# Daniel Zhang (張道博) Issues Report

View Options ▼ From: Maui-Smart-Grid

# Bug

MSG-26 — convert all sql execute calls to new method

#### **Comments**

Daniel Zhang (張道博) 06 Apr 2013 16:15 Commit made by **Daniel Zhang** on *2013-04-06T19:15:06-07:00* https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2a616743cd2c0502795fb7619209b4a2a9928d00

setting all executes to use same method: #MSG-26 In Progress

Daniel Zhang (張道博) 16 Apr 2013 12:54 All db executes are now through the db utils.

MSG-55 — full test run is stalling on meco dupe check test

#### Comments

Daniel Zhang (張道博) 22 Apr 2013 16:08 Commit made by **Daniel Zhang (**張道博**)** on 2013-04-22T19:08:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f47069a4b4ebc9c4b45d2553f64b7d9c0f12c0af

changed erase test meco to commit after every op to reduce transactions; full test run completes successfully: #MSG-55 fixed

MSG-71 — update test\_\_\_\_mecodbutil.py to meco\_v3

### **Comments**

Daniel Zhang (張道博) 29 Apr 2013 15:09 Commit made by **Daniel Zhang (**張道博**)** on *2013-04-29T18:09:22-07:00* 

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9d8a00c885bf6e2fd3ca435962a4dc949c5bcc8d

added event data tables to erase method; further reduction of test data: #MSG-71 fixed

MSG-105 — create testing suite runner script

MSG-153 — database connection messages are conflicting

Example from test mecodbinserter.py:

Testing Mode is ON.

Using database test\_meco.

Using database meco\_v3.

Closing the DB connection to meco\_v3.

-----MeterData

{'UtilDeviceID': 'util\_device\_id', 'MacID': 'mac\_id', 'MeterName': 'meter\_name', '\_pkey': 'meter\_data\_id'}

{'MacID': '00:00:00:00:00:00:00:00', 'UtilDeviceID': '100001', 'MeterName': '100001'}

util device id 100001

mac\_id 00:00:00:00:00:00:00

meter name 100001

meter data id DEFAULT

sql=insert into "MeterData" (util\_device\_id,meter\_data\_id,created,mac\_id,meter\_name) values

('100001',DEFAULT,NOW(),'00:00:00:00:00:00:00:00','100001')

SQL execute was successful.

table name = MeterData

column name = meter\_data\_id

SQL execute was successful.

lastSeqVal = 2

selectRecord:

SQL execute was successful.

SQL execute was successful.

Closing database test\_meco.

Testing Mode is ON.

Using database test meco.

Using database meco v3.

Closing the DB connection to meco\_v3.

Closing database test meco.

Testing Mode is ON.

Using database test\_meco.

Using database meco v3.

Closing the DB connection to meco\_v3.

Closing database test\_meco.

Closing the DB connection to test meco.

### Comments

Daniel Zhang (張道博)

The test is likely accessing both databases. It should only access the testing

31 May 2013 14:56	database.
Daniel Zhang (張道博)	This is resolved due to there being no problem with respect to multiple
07 Aug 2013 16:04	database accesses.

MSG-164 — concise logs are not showing meaningful values for duplicates during insert See #MSG-160.

MSG-180 — fix missing readings not inserted during secondary loading

### **Comments**

Daniel Zhang (張道博) 13 Jun 2013 18:35	An isolated test using test data:
	meco_v3-energy-test-data_with_missing_interval.xml.gz meco_v3-energy-test-data.xml.gz
	resulted in all readings being inserted.
	Results with actual data cannot be confirmed yet. The attachment shows a discrepancy between secondary loading to meco_v3 versus primary loading to meco_v4.
Daniel Zhang (張道博) 21 Jun 2013 17:03	A selection of readings with counts of 12 & 24 are identified as not being dupes. They have been loaded to the DB.
Daniel Zhang (張道博) 21 Jun 2013 23:34	Reading counts are matching dupe counts exactly during insert but actual DB data is different between v3 and v4 where v3 contains 2013-Mar data from the original export and the re-extracted export and v4 contains only the re-extracted export.
Daniel Zhang (張道博) 22 Jun 2013 00:37	Attachment shows difference in DB.
Daniel Zhang (張道博) 22 Jun 2013 01:33	Loading 2013-Mar original data to v4 results in the reading/meter counts matching indicating the re-extracted data has less readings than the original+re-extracted. No missing readings are detected as a result of loading.

# MSG-209 — reading/meter plots appear to have doubled plotting

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-21T19:10:28-07:00</i>
21 Jun 2013 16:10	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/103ad7ab30ae7a9e0e6b68dced73eebb0b5df11f

### the operational class had TEST\_SCRIPT=True: #MSG-209 fixed

# MSG-210 — logger error occurs during send mail

attachment = /home/daniel/msg-plots/ReadingAndMeterCounts.png Sending multipart email.

Attaching file /home/daniel/msg-plots/ReadingAndMeterCounts.png.

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/recursivelyInsertData.py", line 192, in <module> commandLineArgs.testing)

File "/home/daniel/dzmbp-maui-smart-grid/src/meconotifier.py", line 164, in sendMailWithAttachments sys.logger.log('No exceptions occurred.\n', 'info')

AttributeError: 'module' object has no attribute 'logger'

### Comments

Daniel Zhang (張道博)

Fixed in #MSG-223.

29 Jul 2013 15:56

**MSG-221** — event duplicates are not detected on secondary loading Inserting data to database test meco.

Parsing XML in ./meco\_v3-energy-test-data.xml.gz.

 $\label{eq:condition} $$ \{re-dupe==>\}{32rd,56re,0ev}(0)[125]<0rd,0re,4ev,37,37>---{0rd,0re,0ev}(0)[125]<0rd,0re,0ev,0,37>^* $$$ 

2013-06-28 16:22:20,262 - mecoxmlparser - INFO - Data process count = 125.

2013-06-28 16:22:20,262 - mecoxmlparser - INFO - Reading dupe check count = 32.

real 0m0.873s user 0m0.604s sys 0m0.044s

#### Comments

Daniel Zhang (張道博) 28 Jun 2013 16:45 Commit made by **Daniel Zhang** (張道博) on 2013-06-28T19:45:28-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9c39b17b090443df3ccf1049519d7f65949fe674

event dupes are detected and dropped: #MSG-221 fixed

# MSG-223 — error during loading

2013-07-02 15:22:15,942 - mecoxmlparser - INFO - Data process count = 694454. 2013-07-02 15:22:15,942 - mecoxmlparser - INFO - Reading dupe check count = 541440. plotPath = /home/daniel/msg-plots

attachment = /home/daniel/msg-plots/ReadingAndMeterCounts.png Sending multipart email.

Attaching file /home/daniel/msg-plots/ReadingAndMeterCounts.png.

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/recursivelyInsertData.py", line 193, in <module> commandLineArgs.testing)

File "/home/daniel/dzmbp-maui-smart-grid/src/meconotifier.py", line 164, in sendMailWithAttachments sys.logger.log('No exceptions occurred.\n', 'info')

AttributeError: 'module' object has no attribute 'logger'

#### **Comments**

Daniel Zhang (張道博) 17 Jul 2013 15:42 Commit made by **Daniel Zhang (**張道博) on 2013-07-17T18:41:34-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a4a05a2bf08fb361de8fd8cc6c1225bbfd6fb02e

fixing logger warning: #MSG-223 fixed

# MSG-277 — loading doesn't terminate after keyboard interrupt

### **Comments**

Daniel Zhang (張道博) 12 Aug 2013 15:51 Commit made by **Daniel Zhang** (張道博) on 2013-08-12T18:51:35-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6a8079470534f50e15386e06b9603124c7716c46

parallelized data loading: #MSG-272 fixed

keyboard interrupt terminates loading: #MSG-277 fixed

# MSG-281 — concise log is not being emailed

### **Comments**

13 Aug 2013 17:51

Daniel Zhang (張道博)

Loader needs to use a queue.

Commit made by **Daniel Zhang (**張道博) on 2013-08-13T20:51:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/44a8af5b9ed73da55377ee3e342fc90ccb348ab0

switched to queue: #MSG-281 In Progress

Daniel Zhang (張道博) 13 Aug 2013 17:53

- Need to get the parse results from the queue.
- Need to pass the process ID to the parser.

Daniel Zhang (張道博) Commit made by **Daniel Zhang** (張道博) on 2013-08-14T18:21:21-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/cd00001b03bf7a2d0e75bf3efe308ceee2c9635e

Daniel Zhang (張道博) Commit made by **Daniel Zhang** (張道博) on 2013-08-14T20:15:35-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9bc0d6fb11400d6a275eca85246d2fc31a0c10d1

concise log is restored to email: #MSG-281 fixed

# MSG-291 — weather data loading is not seeing non-loaded entries

### **Comments**

Daniel Zhang (張道博) 19 Aug 2013 16:42 Commit made by **Daniel Zhang (**張道博) on 2013-08-19T19:40:47-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2b7b3355ffcf884d6b618569a2f1452cdf64b392

made keep list use last day in month: #MSG-291 fixed

# **Feature**

# MSG-2 — Testing

#### Comments

Daniel Zhang (張道博) 14 May 2013 13:20 All tests pass.

MSG-3 — Data Insertion

**MSG-20** — meco v2

MSG-45 — Event Data

#### Comments

Daniel Zhang (張道博) 24 Apr 2013 14:55 Commit made by **Daniel Zhang** (張道博) on 2013-04-24T17:55:03-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/52f40d3577deab1c18a6a8333c0b393eb13a06f2

creating v3: #MSG-45 in progress

### **MSG-56** — Notifications

MSG-122 — Views

MSG-156 — MECO Data Loading

**MSG-175** — Weather Data Loading

MSG-198 — Logging

**MSG-216** — Database Maintenance

**MSG-231** — Meter Location History

MSG-266 — Testing

MSG-279 — Views

MSG-283 — Error Handling

MSG-297 — eGauge Readings

# Task

**MSG-1** — setup test XML source data for test mecoxmlparser.py

**MSG-4** — perform dupe check prior to insertion

#### **Comments**

Daniel Zhang (張道博) dupe checking on meter name and interval end time works but there exists duplicate channel data in the raw data

# MSG-5 — have meter data, meter IDs, be unique

### Comments

Daniel Zhang (張道博) 15 Mar 2013 16:05	meter ids should be recorded once and only once
Daniel Zhang (張道博) 21 Mar 2013 17:44	this may not be necessary

# MSG-6 — insert test data to test\_meco database

### **Comments**

Daniel Zhang (張道博) insert of testing data works fine
15 Mar 2013 16:04

MSG-7 — reduce static test data set

MSG-8 — setup insert test data for dupe check test

#### Comments

Daniel Zhang (張道博) The same sample data used for the parser test is being used by the dupe check 17 Apr 2013 13:25 test.

# MSG-9 — determine how to dupe check when parsing data

### **Comments**

Daniel Zhang (張道博)	dupe checking can be accomplished by referencing the meter data id and the
20 Mar 2013 16:39	end_time (reading branch) or the read_time (register branch)

# MSG-10 — determine where to rollback or stop a commit when a dupe is present

### Comments

Daniel Zhang (張道博) 21 Mar 2013 08:16	currently, the end of the reading branch is the commit point.
	does this need to be implemented to explicitly handle the register branch?

# MSG-11 — intercept duplicate channel data

### **Comments**

Daniel Zhang (張道博) 22 Mar 2013 16:44	there appear to be duplicates of reading data in the raw data. these need to be intercepted and prevented from being inserted into the database.
Daniel Zhang (張道博) 22 Mar 2013 16:46	using a combined meterName-IntervalEndTime-channel field is possible to ensure data integrity.
Daniel Zhang (張道博) 25 Mar 2013 01:47	the reading branch is covered for duplicates now.

# MSG-13 — add additional check to verify that duplicate rows to be discarded have equivalent data in the database

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> on 2013-03-25T04:40:24-07:00
25 Mar 2013 01:44	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/fbff88b9cc88d4d814b34de737d45add9d7aa0c4
	changing dupe handling method, focusing on reading branch: #MSG-13 In Progress
Daniel Zhang (張道博)	removed rollback when dupes are present. testing on meterName-endTlme-
25 Mar 2013 01:49	channel is lower level than meterName-endTime.
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> on 2013-03-25T14:07:15-07:00
25 Mar 2013 11:07	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/fe29ca7966c091c0deb2ea06a9884b5d52c881c7

typecasting for equality checks works; disabling rollback on dupes: #MSG-13 Fixed

MSG-14 — check for duplicates on the register branch

MSG-15 — stop rolling back for duplicates, rely on three-element unique identifier (meter name, end time, channel) instead

MSG-16 — write equality verification test when dropping reading data due to duplication

### **Comments**

Daniel Zhang (張道博) 17 Apr 2013 13:24	This has been accomplished in testmecodupecheck.py.
Daniel Zhang (張道博) 17 Apr 2013 15:18	An equality check is performed during insertion of data and a separate test is not needed.

# MSG-17 — move debug option to local config

### **Comments**

Daniel Zhang (張道博) 26 Mar 2013 18:08	Commit made by <b>Daniel Zhang</b> on 2013-03-26T21:08:16-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/cd5d70316b00b2135cfc99c61ea7887277ccf9ca
	moving debug option: #MSG-17 In Progress
Daniel Zhang (張道博) 07 Jun 2013 13:34	The debugging option works through the local configuration.

# MSG-18 — create meco\_v2 from latest development

Daniel Zhang (張道博) 26 Mar 2013 18:06	Commit made by <b>Daniel Zhang</b> on 2013-03-26T21:06:14-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0791eaa0ba2f8398806f52a446f67a4dc47531c5
	adding tables for meco_v2: #MSG-18 In Progress
Daniel Zhang (張道博) 01 Apr 2013 10:47	still need to add kahalui weather data
Daniel Zhang (張道博) 01 Apr 2013 22:35	Commit made by <b>Daniel Zhang</b> on 2013-04-02T01:34:57-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9fe44c81b3e1f0d1aab1f7d38a2263781e04c00a

adjust weather script: #MSG-18 Fixed

MSG-19 — eliminate duplicate data insertion in 2012 data

**MSG-21** — insert aug 2012

**MSG-22** — insert sep 2012

MSG-23 — insert oct 2012

MSG-24 — add creation timestamp to meter data table

### **Comments**

Daniel Zhang (張道博) 27 Mar 2013 22:14 Commit made by **Daniel Zhang** on *2013-03-28T01:14:34-07:00* https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7b613dd8d8dd62585626da34e535dc6165bc62d9

#MSG-24 In Progress

adding creation timestamp upon insert

MSG-25 — change parser to use in-memory file object instead of file on disk this is for gzip support

MSG-27 — transfer views from meco\_v1 to meco\_v2

#### Comments

Daniel Zhang (張道博)  Commit made by <b>Daniel Zhang</b> on 2013-04-02T20:46:03-07:00  https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/808bc26c0b6037f67f7b3380713b93af94338126  dumped meco_v1 structure, tables and views: #MSG-27 In Progress  Daniel Zhang (張道博)  Commit made by <b>Daniel Zhang</b> on 2013-04-02T21:07:02-07:00  https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36  separating tables and views for meco_v1: #MSG-27 In Progress  Daniel Zhang (張道博)  Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00  https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/03a9e668436cb416d37376bcb4b9ad04eed5b911		
Grid/commit/808bc26c0b6037f67f7b3380713b93af94338126  dumped meco_v1 structure, tables and views: #MSG-27 In Progress  Daniel Zhang (張道博)  Commit made by <b>Daniel Zhang</b> on 2013-04-02T21:07:02-07:00  https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36  separating tables and views for meco_v1: #MSG-27 In Progress  Daniel Zhang (張道博)  Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00  https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-	Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> on 2013-04-02T20:46:03-07:00
Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-02T21:07:02-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36  Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36	02 Apr 2013 17:47	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-02T21:07:02-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36  separating tables and views for meco_v1: #MSG-27 In Progress  Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-		Grid/commit/808bc26c0b6037f67f7b3380713b93af94338126
02 Apr 2013 18:07 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36 separating tables and views for meco_v1: #MSG-27 In Progress  Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-		dumped meco_v1 structure, tables and views: #MSG-27 In Progress
Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36  separating tables and views for meco_v1: #MSG-27 In Progress  Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-	Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> on 2013-04-02T21:07:02-07:00
separating tables and views for meco_v1: #MSG-27 In Progress  Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-	02 Apr 2013 18:07	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
Daniel Zhang (張道博) Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-		Grid/commit/736d2a6ceb45fe173ee71f4f0e6379f580337a36
03 Apr 2013 10:45 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-		separating tables and views for meco_v1: #MSG-27 In Progress
• • • • • • • • • • • • • • • • • • • •	Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> on 2013-04-03T13:45:41-07:00
Grid/commit/03a9e668436cb416d37376bcb4b9ad04eed5b911	03 Apr 2013 10:45	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
		Grid/commit/03a9e668436cb416d37376bcb4b9ad04eed5b911

dumping structure for meco\_v2 including transfer of views from meco\_v1: #MSG-27 Fixed

<b>MSG-28</b>	— fix test	mecodbinserter.py	V

#### Comments

Daniel Zhang (張道博) 05 Apr 2013 16:59 Commit made by **Daniel Zhang** on 2013-04-05T19:59:35-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ea22443b8db41831f1f45593e344578852de188c

adding testing meter data table: #MSG-28 fixed

# MSG-29 — fix test\_\_\_\_mecodbread.py

### **Comments**

Daniel Zhang (張道博) 05 Apr 2013 18:01	mapper needs updating
Daniel Zhang (張道博) 06 Apr 2013 01:16	sequence didn't get copied with table copy. add the default value for meter data id and now problem is down to retrieving last sequence value.
Daniel Zhang (張道博) 06 Apr 2013 15:46	Commit made by <b>Daniel Zhang</b> on 2013-04-06T04:55:09-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/77f90dd3cbeadd9e4feec6cebf677cf38784ca80
	fixing test by correcting use of sequence: #MSG-29 In Progress
Daniel Zhang (張道博) 06 Apr 2013 15:46	Commit made by <b>Daniel Zhang</b> on 2013-04-06T18:46:19-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d05bf15f3a84739bfe2dbca5ed947ffb604cc500 add sequence to update testing table: #MSG-29 fixed

# MSG-30 — fix test mecodbutil.py

### **Comments**

Daniel Zhang (張道博) 06 Apr 2013 15:48 Grid/commit/0f11122ae0108239cf43f7c18ead18ccbd38516c

change table name: #MSG-30 Fixed

**MSG-31** — fix test mecoxmlparser.py

Daniel Zhang (張道博) 09 Apr 2013 15:56	this test needs to be changed to use the test database
Daniel Zhang (張道博) 09 Apr 2013 17:40	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-04-09T20:39:24-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ec428ec772877f826c5c5691846a73834bb172c9 getting parser test to use new testing mode: #MSG-31 in progress
Daniel Zhang (張道博) 10 Apr 2013 17:57	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-04-10T20:57:04-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d3dc9406f55311414a9ca9c2f059ea599a486388
	Dumping meco_v2 structure again: #MSG-31 in progress  The sequence was wrongly set to the testing meter data sequence id for the meter data table. It has now been set correctly.
Daniel Zhang (張道博) 11 Apr 2013 18:24	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-04-11T21:24:19-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b66ce5b4d2fa85a89194ac34f8dae41f917a53ac  testEveryElementIsVisited() requires an empty database; setup erase of testing database (test_meco) before the test: #MSG-31 in progress
Daniel Zhang (張道博) 13 Apr 2013 03:33	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-04-13T00:53:44-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/eb048e1e7040cf8b2d78dcd1dc468a186e2da4af  parser tests are now passing: #MSG-31 fixed
	Committing after erasing test_meco, and before running the parser tests, is critical. Not committing results in the server hanging.

MSG-32 — insert new data up to 2013 Mar 11 download

MSG-33 — determine correct cursor usage

ref: http://www.python.org/dev/peps/pep-0249/#cursor-objects

Passing a cursor around may be unnecessary in python. Does it matter whether the cursor reference is maintained during a sequence of database operations?

Daniel Zhang (張道博) 09 Apr 2013 18:12 do cursors need to be passed as parameters?

## MSG-34 — ensure that testing tables are fully cleaned after testing

### Comments

Daniel Zhang (張道博) 17 Apr 2013 13:08 Testing tables are being cleaned BEFORE testing.

Database test meco is erased prior to running tests on it.

# MSG-35 — rebuild truncated testing data set from latest data export

### **Comments**

Daniel Zhang (張道博) 07 Jun 2013 13:33

The current truncated testing data set is based on export data from 2013-Apr.

# MSG-36 — fix test\_\_\_\_mecodupecheck.py

### **Comments**

Daniel Zhang (張道博) 16 Apr 2013 12:52

Commit made by **Daniel Zhang (**張道博**)** on 2013-04-16T15:52:45-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/82ee467702978b0cd99cd78a548fe1c2f75657cd

checking for a duplicate in the reading branch works: #MSG-36 fixed

# MSG-37 — have a script for creating a new meco database

The script is used to set up the structure of the database once the database has been created on the server.

### **Comments**

Daniel Zhang (張道博) 09 Apr 2013 17:40 Commit made by **Daniel Zhang (**張道博**)** on *2013-04-09T20:39:58-07:00* 

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8816e738197b8d1e953715531be2213ed502979a

creating script for creating a new meco db: #MSG-37 in progress

Daniel Zhang (張道博) 09 Apr 2013 18:35 Commit made by **Daniel Zhang (**張道博) on 2013-04-09T21:35:02-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c25de2cd02ad44fd461744180b7c8a21ee4d738a

adding full meco\_v2 structure dump: #MSG-37 in progress

MSG-38 — verify that test\_\_\_\_mecoxmlparser.py is using test\_meco as its database

#### Comments

Da	niel	Zhang	j	(張道博)
11	Apr	2013	1	6:57

A separate parameter is being used now that indicates if testing mode is enabled. When testing mode is enabled, then the test\_meco database should be used for tests involving db connections.

## **MSG-39** — verify database name in eraseTestMeco()

### **Comments**

Daniel Zhang (張道博) Database name must match testing_db_name exactly.  18 Apr 2013 12:25			
Daniel Zhang (張道博) 19 Apr 2013 14:34	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-04-19T17:34:18-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/dc1c10365eabdf4c498008762c9b8e61ebb65747  database name is verified when the testing database is erased: #MSG-39 fixed		

### MSG-40 — switch all testing operations to test meco

All database operations during testing should use the testing database or test\_meco exclusively. This is accomplished by setting the Testing argument to True for supported classes.

The classes that accept the testing argument are:

meco db connect and meco xml parser

### **Comments**

Daniel Zhang (張道博)
22 Apr 2013 14:43

Commit made by **Daniel Zhang** (張道博) on 2013-04-22T17:42:56-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f993a9687d2475300e916c490ff679cfb1a0d9b9

testing operations have been switched to testing database: #MSG-40 fixed

There is a problem of the test suite freezing when running all tests that does not happen when running tests individually.

# MSG-41 — Provide permissions checking for .meco-data-operations.cfg

### Comments

Daniel Zhang (張道博)
17 Apr 2013 13:27

World readability needs to be disabled. Ideally permissions should be no more than owner readable and writable.

Daniel Zhang (張道博) 17 Apr 2013 16:04 Commit made by **Daniel Zhang** (張道博) on 2013-04-17T19:03:55-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fc7d67a13fb0d9539ca2d23eeec914914d5a35e4

tightened required config permissions: #MSG-41 fixed

MSG-42 — insert new data for 2013-Mar-18 to 2013-Apr-15

2013 03 18 download

2013\_03\_25\_download

2013 04 01 download

2013 04 08 download

2013\_04\_15\_download

MSG-43 — verify that config option for debugging-debug works correctly

There is too much output to the console and the debugging-debug flag doesn't seem to be respected.

### **Comments**

Daniel Zhang (張道博) 07 Jun 2013 13:35 The local debugging option works correctly when its value is properly evaluated.

# MSG-44 — remove testing meterdata table

### Comments

Daniel Zhang (張道博) The testing meter data table will be removed from meco_v3. 23 Apr 2013 14:27		
Daniel Zhang (張道博)  Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-04-237</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Sm Grid/commit/df3d63cb6e9b3a1e0e335cb5efc6eaa488d5c		
Daniel Zhang (張道博) 23 Apr 2013 15:17	The test suite passes.	
Daniel Zhang (張道博) 23 Apr 2013 16:08	Testing MeterData was removed from test_meco and all tests still pass.	

MSG-46 — create tables for event data

MSG-48 — change insertion code to handle event data

### **Comments**

Daniel Zhang (張道博)

Event data is being inserted as a result of modifying the classes to get the tests

30 Apr 2013 15:27

to work.

# MSG-49 — Provide parsing of event data

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-04-25T19:08:03-07:00
25 Apr 2013 16:08 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d3c038593fe68432bd40c1a83a129ea1cea1fe76

starting to provide parsing of event data: #MSG-49 in progress

Daniel Zhang (張道博) 30 Apr 2013 15:29 Event data is parsed as a result of getting the relevant tests to work.

# MSG-50 — update schema diagram

### **Comments**

Daniel Zhang (張道博) C 24 Apr 2013 13:44 h

Commit made by **Daniel Zhang (**張道博**)** on 2013-04-24T16:38:16-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c705aae42f383d6477e4ed790fc99139ddfd618f

created v3 diagrams: #MSG-50 fixed

MSG-51 — Determine an official location for data that has been, or will be, inserted to the database

MSG-53 — add UIQ vs net metering data as a table in the database

MSG-57 — send email on successful data insert

Daniel Zhang (張道博) 13 May 2013 15:54	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-13T18:54:49-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e908bc7d80ee2f9b63635e837534a7480a335538
	starting class and tests: #MSG-57 in progress
Daniel Zhang (張道博) 15 May 2013 15:13	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-15T18:13:25-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd

email on data loading works: #MSG-57 fixed

#MSG-107 fixed #MSG-104 fixed #MSG-106 fixed

MSG-58 — setup remote login for enter encryption passphrase

MSG-59 — create sequences for event data tables

MSG-60 — provide SQL dump file for meco\_v3

### Comments

Daniel Zhang (張道博) 24 Apr 2013 14:56	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-04-24T17:56:38-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/005bf54cdf317ce67d8e52e32aaeefc89a8f1784
	providing sql dump file: #MSG-60 in progress
Daniel Zhang (張道博) 06 May 2013 17:53	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-05-06T20:53:41-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/93afae27e5647234a8f4315ed6a721cd54a46cef
	adding cascade update and delete to EventData, Interval, and Reading: #MSG-79 fixed

MSG-61 — Establish table ownership for sequencesMSG-62 — add foreign keys to event data tables

#MSG-60 fixed

### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-04-24T19:35:41-07:00* 24 Apr 2013 16:35 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/f7b228e909139c7ce651e5652eea6efad9fbfb2b

added foreign keys: #MSG-62 fixed

MSG-63 — add primary keys to event tables

**MSG-66** — migrate test\_meco to meco\_v3

Setup test\_meco using the meco\_v3 schema.

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-04-25T17:48:28-07:00*25 Apr 2013 14:48 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

#### Grid/commit/8d239f3182618edae366626960739daa77350999

configured test\_meco to match meco\_v3: #MSG-66 fixed

Daniel Zhang (張道博) 25 Apr 2013 15:15 All tests pass.

### MSG-67 — Create new test data set based on latest data that includes event data

_					
		m	m	n	ts
	L J				

Daniel Zhang (張道博) 29 Apr 2013 13:45 Commit made by **Daniel Zhang** (張道博) on 2013-04-29T16:45:20-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8113f32019f7fc9d3c876c2b4dd55c4d05206386

created new truncated, value changed, test data file based on latest data: #msg-67 fixed

Daniel Zhang (張道博) 29 Apr 2013 13:57 Commit made by **Daniel Zhang** (張道博) on 2013-04-29T16:57:08-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/98b6492ed15f46c991d53366f8b0a833cc4a8e01

reduced test data by removing intervals: #msg-67 fixed

NumberIntervals is now incorrectly specified.

Daniel Zhang (張道博) 29 Apr 2013 13:59

Commit made by **Daniel Zhang (**張道博) on 2013-04-29T16:59:26-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2376b494c6d7f7b1ff51509723c89d13f00444b4

further reduction of test data set for faster testing: #MSG-67 fixed

MSG-68 — Update unit tests to use new test data (v3)

MSG-69 — update test\_\_\_\_mecoxmlparser.py to meco\_v3

#### Comments

Daniel Zhang (張道博) 29 Apr 2013 15:48 Commit made by **Daniel Zhang (**張道博**)** on 2013-04-29T18:48:26-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ad8d7a5525e060a68668b0e682dd390ded3e527c

updated parser test for v3: #MSG-69 fixed

MSG-70 — update test\_\_\_\_mecodupecheck.py to meco\_v3

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-04-29T19:19:04-07:00*29 Apr 2013 16:19 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/9ca18bad94ea990ff78e962752312b0e2e1aa15e

updated dupe check test to v3: #MSG-70 fixed

# MSG-72 — verify event data is processed by testing suite

The loading of event data should be verifiable in the testing database.

### Comments

Daniel Zhang (張道博) 30 Apr 2013 15:26 Event data is being loaded to the testing database.

# MSG-73 — process event text

The separate event text is not being handled.

### Comments

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-02T19:16:38-07:00
02 May 2013 16:16	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/17bc89bf2cc76f2825bde39af77f903375844721

changing parser to handle event text: #MSG-73 in progress

Daniel Zhang (張道博) 03 May 2013 14:49 Commit made by **Daniel Zhang (**張道博**)** on *2013-05-03T17:49:46-07:00* 

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1c907083aae7e24c31f44ddb9bf6b1bf97b4df76

event text is now being handled: #MSG-73 fixed

# MSG-74 — verify that foreign keys are generated for event data

MSG-75 — fix test\_\_\_\_mecoxmlparser.py after breakage from refactoring

### **Comments**

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-05-02T16:13:39-07:00</i>
02 May 2013 13:13	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/47e9816d1af03a07433709c012c0ec6993f33c2d
	fixing parse test: #MSG-75 in progress

Daniel Zhang (張道博) 'None' is being incorrectly used as a foreign key.

02 May 2013 13:34

### -----MeterData

```
{'UtilDeviceID': 'util device id', 'MacID': 'mac id', 'MeterName': 'meter name',
' pkey': 'meter data id'}
{'MeterName': '100000', 'UtilDeviceID': '100000', 'MacID':
'00:00:00:00:00:00:00:00'}
util_device_id 100000
mac_id 00:00:00:00:00:00:00
meter name 100000
meter data id DEFAULT
sgl=insert into "MeterData"
(util device id,meter data id,created,mac id,meter name) values
('100000',DEFAULT,NOW(),'00:00:00:00:00:00:00','100000')
SQL execute was successful.
table name = MeterData
column name = meter_data_id
SQL execute was successful.
fkeyColName = None
-----RegisterData
```

```
{'NumberReads': 'number reads', 'EndTime': 'end time', 'fkey':
'meter data id', 'StartTime': 'start time', ' pkey': 'register data id'}
{'NumberReads': '7', 'EndTime': '2013-04-14T06:00:08.748-10:00', 'StartTime':
'2013-04-08T06:00:08.241-10:00'}
number reads 7
end time 2013-04-14T06:00:08.748-10:00
meter_data_id None
start time 2013-04-08T06:00:08.241-10:00
register data id DEFAULT
sql=insert into "RegisterData"
(start time,meter data id,number reads,register data id,end time) values
('2013-04-08T06:00:08.241-10:00','None','7',DEFAULT,'2013-04-
14T06:00:08.748-10:00')
SQL execute failed using insert into "RegisterData"
(start_time,meter_data_id,number_reads,register_data_id,end_time) values
('2013-04-08T06:00:08.241-10:00', 'None', '7', DEFAULT, '2013-04-
14T06:00:08.748-10:00').
The error is: invalid input syntax for integer: "None"
```

LINE 1: ...end time) values ('2013-04-08T06:00:08.241-10:00','None','7'...

table name = RegisterData
column name = register\_data\_id

SQL execute failed using select

currval(pg\_get\_serial\_sequence("RegisterData",'register\_data\_id')).

The error is: current transaction is aborted, commands ignored until end of

transaction block

Daniel Zhang (張道博) 02 May 2013 13:53 Commit made by **Daniel Zhang (**張道博) on 2013-05-02T16:52:45-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/33b64da3e6f9405f1a0104cc6715a2ba058010b0

Reverting parser to last working state: #MSG-75 in progress

This reverts commit 47e9816d1af03a07433709c012c0ec6993f33c2d.

### MSG-76 — be able to run tests within local environment

### **Comments**

Daniel Zhang (張道博) 13 May 2013 14:41 Local environment testing can be accomplished by adding the MECO src path

to PYTHONPATH.

## MSG-77 — test insertion of test data to meco v3

#### Comments

Daniel Zhang (張道博)

07 May 2013 15:05

Data is being successfully inserted.

MSG-78 — fix get last sequence ID for parser

parsing xml in ./meco v3-energy-test-data.xml

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/insertData.py", line 57, in <module> i.parser.parseXML(fileObject, True)

File "/home/daniel/dzmbp-maui-smart-grid/src/mecoxmlparser.py", line 93, in parseXML self.walkTheTreeFromRoot(root)

File "/home/daniel/dzmbp-maui-smart-grid/src/mecoxmlparser.py", line 217, in walkTheTreeFromRoot pkeyCol)

File "/home/daniel/dzmbp-maui-smart-grid/src/mecodbutils.py", line 41, in getLastSequenceID row = cur.fetchone()

psycopg2.ProgrammingError: no results to fetch

#### Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-05-06T19:00:26-07:00

06 May 2013 16:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/33310de23a993896e71d12b7abde1644982f0ff9

debugging last sequence id error: #MSG-78 in progress

Daniel Zhang (張道博) 07 May 2013 15:04 This error is no longer occurring.

## MSG-79 — Change foreign keys to cascade delete and update

This is to allow deleting of branches from their respective meter data roots.

### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-05-06T20:51:36-07:00* 06 May 2013 17:53 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/12e1b030fcdfe6e07512f8af2933543ff8271912

changed erase code in response to having cascading update and delete with MeterData as the root: #MSG-79 in progress

Daniel Zhang (張道博) 06 May 2013 17:53 Commit made by **Daniel Zhang (**張道博**)** on *2013-05-06T20:53:41-07:00* https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/93afae27e5647234a8f4315ed6a721cd54a46cef

adding cascade update and delete to EventData, Interval, and Reading:

#MSG-79 fixed #MSG-60 fixed

# MSG-80 — provide updated full structure dump for meco v2

### Comments

Daniel Zhang (張道博) 07 May 2013 13:52 Commit made by **Daniel Zhang** (張道博) on 2013-05-07T16:52:09-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9e971ce0b639b4ca0fc0f115f4dab4efa260540c

updating meco\_v2: #MSG-80 fixed

# MSG-81 — Test insertion of actual data to meco\_v3

#### Comments

Daniel Zhang (張道博) 07 May 2013 15:53 Data was successfully inserted.

Inserting data to database meco\_v3.

parsing xml in ./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz {0}[0](6878){0}[1](10313){0}[2](20739){0}[3](24174){0}[4](27609){0}[5](31044) {0}[6](34479){0}[7](37915){0}[8](44788)

parsing xml in ./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz  $\{0\}[0](51662)\{0\}[1](55097)\{0\}[2](61971)\{0\}[3](65407)\{0\}[4](72280)\{0\}[5](75715)$   $\{0\}[6](82611)\{0\}[7](89485)\{0\}[8](92921)$ 

real 3m46.910s user 0m48.983s sys 0m59.076s

# MSG-82 — write recursive insert script

### Comments

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-05-08T21:23:28-07:00</i>
08 May 2013 18:23	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/f52aaa6b264293f43ee49bb705963b4462678549
	writing script for recursive insert: #MSG-82 in progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-05-09T18:24:23-07:00</i>
09 May 2013 15:24	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/c8a09bf2fff6dea42d3e03f0c7524ee65db2de5b
	recursive insert works: #MSG-82 fixed

# MSG-83 — Add command line option for file name to insert data script

#### Comments

Daniel Zhang (張道博) 08 May 2013 18:36	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-08T21:36:44-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3887407e5adbff61af58bf3713646fbd164400fe
	changing insert script to process a single item given by the file path argument: #MSG-83 in progress
Daniel Zhang (張道博) 09 May 2013 15:23	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-09T18:23:48-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/be703f0fc1365513476e2a4e07057b8f0ef71a66
	command line option works: #MSG-83 fixed

MSG-84 — add xml file pre-checking to recursive insert script

### **Comments**

Daniel Zhang (張道博) 10 May 2013 15:03	The intention is to not process files that may not contain valid data.
Daniel Zhang (張道博) 13 May 2013 14:33	The script has support for filtering the log files. No further filtering will be performed at this time.

### MSG-85 — update config file documentation in the readme to the latest version

### Comments

Daniel Zhang (張道博) 13 May 2013 14:55 Commit made by **Daniel Zhang (**張道博) on 2013-05-13T17:55:38-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f85bc8a82cce5d690a21cf55f2bee0c7653c9d75

updating documentation for configuration file: #MSG-85 fixed

# MSG-86 — Skip log files during recursive insert

Log files are denoted as \*.log.xml.

### **Comments**

Daniel Zhang (張道博) 10 May 2013 01:18 Commit made by **Daniel Zhang** (張道博) on 2013-05-10T04:18:45-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5d2ce24cf14a2db047e1f5b63215d529ada004b8

skipping log files during recursive insert: #MSG-86 fixed

# MSG-87 — Test recursive insert script on XML data containing event data

### **Comments**

Daniel Zhang (張道博) 10 May 2013 16:50

The test completed successfully.

time python ~/dzmbp-maui-smartgrid/src/recursivelyInsertData.py > insert-log.txt Inserting data to database meco v3.

parsing xml in ./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz  $\{0\}[0](6874)\{0\}[1](10309)\{0\}[2](17183)\{0\}[3](20619)\{0\}[4](27492)\{0\}[5](30927)$   $\{0\}[6](37823)\{0\}[7](44697)\{0\}[8](48133)$ Inserting data to database meco\_v3.

parsing xml in ./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz  $\{0\}[0](6878)\{0\}[1](10313)\{0\}[2](20739)\{0\}[3](24174)\{0\}[4](27609)\{0\}[5](31044)$ 

{0}[6](34479){0}[7](37915){0}[8](44788)

real 2m52.829s user 0m43.047s sys 0m6.808s

# MSG-88 — reduce complexity in walkTheTreeFromRoot

#### Comments

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-06-05T19:09:43-07:00</i>
05 Jun 2013 16:09	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/c317a6a96c959499022f81f49dd35eed80cc9b2c
	determine table name per element: #MSG-88 in progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-06-05T20:34:52-07:00</i>
05 Jun 2013 17:35	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/9f42ab58ebac2581d4d085c67bee25ba432666d4
	extracted insert data processing: #MSG-88 in progress
Daniel Zhang (張道博)	walkTheTreeFromRoot has been reworked to be more clearly expressed.
21 Jun 2013 13:48	

### MSG-89 — fix cursor error in recursive insert

Receiving 'psycopg2.InterfaceError: cursor already closed' on 'row = cur.fetchone()'.

### **Comments**

Daniel Zhang (張道博) The error have been caused by an interruption of the network connection. 10 May 2013 14:59

### MSG-90 — fix insert execution exception

insertScript = /home/daniel/dzmbp-maui-smart-grid/src/insertData.py

./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/recursivelyInsertData.py", line 66, in <module> call([insertScript, "–filepath", fullPath])

File "/usr/lib/python2.7/subprocess.py", line 493, in call

return Popen(\*popenargs, \*\*kwargs).wait()

File "/usr/lib/python2.7/subprocess.py", line 679, in \_\_init\_\_

errread, errwrite)

File "/usr/lib/python2.7/subprocess.py", line 1249, in \_execute\_child

raise child\_exception

OSError: [Errno 13] Permission denied

### **Comments**

Daniel Zhang (張道博) 10 May 2013 16:37 The permissions problem cleared up when switching to Macfusion vs SFTP.

### MSG-91 — perform data insert test with two folders of data

### **Comments**

Daniel Zhang (張道博) 13 May 2013 15:38 Results of old data + isolated event data:

Inserting data to database meco v3.

parsing xml in ./MSGdataJan29-2-1.xml.gz {0}[0](14806){0}[1](29556){0}[2](44306){0}[3](59034){0}[4](73762){0}[5](88490) {0}[6](103218){0}[7](117946){0}[8](132674) Inserting data to database meco v3.

parsing xml in ./MSGeventsJan30-1-1.xml.gz

Inserting data to database meco\_v3.

parsing xml in ./MSGeventsJan30-2-1.xml.gz

Inserting data to database meco v3.

parsing xml in ./MSGdataJan29-1-1.xml.gz  $\{0\}[0](14839)\{0\}[1](29589)\{0\}[2](44350)\{0\}[3](59078)\{0\}[4](73817)\{0\}[5](88545)\{0\}[6](103273)\{0\}[7](118001)\{0\}[8](132729)$ 

real 8m2.043s user 2m11.028s sys 0m18.809s

Daniel Zhang (張道博) 13 May 2013 16:22 Two folder test was successful:

Inserting data to database meco\_v3.

parsing xml in ./2013\_02\_04\_DataDownloaded\_wCurtis/MSGdataDec30-2-1.xml.gz

{0}[0](14739){0}[1](29512){0}[2](44240){0}[3](58968){0}[4](73697){0}[5](88425) {0}[6](103153){0}[7](117881){0}[8](132614)

Inserting data to database meco\_v3.

parsing xml in ./2013\_02\_04\_DataDownloaded\_wCurtis/MSGdataDec30-1-1.xml.gz

{dupe on insert

}{3776}[0](19449){0}[1](34177){0}[2](48905){0}[3](63638){0}[4](78368){0}[5] (93103){0}[6](107832){0}[7](122565){dupe on insert

>}{29632}[8](174362)

Inserting data to database meco\_v3.

parsing xml in ./2013\_04\_08\_download/20130408-f02e1048-f11e-4004-a90e-2f1e1a05fbfe-1-1.xml.gz {0}[0](137770)

Inserting data to database meco\_v3.

parsing xml in ./2013\_04\_08\_download/20130408-f02e1048-f11e-4004-a90e-2f1e1a05fbfe-2-1.xml.gz

 $\{0\}[0](123946)\{0\}[1](131074)\{0\}[2](134552)$ 

real 18m5.586s user 4m34.625s sys 0m40.019s

**MSG-92** — pass mecodbconnect object instead of raw conn to mecodbinsert The following definition can be changed:

MSG-93 — add destructors to db connecting classes

#### Comments

Daniel Zhang (張道博) 20 May 2013 16:14 Commit made by **Daniel Zhang** (張道博) on 2013-05-20T19:14:14-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/12bc4eae1ffc0339819c0567438e8a05f512e9a6

adding destructor for db closing: #MSG-93 fixed

# MSG-100 — be able to send an email message

### Comments

Daniel Zhang (張道博) 14 May 2013 16:12 Commit made by **Daniel Zhang** (張道博) on 2013-05-14T19:12:04-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3646d81ff6f6fa71b112ea9f3913f30007407da9

email sending works: #MSG-100 fixed

MSG-101 — add notifications for testing suite

MSG-102 — update config file documentation with notification parameters

#### **Comments**

Daniel Zhang (張道博) 30 May 2013 13:32 Commit made by **Daniel Zhang** (張道博) on 2013-05-30T16:32:03-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/61e1b48a1c59ca3602ae16ae22c66cb334b871d9

updating documentation to include notification variables and plot path: #MSG-102 fixed

MSG-103 — Support export of data to cloud storage

MSG-104 — add email notification option to recursive insert

### **Comments**

Daniel Zhang (張道博) 15 May 2013 14:39 Commit made by **Daniel Zhang (**張道博) on 2013-05-15T17:39:23-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9f0a5be70187def145d7476157bbd72089447c35

adding email notification: #MSG-104 in progress

Daniel Zhang (張道博) 15 May 2013 15:13 Commit made by **Daniel Zhang (**張道博) on 2013-05-15T18:13:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd

email on data loading works: #MSG-57 fixed

#MSG-107 fixed

#MSG-104 fixed #MSG-106 fixed

MSG-106 — perform test run of data loading notification

#### Comments

Daniel Zhang (張道博) 15 May 2013 15:13 Commit made by **Daniel Zhang** (張道博) on 2013-05-15T18:13:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd

email on data loading works: #MSG-57 fixed

#MSG-107 fixed #MSG-104 fixed #MSG-106 fixed

# MSG-107 — add db name to notification body

#### Comments

Daniel Zhang (張道博) 15 May 2013 15:13 Commit made by **Daniel Zhang (**張道博) on 2013-05-15T18:13:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd

email on data loading works: #MSG-57 fixed

#MSG-107 fixed #MSG-104 fixed #MSG-106 fixed

### MSG-108 — add run time profiling to data loading notifications

#### **Comments**

Daniel Zhang (張道博) 30 May 2013 16:14 Commit made by **Daniel Zhang** (張道博) on 2013-05-30T19:14:36-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/155b085c4fcedb539ff0d4ca37705f90998f1a1c

added wall time measure to recursive insert: #MSG-108 fixed

### MSG-109 — load energy data to production meco v3

### Comments

Daniel Zhang (張道博) 24 May 2013 13:45 Commit made by **Daniel Zhang** (張道博) on 2013-05-24T16:45:28-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6efd622fd3aedc485331a14ef0dfc6e1265c6593

data is loaded: #MSG-109 fixed

Uploading diagram of result counts.

### MSG-110 — require explicit flag to send email on insert

### Comments

Daniel Zhang (張道博) 15 May 2013 15:36 Commit made by **Daniel Zhang** (張道博) on 2013-05-15T18:35:53-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

#### Grid/commit/9cc4e425ac6f32b68f57a828f52f2f9e7c7cf35b

adding explicit argument for email notification: #MSG-110 fixed

## **MSG-111** — add explicit testing argument to recursive insert

### **Comments**

Daniel Zhang (張道博)
Commit made by **Daniel Zhang** (張道博) on 2013-05-16T19:32:43-07:00
https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2d8bc25f7d4c47e3128655606b79ae2ce0357f63

adding additional testing argument: #MSG-111 in progress

Multiple switch arguments are not currently working as the second argument is being consumed incorrectly.

Daniel Zhang (張道博)
Commit made by **Daniel Zhang** (張道博) on 2013-05-16T20:20:46-07:00
https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/305b826870ad151e43ca11d4b66cdff6e0f58a10

multiple switch arguments are now working: #MSG-111 fixed

# MSG-112 — perform 14MB data loading test on test meco

Daniel Zhang (張道博) 17 May 2013 15:20	Running with	
	\$ time python -u ~/dzmbp-maui-smart-grid/src/recursivelyInsertData.py —email testing > insert-log.txt	
Daniel Zhang (張道博) 17 May 2013 15:52	Data loading was successful.	
	Testing mode is ON.	
	Email will be sent.	
	Inserting data to database test_meco.	
	parsing xml in ./October2012/20121107-bc289ebc-f666-4384-a6ee- 1baff0657a40-2-2.xml.gz	
	{0}[0](15071){dupe on insert==>}{11520}[1](44225){0}[2](58970){0}[3](73714){(44055)	
	Inserting data to database test_meco.	

parsing xml in ./October2012/20121107-bc289ebc-f666-4384-a6ee-1baff0657a40-1-2.xml.gz  $\{0\}[0](14735)\{\text{dupe on insert}==>\}\{68096\}[1](114599)\{0\}[2](129332)\{0\}[3] \\ (144397)\{0\}[4](159130)\{0\}[5](163317)\{0\}[6](167487)\{0\}[7](181889)\{\text{dupe on insert}==>}\{11520\}[8](211024) \\ \text{Inserting data to database test meco.}$ 

parsing xml in ./October2012/20121107-bc289ebc-f666-4384-a6ee-1baff0657a40-2-1.xml.gz  $\{0\}[0](14735)\{0\}[1](29479)\{0\}[2](44223)\{0\}[3](58956)\{0\}[4](73690)\{0\}[5](88439)\{0\}[6](103172)\{\text{dupe on insert}==>}\{11520\}[7](132305)\{0\}[8](147039) \\ \text{Inserting data to database test meco.}$ 

parsing xml in ./2013\_02\_11\_download/20130211-27af62d3-5d28-42db-a4a6-1ca4d2b1fb0b-1-1.xml.gz  $\{0\}[0](6874)\{0\}[1](17334)\{0\}[2](20769)\{0\}[3](24204)\{0\}[4](31333)\{0\}[5](34763) \\ \{0\}[6](38198)\{\text{dupe on insert}==>}\{1856\}[7](50832)\{0\}[8](54267) \\ \text{Inserting data to database test\_meco.}$ 

parsing xml in ./2013\_03\_18\_download/20130318-7b10eca6-c250-4e1d-9ed3-e19a4477254b-2-1.xml.gz  $\{0\}[0](6887)\{0\}[1](10322)\{0\}[2](13757)\{0\}[3](17192)\{0\}[4](20627)\{0\}[5](24063) \\ \{0\}[6](27498)\{0\}[7](30934)\{dupe on insert==>\}\{1408\}[8](56796) \\ Inserting data to database test_meco.$ 

parsing xml in ./2013\_03\_18\_download/20130318-7b10eca6-c250-4e1d-9ed3-e19a4477254b-1-1.xml.gz {0}[0](3436){0}[1](6871){0}[2](17237){0}[3](20672){0}[4](27549){0}[5](30984){0}[6](37856){0}[7](44762){0}[8](48197)

Inserting data to database test meco.

parsing xml in ./2013\_04\_15\_download/20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz

{0}[0](6874){0}[1](10309){0}[2](17183){0}[3](20619){0}[4](27492){0}[5](30927) {0}[6](37823){0}[7](44697){0}[8](48133)

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_15\_download/20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz

 $\{0\}[0](6878)\{0\}[1](10313)\{0\}[2](20739)\{0\}[3](24174)\{0\}[4](27609)\{0\}[5](31044) \\ \{0\}[6](34479)\{0\}[7](37915)\{0\}[8](44788) Sending email notifications.$ 

real 27m23.419s user 6m48.402s sys 1m3.248s

# MSG-113 — add linefeed after concise status output of data insert

### **Comments**

Daniel Zhang (張道博) 17 May 2013 16:16 Commit made by **Daniel Zhang (**張道博) on 2013-05-17T19:16:23-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c66c98d16fa59fb7d1781a76c55b618fb6fdeb0e

adjusting notification message: #MSG-113 fixed

# MSG-114 — prepare full v3 data set for loading

Separate data by months.

# MSG-115 — verify reading counts

Daniel Zhang (張道博) 20 May 2013 13:43	Loading 2013_04_01_download, 2013_04_08_download, 2013_04_15_download to test_meco.
Daniel Zhang (張道博) 20 May 2013 14:10	Insert result:
	src/recursivelyInsertData.py –testing > insert-log.txt Testing mode is ON.
	Inserting data to database test_meco.
	parsing xml in /2013_04_01_download/20130401-a589a5b7-bdee-4a5e-8c39-

21324efa37c0-2-1.xml.gz

{0}[0](6874){0}[1](10309){0}[2](13744){0}[3](17184){0}[4](27504){0}[5](30939) {0}[6](37839){0}[7](48154){0}[8](51589)

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_01\_download/20130401-a589a5b7-bdee-4a5e-8c39-21324efa37c0-1-1.xml.gz

{0}[0](6876){0}[1](17196){0}[2](20631){0}[3](27503){0}[4](30939){0}[5](34375) {0}[6](37810){0}[7](48122){0}[8](51557)

Inserting data to database test meco.

parsing xml in ./2013\_04\_08\_download/20130408-f02e1048-f11e-4004-a90e-2f1e1a05fbfe-1-1.xml.gz {0}[0](137770)

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_08\_download/20130408-f02e1048-f11e-4004-a90e-2f1e1a05fbfe-2-1.xml.gz

{0}[0](123946){0}[1](131074){0}[2](134552)

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_15\_download/20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz

{0}[0](6874){0}[1](10309){0}[2](17183){0}[3](20619){0}[4](27492){0}[5](30927) {0}[6](37823){0}[7](44697){0}[8](48133)

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_15\_download/20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz

{0}[0](6878){0}[1](10313){0}[2](20739){0}[3](24174){0}[4](27609){0}[5](31044) {0}[6](34479){0}[7](37915){0}[8](44788)

real 14m40.411s user 3m24.729s

sys 0m33.342s

Daniel Zhang (張道博) 20 May 2013 15:32 Counts are calculated by the the view countOfReadingsByDay. A discontinuity of 15-minutes or 1 interval seems to appear at the beginning of each data set. Reading counts appear to be as expected, 96/day, at other times. The meter counts are not as expected. The latest MeterRecords indicate 92 meters.

MSG-116 — verify local daily backup is present

MSG-117 — eliminate any db connecting class other than MSGDBConnector

#### **Comments**

Daniel Zhang (張道博) 30 Jul 2013 14:50	DB Util uses cursors for DB connections.
Daniel Zhang (張道博) 05 Aug 2013 14:08	DB connection method has been stable and sufficient.

### MSG-118 — re-verify reading counts

The following check is evaluating to true unexpectedly:

```
self.configer.configOptionValue("Debugging", "limit_commits")
```

Load counts should be re-checked with this check removed.

#### **Comments**

Daniel Zhang (張道博) 20 May 2013 17:25 Load results:

Inserting data to database test meco.

parsing xml in ./2013\_04\_01\_download/20130401-a589a5b7-bdee-4a5e-8c39-21324efa37c0-2-1.xml.gz

 $\{0\}[0](6874)\{0\}[1](10309)\{0\}[2](13744)\{0\}[3](17184)\{0\}[4](27504)\{0\}[5](30939)\{0\}[6](37839)\{0\}[7](48154)\{0\}[8](51589)\{0\}[9](72229)\{0\}[10](75664)\{0\}[11](79099)\{0\}[12](82534)\{0\}[13](85969)\{0\}[14](89405)\{0\}[15](96280)\{0\}[16](103170)\{0\}[17](106753)\{0\}[18](110188)\{0\}[19](113623)\{0\}[20](117058)\{0\}[21](120494)\{0\}[22](124208)\{0\}[23](127685)*commit* \\ Closing the DB connection to test meco.$ 

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_01\_download/20130401-a589a5b7-bdee-4a5e-8c39-21324efa37c0-1-1.xml.gz

{0}[0](6876){0}[1](17196){0}[2](20631){0}[3](27503){0}[4](30939){0}[5](34375) {0}[6](37810){0}[7](48122){0}[8](51557){0}[9](54992){0}[10](61867){0}[11] (72306){0}[12](75741){0}[13](79176){0}[14](82612){0}[15](86047){0}[16](92920) {0}[17](99792){0}[18](103227){0}[19](106741){0}[20](110177){0}[21](117053){0} [22](120488){0}[23](123924){0}[24](127359){0}[25](130794){0}[26] (134662)\*commit\*

Closing the DB connection to test meco.

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_08\_download/20130408-f02e1048-f11e-4004-a90e-2f1e1a05fbfe-1-1.xml.gz {0}[0](137770)\*commit\* Closing the DB connection to test\_meco.

Inserting data to database test meco.

parsing xml in ./2013\_04\_08\_download/20130408-f02e1048-f11e-4004-a90e-2f1e1a05fbfe-2-1.xml.gz {0}[0](123946){0}[1](131074){0}[2](134552)\*commit\* Closing the DB connection to test meco.

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_15\_download/20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz  $\{0\}[0](6874)\{0\}[1](10309)\{0\}[2](17183)\{0\}[3](20619)\{0\}[4](27492)\{0\}[5](30927) \\ \{0\}[6](37823)\{0\}[7](44697)\{0\}[8](48133)\{0\}[9](72207)\{0\}[10](75643)\{0\}[11] \\ (79078)\{0\}[12](82514)\{0\}[13](85950)\{0\}[14](89385)\{0\}[15](96508)\{0\}[16] \\ (103381)\{0\}[17](106895)\{0\}[18](110330)\{0\}[19](113765)\{0\}[20](117200)\{0\}[21] \\ (120636)\{0\}[22](124065)\{0\}[23](127500)\{0\}[24](130935)\{0\}[25](134726)\{0\}[26] \\ (138203)*commit* \\ Closing the DB connection to test meco.$ 

Inserting data to database test\_meco.

parsing xml in ./2013\_04\_15\_download/20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz  $\{0\}[0](6878)\{0\}[1](10313)\{0\}[2](20739)\{0\}[3](24174)\{0\}[4](27609)\{0\}[5](31044) \\ \{0\}[6](34479)\{0\}[7](37915)\{0\}[8](44788)\{0\}[9](48223)\{0\}[10](51659)\{0\}[11] \\ (55094)\{0\}[12](58529)\{0\}[13](61964)\{0\}[14](72407)\{0\}[15](75842)\{0\}[16](79278) \\ \{0\}[17](82713)\{0\}[18](86148)\{0\}[19](93021)\{0\}[20](99895)\{0\}[21](103330)\{0\}[22] \\ (106845)\{0\}[23](110280)\{0\}[24](117154)\{0\}[25](120590)\{0\}[26](134333)\{0\}[27] \\ (137768)\{0\}[28](145125)*commit*$ 

real 25m39.509s user 5m51.750s sys 0m54.251s

Daniel Zhang (張道博) 20 May 2013 17:28 Commit made by **Daniel Zhang (**張道博**)** on *2013-05-20T20:28:23-07:00* https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Closing the DB connection to test\_meco.

#### Grid/commit/52e776bd8ef48503672f99e9b10687e32d96ab8e

removing incorrect flag: #MSG-118 fixed

# MSG-119 — determine correct usage of configOptionValue

### Comments

Daniel Zhang (張道博) 21 May 2013 14:56 Commit made by **Daniel Zhang** (張道博) on 2013-05-21T17:55:53-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/363ca88371b2a54e52bf271eb2cf58a21f3d2829

evaluating boolean config values: #MSG-119 fixed

### MSG-120 — update structure for meco v2

### **Comments**

Daniel Zhang (張道博) 21 May 2013 15:42 Commit made by **Daniel Zhang** (張道博) on 2013-05-21T18:41:52-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/59eff552d1d647bd7c3f90b0ae51a94aed27050f

added count of readings and meters views; updated view\_readings: #MSG-120 fixed

# MSG-121 — process files in ascending order during recursive loading

### Comments

Daniel Zhang (張道博) 07 Aug 2013 16:03 Not needed at this time.

# **MSG-123** — remove time portion in readings-meters counts

### **Comments**

Daniel Zhang (張道博) 22 May 2013 16:23 Commit made by **Daniel Zhang** (張道博) on 2013-05-22T19:23:10-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6e8a153e05894d21956345155417f4c391cd9d77

formatting date as text to remove time: #MSG-123 fixed

### MSG-124 — create reading-meter count graph script

#### Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-05-23T04:27:12-07:00

23 May 2013 01:28

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9367db1a34f02db06f1e38843a6322b98b680a6c

created meter and reading count plot: #MSG-124 fixed

MSG-125 — add concise logs to notification messages

Concise logs should be of the form:

Inserting data to database meco\_v3.

parsing xml in ./2013\_03\_18\_download/20130318-7b10eca6-c250-4e1d-9ed3-e19a4477254b-1-1.xml.gz  $\{0\}[0](3436)\{0\}[1](6871)\{0\}[2](17237)\{0\}[3](20672)\{0\}[4](27549)\{0\}[5](30984)\{0\}[6](37856)\{0\}[7](44762)\{0\}[8] (48197)\{0\}[9](51632)\{0\}[10](55068)\{0\}[11](61942)\{0\}[12](69266)\{0\}[13](72850)\{0\}[14](76285)\{0\}[15](79720)\{0\}[16](83155)\{0\}[17](86590)\{0\}[18](90025)\{0\}[19](93461)\{0\}[20](96897)\{0\}[21](100332)\{0\}[22](103767)\{0\}[23](107281)\{0\}[24](110716)\{0\}[25](117595)\{0\}[26](121030)\{0\}[27](124465)\{0\}[28](127900)\{0\}[29](131336)\{0\}[30](135028)*commit*$ 

Closing the DB connection to meco\_v3.

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-28T18:32:26-07:00
28 May 2013 15:32	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/db54af32b5050e3934127029d26c494e96f2f7c7
	adding return of parse messages: #MSG-125 in progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-05-28T18:57:53-07:00</i>
28 May 2013 15:58	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/577a0073c1ce24e335e5daa7a51a5646c80028f6
	changing insert data code to object method: #MSG-125 in progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-05-28T20:16:15-07:00</i>
28 May 2013 17:17	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/025d9d5b05e5c9e4efa8f393de9e1f32c8fb785b
	disabling execution of script method: #MSG-125 in progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-05-28T20:17:33-07:00</i>
28 May 2013 17:17	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
•	Grid/commit/56df95332104ed5babb5f17403caa2f91e1f9b26
	changing recursive insert to object method: #MSG-125 in progress
	changing recursive insert to object method: #MS(3-125 in progress

Daniel Zhang (張道博) 28 May 2013 18:05 Commit made by **Daniel Zhang** (張道博) on *2013-05-28T20:32:21-07:00* https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/57589f87c2cb866a5b568b5a84378b5759b140a8

provide logging for case of single commit; added reporting of other commits: #MSG-125 fixed

#### MSG-126 — Be able to send an email attachment

#### **Comments**

Daniel Zhang (張道博) 22 May 2013 17:18 Commit made by **Daniel Zhang (**張道博**)** on 2013-05-22T20:18:00-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b05144c0fe1b17aac7444934355109561e8c24bf

attachments work: #MSG-126 fixed

## MSG-127 — attach meter reading count plot to loading notification

#### **Comments**

Daniel Zhang (張道博) 23 May 2013 01:54 Commit made by **Daniel Zhang (**張道博) on 2013-05-23T04:54:41-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/76cd5925099da76b9705c04a1911eb3476c0b6de

added plot to notification during recursive insert: #MSG-128 fixed #MSG-127 fixed

### MSG-128 — add plotting to recursive insert

#### Comments

Daniel Zhang (張道博) 23 May 2013 01:54 Commit made by **Daniel Zhang (**張道博) on 2013-05-23T04:54:41-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/76cd5925099da76b9705c04a1911eb3476c0b6de

added plot to notification during recursive insert: #MSG-128 fixed #MSG-127 fixed

Daniel Zhang (張道博) 23 May 2013 02:44 Commit made by **Daniel Zhang (**張道博**)** on *2013-05-23T05:44:33-07:00* 

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/42e7d1916f02b95f290f0ea91f55c27048b89af3

corrected use of attachment: #MSG-128 fixed

### MSG-129 — handle plot failure case during loading

If a plot fails to generate during loading the error condition should be handled gracefully.

#### Comments

Daniel Zhang (張道博) 05 Jun 2013 16:21 Commit made by **Daniel Zhang (**張道博**)** on 2013-06-05T19:21:01-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/99b173c563006e42bded0ffdaa420126e9d4f295

generating error on plot failure: #MSG-129 fixed

# MSG-130 — Add weather data loading to notifications

#### **Comments**

Daniel Zhang (張道博) 06 Jun 2013 16:44 Commit made by **Daniel Zhang** (張道博) on 2013-06-06T19:44:09-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5ab3297a3cb1d2899d581ce8ffb4eb8e9321de42

Added notifications to whether data loading: #MSG-130 fixed

### MSG-131 — Add static location and meter record loading to notifications

#### **Comments**

Daniel Zhang (張道博) 05 Jun 2013 15:55 Commit made by **Daniel Zhang** (張道博) on 2013-06-05T18:55:00-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e069526be7b0d2ec012c8a051a22dcb33007ce0e

adding reporting and notifications to static meter record loading and static

location record loading: #MSG-131 fixed

#MSG-140 fixed #MSG-139 fixed

**MSG-132** — load static location and meter records

MSG-133 — load weather data

#### Comments

Daniel Zhang (張道博) 06 Jun 2013 16:28 Loaded:

KahuluiQCLCD\_2012\_08.csv KahuluiQCLCD\_2012\_09.csv KahuluiQCLCD\_2012\_10.csv KahuluiQCLCD\_2012\_11.csv

#### MSG-134 — transfer views from v2

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-05-24T18:22:06-07:00*24 May 2013 15:22 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/71c70fbd816507f305ec7eee3b2859bd1cb5945f

views transferred from v2 to v3: #MSG-134 fixed

### **MSG-136** — post reading-meter plot to documentation

#### **Comments**

Daniel Zhang (張道博) 24 May 2013 15:23 Plot was added.

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/07e643361755a533aa446fb2204912a2fd7a2018

### MSG-137 — add parallel notes to documentation

#### Comments

Daniel Zhang (張道博) 03 Jun 2013 16:54 Commit made by **Daniel Zhang** (張道博) on 2013-06-03T19:54:19-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7ccbeaca29d3b93e65b1cb5364a515dfb1ba8e1d

add parallel loading note to docs: #MSG-137 fixed

### **MSG-138** — add gridlines to count plot

#### Comments

Daniel Zhang (張道博) 29 May 2013 15:57 Commit made by **Daniel Zhang** (張道博) on 2013-05-29T18:57:43-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c45d271c89580e6c99361a875b3bcc3e0b1fd33c

added gridlines: #MSG-138 fixed

### MSG-139 — provide concise report for static location record loading

#### **Comments**

Daniel Zhang (張道博) 05 Jun 2013 15:55 Commit made by **Daniel Zhang** (張道博) on 2013-06-05T18:55:00-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e069526be7b0d2ec012c8a051a22dcb33007ce0e

adding reporting and notifications to static meter record loading and static location record loading: #MSG-131 fixed

#MSG-140 fixed #MSG-139 fixed

### MSG-140 — provide concise report for static meter record loading

#### **Comments**

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-06-05T17:57:42-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-SmartGrid/commit/4216d33543a5451d382fc8b5de676c8269b935be

adding notifications to static meter record loading: #MSG-140 fixed

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-06-05T18:55:00-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e069526be7b0d2ec012c8a051a22dcb33007ce0e

adding reporting and notifications to static meter record loading and static location record loading: #MSG-131 fixed

#MSG-140 fixed

#MSG-139 fixed

# MSG-141 — add separate testing recipient list to config file and support for it in the notifier

Daniel Zhang (張道博) 29 May 2013 14:37	The configuration option will be testing_email_recipients.
Daniel Zhang (張道博) 29 May 2013 14:41	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-29T17:41:07-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/be11dfec29bf5dbf24d8b2327497fb2c93d6db5b added support for testing mode to sendMailWithAttachments: #MSG-141 fixed
Daniel Zhang (張道博) 29 May 2013 14:49	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-05-29T17:48:03-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/07304b01d646f6929ebf3ac81a79d1f358738bfb  setting testing support to single part mail sender while removing its deprecated status: #MSG-141 fixed

### MSG-142 — have plotting support testing mode

This is a function of the recursive insert script and can be implemented there.

#### Comments

Daniel Zhang (張道博) 29 May 2013 14:49 Commit made by **Daniel Zhang (**張道博**)** on 2013-05-29T17:49:10-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/83531e60585482a39e36c200faa4cb022ee42442

mail with attached plot and other mails now support testing mode: #MSG-142 fixed

MSG-143 — have db destructor message handle testing mode

MSG-144 — provide source data monitoring service

The file system is continuously monitored such that the presence of source data will initiate the loading process.

**MSG-145** — test support for testing mode in notifications

#### **Comments**

Daniel Zhang (張道博) 30 May 2013 16:05

Commit made by **Daniel Zhang** (張道博) on 2013-05-30T19:04:55-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5ab379da1c6b2376ef91fce85dfe6f67a68a0d3a

reverting imports to deal with TypeError: #MSG-145 in progress

TypeError: 'LazyImporter' object is not callable

Daniel Zhang (張道博) 18 Jun 2013 15:57 Logging configuration, including that of providing notice for testing mode, is handled on a class-by-class. Therefore, issues related to logging should address specific classes.

# MSG-146 — create script for PV data loading

#### **Comments**

Daniel Zhang (張道博) 28 Jun 2013 13:06 PV data was added by Eileen.

MSG-147 — fix /src/tests/test\_\_\_\_mecoconfig.py

#### Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-05-31T18:32:58-07:00

31 May 2013 15:33

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/693c5c3b5630d69c596c08878ee47fef3ec5600a

fixed test by correcting use of debugging option: #MSG-147 fixed

# MSG-154 — drop duplicates in the event branch on insert

#### **Comments**

Daniel Zhang (張道博) 28 Jun 2013 15:15	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-28T18:14:27-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d525927d3b193e06d328005a05ffe4774fda7c85
	determining event dupes: #MSG-154 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-28T19:14:53-07:00</i>
28 Jun 2013 16:14	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/ddcc4fc153513e2c44d7a4a442c573e21e5fb332
	added event dupe dropping: #MSG-154 fixed
	Needs testing.
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-28T19:21:49-07:00</i>
28 Jun 2013 16:21	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/6a890d188d57a4216ec636ac9fb9b142bbe9b4cc
	adding additional needed items for event dupes: #MSG-154 fixed

# MSG-155 — drop duplicates in the register branch on insert

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-06-24T19:34:27-07:00</i>
24 Jun 2013 16:34	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/8df87bd63cfd56a10f626b37976d923a62dd4cc8
	detecting duplicates in the register branch: #MSG-155 In Progress
 Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-06-25T18:39:03-07:00</i>
25 Jun 2013 15:39	
	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/12ac3fbca2ac3fe8094ffac9d92091de361fea17

Daniel Zhang (張道博) 25 Jun 2013 16:48 Commit made by **Daniel Zhang** (張道博) on 2013-06-25T19:48:27-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/71fe9062e92592d6bd8c03cbb786261c5ac7d264

fixed numerous code problems: #MSG-155 In Progress

Daniel Zhang (張道博) 26 Jun 2013 16:43 Register duplicates are dropped on insert:

~/msg-data/unit-test-data\$ time python ~/dzmbp-maui-smart-grid/src/recursivelyInsertData.py \_testing > insert-log.txt 2013-06-26 16:38:53,060 - \_\_main\_\_\_ - INFO - Testing mode is ON.

2013-06-26 16:38:53,061 - mecoxmlparser - INFO - Testing Mode is ON.

Inserting data to database test meco.

Parsing XML in ./meco\_v3-energy-test-data.xml.gz. {re-dupe==>}{rd-dupe==>}{32rd,56re}(0)[125]<0rd,0re,37,37>—{0rd,0re}(0) [125]<0rd,0re,0,37>\* 2013-06-26 16:38:53,413 - mecoxmlparser - INFO - Data process count = 125. 2013-06-26 16:38:53,413 - mecoxmlparser - INFO - Reading dupe check count = 32.

# MSG-157 — fix problem where recursive insert immediately terminates upon finding duplicate data

#### Comments

Daniel Zhang (張道博) 03 Jun 2013 17:03 Tail of the insert log is:

SQL execute was successful.

table name = Interval

column name = interval id

SQL execute was successful.

SQL execute was successful.

Duplicate meter-endtime-channel exists.

SQL execute was successful.

table name = Reading

column name = reading id

SQL execute failed using select

currval(pg\_get\_serial\_sequence("Reading",'reading\_id')).

The error is: currval of sequence "reading\_id\_seq" is not yet defined in this

session

Daniel Zhang (張道博)
04 Jun 2013 14:02

Daniel Zhang (張道博)
Commit made by **Daniel Zhang** (張道博) on 2013-06-04T18:25:30-07:00
04 Jun 2013 15:25

Commit made by **Daniel Zhang** (張道博) on 2013-06-04T18:25:30-07:00
https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c84a20ec5c7558d247901f6a22cb3e4f9b858fba

recursive insert proceeds if readings dupes are immediately encountered: #MSG-157 fixed

MSG-158 — report sql failures through stderr during loading

MSG-159 — create separate plot during testing mode

#### Comments

Daniel Zhang (張道博) 12 Jun 2013 14:53	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-06-12T17:52:21-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/81f8482b06e692639b7a8508b44577fd86daf40f
	Adding support for testing mode to mecoplotting: #MSG-159 in progress
Daniel Zhang (張道博) 12 Jun 2013 16:09	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-06-12T19:09:45-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1bf4ff0ba00b4f32d3c03b719fec906656986f71
	pass testing to plotter: #MSG-159 in progress
Daniel Zhang (張道博) 22 Aug 2013 13:59	Separate plot during testing is generated.

## MSG-160 — load month-long data set

### **Comments**

Daniel Zhang (張道博)

04 Jun 2013 16:28

Results are:

O4 Jun 2013 16:28

Inserting data to database meco\_v3.

Parsing XML in ./All of May-2-1.xml.gz.
{dupe on insert==>}\*commit\*{9968}[0](14735){dupe on insert==>}\*commit\*
{9968}[1](29468){dupe on insert==>}\*commit\*{9968}[2](4
4197){dupe on insert==>}\*commit\*{9968}[3](58926){dupe on insert==>}\*commit\*{9968}[5](88384){dupe on insert==>}\*commit\*{9968}[6](103113){dupe on insert==>}\*commit\*{9968}[7](117841){dupe on insert==>}\*commit\*

{9968}[8](132570){dupe on insert==>}\*commit\*{9968}[9](147304){dupe on insert==>}\*commit\*{9968}[10](162038){dupe on insert==

\; commit\*\{9968\\[11\](176772)\{dupe on insert==>\}\; commit\*\{9968\\[12\](191502)\} {dupe on insert==>}\*commit\*{9968}[13](206232){dupe on insert==>}\*commit\*{9968}[14](220960){dupe on insert==>}\*commit\*{9968} [15](235688){dupe on insert==>}\*commit\*{9968}[16](25 0423){dupe on insert==>}\*commit\*{9968}[17](265152){dupe on insert==>}\*commit\*{9968}[18](279881){dupe on insert==>}\*commit\*{9 968}[19](294611){dupe on insert==>}\*commit\*{9968}[20](309345){dupe on insert==>}\*commit\*{9968}[21](324074){dupe on insert==> \\$\text{9968}[22](338807)\{dupe on insert==>\}\text{commit}\{9968}[23](353541) {dupe on insert==>}\*commit\*{9968}[24](368270){dupe o n insert==>}\*commit\*{9968}[25](383004){dupe on insert==>}\*commit\*{9968}[26] (397732){dupe on insert==>}\*commit\*{9968}[27](412 461){dupe on insert==>}\*commit\*{9968}[28](427189){dupe on insert==>}\*commit\*{9968}[29](441918){dupe on insert==>}\*commit\*{99 68}[30](456979){dupe on insert==>}\*commit\*{9968}[31](471708){dupe on insert==>}\*commit\*{9968}[32](486436){dupe on insert==>} **commit**{9968}[33](501165){dupe on insert==>}\*commit\*{9968}[34](515899) {dupe on insert==>}\*commit\*{9968}[35](530627){dupe on insert==>}\*commit\*{9968}[36](545356){dupe on insert==>}\*commit\*{9968}[37] (560084){dupe on insert==>}\*commit\*{2476}[38](5657 65){dupe on insert==>}\*commit\*{2476}[39](571114){dupe on insert==>}\*commit\*{2476}[40](576474){dupe on insert==>}\*commit\*{9968}[41] (591389){dupe on insert==>}\*commit\*{9968}[42](606299)\*commit\* Closing the DB connection to meco\_v3.

Inserting data to database meco\_v3.

Parsing XML in ./All of May-1-1.xml.gz. {dupe on insert==>}\*commit\*{9968}[0](14730){dupe on insert==>}\*commit\* {9968}[1](29480){dupe on insert==>}\*commit\*{9968}[2](44208){dupe on insert==>}\*commit\*{9968}[3](58936){dupe on insert==>}\*commit\*{9968}[4] (73665){dupe on insert==>}\*commit\*{9968}[5](88399){dupe on insert==>}\*commit\*{9968}[6](103128){dupe on insert==>}\*commit\*{9968}[7] (117862){dupe on insert==>}\*commit\*{9968}[8](132596){dupe on insert==>}\*commit\*{9968}[9](147325){dupe on insert==>}\*commit\*{9968}[10] (162054){dupe on insert==>}\*commit\*{9968}[12](191512){dupe on insert==>}\*commit\*{9968}[13] (206246){dupe on insert==>}\*commit\*{9968}[15](235703){dupe on insert==>}\*commit\*{9968}[16]

(250431){dupe on insert==>}\*commit\*{9968}[17](265165){dupe on insert==>}\*commit\*{9968}[18](279894){dupe on insert==>}\*commit\*{9968}[19] (294954){dupe on insert==>}\*commit\*{9968}[20](309683){dupe on insert==>}\*commit\*{9968}[21](324417){dupe on insert==>}\*commit\*{9968}[22] (339146){dupe on insert==>}\*commit\*{9968}[23](353874){dupe on insert==>}\*commit\*{9968}[24](368602){dupe on insert==>}\*commit\*{9968}[25] (383330){dupe on insert==>}\*commit\*{9968}[26](398059){dupe on insert==>}\*commit\*{9968}[27](412787){dupe on insert==>}\*commit\*{9968}[28] (427515){dupe on insert==>}\*commit\*{9968}[29](442585){dupe on insert==>}\*commit\*{9968}[30](457313){dupe on insert==>}\*commit\*{9968}[31] (472041){dupe on insert==>}\*commit\*{9968}[32](486770){dupe on insert==>}\*commit\*{9968}[33](501503){dupe on insert==>}\*commit\*{9968}[34] (516232){dupe on insert==>}\*commit\*{9968}[35](530960){dupe on insert==>}\*commit\*{9968}[36](545688){dupe on insert==>}\*commit\*{9968}[37] (560417){dupe on insert==>}\*commit\*{9968}[38](575146){dupe on insert==>}\*commit\*{9968}[39](589875){dupe on insert==>}\*commit\*{9968}[40] (604604){dupe on insert==>}\*commit\*{2476}[41](609953){dupe on insert==>}\*commit\*{2476}[42](615302){dupe on insert==>}\*commit\*{2476}[43] (620651){dupe on insert==>}\*commit\*{2488}[44](626017){dupe on insert==>}\*commit\*{2476}[45](631366){dupe on insert==>}\*commit\*{9968}[46] (646546)\*commit\*

Closing the DB connection to meco\_v3.

plotPath = /home/daniel/msg-plots

attachment = /home/daniel/msg-plots/ReadingAndMeterCounts.png

Sending multipart email.

Attaching file /home/daniel/msg-plots/ReadingAndMeterCounts.png.

Closing the DB connection to meco v3.

Closing the DB connection to meco v3.

real 29m33.394s user 4m53.446s sys 2m59.439s

No exceptions occurred.

Daniel Zhang (張道博) 04 Jun 2013 16:58 Results according to plot comparison of v3 vs v4 appear correct but the concise log dupe counts don't appear to be meaningful, being mostly the same value of 9968.

#### MSG-161 — create v4 structure

Daniel Zhang (張道博) 04 Jun 2013 16:25 Commit made by **Daniel Zhang** (張道博) on 2013-06-04T19:25:03-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c8475ed7953602dbea60b767b322975114888eec

adding meco\_v4 structure: #MSG-161 fixed

MSG-162 — insert 2013\_06\_03\_All\_of\_May\_2013 to v4

#### Comments

Daniel Zhang (張道博) 04 Jun 2013 17:01 Results are:

./All of May-2-1.xml.gz

Inserting data to database meco\_v4.

Parsing XML in ./All of May-2-1.xml.gz.

commit{0}[0](14735)\*commit\*{0}[1](29468)\*commit\*{0}[2](44197)\*commit\*{0}[3]
(58926)\*commit\*{0}[4](73655)\*commit\*{0}[5](88384)\*commit\*{0}[6]
(103113)\*commit\*{0}[7](117841)\*commit\*{0}[8](132570)\*commit\*{0}[9]
(147304)\*commit\*{0}[10](162038)\*commit\*{0}[11](176772)\*commit\*{0}[12]
(191502)\*commit\*{0}[13](206232)\*commit\*{0}[14](220960)\*commit\*{0}[15]
(235688)\*commit\*{0}[16](250423)\*commit\*{0}[17](265152)\*commit\*{0}[18]
(279881)\*commit\*{0}[19](294611)\*commit\*{0}[20](309345)\*commit\*{0}[21]
(324074)\*commit\*{0}[22](338807)\*commit\*{0}[23](353541)\*commit\*{0}[24]
(368270)\*commit\*{0}[25](383004)\*commit\*{0}[26](397732)\*commit\*{0}[27]
(412461)\*commit\*{0}[28](427189)\*commit\*{0}[29](441918)\*commit\*{0}[30]
(456979)\*commit\*{0}[31](471708)\*commit\*{0}[32](486436)\*commit\*{0}[33]
(501165)\*commit\*{0}[37](560084)\*commit\*{0}[38](565765)\*commit\*{0}[39]
(571114)\*commit\*{0}[40](576474)\*commit\*{0}[41](591389)\*commit\*{0}[42]
(606299)\*commit\*

Wall time = 805.68 seconds. ./All of May-1-1.xml.gz

Inserting data to database meco v4.

Parsing XML in ./All of May-1-1.xml.gz. **commit**{0}[0](14730)\*commit\*{0}[1](29480)\*commit\*{0}[2](44208)\*commit\*{0}[3]
(58936)\*commit\*{0}[4](73665)\*commit\*{0}[5](88399)\*commit\*{0}[6]
(103128)\*commit\*{0}[7](117862)\*commit\*{0}[8](132596)\*commit\*{0}[9]
(147325)\*commit\*{0}[10](162054)\*commit\*{0}[11](176783)\*commit\*{0}[12]

(191512)\*commit\*{0}[13](206246)\*commit\*{0}[14](220974)\*commit\*{0}[15] (235703)\*commit\*{0}[16](250431)\*commit\*{0}[17](265165)\*commit\*{0}[18] (279894)\*commit\*{0}[19](294954)\*commit\*{0}[20](309683)\*commit\*{0}[21] (324417)\*commit\*{0}[22](339146)\*commit\*{0}[23](353874)\*commit\*{0}[24] (368602)\*commit\*{0}[25](383330)\*commit\*{0}[26](398059)\*commit\*{0}[27] (412787)\*commit\*{0}[28](427515)\*commit\*{0}[29](442585)\*commit\*{0}[30] (457313)\*commit\*{0}[31](472041)\*commit\*{0}[32](486770)\*commit\*{0}[33] (501503)\*commit\*{0}[34](516232)\*commit\*{0}[35](530960)\*commit\*{0}[36] (545688)\*commit\*{0}[37](560417)\*commit\*{0}[38](575146)\*commit\*{0}[39] (589875)\*commit\*{0}[40](604604)\*commit\*{0}[41](609953)\*commit\*{0}[42] (615302)\*commit\*{0}[43](620651)\*commit\*{0}[44](626017)\*commit\*{0}[45] (631366)\*commit\*{0}[46](646546)\*commit\*

Wall time = 968.81 seconds.

Processed file count is 2.

### MSG-163 — add timestamp to plot

#### **Comments**

Daniel Zhang (張道博) 11 Jun 2013 16:37 Commit made by **Daniel Zhang (**張道博) on 2013-06-11T19:37:38-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/82c6c188350317fd2ca176dc9a3efbfd43dc8064

added timestamp to plot: #MSG-163 fixed

#### MSG-165 — add test for static meter record loading

#### **Comments**

Daniel Zhang (張道博) 22 Aug 2013 13:57 No longer loading static meter records.

#### MSG-166 — add test for static location record loading

#### Comments

Daniel Zhang (張道博) 22 Aug 2013 13:58 No longer loading static location records.

MSG-167 — eliminate connections to the production DB in testing mode

For reference:

Testing mode is ON.

Email will be sent.

Inserting data to database test\_meco.

Parsing XML in ./meco\_v3-energy-test-data.xml.gz. {0}[0](126)\*commit\* Closing the DB connection to test\_meco.

Closing the DB connection to meco\_v4. plotPath = /home/daniel/msg-plots attachment = /home/daniel/msg-plots/ReadingAndMeterCounts.png Sending multipart email. Notification testing mode is ON. Attaching file /home/daniel/msg-plots/ReadingAndMeterCounts.png.

No exceptions occurred.

Closing the DB connection to meco\_v4.

0m5.177s real user 0m0.628s sys 0m0.132s

#### Comments

Daniel Zhang (張道博) 05 Aug 2013 14:10

This is not a problem at this time.

## MSG-168 — add log legend

### Comments

Daniel Zhang (張道博) 05 Jun 2013 17:35	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-06-05T20:34:05-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/42794135586fb83fe3a182de5826d913e00be48c
	added log legend: #MSG-168 fixed
Daniel Zhang (張道博) 10 Jun 2013 13:54	Commit made by <b>Daniel Zhang (</b> 張道博) on 2013-06-10T16:52:32-07:00
	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart- Grid/commit/0833cdb491b22f0c642cd1eb5b087c22fb85e979

MSG-169 — add email and testing command-line arguments to static meter record loading

### MSG-170 — add email and testing command-line arguments to static location record loading

#### **Comments**

Daniel Zhang (張道博) 22 Aug 2013 13:59 No longer loading static location records.

### MSG-171 — add email and testing command-line arguments to weather data loading

#### Comments

Daniel Zhang (張道博) 09 Jul 2013 15:55 These arguments are supported in insertCompressedWeatherData.py.

### MSG-172 — add last date test for weather data loading

#### Comments

Daniel Zhang (張道博) 30 Jul 2013 15:18 Commit made by **Daniel Zhang (**張道博) on *2013-07-30T18:18:05-07:00* 

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a9ad32a871c9e869695933118b36c73962ede70d

adding test stub: #MSG-172 In Progress

Daniel Zhang (張道博) 30 Jul 2013 16:56 Commit made by **Daniel Zhang (**張道博**)** on 2013-07-30T19:56:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/95cd03a2d1737a9abec56d01a8e1c0827be9a3f1

filling out last date test; renamed db connector: #MSG-172 In Progress

Daniel Zhang (張道博) 31 Jul 2013 14:38 Commit made by **Daniel Zhang** (張道博) on 2013-07-31T17:38:00-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a540a8bb94b5f1888ec6778d910a9358c6a11626

added test for last date: #MSG-172 fixed

# MSG-173 — cleanup views

#### Comments

Daniel Zhang (張道博) 06 Jun 2013 16:46 Commit made by **Daniel Zhang** (張道博) on 2013-06-06T19:46:42-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5a6ab85ef69977a3269de83f2fa6725a6f2770ef

removed view with camel case name: #MSG-173 fixed

# MSG-174 — Update dependencies in the documentation

#### Comments

Daniel Zhang (張道博) 11 Jun 2013 13:19 Fixed in https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/38420a8dca2e8f99162ee4dda1461238357b49ee.

### MSG-176 — support processing of NOAA weather data

#### **Comments**

Daniel Zhang (張道博) 02 Jul 2013 17:13 Commit made by **Daniel Zhang** (張道博) on 2013-07-02T20:13:13-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/13d8d57f8f8346944eef7be0a8c2b992454d19be

setting up weather data loading: #MSG-176 In Progress

#MSG-178 In Progress #MSG-222 In Progress

Daniel Zhang (張道博) 03 Jul 2013 17:27 Commit made by **Daniel Zhang** (張道博) on 2013-07-03T20:26:56-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/82231b6c03b516801d36703ed5ea9708de5820e5

setting up weather data loading: #MSG-176 In Progress

#MSG-178 In Progress #MSG-222 In Progress

Daniel Zhang (張道博) 03 Jul 2013 17:47 Weather data insertion is enabled by insertCompressedWeatherData.py.

MSG-177 — support weather data plot notification

MSG-178 — provide class for duplicate checking during weather data loading

#### **Comments**

Daniel Zhang (張道博) 02 Jul 2013 17:13 Commit made by **Daniel Zhang** (張道博) on 2013-07-02T20:13:13-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/13d8d57f8f8346944eef7be0a8c2b992454d19be

setting up weather data loading: #MSG-176 In Progress

#MSG-178 In Progress #MSG-222 In Progress

Daniel Zhang (張道博) 03 Jul 2013 17:27 Commit made by **Daniel Zhang** (張道博) on 2013-07-03T20:26:56-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/82231b6c03b516801d36703ed5ea9708de5820e5

setting up weather data loading: #MSG-176 In Progress

#MSG-178 In Progress #MSG-222 In Progress

Daniel Zhang (張道博) 03 Jul 2013 17:45 Support is provided by MSGWeatherDataDupeChecker.

### MSG-179 — Add database name to plot

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang** (張道博) on 2013-06-11T20:05:32-07:00 11 Jun 2013 17:05 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/23c73187a02035fadd8b40ac8b0fe609343bcd44 added db name to plots: #MSG-179 fixed Daniel Zhang (張道博) Commit made by **Daniel Zhang** (張道博) on 2013-06-12T16:23:25-07:00 12 Jun 2013 13:23 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fa6c7c152bfa544ec8b78f223882c8f4ecf86157 fixed argument count: #MSG-179 fixed Daniel Zhang (張道博) Commit made by **Daniel Zhang** (張道博) on 2013-06-12T18:51:18-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-12 Jun 2013 15:51 Grid/commit/93054ceb50e7f1e240a2be991a3bb2e7d0e5dd41

adding dbname to plot: #MSG-179 fixed

# MSG-181 — Create test data set with a missing interval

#### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on *2013-06-12T17:53:28-07:00* https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/2961371e1d300bd441def814566ccddb1e111851

created test data set with missing interval: #MSG-181 fixed

# MSG-183 — fix email setting during testing for recursive insert

Email is getting sent without the email option.

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-06-12T17:33:35-07:00

12 Jun 2013 14:33

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d7757880a1c8a04a7318e9075d7ecaace609b3d0

added email check to fail case: #MSG-183 fixed

**MSG-184** — fix display of 'using database' on recursive insert using --testing Display is incorrect:

Using database meco\_v4.

Testing mode is ON.

Recursively inserting data to the database named test\_meco.

. . .

Found XML files that are not gzip compressed.

Unable to proceed.

Sending email notifications.

Closing the DB connection to meco\_v4.

real 0m2.729s user 0m0.272s sys 0m0.032s

#### **Comments**

Daniel Zhang (張道博) Not a problem at this time. 22 Aug 2013 13:54

MSG-185 — be able to generate plots from the command-line using mecoplotting
 MSG-186 — support db name adding to plot when running mecoplotting as script

### **Comments**

Daniel Zhang (張道博) Support is provided for in #MSG-179. 12 Jun 2013 15:51

MSG-188 — reduce quantity of db connections

Example:

recursivelyInsertData.py –testing > insert-log.txt Using database meco\_v4. Opened DB connection to meco\_v4.

Using database meco\_v4.

Opened DB connection to meco v4.

Opened DB connection to meco\_v4.

Closing the DB connection to meco\_v4.

Using database meco\_v4.

Opened DB connection to meco\_v4.

Opened DB connection to meco v4.

Testing mode is ON.

Testing Mode is ON.

Testing Mode is ON.

Using database test\_meco.

Opened DB connection to test\_meco.

Opened DB connection to test\_meco.

Inserting data to database test\_meco.

Parsing XML in ./meco\_v3-energy-test-data\_with\_missing\_interval.xml.gz. {dupe on insert==>}{28}[0][121]\*

Closing the DB connection to test\_meco.

Using database meco\_v4.

Opened DB connection to meco\_v4.

Testing Mode is ON.

Using database test\_meco.

Opened DB connection to test\_meco.

Opened DB connection to test meco.

Closing the DB connection to test\_meco.

Closing the DB connection to meco\_v4.

Closing the DB connection to meco\_v4.

Closing the DB connection to meco\_v4.

real 0m9.645s user 0m1.532s sys 0m0.100s

#### **Comments**

Daniel Zhang (張道博) 14 Jun 2013 14:49	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-06-14T17:49:14-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e578ed0b7010f2619ebf0f8af5aa1887d74e2eec
	migrating to logging module: #MSG-188 In Progress
Daniel Zhang (張道博)	Less DB connections are now reported. Individual classes establish their own

# 18 Jun 2013 15:54

connections and should be addressed individually.

# MSG-189 — adapt mecologger to logging

Daniel Zhang (張道博) 14 Jun 2013 13:36	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-14T16:33:38-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/74bb59e1d9534ed4085f26070d10d4d9ee546417
	adding logger to mecologging: #MSG-189 in progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-14T17:48:28-07:00</i>
14 Jun 2013 14:49	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/cc9d336c108eab97a450e3a3f8d8a109134fd03f
	added explicit flush but it may not be necessary: #MSG-189 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-14T18:00:53-07:00</i>
14 Jun 2013 15:01	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/46f87e4e04fff8258d2b11d977a13d9d60a02f15
	changing logging idiom to self reported class name: #MSG-189 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-14T18:53:02-07:00</i>

14 Jun 2013 15:53

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ab20eb9dfa88dba52f962d8ce3cb3796b4c129ba

adding multiple switches to logging: #MSG-189 In Progress

Logging level can be set per item. It is also set by class and it defaults to Silent.

Daniel Zhang (張道博) 18 Jun 2013 15:52

MECOLogger is in place and available throughout the project using the logging module. Individual classes should be migrated to MECOLogger for their logging needs.

### MSG-191 — create db dump script

#### Comments

Daniel Zhang (張道博) 07 Aug 2013 16:28

Commit made by **Daniel Zhang (**張道博) on 2013-08-07T19:28:30-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/883f86d1d00721fbaca16c73b87c6e85963549a9

adding db dump script: #MSG-191 fixed

### MSG-192 — regenerate meco v4 to clean up views

#### Comments

Daniel Zhang (張道博) 07 Aug 2013 16:05

This is for meco\_v4.

MSG-193 — report count of readings inserted before the last reading Need last end time and last MeterData creation time.

#### Comments

Daniel Zhang (張道博) 20 Jun 2013 15:37

#MSG-208 may be sufficient.

MSG-194 — view for energy and voltages for houses without pv

#### **Comments**

Daniel Zhang (張道博) 15 Jun 2013 01:57

Commit made by **Daniel Zhang** (張道博) on 2013-06-15T04:57:43-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8257179e38821f77cf433f454fa88ffcb01a9e6b

added view for energy and voltages for houses without pv: #MSG-194 fixed

Daniel Zhang (張道博) 15 Jun 2013 01:59

```
(cost=256592.58..257706.53 rows=26940 width
GroupAggregate
     Sort (cost=256592.58..256677.03 rows=33782 width=46)
       Sort Key: "Interval".end_time
        Sort Method: external merge Disk: 166688kB
           Hash Join (cost=9431.69..253012.00 rows=33782
              Hash Cond: ("Reading".interval id = "Interval
                 Seq Scan on "Reading" (cost=0.00..193374
                    Filter: ((channel = 1::smallint) OR (ch
                 Hash (cost=8802.15..8802.15 rows=29563 w
                    Buckets: 2048 Batches: 256 (originally
                    -> Nested Loop (cost=53.25..8802.15 r
                             Hash Join
                                        (cost=53.25..102.3
                                Hash Cond: ("IntervalReadDa
                                -> Seg Scan on "IntervalRe
                                -> Hash (cost=52.96..52.9
                                     Buckets: 1024 Batche
                                      -> Nested Loop (cos
                                            -> Hash Anti J
                                                 Hash Cond
                                                    Seq S
                                                     Hash
                                                       Buc
                                               Bitmap Heap
```

Daniel Zhang (張道博) 15 Jun 2013 02:02 Commit made by **Daniel Zhang** (張道博) on 2013-06-15T05:02:09-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/be944a4a8d29e2300f2f46bda2b3e3c9760d09a8

adding comment: #MSG-194 fixed

Daniel Zhang (張道博) 17 Jun 2013 00:30 Corrected in #MSG-195.

MSG-195 — provide corrected view for energy and voltages for houses without pv

### **Comments**

Daniel Zhang (張道博) 17 Jun 2013 00:28 Commit made by **Daniel Zhang** (張道博) on 2013-06-17T03:28:16-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/883ef7967464c3d5d3f31cbe38182a8ff21c8efd

corrected view to show all houses with correct readings: #MSG-195 fixed

Daniel Zhang (張道博) 17 Jun 2013 00:29

```
Subguery Scan on dz energy voltages for houses without pv
     GroupAggregate (cost=256592.58..257774.95 rows=33782
                 (cost=256592.58..256677.03 rows=33782 wid
           Sort
             Sort Key: "LocationRecords".device_util_id,
             Sort Method: external merge Disk: 166688kB
                Hash Join (cost=9431.69..253012.00 rows=
                   Hash Cond: ("Reading".interval_id = "In
                       Seq Scan on "Reading" (cost=0.00..
                         Filter: ((channel = 1::smallint)
                       Hash (cost=8802.15..8802.15 rows=2
                         Buckets: 2048 Batches: 256 (orig
                         -> Nested Loop (cost=53.25..880
                                  Hash Join (cost=53.25.
                                     Hash Cond: ("Interval
                                     -> Seg Scan on "Inte
                                     -> Hash (cost=52.96
                                           Buckets: 1024
                                           -> Nested Loop
                                                     Hash
                                                       Has
                                                       ->
                                                       ->
```

MSG-196 — add option to report element count only during recursive insert

#### Comments

Daniel Zhang (張道博) Current reporting is aligning exactly. 20 Jun 2013 16:55

**MSG-197** — Prevent timeout during automated DB operations

MSG-199 — change testing mode output to use logging

Example:

time python -u ~/dzmbp-maui-smart-grid/src/recursivelyInsertData.py –testing > insert-log.txt Testing mode is ON.

Testing Mode is ON.

Inserting data to database test meco.

MSG-200 — determine problem for duplicates not matching during successive loading of the same set

Current situation:

Insert to empty:

==========

Inserting data to database test meco.

Parsing XML in ./20130304-da4c4461-c0ef-4b9b-9c19-541ee55e2c17-1-1.xml.gz.

**{0}[0][3431]**{0}[1][6877]\*{0}[2][17246]\*{0}[3][20682]\*{0}[4][24128]\*{0}[5][27564]{dupe on insert==>}\*{1472}[6] [36301]\*{0}[7][39736]\*{0}[8][46608]\*{0}[9][50043]\*{0}[10][53478]\*{0}[11][56913]\*{0}[12][63788]\*{0}[13][67223]\* {0}[14][70658]\*{0}[15][74229]\*{0}[16][77675]\*{0}[17][81126]\*{0}[18][84562]\*{0}[19][87997]\*{0}[20][91432]\*{0}[21] [94867]\*{0}[22][98302]\*{0}[23][101737]\*{0}[24][105172]\*{0}[25][108686]\*{0}[26][112121]\*{0}[27][115567]\*{0}[28] [119014]\*{0}[29][122461]\*{0}[30][125896]\*{0}[31][129326]\*

real 5m27.510s user 1m4.592s sys 1m23.421s

Insert to loaded:

===========

Inserting data to database test\_meco.

Parsing XML in ./20130304-da4c4461-c0ef-4b9b-9c19-541ee55e2c17-1-1.xml.gz. {dupe on insert==>}\*{2680}[0][3431]{dupe on insert==>}\*{2684}[1][6877]{dupe on insert==>}\*{8052}[2][17246] {dupe on insert==>}\*{2684}[3][20682]{dupe on insert==>}\*{2684}[4][24128]{dupe on insert==>}\*{2684}[5] [27564]{dupe on insert==>}\*{6840}[6][36301]{dupe on insert==>}\*{2684}[7][39736]{dupe on insert==>}\*{5368} [8][46608]{dupe on insert==>}\*{2684}[9][50043]{dupe on insert==>}\*{2684}[10][53478]{dupe on insert==>}\*{2684}[11][56913]{dupe on insert==>}\*{2684}[12][63788]{dupe on insert==>}\*{2684}[13][67223]{dupe on insert==>}\*{2684}[14][70658]{dupe on insert==>}\*{2684}[15][74229]{dupe on insert==>}\*{2684}[16][77675] {dupe on insert==>}\*{2684}[17][81126]{dupe on insert==>}\*{2684}[18][84562]{dupe on insert==>}\*{2684}[19][87997]{dupe on insert==>}\*{2684}[20][91432]{dupe on insert==>}\*{2684}[21][94867]{dupe on insert==>}\*{2684}[22][98302]{dupe on insert==>}\*{2684}[23][101737]{dupe on insert==>}\*{2684}[27][115567] {dupe on insert==>}\*{2684}[28][119014]{dupe on insert==>}\*{2684}[29][122461]{dupe on insert==>}\*{2684}[30][125896]{dupe on insert==>}\*{2680}[31][129326]{dupe on insert==>}\*

real 4m13.370s user 0m49.435s sys 0m33.826s

### Comments

Daniel Zhang (張道博) 18 Jun 2013 17:35 Commit made by **Daniel Zhang (**張道博) on 2013-06-18T20:33:36-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/dec003af970ace6bc642f10ec9d58a15f0351ed8

	debugging insert discrepancy: #MSG-200 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-18T20:50:42-07:00</i>
18 Jun 2013 18:01	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/509e62a373801cf244892a1612721eaa5f29d65a
	correcting assert; adding insert count: #MSG-200 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-18T21:01:29-07:00</i>
18 Jun 2013 18:01	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/17b5c0d6463a3a155c2b600a0dd9b6d199cbe83d
	identified floating point equality problem: #MSG-200 fixed
Daniel Zhang (張道博) 18 Jun 2013 18:11	Also dupe count != data process count due to data types other than Reading

# MSG-201 — fix floating point equality check in mecodupecheck

### **Comments**

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-06-19T19:30:10-07:00</i>
19 Jun 2013 16:30	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/b564dcfb0247f9f8cd4edbdc3bfa8c16fb9e2f7c
	debugging dupe checking: #MSG-201 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-19T19:52:35-07:00</i>
19 Jun 2013 16:54	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/4ccc7d60779b2ab2e847829593d66a589969bcb1
	floating point equality works: #MSG-201 fixed
	Added DEBUG logging option.

# MSG-202 — clean up unused views in meco\_v3

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on 2013-07-18T20:27:10-07:00
18 Jul 2013 17:27	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/ec9e0f809a36b7392ddac4da9ef1c9ed48809d0b
	deprecating unused views: #MSG-202 In Progress

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-07-23T19:57:18-07:00</i>
23 Jul 2013 16:57	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/924e3ea8882ab79139d1dcc6cba17a0f069b029a
	deprecating unused/irrelevant views: #MSG-202 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-07T16:08:27-07:00</i>
07 Aug 2013 13:08	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/711560baa362213872800e31356268e4d0be5c25
	removing deprecated views: #MSG-202 fixed
	* PVServicePointIDs has changes.

**MSG-203** — determine why insert count vs element count is initially one off Example:

Parsing XML in ./20130304-da4c4461-c0ef-4b9b-9c19-541ee55e2c17-1-1.xml.gz.  $\{0\}[0][3431] < 3430 > *\{0\}[1][6877] < 3446 > *\{0\}[2][17246] < 10368 > *\{0\}[3][20682] < 3435 > *\{0\}[4][24128] < 3446 > *\{0\}[5][27564] < 3435 > *\{0\}[1][6877] < 3446 > *\{0\}[2][17246] < 10368 > *\{0\}[3][20682] < 3435 > *\{0\}[4][24128] < 3446 > *\{0\}[5][27564] < 3435 > *\{0\}[10][53478] < 3435 > *\{0\}[11][56913] < 3435 > *\{0\}[12][63788] < 6875 > *\{0\}[13][67223] < 3435 > *\{0\}[14][70658] < 3435 > *\{0\}[15][74229] < 3571 > *\{0\}[16][77675] < 3446 > *\{0\}[17][81126] < 3446 > *\{0\}[18][84562] < 3435 > *\{0\}[19][87997] < 3435 > *\{0\}[20][91432] < 3435 > *\{0\}[21][94867] < 3435 > *\{0\}[22][98302] < 3435 > *\{0\}[23][101737] < 3435 > *\{0\}[24][105172] < 3435 > *\{0\}[25][108686] < 3514 > *\{0\}[26][112121] < 3435 > *\{0\}[27][115567] < 3446 > *\{0\}[28][119014] < 3446 > *\{0\}[29][122461] < 3446 > *\{0\}[30][125896] < 3435 > *\{0\}[31][129326] < 3430 > *\{0\}[32][136464] < 0 > *$ 

2013-06-19 16:55:18,541 - mecoxmlparser - INFO - Data process count = 136444.

#### **Comments**

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-06-19T20:23:28-07:00</i>
19 Jun 2013 17:23	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/29e21fd761f91cdd9e28ca4c6507afc2337ebb27
	corrected by changing counter position: #MSG-203 fixed

Daniel Zhang (張道博) 19 Jun 2013 18:35	Non-insert elements were being included in the count.
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博) on <i>2013-06-19T21:39:18-07:00</i>
19 Jun 2013 18:39	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/19365ebb9ef670e9110d512d138ac45812eba57a
	insert count matches process for insert element count: #MSG-204 fixed
Daniel Zhang (張道博) 19 Jun 2013 18:39	Parsing XML in ./20130304-da4c4461-c0ef-4b9b-9c19-541ee55e2c17-1-1.xml.gz.
	{0}(0)[3430]<3430,3430>*{0}(1)[6876]<3446,6876>*{0}(2)[17244]
	<10368,17244>*{0}(3)[20679]<3435,20679>*{0}(4)[24125]<3446,24125>*{0}(5)
	[27560]<3435,27560>*{dupe on insert==>}{1472}(6)[36294]<7262,34822>*{0}
	(7)[39729]<3435,38257>*{0}(8)[46601]<6872,45129>*{0}(9)[50036]
	<3435,48564>*{0}(10)[53471]<3435,51999>*{0}(11)[56906]<3435,55434>*{0}
	(12)[63781]<6875,62309>*{0}(13)[67216]<3435,65744>*{0}(14)[70651]
	<3435,69179>*{0}(15)[74222]<3571,72750>*{0}(16)[77668]<3446,76196>*{0}
	(17)[81114]<3446,79642>*{0}(18)[84549]<3435,83077>*{0}(19)[87984]
	<3435,86512>*{0}(20)[91419]<3435,89947>*{0}(21)[94854]<3435,93382>*{0}
	(22)[98289]<3435,96817>*{0}(23)[101724]<3435,100252>*{0}(24)[105159]
	<3435,103687>*{0}(25)[108673]<3514,107201>*{0}(26)[112108]
	<3435,110636>*{0}(27)[115554]<3446,114082>*{0}(28)[119000]
	<3446,117528>*{0}(29)[122446]<3446,120974>*{0}(30)[125881]
	<3435,124409>*{0}(31)[129311]<3430,127839>*{0}(32)[136444]<0,134972>*
	2013-06-19 18:38:32,359 - mecoxmlparser - INFO - Data process count = 136444.
	2013-06-19 18:38:32,359 - mecoxmlparser - INFO - Data process count =
	136444.
	2013-06-19 18:38:32,359 - mecoxmlparser - INFO - Dupe check count =
	106140.
	2013-06-19 18:38:32,359 - mecoxmlparser - INFO - Dupe check count =
	106140.
	real 3m45.605s
	user 0m51.879s
	sys 0m8.873s

MSG-205 - update data insert documentation

MSG-206 — rewrite location records

Daniel Zhang (張道博) Loading static location record data in file 01e25a6c-95cf-4741-ac63-

20 Jun 2013 15:28 f7df530808e2-LOCATION.tsv to database meco\_v3.

Processed 97 lines.

Finished inserting location records.

### MSG-207 — rewrite meter records

#### Comments

Daniel Zhang (張道博) Loading static meter record data in file 01e25a6c-95cf-4741-ac63-

20 Jun 2013 15:29 f7df530808e2-METER.tsv to database meco\_v3.

Processed 99 lines.

### **MSG-208** — count inserted readings separately

#### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-06-20T19:19:50-07:00

20 Jun 2013 16:20 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/e790cef5c147cb6214827b00edf6879f50ea1ecc

added separate readings insert count; updated log legend: #MSG-208 fixed

### MSG-211 — Provide separate script-based method of plotting

#### Comments

Daniel Zhang (張道博) Script-based plotting is not needed at this time.

07 Aug 2013 16:06

### MSG-212 — determine duplicate register records

#### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-06-24T19:13:01-07:00

24 Jun 2013 16:13 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/d82f412df3a2dd4c5ebf7cd50374f1a6d2580065

added view to count register branch duplicates: #MSG-212 fixed

### MSG-213 — eliminate duplicate log messages

#### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-06-26T19:40:38-07:00

26 Jun 2013 16:40 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

#### Grid/commit/4973d7f77426106911c09ae9512892e298c4ae77

duplicate logging output is fixed by explicitly handling the stream handler: #MSG-213 fixed

### MSG-214 — add count of register duplicates to concise log

#### Comments

Daniel Zhang (張道博) 26 Jun 2013 13:46 Commit made by **Daniel Zhang (**張道博) on 2013-06-26T16:45:52-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f616051190191f6892adc5c33db1f3179ac5d0b2

Register duplicates are added to the concise log: #MSG-214 fixed

### **MSG-215** — determine remaining dupes

37 are dupes:

Parsing XML in ./meco\_v3-energy-test-data.xml.gz. {re-dupe==>}{rd-dupe==>}{32rd,56re}(0)[125]<0rd,0re,37,37>—{0rd,0re}(0)[125]<0rd,0re,0,37>\*

#### **Comments**

Daniel Zhang (張道博) 26 Jun 2013 23:25 Remaining dupes are attached.

MSG-217 — have the capability to remove register branches that do not have register data

MSG-218 — have the capability to remove reading branches that do not have reading data

MSG-219 — have the capability to remove event branches that do not have event data

MSG-220 — automatically obtain weather data

#### Comments

Daniel Zhang (張道博) 01 Jul 2013 17:18 Commit made by **Daniel Zhang (**張道博**)** on 2013-07-01T20:18:25-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7399cd22fb82b843ec5cbc3cadd581f7294caa5b

national weather data is retrieved: #MSG-220 fixed

### MSG-222 — support extract of local climate data

#### **Comments**

Daniel Zhang (張道博) 02 Jul 2013 17:13 Commit made by **Daniel Zhang (**張道博) on 2013-07-02T20:13:13-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

#### Grid/commit/13d8d57f8f8346944eef7be0a8c2b992454d19be

setting up weather data loading: #MSG-176 In Progress

#MSG-178 In Progress #MSG-222 In Progress

Daniel Zhang (張道博) 03 Jul 2013 17:27 Commit made by **Daniel Zhang (**張道博) on 2013-07-03T20:26:56-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/82231b6c03b516801d36703ed5ea9708de5820e5

setting up weather data loading: #MSG-176 In Progress

#MSG-178 In Progress #MSG-222 In Progress

Daniel Zhang (張道博) 03 Jul 2013 17:47

Local climate data is extracted during insertion.

#### MSG-224 — provide parsing of noaa weather data

#### **Comments**

Daniel Zhang (張道博) 04 Jul 2013 16:01 Commit made by **Daniel Zhang (**張道博) on 2013-07-04T19:01:33-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/20d69e9e64495fc213cd63a4d304b6430a702020

weather data is returned in-memory: #MSG-224 fixed

### MSG-225 — provide duplicate checking for noaa weather data

### Comments

Daniel Zhang (張道博) 09 Jul 2013 17:27 Commit made by **Daniel Zhang** (張道博) on 2013-07-09T20:26:59-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f32d3eebf8c65f90e25d7e5603d6cb01723c92cf

dupes are dropped: #MSG-225 fixed

### MSG-226 — be able to insert parsed weather data to the db

#### Comments

Daniel Zhang (張道博) 05 Jul 2013 17:56 Commit made by **Daniel Zhang** (張道博) on 2013-07-05T20:56:09-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4e333aa05ef65a25b1be3e071ebf1ef6f9cf5272

putting data into insertable form: #MSG-226 In Progress

Daniel Zhang (張道博) 08 Jul 2013 15:45 Commit made by **Daniel Zhang** (張道博) on 2013-07-08T18:44:53-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/1e1d93fe429fed800d221aba94458260ea42ceeb

parsed data is insertable: #MSG-226 fixed

## MSG-227 — convert in-memory parsing to dict format

#### **Comments**

Daniel Zhang (張道博) 05 Jul 2013 16:13 Commit made by **Daniel Zhang (**張道博) on 2013-07-05T19:13:07-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d153118279a3896416787eb3e495541f32800077

converted to dict structure: #MSG-227 fixed

### MSG-228 — set primary key on noaa table

#### **Comments**

Daniel Zhang (張道博) 08 Jul 2013 17:12 Commit made by **Daniel Zhang** (張道博) on 2013-07-08T20:12:30-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ee53a8e2e9d75e87ffcb9d9a98b9d553dd869322

adding pkwy; adding tz to timestamp: #MSG-228 fixed

Daniel Zhang (張道博) 08 Jul 2013 19:09 Commit made by **Daniel Zhang (**張道博) on 2013-07-08T22:08:55-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/44c7544be765c3bba939db6908e6acf8d30e3d48

pkwy set to wban-datetime-record\_type: #MSG-228 fixed

Tested using hourly data for 2012-01 to 2013-07.

Daniel Zhang (張道博) 08 Jul 2013 19:11 Commit made by **Daniel Zhang (**張道博**)** on 2013-07-08T22:10:58-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f7c80a50b75c12f065326e71fd9549254b85b6db

pkey set to wban-datetime-record\_type: #MSG-228 fixed

Tested with 2012-01 to 2013-07 hourly data.

#### MSG-229 — test use of tz in MeterData

#### Comments

Daniel Zhang (張道博) Decided to not use tz in meter data at this time. 22 Jul 2013 13:45

# MSG-230 — support weather data loading notifications

- Report records loaded.
- · Report time intervals loaded.

#### **Comments**

Daniel Zhang (張道博) 11 Jul 2013 17:16	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-07-11T20:16:33-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2d9a31634103f06531ffa14afb273cdb60efee32
	return date times to be used for interval calcs: #MSG-230 In Progress
Daniel Zhang (張道博) 12 Jul 2013 17:40	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-07-12T20:40:19-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/dda72b960020d87b5e443c05941ad0bc0930642e
	days are reported for weather loading: #MSG-230 fixed

### MSG-232 — create location history table

#### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-07-16T17:59:43-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d85db14f6ceb50df012a90787ea2b6d522080556 adding meter location history table: #MSG-232 fixed

# MSG-233 — isolate days during weather data loading notifications

Daniel Zhang (張道博) 15 Jul 2013 14:46	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-07-15T17:46:38-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5d31d79fa77347b033ac8b021dd4e9bb8784a7a1
	datetimes are grouped by day: #MSG-233 fixed
Daniel Zhang (張道博)	Days are not being grouped.

15 Jul 2013 15:12

Daniel Zhang (張道博) 15 Jul 2013 15:16 Commit made by **Daniel Zhang** (張道博) on 2013-07-15T18:16:38-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bba07b4403c749e771800fa481dface13d4de1c0

days are grouped: #MSG-233 fixed

MSG-234 — fix assertion error in time util during loading of actual data

... line 39, in reportOfDays

assert type(day) is dt.datetime, "Day should be type datetime."

AssertionError: Day should be type datetime.

#### **Comments**

Daniel Zhang (張道博) 15 Jul 2013 15:04 Commit made by **Daniel Zhang** (張道博) on 2013-07-15T18:03:27-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d2ec223c423fef92fc71c2a96216d9f96bbd9bd1

correctly submitting datetime type: #MSG-234 fixed

### MSG-235 — fix smtp error

... line 150, in sendMailWithAttachments

self.config.configOptionValue('Notifications', 'email smtp server'))

File "/usr/lib/python2.7/smtplib.py", line 249, in \_\_init\_\_

(code, msg) = self.connect(host, port)

File "/usr/lib/python2.7/smtplib.py", line 309, in connect

self.sock = self.\_get\_socket(host, port, self.timeout)

File "/usr/lib/python2.7/smtplib.py", line 284, in \_get\_socket

return socket.create\_connection((port, host)

### , timeout)

File "/usr/lib/python2.7/socket.py", line 553, in create\_connection

for res in getaddrinfo(host, port, 0, SOCK\_STREAM):

socket.gaierror: [Errno -2] Name or service not known

### Comments

Daniel Zhang (張道博) 15 Jul 2013 15:18 Error is due to timeout during connection to the SMTP server.

MSG-236 — load weather data to meco v3

Daniel Zhang (張道博) 15 Jul 2013 15:35 Data is loaded.

Processed 546 days between 2012-01-01 to 2013-06-29, inclusive.

### MSG-237 — remove unnecessary weather data

#### **Comments**

Daniel Zhang (張道博) 15 Jul 2013 16:43 Commit made by **Daniel Zhang** (張道博) on 2013-07-15T19:26:35-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4b2be0d27db6d5e8988dde3ab550c45ea1d30c56

restricting retrieval: #MSG-237 fixed

### MSG-238 — prevent retrieval of existing weather data

### **Comments**

Daniel Zhang (張道博) 23 Jul 2013 15:47 Commit made by **Daniel Zhang** (張道博) on 2013-07-23T18:47:36-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6379354e64956d0f41f96a923a186b380ea74eaa

separating retrieve: #MSG-238 In Progress

Daniel Zhang (張道博) 23 Jul 2013 16:22 Commit made by **Daniel Zhang** (張道博) on 2013-07-23T19:22:32-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/dd63f24709a1b02dbcc0e77cab8e67e1bd86b306

existing files are not retrieved: #MSG-238 fixed

## MSG-239 — handle incomplete retrieval

... line 39, in downloadWeatherData curl.perform()

pycurl.error: (6, "Couldn't resolve host 'cdo.ncdc.noaa.gov")

#### Comments

Daniel Zhang (張道博) 06 Aug 2013 16:51

Commit made by **Daniel Zhang (**張道博**)** on 2013-08-06T19:51:28-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ef56f405697c90ca8c632e1aecc6f4cf8873f2d9

added error checking to downloading: #MSG-239 fixed

# MSG-240 — insert meter location history records

#### Comments

Daniel Zhang (張道博) 16 Jul 2013 17:09 Loading Meter Location History data in file mecoMeterHistory20130715.txt to database meco v3.

Processed 117 lines.

MSG-241 — adapt houses without pv view to meter location history

#### **Comments**

Daniel Zhang (張道博) 18 Jul 2013 17:18 Commit made by **Daniel Zhang** (張道博) on 2013-07-18T20:18:41-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/95356b0feb25828bb4e7754e527df6fb58c466eb

added view for houses without pv using meter location history: #MSG-241 fixed

### MSG-242 — support testing during insertion

Provide support for insertion to testing DBs.

#### **Comments**

Daniel Zhang (張道博) 17 Jul 2013 16:43 Commit made by **Daniel Zhang** (張道博) on 2013-07-17T19:43:03-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a163fe5eed3e34482754ffbfd4803c4f12c53eb7

testing mode is supported: #MSG-242 fixed

### MSG-243 — support insertion of meter location history records

#### Comments

Daniel Zhang (張道博) 16 Jul 2013 17:11

Commit made by **Daniel Zhang** (張道博) on 2013-07-16T20:09:30-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e51dfab638396419e22d6b8f237051006d10ef4f

adding support for inserting meter location history records: #MSG-243 fixed

**MSG-244** — report records processed count during meter location history loading Current count is line count.

MSG-245 — add view for readings by meter location history

#### Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-07-18T19:37:41-07:00

18 Jul 2013 16:37

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5c2254a94ec1a9b3d991ccaafa5ee82a72951948

adding readings by meter location history view: #MSG-245 fixed

- Deprecating some unused views.
- Adding some indices to Meter Location History.

Daniel Zhang (張道博) 18 Jul 2013 17:01 Commit made by **Daniel Zhang** (張道博) on 2013-07-18T20:01:01-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bf0da43545496cff9f3ae15b11154fdeccf4c709

removing end time alias; removing start time: #MSG-245 fixed

Daniel Zhang (張道博) 18 Jul 2013 17:09

Commit made by **Daniel Zhang** (張道博) on 2013-07-18T20:09:10-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/9b2fbefd0031098f1b7a55a905e2857980c909e8

adding address: #MSG-245 fixed

MSG-246 — determine cause of readings not referenced by meter location history

Total readings = 10011736 MLH readings = 9730256 Difference = 281480

#### **Comments**

Daniel Zhang (張道博) 19 Jul 2013 17:13 Commit made by **Daniel Zhang (**張道博) on 2013-07-19T20:13:31-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9a597771e0c6019eec2d8166f22d5dadb47d5e64

adding views to help determine unreferenced readings: #MSG-246 In Progress

Daniel Zhang (張道博) 22 Jul 2013 13:44 Meters not referenced by MLH include readings before install and readings after uninstall.

### MSG-247 — add views for unreferenced readings

#### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-07-22T19:15:27-07:00*22 Jul 2013 16:15 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

### Grid/commit/e740f7af4f51d41ad9bf8d27cfe50aedba9c369c

added views for nonMLH readings: #MSG-247 fixed

- Cleaned up MLH readings view.
- Cleaned up dz without PV view.
- Removed views returning incorrect results for nonMLH readings.

## MSG-248 — retrieve data where there is an existing partial set

### Comments

Daniel Zhang (張道博) 25 Jul 2013 13:43 Commit made by **Daniel Zhang (**張道博) on 2013-07-25T16:43:14-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0dbd637a9d643a814fc6a7c944b5dcadbc970cce

retrieving last data set on retrieval: #MSG-248 fixed

parallelized retrieval: #MSG-249 fixed

Daniel Zhang (張道博) 25 Jul 2013 13:46 Commit made by **Daniel Zhang** (張道博) on 2013-07-25T16:46:41-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/88c46ee488f588c7877972c3f82f7b71be3bf5eb

retrieving last data set on retrieval: #MSG-248 fixed

parallelized retrieval: #MSG-249 fixed

Daniel Zhang (張道博) 25 Jul 2013 13:49 Commit made by **Daniel Zhang** (張道博) on 2013-07-25T16:49:23-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f14ec17b02749b7b8dbfeb8bb16a1332c6812f7f

parallelized retrieval: #MSG-249 fixed

retrieving last data set on retrieval: #MSG-248 fixed

## MSG-249 — uncompress retrieved data and compress hourly data using multiprocessing

#### Comments

Daniel Zhang (張道博) 25 Jul 2013 13:43 Commit made by **Daniel Zhang** (張道博) on 2013-07-25T16:43:14-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0dbd637a9d643a814fc6a7c944b5dcadbc970cce

retrieving last data set on retrieval: #MSG-248 fixed

parallelized retrieval: #MSG-249 fixed

Daniel Zhang (張道博) 25 Jul 2013 13:46 Commit made by **Daniel Zhang** (張道博) on 2013-07-25T16:46:41-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/88c46ee488f588c7877972c3f82f7b71be3bf5eb

retrieving last data set on retrieval: #MSG-248 fixed

parallelized retrieval: #MSG-249 fixed

Daniel Zhang (張道博) 25 Jul 2013 13:49 Commit made by **Daniel Zhang** (張道博) on 2013-07-25T16:49:23-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f14ec17b02749b7b8dbfeb8bb16a1332c6812f7f

parallelized retrieval: #MSG-249 fixed

retrieving last data set on retrieval: #MSG-248 fixed

# MSG-250 — create energy view with PV readings by service point ID

### **Comments**

Daniel Zhang (張道博) 25 Jul 2013 17:53 Commit made by **Daniel Zhang** (張道博) on 2013-07-25T20:53:03-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fc980252cad5cbd96ff82f0a64a1f96322399f3e

adding view readings with pv service point id: #MSG-250 fixed

- Corrected dz\_energy\_voltages\_for\_houses\_without\_pv view.
- Changed col name in PVServicePointIDs.
- Updating DB.
- Needs further cleanup to remove unused added views.

### MSG-252 — load data after retrieval of last dated set

### **Comments**

Daniel Zhang (張道博) 26 Jul 2013 17:43 Commit made by **Daniel Zhang (**張道博**)** on 2013-07-26T20:43:09-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/25039a07f7d452bc4793deb85b3e7c63c629fb70

last dated weather set is supported: #MSG-252 fixed

- · Added all data argument.
- · Code needs reorganization.

# MSG-253 — move weather URL to site config

### Comments

Daniel Zhang (張道博) 31 Jul 2013 15:53 Commit made by **Daniel Zhang (**張道博**)** on 2013-07-31T18:53:31-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c1a5168900b76fef82f2d8f804e79cba427336a4

removing unused; changing url source, changing pattern source, renaming weather related scripts: #MSG-253 fixed

#MSG-263 fixed

MSG-254 — move file download pattern to site config

MSG-255 — be able to load weather data from last date

## **Comments**

Daniel Zhang (張道博) 01 Aug 2013 15:56	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-01T18:56:32-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/c9e1e5ff98a33c61133fe6d05d8465ff3ed2116b
	overloaded datepart: #MSG-255 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-01T20:25:57-07:00</i>
01 Aug 2013 17:26	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/a57eb954efb61e736a425da046cf6a79aef79a2e
	retrieve data from last date and also the previous month: #MSG-255 In Progress
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-02T17:41:16-07:00</i>
02 Aug 2013 14:41	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/b943122788a10aa6dbe839ebd43e7e7ed7307a2a
	rearranging to prevent dupe download: #MSG-255 In Progress
Daniel Zhang (張道博)	Compressed insert script needs processing from last date.
02 Aug 2013 14:48	
Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-02T18:37:57-07:00</i>
02 Aug 2013 15:38	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/466c0a9962a4d18839a1c634b703159c5fb813f9
	distributing operations: #MSG-255 In Progress

Daniel Zhang (張道博) 02 Aug 2013 16:12 Commit made by **Daniel Zhang** (張道博) on 2013-08-02T19:12:38-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4f06a20f625947f85c0bf0ee9abd64955116c7c4

weather data is loaded from last loaded date: #MSG-255 fixed

MSG-257 — fix /src/tests/test mecodbutil.py

### **Comments**

Daniel Zhang (張道博) 29 Jul 2013 16:48 Commit made by **Daniel Zhang (**張道博) on 2013-07-29T19:48:26-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/36ae57b89f8585aa95454978867416eed9ccc3a1

fixed tests by correcting msg db util: #MSG-257 fixed

MSG-258 — fix /src/tests/test\_\_\_\_mecodupecheck.py

### **Comments**

Daniel Zhang (張道博) 30 Jul 2013 14:44 Dupe check tests pass.

MSG-259 — fix /src/tests/test\_\_\_\_mecoxmlparser.py

### **Comments**

Daniel Zhang (張道博) 30 Jul 2013 14:47 Commit made by **Daniel Zhang** (張道博) on 2013-07-30T17:47:28-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3f8a229e1836bbf15a497b50da90524f49d6ca31

parse test fixed: #MSG-259 fixed

MSG-260 — raise exception on unmatched logger type

MSG-261 — rename config file

### Comments

Daniel Zhang (張道博) 31 Jul 2013 15:40 Commit made by **Daniel Zhang (**張道博**)** on 2013-07-31T18:40:29-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a8122a667bd50065bf7c48668f469fcd2db93b53

renaming config; updating documentation: #MSG-261 fixed

MSG-262 — remove need for log type in log() method

### Comments

Daniel Zhang (張道博) 31 Jul 2013 17:06 Commit made by **Daniel Zhang** (張道博) on 2013-07-31T20:05:50-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/cf66f34e822dfd752bcf07b3ea488aa547691958

removed need for type arg on log(): #MSG-262 fixed

## MSG-263 — move weather data file pattern to site config

### **Comments**

Daniel Zhang (張道博) 31 Jul 2013 15:53 Commit made by **Daniel Zhang (**張道博) on 2013-07-31T18:53:31-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c1a5168900b76fef82f2d8f804e79cba427336a4

removing unused; changing url source, changing pattern source, renaming weather related scripts: #MSG-253 fixed

#MSG-263 fixed

## MSG-264 — fix weather data retrieval

Map method only accepts sequence argument.

#### Comments

Daniel Zhang (張道博) 01 Aug 2013 15:29 Commit made by **Daniel Zhang (**張道博) on 2013-08-01T18:29:03-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a67fda1385d70320950482eb648710e9ee977f68

fixed weather data retrieval: #MSG-264 fixed

\* Cleaned up globals.

## MSG-265 — perform cleanup of unused decompressed files

### **Comments**

Daniel Zhang (張道博) 06 Aug 2013 16:12 Commit made by **Daniel Zhang** (張道博) on 2013-08-06T19:11:58-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3c4c924b73f6f20dfb3f424ce7e877a2b7f931d4

cleaning up unused txt files: #MSG-265 fixed

## MSG-267 — parallelize secondary retrieval

### **Comments**

Daniel Zhang (張道博) 05 Aug 2013 15:58	Use of map is impeded by forceDownload = True.
Daniel Zhang (張道博) 05 Aug 2013 16:20	Commit made by <b>Daniel Zhang</b> (張道博) on 2013-08-05T19:20:04-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5fa80d916f088994c6445de626be9e442445e74d
	parallelized secondary retrieval: #MSG-267 fixed

## MSG-268 — compress exported dbs

### **Comments**

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-08-19T19:32:10-07:00
19 Aug 2013 16:32 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e97d2117add6ee3964036a88734a36d86aabd6ef

dbs are compressed: #MSG-268 fixed

MSG-269 — support multiple db export
MSG-270 — update sample config in repo

### **Comments**

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-16T18:50:40-07:00</i>
16 Aug 2013 15:50	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/2e9389d7c67d0623d415ff869744f18e22c9650d
	updating sample config: #MSG-270 fixed

## MSG-271 — add copyright/license to src

### **Comments**

Daniel Zhang (張道博)	Commit made by <b>Daniel Zhang (</b> 張道博 <b>)</b> on <i>2013-08-20T17:13:20-07:00</i>
20 Aug 2013 14:13	https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-
	Grid/commit/2d48ac742b11db9f5a7262597ce0529262201bd3
	added copyright and license notes: #MSG-271 fixed

## MSG-272 — parallelize meco energy data loading

### **Comments**

Daniel Zhang (張道博) 12 Aug 2013 15:51 Commit made by **Daniel Zhang** (張道博) on 2013-08-12T18:51:35-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6a8079470534f50e15386e06b9603124c7716c46

parallelized data loading: #MSG-272 fixed

keyboard interrupt terminates loading: #MSG-277 fixed

## MSG-273 — update view meter\_ids\_for\_houses\_without\_pv to work with mlh

### **Comments**

Daniel Zhang (張道博) 15 Aug 2013 14:30 Commit made by **Daniel Zhang** (張道博) on 2013-08-15T17:30:11-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ae1102d154d08173477dd04adf5d7029ac3b4681

added view meter\_ids\_for\_nonpv\_service\_points: #MSG-273 fixed

This replaces meter\_ids\_for\_houses\_with\_pv because it works with the MLH instead of the Location table.

## MSG-274 — have a view for new pv instances

This is for providing notification of new PV instances.

### Comments

Daniel Zhang (張道博) 16 Aug 2013 13:48

Commit made by **Daniel Zhang (**張道博**)** on 2013-08-16T16:48:18-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/49bc7d832308b7ef3c3cd749ac0e4c8c91037d73

additions & changes related to pv readings in nonpv mlh: #MSG-274 fixed

## MSG-275 — add view for monthly energy summary for houses without pv

### **Comments**

Daniel Zhang (張道博) 09 Aug 2013 17:09 Commit made by **Daniel Zhang** (張道博) on 2013-08-09T20:09:44-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6c2c3e4621efe1464b9ec504ab06466bb261442c

added nonpv service point id view; added monthly energy summary for nonpv sp: #MSG-275 fixed

- PVServicePointIDs has new columns.
- CD views added.
- Deprecating get voltage views.
- Monthly energy summary views added.
- PV sec pt spec view added

Daniel Zhang (張道博) 09 Aug 2013 17:13 Commit made by **Daniel Zhang** (張道博) on 2013-08-09T20:13:30-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/560ccca1a25ea127eda2aedf8057ac73a717f92a

added nonpv service point id view; added monthly energy summary for nonpv sp: #MSG-275 fixed

- PVServicePointIDs has new columns.
- · CD views added.
- Deprecating get voltage views.
- · Monthly energy summary views added.
- PV svc pt spec view added

MSG-276 — change multiprocessing instances to use config option

### **Comments**

Daniel Zhang (張道博) 16 Aug 2013 16:21 Commit made by **Daniel Zhang (**張道博**)** on 2013-08-16T19:21:34-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/32af6426ccc882f5ef9f1535cd33928ae88e1bb2

using config-based limit: #MSG-276 fixed

MSG-278 — adjust live output during multiprocessing loading

MSG-280 — add job id to parallel loader

### **Comments**

Daniel Zhang (張道博) 13 Aug 2013 15:17 Commit made by **Daniel Zhang** (張道博) on 2013-08-13T18:16:51-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e5d6cde90960ffae80b8e55283f0c28fc744a756

added job id: #MSG-280 fixed

MSG-282 — send latest view results to email

MSG-284 — handle db connect exception

MSG-285 — test multiprocessing log results

### Comments

Daniel Zhang (張道博) 14 Aug 2013 17:39 Multiprocessing results have correctly separated output.

## MSG-286 — keyboard interrupt doesn't terminate multiprocessing

### **Comments**

Daniel Zhang (張道博) 14 Aug 2013 17:46 Terminate works after double interrupt.

MSG-287 — add linefeeds to concise log

#### Comments

Daniel Zhang (張道博)

Not necessary at this time.

22 Aug 2013 13:55

MSG-288 — get view results since a last processed date

Provide storage for a last processed date.

This is to allow notifications based on views.

### **Comments**

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-08-16T19:10:00-07:00

16 Aug 2013 16:10 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/bb6d35c85d5686283c5098eb6a390639469313ab

stubbing out notifier: #MSG-288 In Progress

MSG-289 — evaluate performance of flattened readings

MSG-290 — verify insertion sums during loading

MSG-292 — remove source file after compress

#### Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on 2013-08-20T19:59:47-07:00

20 Aug 2013 16:59

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1eb8462b3542421f759c48f8b9c2efeec8849ab8

uncompressed file is removed: #MSG-292 fixed removal error is handled: #MSG-296 fixed

MSG-294 — write export to cloud storage

MSG-295 — verify compressed file

MSG-296 — handle error during remove

### Comments

Daniel Zhang (張道博) 20 Aug 2013 16:59 Commit made by **Daniel Zhang (**張道博**)** on 2013-08-20T19:59:47-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1eb8462b3542421f759c48f8b9c2efeec8849ab8

uncompressed file is removed: #MSG-292 fixed removal error is handled: #MSG-296 fixed

MSG-298 — test data retrieval

MSG-299 — create data table

#### Comments

Daniel Zhang (張道博) 22 Aug 2013 17:25 Commit made by **Daniel Zhang** (張道博) on 2013-08-22T20:23:58-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8d8be3448b7230d3d996a1277428414199371dea

adding table structure for egauge service: #MSG-299 fixed

MSG-300 — adapt egauge service to msg

### **Comments**

Daniel Zhang (張道博) 22 Aug 2013 16:11 Commit made by **Daniel Zhang** (張道博) on 2013-08-22T19:10:52-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d11661da07b4413a889e20c9f85c04616f93cf78

initial adaptation: #MSG-300 fixed

**MSG-301** — switch egauge services to egauge role

They are currently being run under a user role.

MSG-302 — be able to retrieve egauge data

### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-08-23T17:43:58-07:00

23 Aug 2013 14:44 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/79659b417dc8723ee4bd3165bb975c8749fd7617

modifying to support MSG egauge retrieval: #MSG-302 In Progress

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-08-23T19:13:07-07:00

23 Aug 2013 16:13 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

data is retrieved: #MSG-302 fixed

\* Added username and password.

## MSG-303 — be able to insert egauge data

### Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博**)** on *2013-08-26T18:24:16-07:00*26 Aug 2013 15:24 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-

Grid/commit/1bab3ce768557deafec4ba41f91df9d3b94c6fca

Grid/commit/792e38629723555229092d8ab41548c38229c8b4

data can be inserted: #MSG-303 fixed

**MSG-304** — add config docs for msg egauge service

MSG-305 — add sequence for msg egauge service

### Comments

Daniel Zhang (張道博) Not needed. 23 Aug 2013 16:29

MSG-306 — alter table to include all columns present

#### Comments

23 Aug 2013 17:17

Daniel Zhang (張道博) Commit made by **Daniel Zhang (**張道博) on 2013-08-23T20:17:06-07:00

https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9476b93aee7b445bfd09a7334d5f672d746134ca

adding table and view creation script: #MSG-306 fixed

**MSG-307** — remove house mappings

## **Comments**

Daniel Zhang (張道博) 26 Aug 2013 14:36 Commit made by **Daniel Zhang** (張道博) on 2013-08-26T17:36:04-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0e6f82fa5daa38287be6c9009b9e31d2b53a484b

removed use of house id: #MSG-307 fixed