsibility for the EEDRS, the U.S. Army Engineering and Support Center, Huntsville can also provide qualified technicians to assist the NEC in troubleshooting EEDRS connectivity problems.

Troubleshooting the loss of connection downstream from the EEDRS, i.e., at the building point of connection (BPOC) or the meter itself requires a little more investigation. One of the biggest indicators of a BPOC issue is when every meter associated with the building went offline at the same time and have the same "Last Reported" date/time stamp. Copy down the building number where the meters are installed go to the building and locate the BPOC, usually in the network communications storage room/closet. Once you have located the device, power cycle (power-off and back on again) to re-set the BPOC to attempt a connectivity restore. While there, physically trace the network cable on the BPOC to the network switch it's plugged into and record both the switch and port number. Note: If it isn't plugged into anything, you may have found the problem — contact your NEC!

After the power cycle reset of the BPOC, check the EEDRS/UMCS workstation again to
 ...(Continued on pg.3)

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TROUBLESHOOTING ARMY METER NETWORK OUTAGES (CONT. FROM PG. 2)

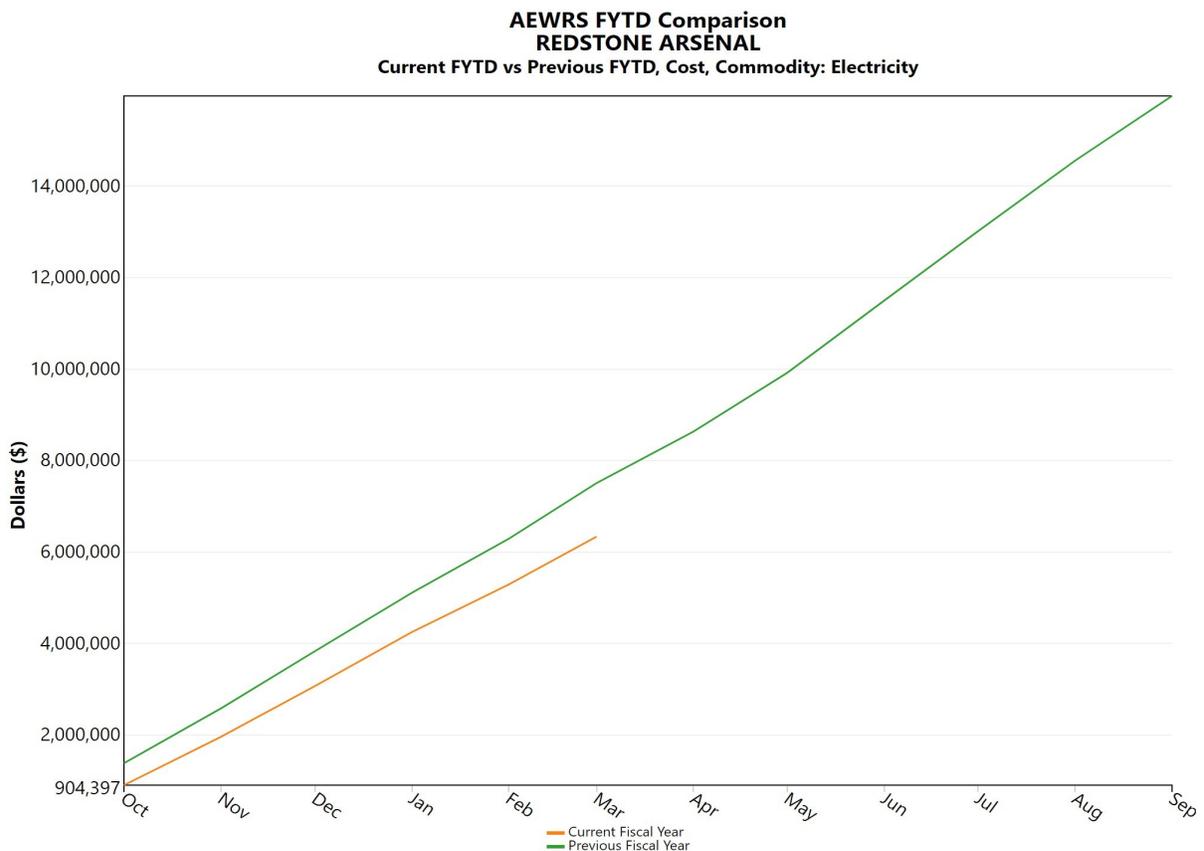
...see if that restored connectivity. If it did, you should see the change within MDMS within 2-3 hours. If that did not do the trick, the next step would be to confirm that the BPOC is on the correct local energy network with the local NEC. This step is very important and quite possibly the issue at hand, if both the physical connection has been confirmed and power-cycling the devices and/or meters doesn't restore connectivity. Upon contacting the NEC, they will likely ask you for the switch and port number you copied down. The NEC should be able to reconfigure the switch/port with the correct local energy network and it should restore connectivity. If the NEC has confirmed that the specific device is on the correct local energy network and meter data is still not flowing "upstream" to the EEDRS/UMCS or MDMS data source, the other possibility is that the EEDRS/UMCS is not configured to communicate with the particular meter device(s) or a larger network issue has occurred. This would also require communication with your NEC and potentially the meter integrator or EEDRS/UMCS support vendor.

While this article focuses on various ways the DPW Energy Manager can assist the troubleshooting efforts and expedite the restoration of meter data reporting to the MDMS, additional technical procedures, tips and lessons learned materials can be found on the Army Meter Service Desk (<https://army.deps.mil/NETCOM/EEDRS/SitePages/AMSD.aspx>) and EEDRS (<https://army.deps.mil/NETCOM/EEDRS/default.aspx>) websites. One particular technical white paper of interest (found on the EEDRS website), "Information Technology & Network Support AMP Lifecycle Management and Lessons Learned" provides information on post-implementation roles and responsibilities, program portals and points of contact for additional information, as well as troubleshooting lessons learned.

NEW FUNCTIONALITY AVAILABLE

In an ongoing effort to provide users with more tools to help with their analysis and reporting needs, three more modules have been added to MDMS. They will be briefed here.

The AEWRS FYTD Comparison Report is found on the Energy Management page and allows you compare the previous FYTD to the current FYTD trend for either cost or consumption based on the commodity and organization selected. Since current FYTD AEWRS data is entered and validated quarterly, the trend line will stop at the last reported data month. ...(Continued on pg.4)



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NEW FUNCTIONALITY AVAILABLE (CONT. FROM PG. 3)

...The Plug Load Comparison Report, also found on the Energy Management page, provides the ability to compare the plug load in kW, watts/SQFT (Square Feet), Cat Code, and Square Footage amongst all buildings at a site or installation. This gives you the opportunity to identify those buildings with unreasonably large plug loads and/or watts/sqft that should not be at that load based on building Cat Code or Square Footage. And last, but not least, a new

Plug Load Comparison

Add Site Add Installation Generate Report

Installation Remove

FORT BRAGG ✕

Export to Excel

Installation	Site	Building	Square Footage	Cat Code	Plug Load (KW)	Watts/SF
FORT BRAGG	FORT BRAGG	C6039 - REF/A-C BLDG	7,564	REF/A-C BL	1086.669	143.663
FORT BRAGG	FORT BRAGG	82312 - INSTALLATIONPROCESSINGNODEBLDGFORFORSCOM	30,762	INFO PROC	895.748	29.119
FORT BRAGG	FORT BRAGG	41832 - DINING FACILITY - Warrior Transition Support	17,649	DINING FAC	144.563	8.191
FORT BRAGG	FORT BRAGG	N6002 - COSCOMHEATPLANT	10,818	HEAT PLT B	58.794	5.435
FORT BRAGG	FORT BRAGG	D1209 - FREEFALLSIMULATOR (WINDTUNEL)	15,327	SIM BLD NO	64.000	4.176
FORT BRAGG	FORT BRAGG	42374 - BOWLING CENTER.	20,849	BOWLING CE	86.135	4.131
FORT BRAGG	FORT BRAGG	H3441 - PHOTO LAB.	42,728	PHOTO LAB	136.000	3.183
FORT BRAGG	FORT BRAGG	R3065 - GOLDENKNIGHTSHANGAR	12,641	AC MAINT H	39.500	3.125
FORT BRAGG	FORT BRAGG	L5504 - FH SR NCO	4,634	FH SR NCO	14.000	3.021
FORT BRAGG	FORT BRAGG	H4406 - BURGERKING	6,720	FST FD/SNK	16.204	2.411
FORT BRAGG	FORT BRAGG	A2565 - QuadMedCOF-B,CoHQ,Separates	44,136	CO HQ BLDG	105.000	2.379
FORT BRAGG	FORT BRAGG	X5486 - SIM CENTER	46,980	SIM CENTER	108.162	2.302

knowledgebase page has been added to the main navigational pull down menu. On this page is the Videos option, which when selected, shows all of the recorded videos for MDMS. Currently, all of the distinct pre-recorded training/webinar sessions have been added here. This gives users the ability to watch or re-watch training sessions at their convenience. You can pause, fast forward, and rewind as needed. We will add more as available.

Meter Data Management System

Home Support Log Out

Knowledgebase

Videos

Meter Data Management System

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Meter Data Management System

Component Benchmarking

Meter Data Management System

Aggregated and Monthly Usage

Meter Data Management System

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Setting up your Dashboard

Meter Data Management System

Troubleshooting System Overrides

