Day Time Server Changes – Energy Tracking

Dated: November 1, 2017
Updated: November 16th 2017

Models Affected: ALL

History: Energy Tracking's metering technology originally used SNTP servers for time synchronization. On rare occasions, the resulting date / time stamp would be incorrect. So, a backup module was designed to use the Day Time protocol to validate the date and time.

Problems & Fix:

a. Several SNTP and Day Time Servers were terminated by nist.gov causing a timeout in the meter resulting it to reboot.

    This issue was exacerbated if the option "Force Day Time Sych" was checked / enabled. Note: The DNS to many servers was executed successfully but the connection would timeout. Also, with the proliferation of IoT devices is resulting in congestion and high traffic.

b. Server List http://tf.nist.gov/tf-cgi/servers.cgi for future reference.

c. Bug fix: The Day Time Servers could be manually changed but upon a meter reboot, these changes would revert back to the original servers.

Solution:

1. Upgrade to the latest firmware. This is an important upgrade. The firmware upgrade version 115117_MX3_TB for the WEM-MX 333mV meters will automatically upgrade the SNTP and Day Time Servers.

2. Verify upgrade of SNTP Server 2. Path: Setup >> Main Configuration.

SNTP And Time Zone Setup:	
Enable SNTP	☑ **Enable Time Synch**
Server 1	0.us.pool.ntp.org
Server 2	time-b-wwv.nist.gov

Server 2: time-b-wwv.nist.gov

Note: You are free to choose other NTP Servers. However, SNTP Server 2 <u>must</u> support both NTP and Day Time protocols.

3. Verify upgrade of the Day Time Servers. Path: Setup >> Setup DayTime Servers.

DayTime Servers Setup	
Server 1:	time.nist.gov
Server 2:	time-c.nist.gov
Server 3:	time-d-wwv.nist.gov
Server 4:	time-d.nist.gov
Server 5:	utcnist.colorado.edu
	Submit Cancel

Server 1: time.nist.gov
Server 2: time-c.nist.gov
Server 3: time-d-wwv.nist.gov
Server 4: time-d.nist.gov
Server 5: utcnist.colorado.edu

Note: You are free to choose other Day Time Servers.