

# Daniel Zhang (張道博) Issues Report

State: {In Progress}, Open, Submitted, {To be discussed}, Reopened, {Can't Reproduce}, Duplicate, Fixed, {Won't fix}, Incomplete, Obsolete, Verified, New sort by: updated

## INV-26 — provide time-based exclusion of source data

Find the max timestamp in source data and compare it to the max timestamp in the DB.

Daniel Zhang (張道博)  
15 Sep 2014 11:15

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/3ff79fc1b7aff0a0ed4f965741dca7129101fc7f>

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## INV-28 — provide notifications for new data loaded

**availex-1** — move config parameters to separate config  
Using SEK Configger

Daniel Zhang (張道博)  
06 Sep 2014 11:03

<https://github.com/Hawaii-Smart-Energy-Project/Available-Exports/commit/afcc2f2bd97f4c72df7dbb61471703e5baa96b94>

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## availex-3 — remove unused items from service

\* sqlite support

## availex-2 — Add authentication to post operation for available files

## SEK-5 — merge MSG notifier

Daniel Zhang (張道博)  
19 Aug 2014 13:37

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Energy-Kit/commit/716b2a9330f7764f90532558b81cf8040fae0298#diff-d41d8cd98f00b204e9800998ecf8427e>

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## INV-18 — load all available data

Daniel Zhang (張道博)  
05 Sep 2014 11:19

Available data has been loaded.

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## INV-24 — solve deadlock on loading of 001EC60519E9

Daniel Zhang (張道博)  
28 Aug 2014 10:44

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/e48f23f41f7cfe245ba5f477149f0017774f9d61>

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Daniel Zhang (張道博)  
28 Aug 2014 10:55

Not exiting on SQL errors or the use of 'STOP' in the queue may have solved the deadlock.

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## INV-4 — determine if all data will fit current model

Daniel Zhang (張道博)

Data in initial loading works fine.

**INV-21** — create trigger function for partitioning data upon insert

**INV-6** — Data Loading

**INV-27** — determine if a new meter is present

**INV-25** — provide check on source record count vs data loaded count

**INV-20** — revise multiprocessor loading to use more joinable queue

Daniel Zhang (張道博)

26 Aug 2014 17:11

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/39040569428327034eaac3d259a533e930ebc40e>

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**INV-23** — add foreign key to individual partitions

Daniel Zhang (張道博)

26 Aug 2014 17:11

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/57299c13a31a959f294f29c0afbff09232e536bb>

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**INV-19** — create separate meter tables as partitions

Daniel Zhang (張道博)

26 Aug 2014 14:27

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/221629597d528d24bda76235c5623fdaa3ef969f>

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**INV-22** — create trigger for calling trigger function

**INV-9** — implement multiprocessor loading

Daniel Zhang (張道博)

23 Aug 2014 13:08

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/ec0812ef2df437139ae6785bcd0ed029363a4c02#diff-d41d8cd98f00b204e9800998ecf8427e>

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**INV-16** — change make new meter to once per multi file loading instance

Daniel Zhang (張道博)

23 Aug 2014 16:50

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/4ff3af35152c990ccacb7654477f32bffadb2117>

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**INV-15** — handle duplicate meter creation error

Daniel Zhang (張道博)

23 Aug 2014 16:49

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/4ff3af35152c990ccacb7654477f32bffadb2117>

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**INV-14** — skip over bad data records

Daniel Zhang (張道博)

23 Aug 2014 13:07

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/eed47204c3f2a22cd0079b37a686019cb399e739#diff-d41d8cd98f00b204e9800998ecf8427e>

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## INV-11 — use latest record when encountering duplicates

Daniel Zhang (張道博)  
22 Aug 2014 22:23

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/956fcb3ab3f2ba1e8cd4b5b1396e0b9b1af589d8>

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## INV-7 — create data loader

Daniel Zhang (張道博)  
22 Aug 2014 12:25

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/09f2f22c43b8d12f483f696244ed984b17878a07#diff-d41d8cd98f00b204e9800998ecf8427e>

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## INV-2 — perform insertion of meter data

Daniel Zhang (張道博)  
22 Aug 2014 12:25

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/09f2f22c43b8d12f483f696244ed984b17878a07#diff-d41d8cd98f00b204e9800998ecf8427e>

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## INV-8 — process existing meter names from folder names

Daniel Zhang (張道博)  
21 Aug 2014 19:43

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/c964158ffd09167f99748edde19afd2873a186d0#diff-d41d8cd98f00b204e9800998ecf8427e>

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## INV-3 — provide way of automatically adding meters when new meters are encountered

Daniel Zhang (張道博)  
23 Aug 2014 16:51

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/9f286b6652070c9bd474c1ca236bb75f4259ecf1>

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## INV-13 — log duplicate data records

## INV-12 — log bad data records

## SEK-8 — fix connector error

Traceback (most recent call last):

File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/reportExportSummary.py", line 31, in <module>  
ExportSummaryReporter().sendCurrentExportSummary()

File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/reportExportSummary.py", line 20, in \_\_init\_\_  
self.exporter = MSGDBExporter()

File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 97, in \_\_init\_\_  
self.notifier = SEKNotifier()

File "/usr/local/lib/python2.7/dist-packages/sek/notifier.py", line 70, in \_\_init\_\_  
raise Exception("No connector available.")

Exception: No connector available.

Daniel Zhang (張道博)  
07 Aug 2014 18:21

Fixed by updating SEK.

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**MSG-373** — Cloud Export

**MSG-590** — provide install option for SEK

**MSG-337** — Installer

**SEK-4** — merge MSG logger

Daniel Zhang (張道博)

Verified merge.

04 Aug 2014 17:18

<https://github.com/dz1111/Maui-Smart-Grid/commit/8379ca54b662a880facea0d56530fc9c393109d>

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**SEK-7** — test system install of SEK

Daniel Zhang (張道博)

Install is made to /usr/local/lib/dist-packages/sek.

04 Aug 2014 16:45

**SEK-1** — create system-level installer for SEK

Daniel Zhang (張道博)

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Energy-Kit/commit/0f547f6f1a5941581223bfd31c3a60bd3ea6b687>

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**MSG-589** — change instances of notifier to use new SEKNotifier args instead of the project-dependent config file

**MSG-575** — Code Maintenance

**MSG-588** — add installing SEK to docs

**MSG-347** — Documentation

**MSG-432** — test installer running in update mode for the case when a file is removed from the distribution

If a file is removed from the distribution, will that file be uninstalled from an active installation?

Update mode is implemented by install-msg.py.

Daniel Zhang (張道博)

The case where a file is renamed is handled by the installer during an update. The affected file within an active installation is not duplicated but correctly renamed.

31 Jul 2014 11:37

Daniel Zhang (張道博)

Changing a name and then re-installing with

04 Aug 2014 16:54

python setup.py install

results in the previously installed name still being present. It is not automatically replaced.

This was found to be true for the SEK installer.

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**MSG-446** — provide aggregated weekly status report of exports via notifications

**SEK-6** — merge MSG python util

**SEK-3** — merge MSG file util

**MSG-587** — switch to SEK python util

**MSG-586** — switch to SEK file util

**MSG-585** — switch to SEK notifier

**MSG-584** — switch to SEK logger

**MSG-583** — improve use of exceptions

This is for the purpose of eliminating generic exceptions.

Specific, standard exceptions should be used as much as possible.

Custom exceptions should be created where no suitable standard exists.

Changes should be logged to this issue.

**MSG-582** — change string based datetimes to datetime type

For the purpose of providing greater type safety. Changes should be logged to this issue.

**MSG-581** — change all string based types to Enum types

For the purpose of providing greater type safety. Changes should be logged to this issue.

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Daniel Zhang (張道博)  
28 Jul 2014 22:10

<https://github.com/dz1111/Maui-Smart-Grid/commit/6c7346136540de5c418ec2b535a4e77a7c5e3eca>

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Daniel Zhang (張道博)  
29 Jul 2014 13:29

<https://github.com/dz1111/Maui-Smart-Grid/commit/86d77dc5a320530173c3845702aac78999012ff0>

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Daniel Zhang (張道博)  
29 Jul 2014 13:30

<https://github.com/dz1111/Maui-Smart-Grid/commit/c2acb0a71736544687449863fe0747f0b0a4128f>

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**SEK-2** — port aggregator module to SEK

**INV-1** — create DB schema for meter data

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Daniel Zhang (張道博)  
22 Jul 2014 19:38

<https://github.com/Hawaii-Smart-Energy-Project/Smart-Grid-PV-Inverter/commit/98a8ab9a5fc286a0d0d3770fc93375aaabe2e040>

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**INV-5** — Testing

**MSG-580** — determine/fix reason for duplicate notification during loading

**MSG-156** — MECO Data Loading

**MSG-579** — determine/fix missing script error during loading

**MSG-565** — change automatic insert script to be the one that is in the active installation

Daniel Zhang (張道博)	Reviewed all instances of the insert script and removed those that should not be used.
11 Jul 2014 13:18	

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**MSG-545** — finish aggregator test\_month\_starts\_and\_ends

Daniel Zhang (張道博)	<a href="https://github.com/dz1111/Maui-Smart-Grid/commit/9062ed752663ddd7063e35e6a1b2b956906cb806">https://github.com/dz1111/Maui-Smart-Grid/commit/9062ed752663ddd7063e35e6a1b2b956906cb806</a>
14 Jul 2014 11:48	

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**MSG-564** — identify cause of meco\_v3 upload

Full details:

2014-07-01 18:58:43,202 - msg\_db\_exporter - DEBUG - tdelta:1:36:19.037272, fname:2014-07-01\_070702\_meco\_v3.sql.gz

Daniel Zhang (張道博)	This appears to be a standard export that may be as a single instance due to an interruption or failure in the remainder of the export operation.
02 Jul 2014 18:29	

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Daniel Zhang (張道博)	An additional upload is no longer occurring.
11 Jul 2014 13:21	

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**MSG-578** — convert print statements to use print function

Changes should be added to this issue.

**MSG-577** — convert all substitutions to use format()

Changes should be added to this issue.

Daniel Zhang (張道博)	<a href="https://github.com/dz1111/Maui-Smart-Grid/commit/db13e7fe29eb891885d9ecb9466a1092b0b1a61f">https://github.com/dz1111/Maui-Smart-Grid/commit/db13e7fe29eb891885d9ecb9466a1092b0b1a61f</a>
12 Jul 2014 12:36	

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**MSG-576** — convert map instances to use list comprehensions as necessary

**MSG-528** — update docs for config files

Daniel Zhang (張道博)	<a href="https://github.com/dz1111/Maui-Smart-Grid/commit/7c902d5518737bb31cfbc3b3bdb19c9ab616ba75">https://github.com/dz1111/Maui-Smart-Grid/commit/7c902d5518737bb31cfbc3b3bdb19c9ab616ba75</a>
09 Jul 2014 14:46	

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**MSG-568** — review config symbols and change where necessary to set template value names to their key names

Example:

meco\_new\_data\_path=\${MECO\_AUTOLOAD\_DATA\_PATH}

changes to

meco\_autoload\_data\_path=\${MECO\_AUTOLOAD\_DATA\_PATH}

A secondary goal is that names will serve as documentation.

Daniel Zhang (張道博)  
09 Jul 2014 14:47

<https://github.com/dz1111/Maui-Smart-Grid/commit/946ed8fca8c0e192e57552c729d063c0073bdc77>

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**MSG-574** — create test capable of evaluating data insertion in test\_meco after an autoload by autoloadNewMECOData.py

A fresh instance of test\_meco should be generated for each call to this test.

**MSG-266** — Testing

**MSG-566** — determine reason for two notifications during automatic data loading

Daniel Zhang (張道博)  
10 Jul 2014 13:52

There is a call to the incorrect insert script. This is related to the incorrect script observed in #MSG-565.

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**MSG-567** — provide automatic substitutions for the config file

This is for the purpose of providing a config file template that can be easily transferred to a production system with all of the correct values.

Each substitution key in this file will correspond to the substitutions used in the config file template.

**MSG-481** — Data Aggregation

**MSG-572** — automatically send notifications when exceptions occur during automated operations

**MSG-56** — Notifications

**MSG-571** — provide class to validate every site config value

**MSG-570** — finalize notifier tests

Review and revise tests such that they are sufficient for automatic testing.

**MSG-569** — provide unit test to verify all config file settings

**MSG-553** — finish test\_delete\_out\_dated\_files

Daniel Zhang (張道博)  
01 Jul 2014 19:06

During testing, tdelta is -1 day. Not sure why this is:

```
2014-07-01 19:04:45,127 - __main__ - INFO: outdated:
2014-07-01 19:04:45,563 - msg_db_exporter - DEBUG - tdelta:-1 day,
14:00:04.080489, fname:meco_v3_test_data.sql.gz
2014-07-01 19:04:45,563 - msg_db_exporter - DEBUG - tdelta:1:42:21.398688,
fname:2014-07-01_070702_meco_v3.sql.gz
2014-07-01 19:04:45,563 - msg_db_exporter - DEBUG - tdelta:1 day,
0:55:06.521843, fname:2014-06-30_080818_biahouse.sql.gz
2014-07-01 19:04:45,563 - msg_db_exporter - DEBUG - tdelta:1 day,
0:56:34.142968, fname:2014-06-30_080736_sinclair.sql.gz
2014-07-01 19:04:45,564 - msg_db_exporter - DEBUG - tdelta:1 day,
```

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Daniel Zhang (張道博) 02 Jul 2014 18:34	The -1 day tdelta is normal behavior when the tdelta is within the same day.
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Daniel Zhang (張道博) 02 Jul 2014 18:34	<a href="https://github.com/dz1111/Maui-Smart-Grid/commit/ecfdb4ef8571b9bdaccbfd652ea000fc642218e">https://github.com/dz1111/Maui-Smart-Grid/commit/ecfdb4ef8571b9bdaccbfd652ea000fc642218e</a>
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### MSG-532 — prevent deleting of nontesting export files during testing of delete outdated

Daniel Zhang (張道博) 20 Jun 2014 15:46	There is a boolean param on export db for delete outdated. This method of handling testing, using a testing parameter, has been deprecated due to the overhead of maintaining an additional state on the associated operations.
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Daniel Zhang (張道博) 02 Jul 2014 18:30	Changed deletion to only touch test data.
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Daniel Zhang (張道博) 02 Jul 2014 18:31	<a href="https://github.com/dz1111/Maui-Smart-Grid/commit/624e9781a532c471b7b886ffaea130a270a408fd">https://github.com/dz1111/Maui-Smart-Grid/commit/624e9781a532c471b7b886ffaea130a270a408fd</a>
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### MSG-14 — check for duplicates on the register branch

Daniel Zhang (張道博) 25 Jun 2014 14:08	Covered by MECODupeChecker.registerBranchDupeExists.
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### MSG-3 — Data Insertion

**MSG-563** — have a function that returns whether or not testing can be run in sudo mode for tests requiring sudo

signature:

sudoTestingAvailable:Boolean

In general, this requires testing to performed on the server.

**MSG-558** — provide option for running nonsudo tests only in exporter tests

**MSG-562** — automatically remove stray remnants of uploaded cloud test data

Stray files can exist due to conditions such as errors or network failures during testing.

Daniel Zhang (張道博) 30 Jun 2014 15:52	Improved delete fn.  <a href="https://github.com/dz1111/Maui-Smart-Grid/commit/aa31b1556a94b276d8c726db2807e0fad2d0daff">https://github.com/dz1111/Maui-Smart-Grid/commit/aa31b1556a94b276d8c726db2807e0fad2d0daff</a>
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### MSG-410 — provide db storage report

Report the number of records along with their storage allocation for all data types.



**MSG-560** — provide unit test(s) verifying correct handling of failed MECO data during auto loading

**MSG-426** — Determine a method of reporting MSG software prerequisites

Daniel Zhang (張道博)      Addressed in #MSG-498.  
27 Jun 2014 13:34

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**MSG-395** — fix reporting of seconds in elapsed loading time

It's appearing as Wall time = 11 min 655.33 s.

Daniel Zhang (張道博)      <https://github.com/dz1111/Maui-Smart-Grid/commit/5112e4173eeb01f1185cfd6c2b8c44ebbc6613ce>  
26 Jun 2014 14:40

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**MSG-561** — provide unit test for full install of MSG software including all dependencies

Install should made to a temporary path that is removed upon completion and within a virtual environment established by virtualenv.

**MSG-498** — change external dependencies to pip compatible format

Davey Wilkie      The approach I would take would be to write a "requirements.txt", and have the  
25 Jun 2014 11:27      install-msg.py script invoke pip to install all the external dependencies declared in it.  
Does this seem like the best way to do this? I'll go ahead and get started if so.  
Otherwise, please do let me know a better way.

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Daniel Zhang (張道博)      A requirements file would be sufficient. I prefer not to have the dependencies  
26 Jun 2014 15:19      installed by default at this time. Having them installed via a separate command-line  
option would be viable. The requirements file should be added to the root directory  
of the repository.

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**MSG-367** — record successful egauge data operations in the database and report failures

The motivation for this is that failed loading of data sets can go unnoticed for extended periods of time. Having a way of monitoring these operations would be useful.

**MSG-393** — Provide status notification during loading process of MECO energy data

Ref: meco\_data\_autoloader.py

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

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

Daniel Zhang (張道博)      Commit made by **Daniel Zhang (張道博)** on 2013-06-05T19:21:01-07:00  
05 Jun 2013 16:21      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/99b173c563006e42bded0ffdaa420126e9d4f295>

| generating error on plot failure: #MSG-129 fixed

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**MSG-383** — remove unused linux headers and linux images

Daniel Zhang (張道博)      Removed using

```
sudo apt-get remove linux-headers-${SPECIFIER}
sudo apt-get remove linux-image-${SPECIFIER}
```

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**MSG-512** — check for the existence of new data to be aggregated

Daniel Zhang (張道博)

30 Mar 2014 12:19

<https://github.com/dz1111/Maui-Smart-Grid/commit/d1225949b26f9517b72edd4028c71d6980b69585>

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**MSG-219** — have the capability to remove event branches that do not have event data  
This is for the purpose of conserving space and maintaining query efficiency in the production database.

**MSG-218** — have the capability to remove reading branches that do not have reading data  
This is for the purpose of conserving space and maintaining query efficiency in the production database.

**MSG-217** — have the capability to remove register branches that do not have register data  
This is for the purpose of conserving space and maintaining query efficiency in the production database.

**MSG-310** — write duplicate dropping test for MECO readings

**MSG-559** — provide normalized meter location history  
MLH attributes will be keyed to their appropriate relations.

**MSG-471** — Change logger types to the enumeration type used by the Python standard library  
Additional support should be provided for a SILENT type if it is not already present.

**MSG-355** — maintain copy of live autoloading status  
GH readme image should be representative of the live status of the database.

This requires a separately hosted image that can be updated via http post or similar protocol.

**MSG-356** — Test file locking used for MECO data loading  
When MECO data is being loaded into the database, can those files be modified or deleted? The answer should be no due to the file lock.

File locking is implemented by filelock.py.

**MSG-353** — handle error case during autoloading  
If data fails to load it should be moved to the invalid data storage area.

The path for invalid data is given by the site config as MECO Autoload -> meco\_autoload\_failures\_path.

**MSG-260** — raise exception on unmatched logger type

Daniel Zhang (張道博)

25 Jun 2014 15:55

<https://github.com/dz1111/Maui-Smart-Grid/commit/a518bc87421ac607ba7ae0d2683166a69ba2df61>

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**MSG-476** — forward critical errors via email

Daniel Zhang (張道博)  
25 Jun 2014 14:12

Errors are being handled sufficiently for each component in the overall system.

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#### **MSG-216** — Database Maintenance

**MSG-556** — generate static test db for export testing

**MSG-474** — change cloud access credentials

**MSG-475** — write documentation for cloud access credential generation

**MSG-368** — Provide PDF form of software documentation

**MSG-555** — revise awkward implementation and usage of fileIDForFileName

Daniel Zhang (張道博)  
23 Jun 2014 14:56

<https://github.com/dz1111/Maui-Smart-Grid/commit/a3b2acbce25f54d7a3476926d20368d8a6f33570>

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#### **MSG-557** — delete exported testing db used by test\_export\_db

Daniel Zhang (張道博)  
20 Jun 2014 17:39

<https://github.com/dz1111/Maui-Smart-Grid/commit/39e123bed80a6b2818e30bb22ccf1779990bb849>

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#### **MSG-504** — add filename reporting to verify delete outdated

Daniel Zhang (張道博)  
16 Jun 2014 14:56

<https://github.com/dz1111/Maui-Smart-Grid/commit/48076bc323df6803a945ee83cb482a719acd2f65>

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Daniel Zhang (張道博)  
20 Jun 2014 17:38

<https://github.com/dz1111/Maui-Smart-Grid/commit/39e123bed80a6b2818e30bb22ccf1779990bb849>

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#### **MSG-549** — finish test\_dump\_exclusions\_dictionary

Daniel Zhang (張道博)  
16 Jun 2014 14:39

<https://github.com/dz1111/Maui-Smart-Grid/commit/4abb590c331d40be47d01638630e8b358b27e6f3>

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#### **MSG-554** — implement retry count on add readers

Daniel Zhang (張道博)  
16 Jun 2014 15:47

<https://github.com/dz1111/Maui-Smart-Grid/commit/05b89f82a2a2a6f0a8349a75eb8a179ba875085c>

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#### **MSG-552** — provide support for retry count in exportDB for uploading files

Daniel Zhang (張道博)  
13 Jun 2014 16:05

This will use: export\_retry\_count: Integer.

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Daniel Zhang (張道博)  
16 Jun 2014 15:14

<https://github.com/dz1111/Maui-Smart-Grid/commit/33fd2562fdb15af587a7e90835f6652af73457e1>

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## MSG-551 — activate export log entries for completed exports

Daniel Zhang (張道博)

13 Jun 2014 15:30

[https://github.com/dz1111/Maui-Smart-](https://github.com/dz1111/Maui-Smart-Grid/commit/38eb085333075e3834b33533179abb967b1b2dc0)

[Grid/commit/38eb085333075e3834b33533179abb967b1b2dc0](https://github.com/dz1111/Maui-Smart-Grid/commit/38eb085333075e3834b33533179abb967b1b2dc0)

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## MSG-550 — insert log entries into export history after successful uploading

Daniel Zhang (張道博)

13 Jun 2014 13:44

[https://github.com/dz1111/Maui-Smart-](https://github.com/dz1111/Maui-Smart-Grid/commit/aef5a48665b42efea3b7c942762b976fe1fdea36)

[Grid/commit/aef5a48665b42efea3b7c942762b976fe1fdea36](https://github.com/dz1111/Maui-Smart-Grid/commit/aef5a48665b42efea3b7c942762b976fe1fdea36)

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Daniel Zhang (張道博)

13 Jun 2014 13:44

[https://github.com/dz1111/Maui-Smart-](https://github.com/dz1111/Maui-Smart-Grid/commit/1c2d5a515fe434f8f2897a7e634836eb1c75e576)

[Grid/commit/1c2d5a515fe434f8f2897a7e634836eb1c75e576](https://github.com/dz1111/Maui-Smart-Grid/commit/1c2d5a515fe434f8f2897a7e634836eb1c75e576)

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## MSG-547 — provide support for evaluating an exclusion dictionary to avoid exporting large static data sets unnecessarily

Proposed form:

{DB: ['t1', 't2', 't3']}

Daniel Zhang (張道博)

02 Jun 2014 11:21

[https://github.com/dz1111/Maui-Smart-](https://github.com/dz1111/Maui-Smart-Grid/commit/e0788e6a0d35ab1a541e1805dca6509ba45db8e4)

[Grid/commit/e0788e6a0d35ab1a541e1805dca6509ba45db8e4](https://github.com/dz1111/Maui-Smart-Grid/commit/e0788e6a0d35ab1a541e1805dca6509ba45db8e4)

---

## MSG-544 — remove split parts after upload

Daniel Zhang (張道博)

02 Jun 2014 11:19

[https://github.com/dz1111/Maui-Smart-](https://github.com/dz1111/Maui-Smart-Grid/commit/9c64e91275f75b5268b96eedbe6cba9922258baa)

[Grid/commit/9c64e91275f75b5268b96eedbe6cba9922258baa](https://github.com/dz1111/Maui-Smart-Grid/commit/9c64e91275f75b5268b96eedbe6cba9922258baa)

---

Daniel Zhang (張道博)

02 Jun 2014 11:19

Second time fixing:

[https://github.com/dz1111/Maui-Smart-](https://github.com/dz1111/Maui-Smart-Grid/commit/8a530165736f20943bd307f24a5e527ce96a66bc)

[Grid/commit/8a530165736f20943bd307f24a5e527ce96a66bc](https://github.com/dz1111/Maui-Smart-Grid/commit/8a530165736f20943bd307f24a5e527ce96a66bc)

---

## MSG-546 — handle http exception during upload

2014-05-30 00:09:01,362 - msg\_db\_exporter - INFO - Uploading 2014-05-29\_214100\_meco\_v3.sql.gz.0.

2014-05-30 00:09:01,495 - msg\_db\_exporter - ERROR - Exception while uploading 2014-05-

29\_214100\_meco\_v3.sql.gz.0: .

Traceback (most recent call last):

File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 66, in <module>

deleteOutdated = True)

File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 247, in exportDB

testing = testing)

File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 421, in uploadFileToCloudStorage

if not self.\_\_verifyMD5Sum(fullPath, self.fileIDForFileName(myFile)):

File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 671, in fileIDForFileName

for item in self.cloudFiles['items']:

File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 54, in cloudFiles

self.\_cloudFiles = self.driveService.files().list().execute()

File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional\_wrapper  
return wrapped(\*args, \*\*kwargs)  
File "/usr/local/lib/python2.7/dist-packages/apiclient/http.py", line 716, in execute  
body=self.body, headers=self.headers)  
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional\_wrapper  
return wrapped(\*args, \*\*kwargs)  
File "/usr/local/lib/python2.7/dist-packages/oauth2client/client.py", line 494, in new\_request  
self.\_refresh(request\_orig)  
File "/usr/local/lib/python2.7/dist-packages/oauth2client/client.py", line 663, in \_refresh  
self.\_do\_refresh\_request(http\_request)  
File "/usr/local/lib/python2.7/dist-packages/oauth2client/client.py", line 682, in \_do\_refresh\_request  
self.token\_uri, method='POST', body=body, headers=headers)  
File "/usr/local/lib/python2.7/dist-packages/httplib2/\_\_init\_\_.py", line 1570, in request  
(response, content) = self.\_request(conn, authority, uri, request\_uri, method, body, headers, redirections,  
cachekey)  
File "/usr/local/lib/python2.7/dist-packages/httplib2/\_\_init\_\_.py", line 1317, in \_request  
(response, content) = self.\_conn\_request(conn, request\_uri, method, body, headers)  
File "/usr/local/lib/python2.7/dist-packages/httplib2/\_\_init\_\_.py", line 1286, in \_conn\_request  
response = conn.getresponse()  
File "/usr/lib/python2.7/httplib.py", line 1030, in getresponse  
response.begin()  
File "/usr/lib/python2.7/httplib.py", line 407, in begin  
version, status, reason = self.\_read\_status()  
File "/usr/lib/python2.7/httplib.py", line 371, in \_read\_status  
raise BadStatusLine(line)  
httplib.BadStatusLine:

Daniel Zhang (張道博)

This exception was caused by an excessive upload size.

01 Jun 2014 13:37

---

### MSG-539 — move finalized export files to final dump directory upon completion

Daniel Zhang (張道博)

<https://github.com/dz1111/Maui-Smart-Grid/commit/2b8b72ba8add49f7063f157ed33e586f5f58f1b5>

28 May 2014 18:24

---

### MSG-543 — investigate single interval missing at the beginning of a calendar month for aggregated data

Daniel Zhang (張道博)

Fixed by incrementing month end by one interval.

27 May 2014 14:51

---

Daniel Zhang (張道博)

<https://github.com/dz1111/Maui-Smart-Grid/commit/ad91c7889910ff4bf68132a553fc2e58fe1b072e>

27 May 2014 14:53

---

### MSG-541 — load missing 15-min aggregated data for egauge 4915

Daniel Zhang (張道博)

Loaded. New issue has been opened for missing last days of the month #MSG-542.

23 May 2014 11:22

---

## MSG-542 — investigate and fix aggregation not occurring for the last day in a calendar month

Daniel Zhang (張道博)  
23 May 2014 11:37

The last calendar month days are observed in the timestamps used to process data.

Result of month start-ends for egauge:

```
$ python test____msg_data_aggregator.py
2014-05-23 11:36:40,705 - msg_data_aggregator - INFO: start 2013-08-21 15:00:00
2014-05-23 11:36:40,706 - msg_data_aggregator - INFO: end 2014-05-23 10:58:00
2014-05-23 11:36:40,706 - msg_time_util - DEBUG: start 2013-08-21 15:00:00, end
2014-05-23 10:58:00
(datetime.datetime(2013, 8, 21, 15, 0), datetime.datetime(2013, 8, 31, 23, 59, 59))
(datetime.datetime(2013, 9, 1, 0, 0), datetime.datetime(2013, 9, 30, 23, 59, 59))
(datetime.datetime(2013, 10, 1, 0, 0), datetime.datetime(2013, 10, 31, 23, 59, 59))
(datetime.datetime(2013, 11, 1, 0, 0), datetime.datetime(2013, 11, 30, 23, 59, 59))
(datetime.datetime(2013, 12, 1, 0, 0), datetime.datetime(2013, 12, 31, 23, 59, 59))
(datetime.datetime(2014, 1, 1, 0, 0), datetime.datetime(2014, 1, 31, 23, 59, 59))
(datetime.datetime(2014, 2, 1, 0, 0), datetime.datetime(2014, 2, 28, 23, 59, 59))
(datetime.datetime(2014, 3, 1, 0, 0), datetime.datetime(2014, 3, 31, 23, 59, 59))
(datetime.datetime(2014, 4, 1, 0, 0), datetime.datetime(2014, 4, 30, 23, 59, 59))
(datetime.datetime(2014, 5, 1, 0, 0), datetime.datetime(2014, 5, 23, 23, 59, 59))
[(datetime.datetime(2013, 8, 21, 15, 0), datetime.datetime(2013, 8, 31, 23, 59, 59)),
(datetime.datetime(2013, 9, 1, 0, 0), datetime.datetime(2013, 9, 30, 23, 59, 59)),
(datetime.datetime(2013, 10, 1, 0, 0), datetime.datetime(2013, 10, 31, 23, 59, 59)),
(datetime.datetime(2013, 11, 1, 0, 0), datetime.datetime(2013, 11, 30, 23, 59, 59)),
(datetime.datetime(2013, 12, 1, 0, 0), datetime.datetime(2013, 12, 31, 23, 59, 59)),
(datetime.datetime(2014, 1, 1, 0, 0), datetime.datetime(2014, 1, 31, 23, 59, 59)),
(datetime.datetime(2014, 2, 1, 0, 0), datetime.datetime(2014, 2, 28, 23, 59, 59)),
(datetime.datetime(2014, 3, 1, 0, 0), datetime.datetime(2014, 3, 31, 23, 59, 59)),
(datetime.datetime(2014, 4, 1, 0, 0), datetime.datetime(2014, 4, 30, 23, 59, 59)),
(datetime.datetime(2014, 5, 1, 0, 0), datetime.datetime(2014, 5, 23, 23, 59, 59))]
.
```

---

Ran 1 test in 0.637s

OK

---

Daniel Zhang (張道博)  
23 May 2014 13:46

Missing last day for aggregated data is only appearing in egauge data.

---

Daniel Zhang (張道博)  
23 May 2014 14:58

Fixed missing data for the last calendar day in a month for egauge.

---

Daniel Zhang (張道博)  
23 May 2014 15:01

<https://github.com/dz1111/Maui-Smart-Grid/commit/565dd74979bb34dbf6002e092a7be68b1b09d87a>

---

## MSG-540 — load missing May data for egauge 4913 for 2014 May 02--14

Daniel Zhang (張道博)  
22 May 2014 17:12

Performed manual load of data.

Verified by query.

---

## MSG-407 — Data Processing

### MSG-538 — migrate current dump directory to be new temp work directory

Daniel Zhang (張道博)  
20 May 2014 14:04

<https://github.com/dz1111/Maui-Smart-Grid/commit/45b6cf51bc711ed43ea501b5e9602d18c0774ad0>

---

### MSG-537 — Test export using /usr/local/msg-db-dumps

Daniel Zhang (張道博)  
19 May 2014 18:51

Changed config to new dump location and verified exports are working at the new location.

---

### MSG-536 — need to catch Backend Error from apiclient.errors.HttpError

Traceback (most recent call last):

```
File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 66, in <module>
    deleteOutdated = True)
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 276, in exportDB
    testing = testing)
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 388, in
uploadFileToCloudStorage
    if not self.__verifyMD5Sum(fullPath, self.fileIDForFileName(myFile)):
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 596, in __verifyMD5Sum
    for item in self.cloudFiles['items']:
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 54, in cloudFiles
    self._cloudFiles = self.driveService.files().list().execute()
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional_wrapper
    return wrapped(*args, **kwargs)
File "/usr/local/lib/python2.7/dist-packages/apiclient/http.py", line 723, in execute
    raise HttpError(resp, content, uri=self.uri)
apiclient.errors.HttpError: <HttpError 503 when requesting https://www.googleapis.com/drive/v2/files?alt=json
returned "Backend Error">
```

Daniel Zhang (張道博)  
16 May 2014 13:28

<https://github.com/dz1111/Maui-Smart-Grid/commit/46b0d5016ccd713eb2ad3843dd266bacb4c06609>

---

### MSG-534 — unicode arg error during export (affects available files list)

Traceback (most recent call last):

```
File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 79, in <module>
    exporter.sendDownloadableFiles()
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 467, in sendDownloadableFiles
    output.write(self.markdownListOfDownloadableFiles())
TypeError: unicode argument expected, got 'str'
```

Daniel Zhang (張道博)  
16 May 2014 13:28

<https://github.com/dz1111/Maui-Smart-Grid/commit/46b0d5016ccd713eb2ad3843dd266bacb4c06609>

---

Daniel Zhang (張道博)      from io import StringIO is for Python 3.



**MSG-529** — ensure all exported files are uploaded to the cloud

Notable exceptions are:

.\*fcphase3.sql.gz.0

Has a remote MD5 failure.

Daniel Zhang (張道博)

08 May 2014 18:29

Found exception for fcphase3 part 0:

```
2014-05-08 14:52:49,314 - msg_db_exporter - DEBUG: to upload:
['/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.0',
'/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.1',
'/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.2',
'/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.3']
2014-05-08 14:52:49,315 - msg_db_exporter - DEBUG: files to upload:
['/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.0',
'/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.1',
'/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.2',
'/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.3']
2014-05-08 14:52:49,315 - msg_db_exporter - INFO: Uploading /home/daniel/msg-
db-dumps/2014-05-08_144426_fcphase3.sql.gz.0.
2014-05-08 14:52:49,315 - msg_db_exporter - DEBUG: full path /home/daniel/msg-
db-dumps
2014-05-08 14:52:49,315 - msg_db_exporter - INFO: Uploading 2014-05-
08_144426_fcphase3.sql.gz.0.
2014-05-08 14:52:49,330 - msg_db_exporter - ERROR: Exception while uploading
2014-05-08_144426_fcphase3.sql.gz.0: ''.
```

Daniel Zhang (張道博)

08 May 2014 18:44

Manual upload works fine:

```
In [7]: exporter.uploadDBToCloudStorage(fullPath='/home/daniel/msg-db-
dumps/2014-05-08_144426_fcphase3.sql.gz.0'
)
2014-05-08 18:40:56,168 - msg_db_exporter - DEBUG: full path /home/daniel/msg-
db-dumps
2014-05-08 18:40:56,168 - msg_db_exporter - INFO: Uploading 2014-05-
08_144426_fcphase3.sql.gz.0.
2014-05-08 18:40:56,234 - msg_db_exporter - INFO: Authorizing credentials.
2014-05-08 18:40:56,234 - msg_db_exporter - INFO: Authorized.
2014-05-08 18:42:24,571 - msg_db_exporter - INFO: local file path:
/home/daniel/msg-db-dumps/2014-05-08_144426_fcphase3.sql.gz.0
2014-05-08 18:42:24,895 - msg_db_exporter - DEBUG: local md5:
98ebcf68df78027902b75a9652c9a84e
2014-05-08 18:42:25,760 - msg_db_exporter - DEBUG: remote md5:
98ebcf68df78027902b75a9652c9a84e
2014-05-08 18:42:25,760 - msg_db_exporter - INFO: Verification by MD5 checksum
succeeded.
2014-05-08 18:42:25,760 - msg_db_exporter - INFO: Finished.
```



Out[7]: u'0ByCQ0YIYSwf3Q2hVnVMYk94Ulk'

Daniel Zhang (張道博)  
10 May 2014 16:09

Remote MD5 fails for fcphase3 part 0:

2014-05-10 15:01:01,435 - msg\_db\_exporter - INFO - Uploading /home/daniel/msg-db-dumps/2014-05-10\_145229\_fcphase3.sql.gz.0.  
2014-05-10 15:01:01,435 - msg\_db\_exporter - INFO - full path /home/daniel/msg-db-dumps  
2014-05-10 15:01:01,435 - msg\_db\_exporter - INFO - Uploading 2014-05-10\_145229\_fcphase3.sql.gz.0.  
2014-05-10 15:01:01,440 - msg\_db\_exporter - ERROR - Exception while uploading 2014-05-10\_145229\_fcphase3.sql.gz.0: ''.  
2014-05-10 15:01:02,781 - msg\_db\_exporter - INFO - local file path: /home/daniel/msg-db-dumps/2014-05-10\_145229\_fcphase3.sql.gz.0  
2014-05-10 15:01:03,149 - msg\_db\_exporter - DEBUG - local md5: d6dcb1925989831ecf2f5610b087c8d9  
2014-05-10 15:01:03,915 - msg\_db\_exporter - INFO - Failed MD5 checksum verification.  
2014-05-10 15:01:03,917 - msg\_db\_exporter - INFO - file id after upload: None  
2014-05-10 15:01:03,918 - msg\_db\_exporter - INFO - file id: None

Daniel Zhang (張道博)  
14 May 2014 14:33

Separate test is successful:

2014-05-14 14:31:53,487 - msg\_db\_exporter - INFO - full path /home/daniel/msg-db-dumps  
2014-05-14 14:31:53,487 - msg\_db\_exporter - INFO - Uploading 2014-05-14\_141223\_fcphase3.sql.gz.0.  
2014-05-14 14:31:53,525 - msg\_db\_exporter - INFO - Authorizing credentials.  
2014-05-14 14:31:53,526 - msg\_db\_exporter - INFO - Authorized.  
2014-05-14 14:32:22,527 - msg\_db\_exporter - INFO - remote file ID: 0ByCQ0YIYSwf3c2haTGNvdWE1LVU  
2014-05-14 14:32:22,527 - msg\_db\_exporter - INFO - local file path: /home/daniel/msg-db-dumps/2014-05-14\_141223\_fcphase3.sql.gz.0  
2014-05-14 14:32:22,873 - msg\_db\_exporter - DEBUG - local md5: 05ac5ac922f4f6ac0945a87aaa7ca023  
2014-05-14 14:32:23,870 - msg\_db\_exporter - DEBUG - remote md5: 05ac5ac922f4f6ac0945a87aaa7ca023  
2014-05-14 14:32:23,870 - msg\_db\_exporter - INFO - Verification by MD5 checksum succeeded.  
2014-05-14 14:32:23,870 - msg\_db\_exporter - INFO - Finished.  
2014-05-14 14:32:24,817 - \_\_main\_\_ - DEBUG: file ID to delete: None  
.

Ran 1 test in 31.465s

Daniel Zhang (張道博)  
14 May 2014 14:34

Automated process fails on the same file:

2014-05-14 14:20:53,513 - msg\_db\_exporter - INFO - Uploading /home/daniel/msg-db-dumps/2014-05-14\_141223\_fcphase3.sql.gz.0.  
2014-05-14 14:20:53,514 - msg\_db\_exporter - INFO - full path /home/daniel/msg-db-dumps

2014-05-14 14:20:53,514 - msg\_db\_exporter - INFO - Uploading 2014-05-14\_141223\_fcphase3.sql.gz.0.  
2014-05-14 14:20:53,522 - msg\_db\_exporter - ERROR - Exception while uploading 2014-05-14\_141223\_fcphase3.sql.gz.0: ''.  
2014-05-14 14:20:54,870 - msg\_db\_exporter - INFO - remote file ID: None  
2014-05-14 14:20:54,870 - msg\_db\_exporter - INFO - local file path: /home/daniel/msg-db-dumps/2014-05-14\_141223\_fcphase3.sql.gz.0  
2014-05-14 14:20:55,209 - msg\_db\_exporter - DEBUG - local md5: 05ac5ac922f4f6ac0945a87aaa7ca023  
2014-05-14 14:20:56,170 - msg\_db\_exporter - INFO - Failed MD5 checksum verification.  
2014-05-14 14:20:56,180 - msg\_db\_exporter - INFO - file id after upload: None  
2014-05-14 14:20:56,180 - msg\_db\_exporter - INFO - file id: None

---

Daniel Zhang (張道博)  
14 May 2014 16:44

Changing the DB processing order results in different files failing during upload.

---

Daniel Zhang (張道博)  
14 May 2014 17:58

A single retry, delayed by 10 s, succeeds after an exception:

2014-05-14 17:38:37,237 - msg\_db\_exporter - INFO - Uploading /home/daniel/msg-db-dumps/2014-05-14\_170854\_meco\_v3.sql.gz.0.  
2014-05-14 17:38:37,237 - msg\_db\_exporter - INFO - full path /home/daniel/msg-db-dumps  
2014-05-14 17:38:37,237 - msg\_db\_exporter - INFO - Uploading 2014-05-14\_170854\_meco\_v3.sql.gz.0.  
2014-05-14 17:38:37,243 - msg\_db\_exporter - ERROR - Exception while uploading 2014-05-14\_170854\_meco\_v3.sql.gz.0: ''.  
2014-05-14 17:38:38,967 - msg\_db\_exporter - INFO - remote file ID: None  
2014-05-14 17:38:38,968 - msg\_db\_exporter - INFO - local file path: /home/daniel/msg-db-dumps/2014-05-14\_170854\_meco\_v3.sql.gz.0  
2014-05-14 17:38:39,906 - msg\_db\_exporter - DEBUG - local md5: 42ac3f8ec24c928c1a16c5d0b10f189e  
2014-05-14 17:38:40,809 - msg\_db\_exporter - INFO - Failed MD5 checksum verification.  
2014-05-14 17:38:50,819 - msg\_db\_exporter - INFO - full path /home/daniel/msg-db-dumps  
2014-05-14 17:38:50,820 - msg\_db\_exporter - INFO - Uploading 2014-05-14\_170854\_meco\_v3.sql.gz.0.  
2014-05-14 17:40:08,275 - msg\_db\_exporter - INFO - remote file ID: 0ByCQ0YIYSwf3eG1iT0JNQII0Y28  
2014-05-14 17:40:08,275 - msg\_db\_exporter - INFO - local file path: /home/daniel/msg-db-dumps/2014-05-14\_170854\_meco\_v3.sql.gz.0  
2014-05-14 17:40:09,149 - msg\_db\_exporter - DEBUG - local md5: 42ac3f8ec24c928c1a16c5d0b10f189e  
2014-05-14 17:40:10,172 - msg\_db\_exporter - DEBUG - remote md5: 42ac3f8ec24c928c1a16c5d0b10f189e  
2014-05-14 17:40:10,173 - msg\_db\_exporter - INFO - Verification by MD5 checksum succeeded.  
2014-05-14 17:40:10,173 - msg\_db\_exporter - INFO - Finished.  
2014-05-14 17:40:10,173 - msg\_db\_exporter - INFO - file id after upload: None  
2014-05-14 17:40:10,173 - msg\_db\_exporter - INFO - file id: None

---

Daniel Zhang (張道博)  
15 May 2014 15:39

All files are uploaded successfully.

---

### MSG-506 — verify upload of all files

Part 0 of fcphase3 appears to be missing.

### MSG-495 — verify delete outdated reaches all files that need deleting

Daniel Zhang (張道博)  
14 May 2014 10:22

No problems are observed with file deletion at this time.

---

### MSG-535 — fix DB and table permissions used during export

Table permissions appear to not be set sufficiently for pg\_dump:

pg\_dump: Error message from server: ERROR: permission denied for schema dw  
pg\_dump: The command was: LOCK TABLE dw."MeterLocationHistory\_deprecated" IN ACCESS SHARE MODE  
2014-05-11 14:45:02,508 - msg\_db\_exporter - INFO - Exception while dumping: Command 'pg\_dump -h localhost  
-p 5432 -U daniel meco\_v3 > /home/daniel/msg-db-dumps/2014-05-11\_144502\_meco\_v3.sql' returned non-zero  
exit status 1

Daniel Zhang (張道博)  
13 May 2014 21:57

<https://github.com/dz1111/Maui-Smart-Grid/commit/62f15f5593ec65631482f4f82568024ef97341d5>

---

### MSG-533 — exporter fails to export DBs

Daniel Zhang (張道博)  
08 May 2014 18:09

Fixed password problem.

Pgpass uses escaped chars for ':' and '\' on OS X but doesn't use this on Linux.

---

### MSG-531 — investigate http error involving file upload

[34m2014-04-30 03:05:34,616 - msg\_db\_exporter - [01mINFO: [39;49;0mUploading 2014-04-30\_030430\_biahouse.sql.gz. [39;49;0m

Traceback (most recent call last):

File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 65, in <module>  
 'num\_split\_sections'))))  
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 237, in exportDB  
 fileID = self.uploadDBToCloudStorage(f, testing = testing)  
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 311, in  
uploadDBToCloudStorage  
 media\_body).execute()  
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional\_wrapper  
 return wrapped(\*args, \*\*kwargs)  
File "/usr/local/lib/python2.7/dist-packages/apiclient/http.py", line 688, in execute  
 \_, body = self.next\_chunk(http=http, num\_retries=num\_retries)  
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional\_wrapper  
 return wrapped(\*args, \*\*kwargs)  
File "/usr/local/lib/python2.7/dist-packages/apiclient/http.py", line 874, in next\_chunk

```
return self._process_response(resp, content)
```

File `"/usr/local/lib/python2.7/dist-packages/apiclient/http.py"`, line 901, in `_process_response`  
raise `HttpError(resp, content, uri=self.uri)`  
`apiclient.errors.HttpError: <HttpError 503 when requesting https://www.googleapis.com/upload/drive/v2/files?uploadType=resumable&alt=json returned "Backend Error">`

Daniel Zhang (張道博)

01 May 2014 15:47

Received the following error:

```
[32m2014-05-01 02:48:18,938 - msg_db_exporter - [01mDEBUG: [39;49;0mfull
path /home/daniel/msg-db-dumps [39;49;0m
[34m2014-05-01 02:48:18,938 - msg_db_exporter - [01mINFO:
[39;49;0mUploading 2014-05-01_022001_meco_v3.sql.gz.0. [39;49;0m
[34m2014-05-01 02:48:19,472 - msg_db_exporter - [01mINFO:
[39;49;0mAuthorizing credentials. [39;49;0m
[34m2014-05-01 02:48:19,472 - msg_db_exporter - [01mINFO:
[39;49;0mAuthorized. [39;49;0m
Traceback (most recent call last):
  File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 65, in
<module>
    'num_split_sections'))))
  File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line
237, in exportDB
    fileId = self.uploadDBToCloudStorage(f, testing = testing)
  File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line
309, in uploadDBToCloudStorage
    result = self.driveService.files().insert(body = body,
  File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 61,
in driveService
    self._driveService = build('drive', 'v2', http = http)
  File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in
positional_wrapper
    return wrapped(*args, **kwargs)
  File "/usr/local/lib/python2.7/dist-packages/apiclient/discovery.py", line 192, in
build
    resp, content = http.request(requested_url)
  File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in
positional_wrapper
    return wrapped(*args, **kwargs)
  File "/usr/local/lib/python2.7/dist-packages/oauth2client/client.py", line 490, in
new_request
    redirections, connection_type)
  File "/usr/local/lib/python2.7/dist-packages/httplib2/_init_.py", line 1570, in
request
    (response, content) = self._request(conn, authority, uri, request_uri, method, body,
headers, redirections, cachekey)
  File "/usr/local/lib/python2.7/dist-packages/httplib2/_init_.py", line 1317, in
_request
    (response, content) = self._conn_request(conn, request_uri, method, body,
headers)
  File "/usr/local/lib/python2.7/dist-packages/httplib2/_init_.py", line 1286, in
```

```
_conn_request
    response = conn.getresponse()
    File "/usr/lib/python2.7/httplib.py", line 1018, in getresponse
        raise ResponseNotReady()
    httplib.ResponseNotReady
```

---

Daniel Zhang (張道博)  
02 May 2014 16:26

Errors related to uploading and connecting are no longer appearing.

---

### MSG-530 — files present in cloud storage are not listed on the HISEP available files page

The last listed date is 04-28 on the available files page in contrast to the last file date being 04-30 in cloud storage.

Daniel Zhang (張道博)  
02 May 2014 16:48

Files are now appearing on the HISEP available files page as is expected for correct behavior.

---

### MSG-527 — send aggregation logging to email

Daniel Zhang (張道博)  
30 Apr 2014 15:22

Output to stdout is reported via email. Color codes should be removed.

---

### MSG-488 — aggregate continuously by implementing a schedule for aggregation of new data

Daniel Zhang (張道博)  
28 Apr 2014 16:39

Aggregation has been scheduled.

---

### MSG-519 — add notification of new data aggregation

Daniel Zhang (張道博)  
28 Apr 2014 16:37

<https://github.com/dz1111/Maui-Smart-Grid/commit/46302bc84e81064b1ccb6cb7cc563d2ee00b192d>

---

### MSG-526 — update last reported date of new data aggregation

Daniel Zhang (張道博)  
28 Apr 2014 16:36

<https://github.com/dz1111/Maui-Smart-Grid/commit/46302bc84e81064b1ccb6cb7cc563d2ee00b192d>

---

### MSG-524 — collect results during aggregation of new data report insert quantity

Daniel Zhang (張道博)  
23 Apr 2014 14:05

<https://github.com/dz1111/Maui-Smart-Grid/commit/05a00473275b11a15fd22b40915fd62c8b849f8b>

---

### MSG-525 — handle final endpoint error for egauge data

Daniel Zhang (張道博)  
23 Apr 2014 13:26

<https://github.com/dz1111/Maui-Smart-Grid/commit/9063fd27abfdd0cf5e8e685b7049ee385e40225f>

---

### MSG-523 — handle exception where no new data is available

Example:

2014-04-22 14:37:44,279 - msg\_data\_aggregator - CRITICAL: datatype: weather, start, end: 2014-03-31 23:45:00, 2014-03-31 23:45:00

E

```
=====
ERROR: testAggregateNewData (__main__.MSGDataAggregatorTester)
```

---

Traceback (most recent call last):

```
File "test__msg_data_aggregator.py", line 307, in testAggregateNewData
    map(self.aggregator.aggregateNewData, self.rawTypes)
File "/home/daniel/fork-of-github-maui-smart-grid/src/msg_data_aggregator.py", line 536, in aggregateNewData
    '%Y-%m-%d %H:%M:%S'))
File "/home/daniel/fork-of-github-maui-smart-grid/src/msg_data_aggregator.py", line 820, in aggregatedData
    data = aggData)
File "/home/daniel/fork-of-github-maui-smart-grid/src/msg_aggregated_data.py", line 26, in __init__
    raise Exception('Data not provided.')
Exception: Data not provided.
```

---

Ran 1 test in 0.304s

Daniel Zhang (張道博)  
22 Apr 2014 15:25

<https://github.com/dz1111/Maui-Smart-Grid/commit/86e4f1f8ab5fcea8f485e2b57f5515e576cd5936>

---

### MSG-522 — test aggregation of new data using live data

Daniel Zhang (張道博)      Aggregation of new data is successful.  
21 Apr 2014 15:36

---

### MSG-521 — handle duplicate keys during insert of aggregate new data

Sample error:

2014-04-21 14:47:56,924 - msg\_db\_util - ERROR: SQL execute failed using INSERT INTO "AverageFifteenMinKiheiSCADATemperatureHumidity" (timestamp,met\_air\_temp\_degf,met\_rel\_humid\_pct) VALUES( '2014-02-28T23:45:00',84.2421875,26.7578125). The error is: duplicate key value violates unique constraint "KiheiSCADATemperatureHumidity\_copy\_pkey"  
DETAIL: Key ("timestamp")=(2014-02-28 23:45:00) already exists.

Daniel Zhang (張道博)      Preventing duplicate conflict by incrementing start endpoint.  
21 Apr 2014 15:32

---

Daniel Zhang (張道博)      <https://github.com/dz1111/Maui-Smart-Grid/commit/a824985bf49ad94087201fda00b3b19e548a0d47>  
21 Apr 2014 15:37

---

### MSG-520 — prevent msg aggregator test from accessing production data

### MSG-516 — change end date check to be less than end date + 1 day

Daniel Zhang (張道博)  
04 Apr 2014 14:00

<https://github.com/dz1111/Maui-Smart-Grid/commit/b785b14124598c5cb45feb1b15d8f62259fca99b>

---

### MSG-517 — fix endpoint for aggregate new data

Endpoint is currently 00:00:00 instead of the calculated time.

Daniel Zhang (張道博)  
04 Apr 2014 15:43

<https://github.com/dz1111/Maui-Smart-Grid/commit/7996efbff05fe57ece28447f875260dd58faa64f>

---

### MSG-513 — aggregate new data if present

Daniel Zhang (張道博)  
04 Apr 2014 15:44

Aggregation of new data is successful. Still need to enable insertion.

Daniel Zhang (張道博)  
04 Apr 2014 15:53

<https://github.com/dz1111/Maui-Smart-Grid/commit/cdc63347708529d81f56e337e39814c2e7c2b627>

---

### MSG-515 — generate static test data for data aggregation unit tests

### MSG-518 — clean up aggregator tests

### MSG-489 — clean obsolete users & groups from active DBs

### MSG-417 — generate automatic documentation from source code

### MSG-397 — provide notification upon failed data loading for missing columns

During failed data loading conditions, the invalid data is stored at /usr/local/msg-egauge-service/invalid-data.

Daniel Zhang (張道博)  
23 Jan 2014 18:42

egauge data loading has reporting of status via notifications:  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/eebf31bc3528fec0e7200343d9b27a84cf6ce90a#diff-7c14f14ae6f494eee5f4324b3a685d29>

---

Daniel Zhang (張道博)  
23 Jan 2014 18:43

Failures are not currently separately reported.

---

### MSG-361 — fix meco\_xml\_parser test

E2013-10-11 15:54:21,429 - meco\_xml\_parser - INFO - Testing Mode is ON.

```
.  
=====
```

```
ERROR: testAllTableNamesArePresent (__main__.TestMECOXMLParser)
```

---

Traceback (most recent call last):

File "/Users/daniel/DZDevelopment/github-maui-smart-grid/test/test\_\_\_\_meco\_xml\_parser.py", line 45, in testAllTableNamesArePresent

fileObject = open(self.p.filename, "rb")  
IOError: [Errno 2] No such file or directory: '../test-data/meco\_v3-energy-test-data.xml'

```
=====
```

ERROR: testEveryElementIsVisited (\_\_main\_\_.TestMECOXMLParser)

---

Traceback (most recent call last):

File "/Users/daniel/DZDevelopment/github-maui-smart-grid/test/test\_\_\_\_meco\_xml\_parser.py", line 35, in testEveryElementIsVisited

fileObject = open(self.p.filename, "rb")

IOError: [Errno 2] No such file or directory: '../test-data/meco\_v3-energy-test-data.xml'

---

Ran 3 tests in 2.498s

FAILED (errors=2)

### MSG-510 — perform full aggregation of irradiance, weather, egauge and circuit data

Daniel Zhang (張道博)

21 Mar 2014 13:11

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5bcc87a98677bac0981b9058ff51839d94b6b4de>

---

### MSG-511 — verify calculation of aggregation rows

Example:

2014-03-20 14:11:53,531 - msg\_data\_aggregator - DEBUG: Aggregating 3376 rows of data.

2014-03-20 14:11:53,531 - msg\_data\_aggregator - DEBUG: minute crossed 45

2014-03-20 14:11:53,531 - msg\_data\_aggregator - DEBUG: resetting subkey 1518

Daniel Zhang (張道博)

20 Mar 2014 16:04

Subkey case is verified.

---

Daniel Zhang (張道博)

20 Mar 2014 16:18

Nonsubkey case is verified.

---

Daniel Zhang (張道博)

20 Mar 2014 16:19

<https://github.com/dz1111/Maui-Smart-Grid/commit/ababab4b27ac5455e517df2011283a150ef255ce>

---

Daniel Zhang (張道博)

20 Mar 2014 16:19

<https://github.com/dz1111/Maui-Smart-Grid/commit/963e466e20538155c115ffa1f2665130471f5d8f>

---

### MSG-509 — test writing of all data types

Daniel Zhang (張道博)

17 Mar 2014 14:41

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/55b983218d98fd3a599a15a5345427b7c32acc69>

---

Daniel Zhang (張道博)

17 Mar 2014 14:41

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bf9a2ef5c322d1979336c10563d56efe3c80bd9b>

---

### MSG-507 — convert weather aggregation to the general form

Daniel Zhang (張道博)

14 Mar 2014 13:25

<https://github.com/dz1111/Maui-Smart-Grid/commit/77af1e01351ba3b4086fc5f942d695c4a8b1d68f>

---



### MSG-508 — convert irradiance aggregation to the general form

Daniel Zhang (張道博)

14 Mar 2014 13:25

<https://github.com/dz1111/Maui-Smart-Grid/commit/77af1e01351ba3b4086fc5f942d695c4a8b1d68f>

---

### MSG-505 — handle interval crossings correctly for all subkeys including boundary cases

Daniel Zhang (張道博)

14 Mar 2014 13:24

<https://github.com/dz1111/Maui-Smart-Grid/commit/341f9e276c1aa954ecc971b8605ec69044473150>

---

### MSG-503 — add solar+ column

Daniel Zhang (張道博)

10 Mar 2014 13:16

2461115b0bd61c6610c5003f3ab8bea98c848ff3

---

### MSG-491 — write aggregated irradiance data to the db

Daniel Zhang (張道博)

10 Mar 2014 13:16

6378f94d8e57a496807b64bed7df166b68ad906b

---

### MSG-494 — write aggregated egauge data to the db

Daniel Zhang (張道博)

10 Mar 2014 13:16

6378f94d8e57a496807b64bed7df166b68ad906b

---

### MSG-493 — write aggregated circuit data to the db

Daniel Zhang (張道博)

10 Mar 2014 13:15

6378f94d8e57a496807b64bed7df166b68ad906b

---

### MSG-492 — write aggregated weather data to the db

Daniel Zhang (張道博)

10 Mar 2014 13:15

6378f94d8e57a496807b64bed7df166b68ad906b

---

### MSG-284 — handle db connect exception

Daniel Zhang (張道博)

10 Mar 2014 13:17

6378f94d8e57a496807b64bed7df166b68ad906b

---

### MSG-502 — add pv system column

Daniel Zhang (張道博)

06 Mar 2014 14:06

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1f477008f137e72e797fef8882343ef5cc506bd8>

---

### MSG-485 — implement weather (temp/hum) aggregation 15 min

Daniel Zhang (張道博)  
06 Mar 2014 14:07

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e12c77403328be898774de3948d3ed57b7599371>

---

### MSG-486 — implement circuit data aggregation 15 min

Daniel Zhang (張道博)  
06 Mar 2014 14:06

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5a98e947ed52c17a9e086d468ba600675e0b1b55>

---

### MSG-487 — implement egauge data aggregation 15 min

Daniel Zhang (張道博)  
06 Mar 2014 14:06

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5a98e947ed52c17a9e086d468ba600675e0b1b55>

---

### MSG-297 — eGauge Readings

### MSG-468 — adjust notification formatting to remove linefeeds

Daniel Zhang (張道博)  
03 Feb 2014 16:50

Code in /msg\_notifier.py appears to be correct with no additional linefeeds being present.

---

### MSG-499 — add share all files method

Daniel Zhang (張道博)  
03 Mar 2014 12:44

- commit b7390ebad9542c32f8722e7ee8b621a0d0ed4673
  - commit 91aac3c80bb5b02a185a663c0f11d925766a517d
- 

### MSG-477 — test ability of users to download exported files

Daniel Zhang (張道博)  
03 Mar 2014 12:36

Files can be downloaded for those with reader permission.

---

### MSG-472 — write docs for restoration of dbs from cloud exports

Daniel Zhang (張道博)  
27 Feb 2014 14:11

Docs are on export list site.

---

### MSG-479 — provide access to export download links

Daniel Zhang (張道博)  
27 Feb 2014 14:12

<https://github.com/dz1111/Maui-Smart-Grid/commit/7552de85967194490db1af68b8370711bf5ee13d>

---

Daniel Zhang (張道博)  
03 Mar 2014 12:41

<https://github.com/dz1111/Maui-Smart-Grid/commit/f45c8a0446a6b27f45b29c6109371377bbdd6af9>

---

### MSG-497 — add uploader for download links

Daniel Zhang (張道博)  
27 Feb 2014 14:12

<https://github.com/dz1111/Maui-Smart-Grid/commit/7552de85967194490db1af68b8370711bf5ee13d>

---

### MSG-473 — verify setting of reader permissions for recipient list

Daniel Zhang (張道博)  
03 Mar 2014 12:48

Verified by comparing two accounts.

---

### MSG-483 — create DataAggregator

Daniel Zhang (張道博)  
27 Feb 2014 14:11

Initial class has been created.

---

### MSG-445 — provide more graceful error on non-existing config value

Daniel Zhang (張道博)  
21 Jan 2014 16:31

Existing error message seems sufficient:

```
2014-01-21 16:30:19,631 - __main__ - INFO - Testing exportDB
2014-01-21 16:30:19,631 - msg_db_exporter - INFO - Exporting meco_v3_test1.
Failed when getting _config option export_test_data_path in section Testing
```

---

### MSG-447 — remove outdated local export files after upload

### MSG-496 — verify MECO reading dupes

Daniel Zhang (張道博)  
25 Feb 2014 13:04

<https://github.com/dz1111/Maui-Smart-Grid/commit/6e3a5c69b96016b9916cddb14e139ef678549c45>

---

### MSG-469 — Verify correct operation of deleteOutdatedFiles()

Daniel Zhang (張道博)  
11 Feb 2014 13:49

Number of days is observed as being correct.

---

Daniel Zhang (張道博)  
12 Feb 2014 13:30

Testing a change in number of days.

---

Daniel Zhang (張道博)  
21 Feb 2014 14:32

Determined that expected behavior will occur when deleteOutdatedFiles() is implemented recursively.

---

Daniel Zhang (張道博)  
21 Feb 2014 14:35

<https://github.com/dz1111/Maui-Smart-Grid/commit/4bf7b8ba1904d77668138550c0f1fef85b904e50>

---

### MSG-484 — implement irradiance aggregation 15 min

Daniel Zhang (張道博)  
21 Feb 2014 13:56

<https://github.com/dz1111/Maui-Smart-Grid/commit/684c2e1f272b48910a292cc993f1b02becdb91f1>

---

Daniel Zhang (張道博)  
21 Feb 2014 13:56

<https://github.com/dz1111/Maui-Smart-Grid/commit/dfdccd1d847fe66d5719811634cc40109470f75a>

---

## MSG-279 — Views

## MSG-482 — add all databases to sepgroup acl setter

Daniel Zhang (張道博)  
12 Feb 2014 16:19

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d43d04470355381f28c9e2fecb63c2a255281d95>

---

## MSG-453 — generate 15 min aggregated temp/humidity data for latest data

Daniel Zhang (張道博)  
12 Feb 2014 13:27

Data generated and inserted.

---

## MSG-480 — always upload export files in fixed order

Daniel Zhang (張道博)  
10 Feb 2014 16:01

Order that is applied is the one in the config file.

---

## MSG-436 — output URLs of cloud-based files

Daniel Zhang (張道博)  
05 Feb 2014 16:12

<https://github.com/dz1111/Maui-Smart-Grid/commit/b97966016367d726e0df4fa4ffe0ce0ba7aa325c>

---

## MSG-478 — critical config error causes all services to fail

Weather loading:

Critical error: Failed to read site \_config

Exception AttributeError: "'MSGDBConnector' object has no attribute 'dbName'" in <bound method MSGDBConnector.\_\_del\_\_ of <msg\_db\_connector.MSGDBConnector object at 0x2063b90>> ignored

Export:

Critical error: Failed to read site \_config

Daniel Zhang (張道博)  
04 Feb 2014 16:07

A syntax error was corrected.

The site config is critical to the correct operation of all services. Syntax errors result in complete failure of the system.

---

## MSG-470 — Provide a list of download URLs for exported files

Daniel Zhang (張道博)  
05 Feb 2014 00:49

<https://github.com/dz1111/Maui-Smart-Grid/commit/36eb9ad77b902811be9a4dcb8b14e56f17a12f3c>

---

Daniel Zhang (張道博)  
05 Feb 2014 00:50

<https://github.com/dz1111/Maui-Smart-Grid/commit/cf4fb204afe64201b592c132dd9a3ee79ae31c2c>

---

## MSG-444 — Configer

**MSG-434** — add read permissions for a list of email addresses to export files following upload  
Can reader permissions be provided for many files without excessive email spam?

Daniel Zhang (張道博)  
03 Feb 2014 16:25

<https://github.com/dz1111/Maui-Smart-Grid/commit/91aac3c80bb5b02a185a663c0f11d925766a517d>

---

## MSG-467 — prevent user notification during adding of reader permissions

Daniel Zhang (張道博)  
03 Feb 2014 16:24

<https://github.com/dz1111/Maui-Smart-Grid/commit/148d480d2d55bbe995d425d94fa9a588faf3b3c6>

---

Daniel Zhang (張道博)  
03 Feb 2014 16:24

<https://github.com/dz1111/Maui-Smart-Grid/commit/8eab1fdaf43545fdcd482dc50156dcc6eb284ead>

---

## MSG-466 — verify split archives in cloud

Daniel Zhang (張道博)  
03 Feb 2014 14:32

Latest export has been verified using concatenation and 'gzip -t' testing.

---

## MSG-198 — Logging

## MSG-143 — have db destructor message handle testing mode

## MSG-459 — enable support for MSG logger to use enum types for logger mode

## MSG-175 — Weather Data Loading

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

This is for providing notifcation of new PV instances.

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-177 — support weather data plot notification

## MSG-316 — change definition of PV service point

PV service points are those that have either one or two PV meters as indicated in PVServicePointIDs. The definition and use may be incorrect. This definition has numerous view-based dependencies within the database.

## MSG-413 — be able to import MSG classes in a symmetric manner as standard library classes

Daniel Zhang (張道博)  
04 Dec 2013 18:17

This is based around using the "home scheme" vs the system scheme, iirc.

---

## MSG-412 — Code Maintenance

### MSG-465 — implement: if numchunks is 1 don't create a split section

Daniel Zhang (張道博)  
31 Jan 2014 16:27

<https://github.com/dz1111/Maui-Smart-Grid/commit/849825ca3a9eb6fbb00369cf6231c3ee63aa3352>

---

### MSG-458 — update prerelease installer with working cloud exporter

Daniel Zhang (張道博)  
31 Jan 2014 16:31

Prerelease archive has been updated with the latest dist.

---

### MSG-422 — support install of msg egauge software using install-msg.py

Daniel Zhang (張道博)  
31 Jan 2014 14:13

Installation is supported using install-msg.py.

---

### MSG-464 — switch to more efficient file splitting

Daniel Zhang (張道博)  
31 Jan 2014 14:12

<https://github.com/dz1111/Maui-Smart-Grid/commit/e7fabcb2fbc64a66a381b8666855412b846f710b>

---

### MSG-460 — split gzip archive prior to uploading

Daniel Zhang (張道博)  
30 Jan 2014 19:25

<https://github.com/dz1111/Maui-Smart-Grid/commit/3c4fc114b4ebb7a6f04eaa022ed7b5e4d3eab666>

---

### MSG-463 — fix multiple db export in the live exporter

Daniel Zhang (張道博)  
30 Jan 2014 19:25

<https://github.com/dz1111/Maui-Smart-Grid/commit/3c4fc114b4ebb7a6f04eaa022ed7b5e4d3eab666>

---

### MSG-462 — verify use of dhw\_load\_control

Daniel Zhang (張道博)  
29 Jan 2014 16:48

New data loads successfully.

---

### MSG-461 — add support for dhw\_load\_control

Daniel Zhang (張道博)  
29 Jan 2014 15:27

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/428785ae265e30f499c66b3a07ed3df5116dc57d>

---

Daniel Zhang (張道博)  
29 Jan 2014 15:27

Installed new library to MSG eGauge Service.

---

### MSG-455 — restore cloud export by verifying credentials

Related error:

2014-01-13 20:01:02,030 - \_\_main\_\_ - INFO - Exporting DBs to cloud.  
2014-01-13 20:01:02,032 - msg\_db\_exporter - INFO - Exporting meco\_v3.  
2014-01-13 20:05:25,204 - msg\_db\_exporter - INFO - Compressing meco\_v3 using gzip.  
2014-01-13 20:19:55,972 - msg\_db\_exporter - DEBUG - full path /home/daniel/msg-db-dumps  
2014-01-13 20:19:55,972 - msg\_db\_exporter - INFO - Uploading 2014-01-13\_200102\_meco\_v3.sql.gz.  
2014-01-13 20:19:56,038 - msg\_db\_exporter - INFO - Authorizing credentials.  
2014-01-13 20:19:56,038 - msg\_db\_exporter - INFO - Authorized.

Traceback (most recent call last):

```
File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 55, in <module>
    toCloud = True, testing = commandLineArgs.testing)
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 151, in exportDB
    testing = testing)
File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg_db_exporter.py", line 194, in
uploadDBToCloudStorage
    media_body).execute()
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional_wrapper
    return wrapped(*args, **kwargs)
File "/usr/local/lib/python2.7/dist-packages/apiclient/http.py", line 688, in execute
    _, body = self.next_chunk(http=http, num_retries=num_retries)
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional_wrapper
    return wrapped(*args, **kwargs)
File "/usr/local/lib/python2.7/dist-packages/apiclient/http.py", line 867, in next_chunk
    headers=headers)
File "/usr/local/lib/python2.7/dist-packages/oauth2client/util.py", line 132, in positional_wrapper
    return wrapped(*args, **kwargs)
File "/usr/local/lib/python2.7/dist-packages/oauth2client/client.py", line 490, in new_request
    redirections, connection_type)
File "/usr/local/lib/python2.7/dist-packages/httplib2/__init__.py", line 1570, in request
    (response, content) = self._request(conn, authority, uri, request_uri, method, body, headers, redirections,
cachekey)
File "/usr/local/lib/python2.7/dist-packages/httplib2/__init__.py", line 1317, in _request
    (response, content) = self._conn_request(conn, request_uri, method, body, headers)
File "/usr/local/lib/python2.7/dist-packages/httplib2/__init__.py", line 1286, in _conn_request
    response = conn.getresponse()
File "/usr/lib/python2.7/httplib.py", line 1030, in getresponse
    response.begin()
File "/usr/lib/python2.7/httplib.py", line 407, in begin
    version, status, reason = self._read_status()
File "/usr/lib/python2.7/httplib.py", line 365, in _read_status
    line = self.fp.readline()
File "/usr/lib/python2.7/socket.py", line 430, in readline
    data = recv(1)
File "/usr/lib/python2.7/ssl.py", line 241, in recv

    return self.read(buf len)

File "/usr/lib/python2.7/ssl.py", line 160, in read

    return self._sslobj.read(len)
```

ssl.SSLError: [Errno 1] \_ssl.c:1413: error:1408F119:SSL routines:SSL3\_GET\_RECORD:decryption failed or bad record mac

Daniel Zhang (張道博)  
28 Jan 2014 18:45

Credentials are verified. Upload error is due to archive exceeding max upload size.

---

### MSG-269 — support multiple db export

Daniel Zhang (張道博)  
22 Jan 2014 16:59

Multiple db export is supported.

---

Daniel Zhang (張道博)  
22 Jan 2014 18:14

<https://github.com/dz1111/Maui-Smart-Grid/commit/9a22810e7a677139428232d3edb42023310a1730>

---

### MSG-456 — fix up exporter tests

Daniel Zhang (張道博)  
27 Jan 2014 17:11

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c5e1c9c678ae04a9d9757a1caf0d2cd6f05f12bd>

---

### MSG-449 — update sample config in repo

Daniel Zhang (張道博)  
23 Jan 2014 18:38

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7010c30d9186ec0629329acb4fccfc7a3bd4a148#diff-04c6e90faac2675aa89e2176d2eec7d8>

---

### MSG-457 — update setup.py with new files

Daniel Zhang (張道博)  
23 Jan 2014 17:28

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/afcb27ad3b25d41fe14d38502764b1c36ac50a2c>

---

Daniel Zhang (張道博)  
23 Jan 2014 17:28

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5802de2acdaf7798cada7c8d04bd802a82eca492>

---

### MSG-454 — remove awkward testing mode from msg db exporter

testing mode should be handled entirely through params

Daniel Zhang (張道博)  
22 Jan 2014 18:14

<https://github.com/dz1111/Maui-Smart-Grid/commit/9a22810e7a677139428232d3edb42023310a1730>

---

### MSG-452 — test multiple DB export

Daniel Zhang (張道博)  
20 Jan 2014 18:36

<https://github.com/dz1111/Maui-Smart-Grid/commit/9120c1c93a114bc522ef3f27c7f9d40280b540c0>

---

### MSG-450 — generate 15 min aggregated temperature/humidity data for 2013-jan-06 data

Daniel Zhang (張道博)  
15 Jan 2014 15:20

Processed data using aggregate-scada-weather-data.sh. Found no difference in aggregated results through line-by-line comparison.

---



Daniel Zhang (張道博)  
15 Jan 2014 17:18

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/27ff42c1a2efe85dcdb57a45df92a6409272d79b>

---

**MSG-451** — remove circular reference to msg logging in install-msg.py

Daniel Zhang (張道博)  
09 Jan 2014 15:36

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fdc7975e808e085354de402e3873de80d84f9a73>

---

**MSG-295** — verify local compressed file using checksum verification of extracted archive

Daniel Zhang (張道博)  
14 Jan 2014 23:21

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6dc42051841cbb05ac71e68bb92cb979d5b7e98e>

---

**MSG-448** — generate 15 min aggregated irradiance data for 2013-jan-06 data

Daniel Zhang (張道博)  
07 Jan 2014 14:52

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/95bc1b5682d3504f50b5ce436a23df1914c2bd40>

---

**MSG-374** — provide notification of exported DBs

Daniel Zhang (張道博)  
26 Dec 2013 16:50

Notification is provided upon sharing.

---

**MSG-443** — add test for adding of reader permissions in exports

Daniel Zhang (張道博)  
26 Dec 2013 16:47

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/36df2d59ba84d00aa6750deafd6ea57df820f613>

---

**MSG-430** — provide shared link during notification

**MSG-431** — change insert script to user-based insert script used during automatic data loading

Daniel Zhang (張道博)  
26 Dec 2013 12:28

The user-based script is being used.

---

**MSG-442** — fail on testGetFileIDsForFilename due to nonexistent file

Related to testing order.

Daniel Zhang (張道博)  
24 Dec 2013 18:57

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b32953f1316a11dec57d65a34aa026a431d07b08>

---

**MSG-401** — Provide 1.0.0 release archive to GitHub

Daniel Zhang (張道博)  
24 Dec 2013 13:43

Pre-release of 1.0.0 has been provided.

---

### MSG-438 — log output is doubled during /test/test\_\_\_\_msg\_db\_exporter.py

Doubling is occurring at start of test when the logger is accessed through an external module.

Daniel Zhang (張道博)  
22 Dec 2013 22:13

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3e6f2413d7c842ec6f05cacb8595d71f916c4f94>

---

Daniel Zhang (張道博)  
23 Dec 2013 02:17

Tests pass.

---

### MSG-440 — failure on testUploadTestData due to filename check change

Daniel Zhang (張道博)  
20 Dec 2013 16:24

Resolved by change to returning single file ID for filename search.

---

### MSG-439 — ignore historical files in testGetFileIDForFilename

Daniel Zhang (張道博)  
20 Dec 2013 16:23

Trashed files are ignored.

---

### MSG-437 — fail on testGetFileIDForFilename

Daniel Zhang (張道博)  
20 Dec 2013 15:52

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0b5909fc7c716376a450dfbe55d4a78808cc59d8>

---

### MSG-441 — ignore trashed files in fileIDForFileName

Daniel Zhang (張道博)  
20 Dec 2013 16:21

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d5df5f6a0594c86f80b1a4e244c6f71622da3587>

---

### MSG-435 — add config option for read-access to export files

Daniel Zhang (張道博)  
19 Dec 2013 16:10

Config option is read\_permission. It's value is a list of email addresses.

---

### MSG-429 — outdated export files are not being removed

Traceback (most recent call last):

File "/home/daniel/Maui-Smart-Grid-1.0.0/bin/exportDBsToCloud.py", line 55, in <module>  
toCloud = True, testing = commandLineArgs.testing)

File "/home/daniel/Maui-Smart-Grid-1.0.0/lib/python/msg\_db\_exporter.py", line 163, in exportDB  
days = self.configer.configOptionValue('Export', 'days\_to\_keep'))

TypeError: unsupported type for timedelta days component: str

Daniel Zhang (張道博)  
16 Dec 2013 15:42

Added typecast.

---

Daniel Zhang (張道博)  
17 Dec 2013 13:21

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f7baab9cf53eab2aa70a469ee279f1c4c002382c>

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## MSG-400 — Distribution

### MSG-328 — report weather data download results during report of inserts

Daniel Zhang (張道博)  
12 Sep 2013 16:43

Commit made by **Daniel Zhang (張道博)** on 2013-09-12T19:43:39-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0c21ff0f1fe795fc7ab1241c0b9abb3b91aadf32>

| storing retrieval results: #MSG-328 In Progress

Daniel Zhang (張道博)  
13 Sep 2013 14:44

Commit made by **Daniel Zhang (張道博)** on 2013-09-13T17:44:43-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b484b2088b306d918b247d7a5118353aa31e3401>

| reporting download results: #MSG-328 fixed

Daniel Zhang (張道博)  
17 Sep 2013 15:52

Weather data results are verified to be reported.

## MSG-231 — Meter Location History

### MSG-423 — add power event data to meco\_v3

Daniel Zhang (張道博)  
11 Dec 2013 13:47

Data added to PowerMeterEvents.

### MSG-425 — create power meter event insert script

Daniel Zhang (張道博)  
11 Dec 2013 13:47

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/29c46d3c76e94c35f5dbef294f4aa526f2ceb3b2>

### MSG-424 — create new power meter event table

Daniel Zhang (張道博)  
09 Dec 2013 13:55

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/46dd201cc0e98d1867145280748eeeb7873a31d2>

### MSG-348 — document automatic processes using crontab

Daniel Zhang (張道博)  
04 Dec 2013 13:09

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6a88c5e34757d64977e52b9026a1b001a27ba22e>

### MSG-396 — increase export queue timespan to 48 h

Daniel Zhang (張道博)  
18 Nov 2013 14:15

Timespan has been set. Software install needs to be refreshed for the setting to be used.

Daniel Zhang (張道博)  
03 Dec 2013 17:01

The 48 h timespan is being used.

**MSG-419** — test ability to perform a user-based software update on SEP server where source code is modified

Daniel Zhang (張道博)	Modified code was updated using the custom installer.
03 Dec 2013 17:17	

---

**MSG-399** — switch automated processes to user-based install

Daniel Zhang (張道博)	Processes were switched within the crontab.
03 Dec 2013 17:02	

---

**MSG-418** — ensure python path specification is correct during install

Installer is modifying the path relative to the site. This can result in an unwanted python binary path spec.

Daniel Zhang (張道博)	Scripts installed to bin have an incorrect python binary path.
02 Dec 2013 16:31	

---

Daniel Zhang (張道博)	Verified that /usr/bin/python is being used on SEP server during use of install-msg.py.
02 Dec 2013 17:55	

---

**MSG-349** — perform user-based install of MSG python code on SEP server

Future installation:

Install modules and scripts.

- Scripts should go to /usr/local/bin.
- Modules should go in /usr/local/lib.

Daniel Zhang (張道博)	<a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bda8284dd7be1b9f731964ba591e9a76b80142b9">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bda8284dd7be1b9f731964ba591e9a76b80142b9</a>
02 Dec 2013 16:28	

---

**MSG-420** — have installer provide a default path along with software version

The default path should have the form Maui-Smart-Grid-x.x.x.

Daniel Zhang (張道博)	Software version is obtained from setup.py.
02 Dec 2013 15:17	
	Install path is obtained from a command line arg.

---

Daniel Zhang (張道博)	Need to add the package name.
02 Dec 2013 15:58	

---

Daniel Zhang (張道博)	<a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bda8284dd7be1b9f731964ba591e9a76b80142b9">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bda8284dd7be1b9f731964ba591e9a76b80142b9</a>
02 Dec 2013 16:28	

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**MSG-421** — have tar extract use tarfile

Daniel Zhang (張道博)  
02 Dec 2013 13:13

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/35d433c1e80d4ad3c02f3d0a5d270c10da7b5d0d>

---

### MSG-405 — create install script

- Generate dist archive.
- Install using current code base.

Daniel Zhang (張道博)  
27 Nov 2013 16:55

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c0ffd963e7101946f9b7ec3e67cf0e2b9060faf9>

---

### MSG-414 — generate view with uniform intervals for irradiance averages

Daniel Zhang (張道博)  
25 Nov 2013 13:33

last commit: <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e7c7d58f6d5b497bdb53c2bf2cf0bb8160d602c>

---

### MSG-411 — average scada weather data at 15 min

Daniel Zhang (張道博)  
20 Nov 2013 13:11

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/54fd6a42f22c4d30edde4134e170908f7f13d3e4>

---

### MSG-404 — extract script from msg db exporter

This is needed for the installer.

Daniel Zhang (張道博)  
12 Nov 2013 13:59

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/78add0632886d5372be035ebc0611fa299a1387>

---

### MSG-406 — add temp & humidity data from 2013\_11\_14\_scada

Daniel Zhang (張道博)  
19 Nov 2013 10:52

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4d2c5706cb0901e80b89033d5d0e7a466ee6aa80>

---

Daniel Zhang (張道博)  
19 Nov 2013 10:56

Runtime: 19 min

---

### MSG-409 — insert aggregated irradiance data to a table

Daniel Zhang (張道博)  
19 Nov 2013 10:57

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7c0d27e2c14404e0d2dc91ce93cc25938dd3ba0c>

---

### MSG-408 — generate aggregated irradiance data for 15 min intervals

Daniel Zhang (張道博)  
19 Nov 2013 10:57

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a3a04a4260fa6d035cb9733394d119534b5f8b4c>

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## MSG-402 — test scheduled msg\_db\_exporter for user-based install

Daniel Zhang (張道博)      New exporter script works from user-based install.  
12 Nov 2013 13:57

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## MSG-403 — test scheduled autoload meco data for user-based install

Daniel Zhang (張道博)      Tested using ~ in the crontab & in the data\_load\_command var in the msg config.  
08 Nov 2013 17:44

---

## MSG-392 — create db export unit test file

Daniel Zhang (張道博)      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ab6279ba4957f9e59e156d1b5d4b0cc9c922d6a5>  
05 Nov 2013 17:28

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## MSG-394 — fix logger error

Traceback (most recent call last):

```
File "/home/daniel/dzmbp-maui-smart-grid/src/insertMECOEnergyData.py", line 164, in <module>
    inserter = Inserter()
File "/home/daniel/dzmbp-maui-smart-grid/src/insertSingleMECOEnergyDataFile.py", line 47, in __init__
    self.parser = MECOXMLParser(testing)
File "/home/daniel/dzmbp-maui-smart-grid/src/meco_xml_parser.py", line 38, in __init__
    self.logger = MSGLogger(__name__, 'silent')
```

```
File "/home/daniel/dzmbp-maui-smart-grid/src/msg_logger.py", line 87, in __init__
    self.logger.setLevel(self.loggerLevel)
```

```
File "/usr/lib/python2.7/logging/__init__.py", line 1116, in setLevel
    self.level = _checkLevel(level)
File "/usr/lib/python2.7/logging/__init__.py", line 190, in _checkLevel
    raise TypeError("Level not an integer or a valid string: %r" % level)
TypeError: Level not an integer or a valid string: None
```

Daniel Zhang (張道博)      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8ef6749080cba02a646cb4b2dedc10ac20e1f401>  
06 Nov 2013 13:56

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## MSG-390 — add delete outdated to automatic export process

Daniel Zhang (張道博)      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ec2ae38c3f880d371e70421511e2bfb8e1dac848>  
06 Nov 2013 13:54

---

## MSG-391 — fix md5 checksum verification problem

```
2013-11-04 17:34:16,624 - __main__ - INFO - Exporting meco_v3.
2013-11-04 17:37:49,752 - __main__ - INFO - Compressing meco_v3 using gzip.
2013-11-04 17:49:17,336 - __main__ - DEBUG - full path /home/daniel/msg-db-dumps
2013-11-04 17:49:17,336 - __main__ - DEBUG - Uploading 2013-11-04_171116_meco_v3.sql.gz.
2013-11-04 17:49:17,358 - __main__ - INFO - Authorizing credentials.
```

2013-11-04 17:49:17,358 - \_\_main\_\_ - INFO - Authorized.  
2013-11-04 17:55:35,506 - \_\_main\_\_ - DEBUG - title: 2013-11-04\_171116\_meco\_v3.sql.gz  
2013-11-04 17:55:35,506 - \_\_main\_\_ - DEBUG - local md5: 568d25692144a4ac937def74a6cf369b  
2013-11-04 17:55:35,859 - \_\_main\_\_ - DEBUG - remote md5: 8fa4825dc3362574f4624a14bc0caca7  
2013-11-04 17:55:35,860 - \_\_main\_\_ - DEBUG - Failed MD5 checksum verification.

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/15945fcd7113f5319b69c4455d717e60e652f807>  
05 Nov 2013 17:27

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### MSG-388 — verify uploaded file by md5 checksum

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a0694a84e621fbe8d70e5f238495974afdc79049>  
04 Nov 2013 16:47

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### MSG-389 — retrieve md5sum of cloud-based files

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a0694a84e621fbe8d70e5f238495974afdc79049>  
04 Nov 2013 16:47

---

### MSG-386 — perform instantaneous delete of outdated files

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7eb434d7747951a86d9fb233026a1d8c571ff0e7>  
04 Nov 2013 13:04

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### MSG-376 — parse upload results to determine success of upload

### MSG-385 — report elapsed upload time

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/09c8cd78dfc0e246b97bb04727a64abc684d1eff>  
31 Oct 2013 17:36

---

### MSG-387 — remove pprint output & recording from automatic job report

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/09c8cd78dfc0e246b97bb04727a64abc684d1eff>  
31 Oct 2013 17:37

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### MSG-379 — be able to report cloud storage free space

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7b59e3230debea172731381403b38310c3532c63>  
30 Oct 2013 22:13

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### MSG-384 — eliminate duplicate recorded log entries in the MSGLogger

Daniel Zhang (張道博) <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/238c3351db4d97900b9740eb30460c86036c349a>  
30 Oct 2013 14:07 <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5a852330a47fd8880cfcfe5a7ffa0e4c594c5faf>

---

## MSG-378 — add ability to record log messages within the logger object

Daniel Zhang (張道博)

29 Oct 2013 16:34

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/32c13c3c0dc0249a4a2a87d74748a73003435845>

---

## MSG-381 — fix logger error

2013-10-28 18:30:01,218 - \_\_main\_\_ - INFO - Exporting meco\_v3.

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/msg\_db\_exporter.py", line 212, in <module>  
toCloud = True)

File "/home/daniel/dzmbp-maui-smart-grid/src/msg\_db\_exporter.py", line 85, in exportDB  
self.logger.log('Exporting %s.' % db)

File "/home/daniel/dzmbp-maui-smart-grid/src/msg\_logger.py", line 107, in log  
self.recording += msg

TypeError: cannot concatenate 'str' and 'NoneType' objects

Daniel Zhang (張道博)

29 Oct 2013 16:34

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/32c13c3c0dc0249a4a2a87d74748a73003435845>

---

## MSG-377 — fix exporter error

2013-10-27 18:30:01,743 - \_\_main\_\_ - INFO - Exporting meco\_v3.

2013-10-27 18:45:22,037 - \_\_main\_\_ - INFO - Authorizing credentials.

Compressing meco\_v3 using gzip.

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/msg\_db\_exporter.py", line 205, in <module>  
toCloud = True)

File "/home/daniel/dzmbp-maui-smart-grid/src/msg\_db\_exporter.py", line 106, in exportDB  
self.uploadDBToCloudStorage('%s.sql.gz' % fullPath)

File "/home/daniel/dzmbp-maui-smart-grid/src/msg\_db\_exporter.py", line 136, in uploadDBToCloudStorage  
http = self.googleAPICredentials.authorize(http)

AttributeError: 'NoneType' object has no attribute 'authorize'

Daniel Zhang (張道博)

28 Oct 2013 18:59

Error is still occurring.

---

Daniel Zhang (張道博)

29 Oct 2013 16:34

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/87c073ee774b4879dbe4fbd5717a7924f1d0604f>

---

## MSG-382 — System Administration

## MSG-375 — have automatic daily export be mirrored to cloud storage

Daniel Zhang (張道博)

26 Oct 2013 02:27

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0e02c82078f30c226e81ec6039fbc34651d19ac>

---

## MSG-371 — store persistent cloud authentication token



This is to eliminate the need for verification upon every upload invocation.

Daniel Zhang (張道博)  
25 Oct 2013 17:30

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f24d782533be987b821ac3ca692a19453ba4afd5>

### MSG-307 — remove house mappings

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

### MSG-363 — correct column error for 4915

colAssoc = Garage AC [kW]garage\_ac\_kwRange.Usage [kW]range\_usage\_kwOven [kW]oven\_kwWasher [kW]clotheswasher\_kwgen [kW]gen\_kwGrid [kW]grid\_kwDHW [kW]dhw\_kwRange [kW]range\_kwDate & Time  
dateLarge AC [kW]large\_ac\_kwOven.Usage [kW]oven\_usage\_kwuse [kW]use\_kwStove [kW]stove\_kwRefrigerator [kW]refrigerator\_kwDishwasher [kW]dishwasher\_kwDryer.Usage [kW]dryer\_usage\_kwAC+ [kW]acplus\_kwSolar Pump [kW]solarpump\_kwFan [kW]fan\_kwStove Top [kW]stove\_kwLarge AC.Usage [kW]large\_ac\_usage\_kwRest of House.Usage [kW]rest\_of\_house\_usage\_kwOven and Microwave [kW]oven\_and\_microwave\_kwGarage AC.Usage [kW]garage\_ac\_usage\_kwWhole House [kW]grid\_kwRefrigerator.Usage [kW]refrigerator\_usage\_kwAC [kW]ac\_kwSolar [kW]solarpump\_kwWasher.Usage [kW]clotheswasher\_usage\_kwOven and Microwave+ [kW]oven\_and\_microwave\_plus\_kwDryer [kW]dryer\_kw  
item = house [kW]

ERROR: nonmatching column: does not match

Daniel Zhang (張道博)  
16 Oct 2013 13:05

Problem is still occurring.

Daniel Zhang (張道博)  
16 Oct 2013 19:09

4911,4912,4913 are working.

Daniel Zhang (張道博)  
17 Oct 2013 17:22

4915 is offline.

Daniel Zhang (張道博)  
23 Oct 2013 15:47

The problem is no longer occurring at this time.

### MSG-370 — Be able to write to cloud storage

Daniel Zhang (張道博)  
23 Oct 2013 17:46

Write was successful.

### MSG-294 — write export to cloud storage

Daniel Zhang (張道博)  
25 Oct 2013 14:20

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7ecca7a6433dca3f5ee2e3240a1fc9fa0019eac8>

## MSG-350 — install google api client library for python

Daniel Zhang (張道博)      Successfully installed using remote pip.  
30 Sep 2013 16:31

---

## MSG-346 — setup daily meco\_v3 export

Daniel Zhang (張道博)      Daily export was setup as a cron job using msg\_db\_exporter.py. It should be  
30 Sep 2013 16:14      switched to a system-wide path ASAP.

---

## FC-4 — add additional filtering of invalid data by completeness during retrieval

Daniel Zhang (張道博)      Completeness is tested but invalid data is getting by the validity check.  
22 Oct 2013 15:00

---

Daniel Zhang (張道博)      The filtering has been in place. Somehow, it did not catch an invalid data condition  
22 Oct 2013 18:02      causing the insertion script to be unable to process the data that was present.  
Manually clearing the existing data seems to have resolved the problem.

---

## FC-3 — determine problem for 2215 error

reading file /usr/local/egauge-automatic-data-services/egauge-data-download/2013-Oct-01-Tue-00-20-02/egauge2221.csv...

reading file /usr/local/egauge-automatic-data-services/egauge-data-download/2013-Oct-01-Tue-00-20-02/egauge2225.csv...

DBD::Pg::st execute failed: ERROR: INSERT has more target columns than expressions

LINE 1: ... energy\_autoload\_new (house\_id, datetime, use\_kw, gen\_kw, gr...

^ at /usr/local/egauge-automatic-data-services/bin/insertEgaugeData.pl line

281.

DBD::Pg::st execute failed: ERROR: INSERT has more target columns than expressions

LINE 1: ... energy\_autoload\_new (house\_id, datetime, use\_kw, gen\_kw, gr...

^ at /usr/local/egauge-automatic-data-services/bin/insertEgaugeData.pl line

281.

gauge-automatic-data-services/egauge-data-download/2013-Sep-30-Mon-16-20-01"...

/usr/local/egauge-automatic-data-services/egauge-data-download/2013-Sep-30-Mon-17-20-01

Loading data in "/usr/local/egauge-automatic-data-services/egauge-data-download/2013-Sep-30-Mon-17-20-01"...

/usr/local/egauge-automatic-data-services/egauge-data-download/2013-Sep-30-Mon-18-20-01

Daniel Zhang (張道博)      Problem was determined to be invalid data that was present in the egauge  
23 Oct 2013 17:25      download directory.

---

## MSG-366 — correct column error for 4914

colAssoc = Range.Usage [kW]range\_usage\_kwWasher [kW]clotheswasher\_kwGrid [kW]grid\_kwDate &  
TimedatetimeLarge AC [kW]large\_ac\_kwOven.Usage [kW]oven\_usage\_kwuse [kW]use\_kwStove  
[kW]stove\_kwSolar Pump [kW]solarpump\_kwAC+ [kW]acplus\_kwDryer.Usage [kW]dryer\_usage\_kwStove Top  
[kW]stove\_kwFan [kW]fan\_kwOven and Microwave [kW]oven\_and\_microwave\_kwRest of House.Usage  
[kW]rest\_of\_house\_usage\_kwWhole House [kW]grid\_kwRefrigerator.Usage [kW]refrigerator\_usage\_kwAC  
[kW]ac\_kwWasher.Usage [kW]clotheswasher\_usage\_kwGarage AC [kW]garage\_ac\_kwOven [kW]oven\_kwgen

[kW]gen\_kwDHW [kW]dhw\_kwRange [kW]range\_kwRefrigerator [kW]refrigerator\_kwDishwasher  
[kW]dishwasher\_kwHouse [kW]house\_kwLarge AC.Usage [kW]large\_ac\_usage\_kwGarage AC.Usage  
[kW]garage\_ac\_usage\_kwSolar [kW]solarpump\_kwOven and Microwave+ [kW]oven\_and\_microwave\_plus\_kwDryer  
[kW]dryer\_kw  
item = Shop [kW]  
ERROR: nonmatching column: does not match

Daniel Zhang (張道博)  
22 Oct 2013 13:08

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0fda401abd313326a97db76e102812017edd7ed5>

---

### MSG-362 — create unit test data set

Daniel Zhang (張道博)  
21 Oct 2013 14:52

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/422522cdd52a6561d827afc03c8f51e9344be5fd>

---

### MSG-365 — determine cause of invalid data processing for 4914

Daniel Zhang (張道博)  
18 Oct 2013 15:31

Retrieval is timing out.

---

### MSG-357 — Change performance time log messages to minute-seconds format

Daniel Zhang (張道博)  
18 Oct 2013 13:26

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5b3bf553b74065a1b39fec35c00be99e487f9802>

---

### MSG-364 — suppress cron log output on no data found

Daniel Zhang (張道博)  
16 Oct 2013 17:10

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2897de6ca69c6f9b426d23dbe3444d0afb08c23e>

---

### MSG-344 — document testing mode

Daniel Zhang (張道博)  
09 Oct 2013 16:50

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/89975bf16cb3fb0dee37f17566e14e49f04b4b6a>

---

### MSG-359 — determine method of integration for eGauge service Perl-based installer with Python setup

Daniel Zhang (張道博)  
09 Oct 2013 16:45

The eGauge service has its own separate installer.

---

### MSG-360 — add DB creation scripts to setup package

Daniel Zhang (張道博)  
09 Oct 2013 16:43

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bf5cee817da6e1dbee0bac26e789e8d5d16df9c8>

---

### MSG-358 — get executable scripts to install to bin path

Daniel Zhang (張道博)  
04 Oct 2013 15:43

Scripts, as defined in the setup definition file, can be installed to bin using the `-home` option of `install` like so

```
python setup.py install --home=~/.test-install
```

Executable scripts are then installed in `~/.test-install/bin`

---

### MSG-354 — Provide a locking mechanism on data being processed

Data being processed should not be accessible to any other processes.

Daniel Zhang (張道博)  
03 Oct 2013 13:13

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/daba9623676e3ec97a6e497286f4faa7c4e9716a>

---

### MSG-329 — provide folder monitoring for automatic data processing

Daniel Zhang (張道博)  
24 Sep 2013 16:04

Commit made by **Daniel Zhang (張道博)** on 2013-09-24T19:04:38-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/82a88dc0174f2e7fa1c3e9f96c24681a94b0ad53>

| generating initial API: #MSG-329 In Progress

---

Daniel Zhang (張道博)  
25 Sep 2013 16:35

Commit made by **Daniel Zhang (張道博)** on 2013-09-25T19:35:07-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/643bb9810b909d6a2a733e0fc82f18f3f557faa2>

| added new data checking: #MSG-329 In Progress

---

Daniel Zhang (張道博)  
03 Oct 2013 13:12

Folder monitoring has been implemented through this issue and #MSG-352, #MSG-351.

---

### MSG-352 — move autoloading data after loading

Daniel Zhang (張道博)  
02 Oct 2013 13:13

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f54798b2da9d186435f7d31886ec605b9f6c6356>

---

### MSG-351 — be able to load MECO data from autoload location using the autoloader

Daniel Zhang (張道博)  
01 Oct 2013 16:10

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b5063c3d39c0c04d9eadc8c1c61c8d752bb6c481>

---

### MSG-342 — Provide location for bad data

Daniel Zhang (張道博)  
25 Sep 2013 15:06

Commit made by **Daniel Zhang (張道博)** on 2013-09-25T18:06:38-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d080cb0b5bb1aed6daf64cc15f75c7a669f551ac>

added dirs; updated config and sample config: #MSG-342 fixed  
#MSG-341 fixed

---

### MSG-341 — provide archive directory for previously loaded data

Daniel Zhang (張道博)  
25 Sep 2013 15:06

Commit made by **Daniel Zhang (張道博)** on 2013-09-25T18:06:38-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d080cb0b5bb1aed6daf64cc15f75c7a669f551ac>

added dirs; updated config and sample config: #MSG-342 fixed  
#MSG-341 fixed

---

### MSG-345 — fix column error for 4913

egauge number = 4913  
item = Date & Time  
item = use [kW]  
item = gen [kW]  
item = Whole House [kW]  
item = Refrigerator [kW]  
item = Dryer [kW]  
item = Washer [kW]  
item = Stove Top [kW]  
ERROR: nonmatching column: does not match

Daniel Zhang (張道博)  
27 Sep 2013 16:10

Commit made by **Daniel Zhang (張道博)** on 2013-09-27T19:10:03-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1a2fb12684e46182df25af9e0cc69f6525ebc235>

adding columns: #MSG-345 fixed

---

### MSG-343 — remove debug output during data loading

Daniel Zhang (張道博)  
26 Sep 2013 16:12

Data loading obeys the debug config option.

---

### MSG-334 — determine effect of removal of cumulative count in angled brackets in the concise log

Daniel Zhang (張道博)  
25 Sep 2013 15:47

Commit made by **Daniel Zhang (張道博)** on 2013-09-25T18:47:38-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c5cd8267a869e6eb332e6e0872c0761d7d2ff3c5>

removing cumulative count in final summary because it is redundant: #MSG-334 fixed

---

### MSG-331 — only output duplicate counts to the concise log if duplicates are present

Daniel Zhang (張道博)

Commit made by **Daniel Zhang (張道博)** on 2013-09-25T17:54:33-07:00

25 Sep 2013 14:54

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3a2b0a98b6cf985a1dfac8c0a26b0b4f030998fc>

Preventing log output for final and intermediary concise logging where dupes are not present: #MSG-331 fixed

---

### MSG-244 — report records processed count during meter location history loading

Current count is line count.

Daniel Zhang (張道博)

Not needed at this time.

24 Sep 2013 16:26

---

### MSG-338 — add msg egauge service to setup script

Daniel Zhang (張道博)

23 Sep 2013 15:51

Commit made by **Daniel Zhang (張道博)** on 2013-09-23T18:50:36-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f7ea087e45acaba3a9cbdec6072a0de3184aa732>

adding/updating configs: #MSG-338 fixed  
#MSG-339 fixed

---

Daniel Zhang (張道博)

23 Sep 2013 16:08

Commit made by **Daniel Zhang (張道博)** on 2013-09-23T19:08:30-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6b590aa6e0afa06873e1c8fd2e4787cec40c07e0>

including msg egauge service: #MSG-338 fixed

---

### MSG-340 — add sample main config

Daniel Zhang (張道博)

23 Sep 2013 15:53

Commit made by **Daniel Zhang (張道博)** on 2013-09-23T18:53:08-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2ef5a2a997cb3a18b5e7433a4ea0937782576482>

add/update sample configs: #MSG-339 fixed  
#MSG-340 fixed

---

### MSG-339 — add sample egauge config

Daniel Zhang (張道博)

23 Sep 2013 15:51

Commit made by **Daniel Zhang (張道博)** on 2013-09-23T18:50:36-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f7ea087e45acaba3a9cbdec6072a0de3184aa732>

adding/updating configs: #MSG-338 fixed  
#MSG-339 fixed

---

Daniel Zhang (張道博)

23 Sep 2013 15:53

Commit made by **Daniel Zhang (張道博)** on 2013-09-23T18:53:08-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2ef5a2a997cb3a18b5e7433a4ea0937782576482>

add/update sample configs: #MSG-339 fixed  
#MSG-340 fixed

---

### MSG-322 — create installer for full local server install of MSG software

An installer script should be provided. This is to facilitate proper synchronization of locally installed code with the working repository.

Daniel Zhang (張道博)  
18 Sep 2013 17:21

Commit made by **Daniel Zhang (張道博)** on 2013-09-18T20:20:52-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/31822283d7ed5dc72d9021635a4ff085fb2ff5d5>

working on setup: #MSG-322 In Progress

---

Daniel Zhang (張道博)  
19 Sep 2013 17:06

Commit made by **Daniel Zhang (張道博)** on 2013-09-19T20:06:37-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7f6a85492e17b78ddf3203ee8e1a5f4bec2dde31>

developing setup script: #MSG-322 In Progress

---

Daniel Zhang (張道博)  
20 Sep 2013 15:49

Commit made by **Daniel Zhang (張道博)** on 2013-09-20T18:49:10-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/06964b7d49f0f59dfa3b3b73ccfbc61ea93b7325>

moving unit tests to root: #MSG-322 In Progress

---

Daniel Zhang (張道博)  
20 Sep 2013 16:21

Commit made by **Daniel Zhang (張道博)** on 2013-09-20T19:21:23-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/49b7b3dbe36fa1d221203bf50b0c938008272441>

Adding long description: #MSG-322 fixed

---

### MSG-205 — update data insert documentation

Daniel Zhang (張道博)  
17 Sep 2013 14:48

Commit made by **Daniel Zhang (張道博)** on 2013-09-17T17:48:19-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6cc9df36f73dd0f6e4ac1d86e8c49932143cda19>

updating documentation: #MSG-205 fixed

---

### FC-2 — change local install path to fc-based name

### MSG-330 — Update egauge service installation to account for config change

Daniel Zhang (張道博)  
13 Sep 2013 15:30

Installation in /usr/local/msg-egauge-service was updated.

---

### MSG-333 — add timestamp to retrieval results



Daniel Zhang (張道博)  
13 Sep 2013 14:44

Commit made by **Daniel Zhang (張道博)** on 2013-09-13T17:35:53-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e0d8e19ff01b76cd466cd7eb74f1b02cefcf7ead>

| adding timestamp: #MSG-333 fixed

---

### MSG-304 — add config docs for msg egauge service

Daniel Zhang (張道博)  
11 Sep 2013 16:10

Commit made by **Daniel Zhang (張道博)** on 2013-09-11T19:10:32-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c8892dbbfd90c06c4d58c9ce71198760b72cdaa4>

| adding msg egauge service config example: #MSG-304 fixed

---

**MSG-311** — an additional, duplicate, download task is being performed during secondary retrieval  
Additional retrievals can be the past month and one month before that. The calculation of the keep list needs to be examined.

Daniel Zhang (張道博)  
11 Sep 2013 13:10

Commit made by **Daniel Zhang (張道博)** on 2013-09-11T16:10:32-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4c4bd146ccc6bdc0d97644c63ba68b2adef3383b>

| updating documentation: #MSG-311 In Progress

---

Daniel Zhang (張道博)  
11 Sep 2013 14:34

Commit made by **Daniel Zhang (張道博)** on 2013-09-11T17:33:44-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d634c3dbbfd08c924d34315be3426ccb7724f2c8>

| sorted out downloads: #MSG-311 fixed

- End of month case should be verified.

If last loaded date is in the last month, there should be two downloads, the last month and the current month.

---

### MSG-327 — add summary count of dupes

Daniel Zhang (張道博)  
10 Sep 2013 16:16

Commit made by **Daniel Zhang (張道博)** on 2013-09-10T19:16:11-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7404891efbf6e564117bf653e7ab0f269411b6a5>

| added summary dupe counts: #MSG-327 fixed

---

### MSG-290 — verify insertion sums during loading

...4: {0rd,0re,0ev} (39) [151646] <2688rd,56re,0ev,3440,151003> \*4: {rd-dupe==>} 4: {48rd,0re,0ev} (40) [155086]



```
<2640rd,56re,0ev,3392,154395>*4:{0rd,0re,0ev}(41)[158526]<2688rd,56re,0ev,3440,157835>*4:{rd-dupe==>}4:
{34rd,0re,0ev}(42)[161966]<2654rd,56re,0ev,3406,161241>*4:{0rd,0re,0ev}(43)[165504]
<2688rd,147re,0ev,3538,164779>*—4:{0rd,0re,0ev}(44)[165504]<0rd,0re,0ev,0,164779>*
```

The final summarization should display a sum of insertions. It is currently showing all zero values except for total items processed.

Daniel Zhang (張道博)  
06 Sep 2013 16:24

Commit made by **Daniel Zhang (張道博)** on 2013-09-06T19:24:14-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a4dc01b477912f290570208facb3d01415a677e9>

| updating documentation: #MSG-290 In Progress

Daniel Zhang (張道博)  
09 Sep 2013 16:24

Output using unit test data on a fresh db:

Inserting data to database test\_meco.

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

```
8:{0rd,0re,0ev}(0)[125]<32rd,56re,4ev,125,125>—8:{0rd,0re,0ev}(0)[125]
<0rd,0re,0ev,0,125>*
```

Wall time = 0.33 seconds.

The summary totals are incorrectly reported as zero.

Daniel Zhang (張道博)  
09 Sep 2013 17:36

Commit made by **Daniel Zhang (張道博)** on 2013-09-09T20:35:55-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/96ecc12c61fa3e8bda034d53a830313905ac800c>

| adding support for final report: #MSG-290 In Progress

Daniel Zhang (張道博)  
10 Sep 2013 16:11

Commit made by **Daniel Zhang (張道博)** on 2013-09-10T19:11:07-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/eb95044d6c364a4e4136b7133c53fd70c712d907>

| insertion sums added: #MSG-290 fixed

## MSG-324 — determine problem with cron-based log messages not being sent

This is related to Postfix.

Daniel Zhang (張道博)  
05 Sep 2013 14:37

Fixed by modifying Postfix config (/etc/postfix/main.cf).

## MSG-325 — weather data directory not accessed during insertion

```
... File "/usr/lib/python2.7/gzip.py", line 89, in __init__
  fileobj = self.myfileobj = __builtin__.open(filename, mode or 'rb')
IOError: [Errno 2] No such file or directory: './201308hourly.txt.gz'
```

Daniel Zhang (張道博)

Commit made by **Daniel Zhang (張道博)** on 2013-09-05T18:33:04-07:00

05 Sep 2013 15:33

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/a5565d01bc31baa9cac94fcc0b5612224aeb503a>

| insert uses weather data path: #MSG-325 fixed

---

### MSG-312 — schedule automated retrieval & insertion

Daniel Zhang (張道博)      Scheduled.

05 Sep 2013 15:34

---

### MSG-319 — enable weather data auto loading

Daniel Zhang (張道博)      Enabled.

05 Sep 2013 15:34

---

### MSG-323 — prevent retrieval of existing files

Existing files are not determined correctly for the script being started in arbitrary working directories.

Daniel Zhang (張道博)

04 Sep 2013 17:12

Commit made by **Daniel Zhang (張道博)** on 2013-09-04T20:12:30-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c4e5f4bfb6f2c4ce4d28dde7a0d26f4558e92ca0>

| existing files are handled correctly: #MSG-323 fixed

---

### MSG-313 — Provide persistent notification data storage

This is for the purpose of tracking automatic notifications.

Daniel Zhang (張道博)

28 Aug 2013 16:09

Commit made by **Daniel Zhang (張道博)** on 2013-08-28T19:09:36-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1c4ad342d890062a015255afd5d719f09740373f>

| adding notification history table: #MSG-313 In Progress

---

Daniel Zhang (張道博)

04 Sep 2013 13:29

Persistent storage implemented.

---

### MSG-321 — determine problem with email notification not being sent automatically

Daniel Zhang (張道博)

04 Sep 2013 14:40

Added PYTHONPATH to execution environment.

---

### MSG-320 — write last reported time to notification history

Daniel Zhang (張道博)

03 Sep 2013 16:58

Commit made by **Daniel Zhang (張道博)** on 2013-09-03T19:58:15-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e261c81291cc99008ace22573898b39243df5582>

| writing notification time: #MSG-320 fixed

---

### MSG-309 — provide notification of newly loaded data

Daniel Zhang (張道博)  
30 Aug 2013 14:59

Commit made by **Daniel Zhang (張道博)** on 2013-08-30T17:57:17-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/686922e06e390b0e553780ef0353d8e0c31924af>

| working on notification: #MSG-309 In Progress

---

Daniel Zhang (張道博)  
02 Sep 2013 16:08

Commit made by **Daniel Zhang (張道博)** on 2013-09-02T19:07:58-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3098275d41f3c11a2f2569af802479eeca79e3d>

| adding last report date check: #MSG-309 In Progress

---

Daniel Zhang (張道博)  
02 Sep 2013 17:37

Commit made by **Daniel Zhang (張道博)** on 2013-09-02T20:37:06-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/eebf31bc3528fec0e7200343d9b27a84cf6ce90a>

| reporting works: #MSG-309 fixed

---

### MSG-303 — be able to insert egauge data

Daniel Zhang (張道博)  
26 Aug 2013 15:24

Commit made by **Daniel Zhang (張道博)** on 2013-08-26T18:24:16-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1bab3ce768557deafec4ba41f91df9d3b94c6fca>

| data can be inserted: #MSG-303 fixed

---

### MSG-306 — alter table to include all columns present

Daniel Zhang (張道博)  
23 Aug 2013 17:17

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-302 — be able to retrieve egauge data

Daniel Zhang (張道博)  
23 Aug 2013 14:44

Commit made by **Daniel Zhang (張道博)** on 2013-08-23T17:43:58-07:00  
<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)  
23 Aug 2013 16:13

Commit made by **Daniel Zhang (張道博)** on 2013-08-23T19:13:07-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/79659b417dc8723ee4bd3165bb975c8749fd7617>

| data is retrieved: #MSG-302 fixed

| \* Added username and password.

---

### MSG-305 — add sequence for msg egauge service

Daniel Zhang (張道博)      Not needed.  
23 Aug 2013 16:29

---

### MSG-298 — test data retrieval

### MSG-159 — create separate plot during testing mode

Daniel Zhang (張道博)      Commit made by **Daniel Zhang (張道博)** on 2013-06-12T17:52:21-07:00  
12 Jun 2013 14:53      <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)      Commit made by **Daniel Zhang (張道博)** on 2013-06-12T19:09:45-07:00  
12 Jun 2013 16:09      <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)      Separate plot during testing is generated.  
22 Aug 2013 13:59

---

### MSG-300 — adapt egauge service to msg

Daniel Zhang (張道博)      Commit made by **Daniel Zhang (張道博)** on 2013-08-22T19:10:52-07:00  
22 Aug 2013 16:11      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d11661da07b4413a889e20c9f85c04616f93cf78>

| initial adaptation: #MSG-300 fixed

---

### MSG-299 — create data table

Daniel Zhang (張道博)      Commit made by **Daniel Zhang (張道博)** on 2013-08-22T20:23:58-07:00  
22 Aug 2013 17:25      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8d8be3448b7230d3d996a1277428414199371dea>

| adding table structure for egauge service: #MSG-299 fixed

---

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

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

---

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

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

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

---

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

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

---

**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

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

---

**MSG-130** — Add weather data loading to notifications

Daniel Zhang (張道博)      Commit made by **Daniel Zhang** (張道博) on 2013-06-06T19:44:09-07:00  
06 Jun 2013 16:44      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5ab3297a3cb1d2899d581ce8ffb4eb8e9321de42>

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

---

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

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

30 Jul 2013 14:47

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

| parse test fixed: #MSG-259 fixed

---

## MSG-2 — Testing

Daniel Zhang (張道博)

All tests pass.

14 May 2013 13:20

---

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

Daniel Zhang (張道博)

Dupe check tests pass.

30 Jul 2013 14:44

---

## MSG-257 — fix /src/tests/test\_\_\_\_mecodbutil.py

Daniel Zhang (張道博)

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

29 Jul 2013 16:48

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

| fixed tests by correcting msg\_db\_util: #MSG-257 fixed

---

## MSG-296 — handle error during remove

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-271 — add copyright/license to src

Daniel Zhang (張道博)

Commit made by **Daniel Zhang (張道博)** on 2013-08-20T17:13:20-07:00

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-292 — remove source file after compress

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

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

---

### MSG-268 — compress exported dbs

Daniel Zhang (張道博)  
19 Aug 2013 16:32

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

dbs are compressed: #MSG-268 fixed

---

### MSG-276 — change multiprocessing instances to use config option

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-270 — update sample config in repo

Daniel Zhang (張道博)  
16 Aug 2013 15:50

Commit made by **Daniel Zhang (張道博)** on 2013-08-16T18:50:40-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2e9389d7c67d0623d415ff869744f18e22c9650d>

updating sample config: #MSG-270 fixed

---

### MSG-283 — Error Handling

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

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-281 — concise log is not being emailed

Daniel Zhang (張道博) Loader needs to use a queue.  
13 Aug 2013 17:38

---

Daniel Zhang (張道博) Commit made by **Daniel Zhang (張道博)** on 2013-08-13T20:51:25-07:00  
13 Aug 2013 17:51 <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  
14 Aug 2013 15:21 <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/cd00001b03bf7a2d0e75bf3efe308ceee2c9635e>

| process id is passed: #MSG-281 In Progress

---

Daniel Zhang (張道博) Commit made by **Daniel Zhang (張道博)** on 2013-08-14T20:15:35-07:00  
14 Aug 2013 17:15 <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9bc0d6fb11400d6a275eca85246d2fc31a0c10d1>

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

---

## MSG-285 — test multiprocessing log results

Daniel Zhang (張道博) Multiprocessing results have correctly separated output.  
14 Aug 2013 17:39

---

## MSG-286 — keyboard interrupt doesn't terminate multiprocessing

Daniel Zhang (張道博) Terminate works after double interrupt.  
14 Aug 2013 17:46

---

## MSG-280 — add job id to parallel loader

Daniel Zhang (張道博) Commit made by **Daniel Zhang (張道博)** on 2013-08-13T18:16:51-07:00  
13 Aug 2013 15:17 <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e5d6cde90960ffae80b8e55283f0c28fc744a756>

| added job id: #MSG-280 fixed

---

## MSG-278 — adjust live output during multiprocessing loading

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



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-272 — parallelize meco energy data loading

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

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-191 — create db dump script

| adding db dump script: #MSG-191 fixed

---

### MSG-153 — database connection messages are conflicting

Example from test\_\_\_\_mecodbinsserter.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 00:00:00:00:00:00:00:00
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.

---

Daniel Zhang (張道博)  
07 Aug 2013 16:04

This is resolved due to there being no problem with respect to multiple database accesses.

---

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

Daniel Zhang (張道博)  
18 Jul 2013 17:27

Commit made by **Daniel Zhang (張道博)** on 2013-07-18T20:27:10-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ec9e0f809a36b7392ddac4da9ef1c9ed48809d0b>

| deprecating unused views: #MSG-202 In Progress

---

Daniel Zhang (張道博)  
23 Jul 2013 16:57

Commit made by **Daniel Zhang (張道博)** on 2013-07-23T19:57:18-07:00  
<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)  
07 Aug 2013 13:08

Commit made by **Daniel Zhang (張道博)** on 2013-08-07T16:08:27-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/711560baa362213872800e31356268e4d0be5c25>

| removing deprecated views: #MSG-202 fixed

| \* PVServicePointIDs has changes.

---

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

Daniel Zhang (張道博)  
07 Aug 2013 16:03

Not needed at this time.

---

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

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-239 — handle incomplete retrieval

... line 39, in downloadWeatherData  
    curl.perform()  
pycurl.error: (6, "Couldn't resolve host 'cdo.ncdc.noaa.gov'")

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-267 — parallelize secondary retrieval

Daniel Zhang (張道博)      Use of map is impeded by forceDownload = True.  
05 Aug 2013 15:58

---

Daniel Zhang (張道博)      Commit made by **Daniel Zhang (張道博)** on 2013-08-05T19:20:04-07:00  
05 Aug 2013 16:20      <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5fa80d916f088994c6445de626be9e442445e74d>

| parallelized secondary retrieval: #MSG-267 fixed

---

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

Daniel Zhang (張道博)      DB Util uses cursors for DB connections.  
30 Jul 2013 14:50

---

Daniel Zhang (張道博)      DB connection method has been stable and sufficient.  
05 Aug 2013 14:08

---

## 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.

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

Daniel Zhang (張道博)      This is not a problem at this time.  
05 Aug 2013 14:10

---

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

Daniel Zhang (張道博)  
01 Aug 2013 15:56

Commit made by **Daniel Zhang (張道博)** on 2013-08-01T18:56:32-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c9e1e5ff98a33c61133fe6d05d8465ff3ed2116b>

| overloaded datepart: #MSG-255 In Progress

Daniel Zhang (張道博)  
01 Aug 2013 17:26

Commit made by **Daniel Zhang (張道博)** on 2013-08-01T20:25:57-07:00  
<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)  
02 Aug 2013 14:41

Commit made by **Daniel Zhang (張道博)** on 2013-08-02T17:41:16-07:00  
<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)  
02 Aug 2013 14:48

Compressed insert script needs processing from last date.

Daniel Zhang (張道博)  
02 Aug 2013 15:38

Commit made by **Daniel Zhang (張道博)** on 2013-08-02T18:37:57-07:00  
<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-264 — fix weather data retrieval

Map method only accepts sequence argument.

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-261 — rename config file

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

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

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-253 — move weather URL to site config

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-172 — add last date test for weather data loading

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-254 — move file download pattern to site config

### 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'

Daniel Zhang (張道博)  
29 Jul 2013 15:56

Fixed in #MSG-223.

---

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

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

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

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

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-238 — prevent retrieval of existing weather data



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-247 — add views for unreferenced readings

Daniel Zhang (張道博)  
22 Jul 2013 16:15

Commit made by **Daniel Zhang (張道博)** on 2013-07-22T19:15:27-07:00  
<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-246 — determine cause of readings not referenced by meter location history

Total readings = 10011736  
MLH readings = 9730256  
Difference = 281480

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-242 — support testing during insertion

Provide support for insertion to testing DBs.

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-245 — add view for readings by meter location history

Daniel Zhang (張道博)  
18 Jul 2013 16:37

Commit made by **Daniel Zhang (張道博)** on 2013-07-18T19:37:41-07:00  
<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-241 — adapt houses without pv view to meter location history

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-240 — insert meter location history records

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-243 — support insertion of meter location history records

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-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'

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-232 — create location history table

Daniel Zhang (張道博)  
16 Jul 2013 14:59

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-237 — remove unnecessary weather data

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-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-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.

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-233 — isolate days during weather data loading notifications

Daniel Zhang (張道博)  
15 Jul 2013 14:46

Commit made by **Daniel Zhang (張道博)** on 2013-07-15T17:46:38-07:00  
<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)  
15 Jul 2013 15:12

Days are not being grouped.

---

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-230 — support weather data loading notifications

- Report records loaded.
- Report time intervals loaded.

Daniel Zhang (張道博)  
11 Jul 2013 17:16

Commit made by **Daniel Zhang (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 **Daniel Zhang (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-228 — set primary key on noaa table

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

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-225 — provide duplicate checking for noaa weather data

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

Daniel Zhang (張道博)  
09 Jul 2013 15:55

These arguments are supported in insertCompressedWeatherData.py.

---

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

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>

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

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-222 — support extract of local climate data

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

1. [MSG-178](#) In Progress
  2. [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

1. [MSG-178](#) In Progress
  2. [MSG-222](#) In Progress
- 

Daniel Zhang (張道博)  
03 Jul 2013 17:47

Local climate data is extracted during insertion.

---

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

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

1. [MSG-178](#) In Progress
  2. [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

1. [MSG-178](#) In Progress
2. [MSG-222](#) In Progress

---

Daniel Zhang (張道博)  
03 Jul 2013 17:47

Weather data insertion is enabled by insertCompressedWeatherData.py.

---

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

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

1. [MSG-178](#) In Progress
2. [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

1. [MSG-178](#) In Progress
2. [MSG-222](#) In Progress

---

Daniel Zhang (張道博)  
03 Jul 2013 17:45

Support is provided by MSGWeatherDataDupeChecker.

---

## MSG-220 — automatically obtain weather data

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-154 — drop duplicates in the event branch on insert

Daniel Zhang (張道博)  
28 Jun 2013 15:15

Commit made by **Daniel Zhang** (張道博) on 2013-06-28T18:14:27-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d525927d3b193e06d328005a05ffe4774fda7c85>

determining event dupes: #MSG-154 In Progress

---



Daniel Zhang (張道博)  
28 Jun 2013 16:14

Commit made by **Daniel Zhang (張道博)** on 2013-06-28T19:14:53-07:00  
<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)  
28 Jun 2013 16:21

Commit made by **Daniel Zhang (張道博)** on 2013-06-28T19:21:49-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6a890d188d57a4216ec636ac9fb9b142bbe9b4cc>

adding additional needed items for event dupes: #MSG-154 fixed

## 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.

{re-dupe==>}{rd-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

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-146 — create script for PV data loading

Daniel Zhang (張道博)  
28 Jun 2013 13:06

PV data was added by Eileen.

## 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>\*

Daniel Zhang (張道博)  
26 Jun 2013 23:25

Remaining dupes are attached.

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



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-155 — drop duplicates in the register branch on insert

Daniel Zhang (張道博)  
24 Jun 2013 16:34

Commit made by **Daniel Zhang (張道博)** on 2013-06-24T19:34:27-07:00  
<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)  
25 Jun 2013 15:39

Commit made by **Daniel Zhang (張道博)** on 2013-06-25T18:39:03-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/12ac3fbca2ac3fe8094ffac9d92091de361fea17>

| adding register dupe dropping to parser: #MSG-155 In Progress

---

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-213 — eliminate duplicate log messages

Daniel Zhang (張道博)  
26 Jun 2013 16:40

Commit made by **Daniel Zhang (張道博)** on 2013-06-26T19:40:38-07:00  
<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-212 — determine duplicate register records

Daniel Zhang (張道博)  
24 Jun 2013 16:13

Commit made by **Daniel Zhang (張道博)** on 2013-06-24T19:13:01-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d82f412df3a2dd4c5ebf7cd50374f1a6d2580065>

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

---

### MSG-207 — rewrite meter records

Daniel Zhang (張道博)  
20 Jun 2013 15:29

Loading static meter record data in file 01e25a6c-95cf-4741-ac63-f7df530808e2-METER.tsv to database meco\_v3.  
Processed 99 lines.

---

### MSG-206 — rewrite location records

Daniel Zhang (張道博)  
20 Jun 2013 15:28

Loading static location record data in file 01e25a6c-95cf-4741-ac63-f7df530808e2-LOCATION.tsv to database meco\_v3.  
Processed 97 lines.  
Finished inserting location records.

---

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

Daniel Zhang (張道博)  
21 Jun 2013 16:10

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

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

---

### MSG-208 — count inserted readings separately

Daniel Zhang (張道博)  
20 Jun 2013 16:20

Commit made by **Daniel Zhang (張道博)** on 2013-06-20T19:19:50-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e790cef5c147cb6214827b00edf6879f50ea1ecc>

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

---

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

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-88 — reduce complexity in walkTheTreeFromRoot

---

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

---

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

---

Daniel Zhang (張道博) 05 Jun 2013 15:55	Commit made by <b>Daniel Zhang (張道博)</b> on 2013-06-05T18:55:00-07:00 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e069526be7b0d2ec012c8a051a22dcb33007ce0e">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e069526be7b0d2ec012c8a051a22dcb33007ce0e</a>    adding reporting and notifications to static meter record loading and static location record loading: #MSG-131 fixed    1. MSG-140 fixed   2. MSG-139 fixed
---	--

---

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

Daniel Zhang (張道博)  
05 Jun 2013 14:57

Commit made by **Daniel Zhang (張道博)** on 2013-06-05T17:57:42-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4216d33543a5451d382fc8b5de676c8269b935be>

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

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

1. MSG-140 fixed
2. MSG-139 fixed

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

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

1. MSG-140 fixed
2. MSG-139 fixed

## MSG-204 — determine divergence of insert count vs element count at iteration 2 and 3

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)[17245]<10368,17244>{*}{0}(3)[20681]<3435,20679>{*}{0}(4)[24127]<3446,24125>{*}{0}(5)[27563]<3435,27560>*
```

Daniel Zhang (張道博)  
19 Jun 2013 18:35

Non-insert elements were being included in the count.

Daniel Zhang (張道博)  
19 Jun 2013 18:39

Commit made by **Daniel Zhang (張道博)** on 2013-06-19T21:39:18-07:00  
<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>{*}(12)[63781]<6875,62309>{*}(13)[67216]<3435,65744>{*}
{*}(14)[70651]<3435,69179>{*}(15)[74222]<3571,72750>{*}(16)[77668]
<3446,76196>{*}(17)[81114]<3446,79642>{*}(18)[84549]<3435,83077>{*}(19)
[87984]<3435,86512>{*}(20)[91419]<3435,89947>{*}(21)[94854]<3435,93382>{*}(22)
[98289]<3435,96817>{*}(23)[101724]<3435,100252>{*}(24)[105159]
<3435,103687>{*}(25)[108673]<3514,107201>{*}(26)[112108]<3435,110636>{*}(27)
[115554]<3446,114082>{*}(28)[119000]<3446,117528>{*}(29)[122446]
<3446,120974>{*}(30)[125881]<3435,124409>{*}(31)[129311]<3430,127839>{*}(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-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][3431]<3430>{*}[1][6877]<3446>{*}[2][17246]<10368>{*}[3][20682]<3435>{*}[4][24128]<3446>{*}[5]
[27564]<3435>{*}{dupe on insert==>}{1472}[6][36301]<7262>{*}[7][39736]<3435>{*}[8][46608]<6872>{*}[9][50043]
<3435>{*}[10][53478]<3435>{*}[11][56913]<3435>{*}[12][63788]<6875>{*}[13][67223]<3435>{*}[14][70658]
<3435>{*}[15][74229]<3571>{*}[16][77675]<3446>{*}[17][81126]<3446>{*}[18][84562]<3435>{*}[19][87997]
<3435>{*}[20][91432]<3435>{*}[21][94867]<3435>{*}[22][98302]<3435>{*}[23][101737]<3435>{*}[24][105172]
<3435>{*}[25][108686]<3514>{*}[26][112121]<3435>{*}[27][115567]<3446>{*}[28][119014]<3446>{*}[29]
[122461]<3446>{*}[30][125896]<3435>{*}[31][129326]<3430>{*}[32][136464]<0>{*}
```

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

Daniel Zhang (張道博)  
19 Jun 2013 17:23

Commit made by **Daniel Zhang (張道博)** on 2013-06-19T20:23:28-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/29e21fd761f91cdd9e28ca4c6507afc2337ebb27>

| corrected by changing counter position: #MSG-203 fixed

---

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

Daniel Zhang (張道博)  
19 Jun 2013 16:30

Commit made by **Daniel Zhang (張道博)** on 2013-06-19T19:30:10-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b564dcfb0247f9f8cd4edbd3bfa8c16fb9e2f7c>

| debugging dupe checking: #MSG-201 In Progress

---

Daniel Zhang (張道博)  
19 Jun 2013 16:54

Commit made by **Daniel Zhang (張道博)** on 2013-06-19T19:52:35-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/4ccc7d60779b2ab2e847829593d66a589969bcb1>

floating point equality works: #MSG-201 fixed

Added DEBUG logging option.

**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==>}{5368}[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}[24][105172]{dupe on insert==>}{2684}[25][108686]{dupe on insert==>}{2684}[26][112121]
{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
```

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)  
18 Jun 2013 18:01

Commit made by **Daniel Zhang (張道博)** on 2013-06-18T20:50:42-07:00  
<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)  
18 Jun 2013 18:01

Commit made by **Daniel Zhang (張道博)** on 2013-06-18T21:01:29-07:00  
<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 Readings.

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

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

```
Subquery Scan on dz_energy_voltages_for_houses_without_
-> GroupAggregate (cost=256592.58..257774.95 rows=3
-> Sort (cost=256592.58..256677.03 rows=33782
Sort Key: "LocationRecords".device_util_i
Sort Method: external merge Disk: 166688
-> Hash Join (cost=9431.69..253012.00 r
Hash Cond: ("Reading".interval_id =
-> Seq Scan on "Reading" (cost=0.
Filter: ((channel = 1::smalli
-> Hash (cost=8802.15..8802.15 ro
Buckets: 2048 Batches: 256 (
-> Nested Loop (cost=53.25.
-> Hash Join (cost=53
Hash Cond: ("Inte
-> Seq Scan on "
-> Hash (cost=5
Buckets: 10
-> Nested
-> H
```

## 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

Daniel Zhang (張道博)  
14 Jun 2013 14:49

Commit made by **Daniel Zhang (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)  
18 Jun 2013 15:54

Less DB connections are now reported. Individual classes establish their own connections and should be addressed individually.

## MSG-189 — adapt mecollogger to logging

Daniel Zhang (張道博)  
14 Jun 2013 13:36

Commit made by **Daniel Zhang (張道博)** on 2013-06-14T16:33:38-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/74bb59e1d9534ed4085f26070d10d4d9ee546417>

| adding logger to mecollogging: #MSG-189 in progress

Daniel Zhang (張道博)  
14 Jun 2013 14:49

Commit made by **Daniel Zhang (張道博)** on 2013-06-14T17:48:28-07:00  
<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)  
14 Jun 2013 15:01

Commit made by **Daniel Zhang (張道博)** on 2013-06-14T18:00:53-07:00  
<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)  
14 Jun 2013 15:53

Commit made by **Daniel Zhang (張道博)** on 2013-06-14T18:53:02-07:00  
<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-145 — test support for testing mode in notifications

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

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

```
GroupAggregate (cost=256592.58..257706.53 rows=26940 w
-> Sort (cost=256592.58..256677.03 rows=33782 width
    Sort Key: "Interval".end_time
    Sort Method: external merge  Disk: 166688kB
-> Hash Join (cost=9431.69..253012.00 rows=33
    Hash Cond: ("Reading".interval_id = "Inte
-> Seq Scan on "Reading" (cost=0.00..19
    Filter: ((channel = 1::smallint) OR
-> Hash (cost=8802.15..8802.15 rows=295
    Buckets: 2048  Batches: 256 (origin
-> Nested Loop (cost=53.25..8802.
    -> Hash Join (cost=53.25..1
        Hash Cond: ("IntervalRe
        -> Seq Scan on "Interv
        -> Hash (cost=52.96..
            Buckets: 1024 Ba
            -> Nested Loop
                -> Hash An
                    Hash
                        -> S
                        -> H
```

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-183 — fix email setting during testing for recursive insert

Email is getting sent without the email option.

Daniel Zhang (張道博)  
12 Jun 2013 14:33

Commit made by **Daniel Zhang (張道博)** on 2013-06-12T17:33:35-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d7757880a1c8a04a7318e9075d7ecaace609b3d0>

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

---

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

Daniel Zhang (張道博)  
12 Jun 2013 14:53

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-179 — Add database name to plot

Daniel Zhang (張道博)  
11 Jun 2013 17:05

Commit made by **Daniel Zhang (張道博)** on 2013-06-11T20:05:32-07:00  
<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)  
12 Jun 2013 13:23

Commit made by **Daniel Zhang (張道博)** on 2013-06-12T16:23:25-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fa6c7c152bfa544ec8b78f223882c8f4ecf86157>

| fixed argument count: #MSG-179 fixed

---

Daniel Zhang (張道博)  
12 Jun 2013 15:51

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-Grid/commit/93054ceb50e7f1e240a2be991a3bb2e7d0e5dd41>

| adding dbname to plot: #MSG-179 fixed

---

### MSG-186 — support db name adding to plot when running mecoplotting as script

Daniel Zhang (張道博)  
12 Jun 2013 15:51

Support is provided for in #MSG-179.

---

### MSG-163 — add timestamp to plot

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-174 — Update dependencies in the documentation

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-168 — add log legend

Daniel Zhang (張道博)  
05 Jun 2013 17:35

Commit made by **Daniel Zhang (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 **Daniel Zhang (張道博)** on 2013-06-10T16:52:32-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0833cdb491b22f0c642cd1eb5b087c22fb85e979>

| revise legend: #MSG-168 fixed

---

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

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-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.

Daniel Zhang (張道博)  
07 Jun 2013 13:35

The local debugging option works correctly when its value is properly evaluated.

---

### MSG-17 — move debug option to local config

Daniel Zhang (張道博)  
26 Mar 2013 18:08

Commit made by **Daniel Zhang** 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)

The debugging option works through the local configuration.

**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-158** — report sql failures through stderr during loading**MSG-133** — load weather data

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-173** — cleanup views

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-92** — pass mecodbconnect object instead of raw conn to mecodbinsert

The following definition can be changed:

```
def insertData(self, conn, tableName, columnsAndValues, fKeyVal = None,
               withoutCommit = 0):
```

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

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}[34]
(515899)*commit*{0}[35](530627)*commit*{0}[36](545356)*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-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-160 — load month-long data set

Daniel Zhang (張道博)

04 Jun 2013 16:28

Results are:

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][4](73655){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](250423){dupe on insert==>}\*commit\*[9968][17](265152){dupe on insert==>}\*commit\*[9968][18](279881){dupe on insert==>}\*commit\*[9968][19](294611){dupe on insert==>}\*commit\*[9968][20](309345){dupe on insert==>}\*commit\*[9968][21](324074){dupe on insert==>}\*commit\*[9968][22](338807){dupe on insert==>}\*commit\*[9968][23](353541){dupe on insert==>}\*commit\*[9968][24](368270){dupe on insert==>}\*commit\*[9968][25](383004){dupe on insert==>}\*commit\*[9968][26](397732){dupe on insert==>}\*commit\*[9968][27](412461){dupe on insert==>}\*commit\*[9968][28](427189){dupe on insert==>}\*commit\*[9968][29](441918){dupe on insert==>}\*commit\*[9968][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](565765){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][11](176783){dupe on insert==>}\*commit\*[9968][12](191512){dupe on insert==>}\*commit\*[9968][13](206246){dupe on insert==>}\*commit\*[9968][14](220974){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.
```

```
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.
No exceptions occurred.
```

```
Closing the DB connection to meco_v3.
```

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

---

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

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	If a dupe is encountered before a reading_id is generated, as in the first MeterData set, then this error can occur.
---	--

---

Daniel Zhang (張道博) 04 Jun 2013 15:25	Commit made by <b>Daniel Zhang (張道博)</b> on 2013-06-04T18:25:30-07:00 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c84a20ec5c7558d247901f6a22cb3e4f9b858fba">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c84a20ec5c7558d247901f6a22cb3e4f9b858fba</a>
	recursive insert proceeds if readings dupes are immediately encountered: #MSG-157 fixed

---

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

**FC-1** — verify proper db close after operations

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

Daniel Zhang (張道博) 03 Jun 2013 16:54	Commit made by <b>Daniel Zhang (張道博)</b> on 2013-06-03T19:54:19-07:00 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7ccbeaca29d3b93e65b1cb5364a515dfb1ba8e1d">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/7ccbeaca29d3b93e65b1cb5364a515dfb1ba8e1d</a>
	add parallel loading note to docs: #MSG-137 fixed

---

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

Daniel Zhang (張道博) 31 May 2013 15:33	Commit made by <b>Daniel Zhang (張道博)</b> on 2013-05-31T18:32:58-07:00 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/693c5c3b5630d69c596c08878ee47fef3ec5600a">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/693c5c3b5630d69c596c08878ee47fef3ec5600a</a>
	fixed test by correcting use of debugging option: #MSG-147 fixed

---

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

Daniel Zhang (張道博) 30 May 2013 16:14	Commit made by <b>Daniel Zhang (張道博)</b> on 2013-05-30T19:14:36-07:00 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/155b085c4fcedb539ff0d4ca37705f90998f1a1c">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/155b085c4fcedb539ff0d4ca37705f90998f1a1c</a>
	added wall time measure to recursive insert: #MSG-108 fixed

---

**MSG-102** — update config file documentation with notification parameters

Daniel Zhang (張道博) 30 May 2013 13:32	Commit made by <b>Daniel Zhang (張道博)</b> on 2013-05-30T16:32:03-07:00 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/61e1b48a1c59ca3602ae16ae22c66cb334b871d9">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/61e1b48a1c59ca3602ae16ae22c66cb334b871d9</a>
	updating documentation to include notification variables and plot path: #MSG-102 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 **Daniel Zhang (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 **Daniel Zhang (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.

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-138 — add gridlines to count plot

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-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)  
28 May 2013 15:32

Commit made by **Daniel Zhang (張道博)** on 2013-05-28T18:32:26-07:00  
<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)  
28 May 2013 15:58

Commit made by **Daniel Zhang (張道博)** on 2013-05-28T18:57:53-07:00  
<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)  
28 May 2013 17:17

Commit made by **Daniel Zhang (張道博)** on 2013-05-28T20:16:15-07:00  
<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)  
28 May 2013 17:17

Commit made by **Daniel Zhang (張道博)** on 2013-05-28T20:17:33-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/56df95332104ed5babb5f17403caa2f91e1f9b26>

| changing recursive insert to object method: #MSG-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-132 — load static location and meter records

## MSG-109 — load energy data to production meco\_v3

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-134 — transfer views from v2

Daniel Zhang (張道博)  
24 May 2013 15:22

Commit made by **Daniel Zhang (張道博)** on 2013-05-24T18:22:06-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/71c70fbd816507f305ec7eee3b2859bd1cb5945f>

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

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-114 — prepare full v3 data set for loading

Separate data by months.

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

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-127 — attach meter reading count plot to loading notification

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-123 — remove time portion in readings-meters counts

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-122 — Views

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

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-124 — create reading-meter count graph script

Daniel Zhang (張道博)  
23 May 2013 01:28

Commit made by **Daniel Zhang (張道博)** on 2013-05-23T04:27:12-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9367db1a34f02db06f1e38843a6322b98b680a6c>

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

---

### MSG-120 — update structure for meco\_v2

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-119 — determine correct usage of configOptionValue

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

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

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

Daniel Zhang (張道博)  
29 Apr 2013 16:19

Commit made by **Daniel Zhang (張道博)** on 2013-04-29T19:19:04-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9ca18bad94ea990ff78e962752312b0e2e1aa15e>

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

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-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.

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*
Closing the DB connection to test_meco.
```

```
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-Grid/commit/52e776bd8ef48503672f99e9b10687e32d96ab8e>

| removing incorrect flag: #MSG-118 fixed

---

**MSG-116** — verify local daily backup is present

**MSG-93** — add destructors to db connecting classes

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-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-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){0}[4](84055)
Inserting data to database test_meco.
```

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

```
parsing xml in ./October2012/20121107-bc289ebc-f666-4384-a6ee-1baff0657a40-1-1.xml.gz
{dupe on insert==>}{11520}[0](29155){0}[1](43893){0}[2](58626){0}[3](73359){0}[4](88103){0}[5](102842){0}[6](117589){0}[7](132327){0}[8](147073)
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){dupe on insert==>}{11520}[7](132305){0}[8](147039)
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){dupe on insert==>}{1856}[7](50832){0}[8](54267)
Inserting data to database test_meco.
```

```
parsing xml in ./2013_02_11_download/20130211-27af62d3-5d28-42db-a4a6-1ca4d2b1fb0b-2-1.xml.gz
{0}[0](10329){0}[1](20691){0}[2](24126){0}[3](27561){0}[4](37912){0}[5](41342){0}[6]
```

```
(48211){0}[7](51646){0}[8](61963)
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

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-111 — add explicit testing argument to recursive insert

Daniel Zhang (張道博)  
16 May 2013 16:32

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)  
16 May 2013 17:20

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-110 — require explicit flag to send email on insert

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-107 — add db name to notification body

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

1. MSG-107 fixed
  2. MSG-104 fixed
  3. MSG-106 fixed
- 

### MSG-106 — perform test run of data loading notification

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

1. MSG-107 fixed
  2. MSG-104 fixed
  3. MSG-106 fixed
- 

### MSG-104 — add email notification option to recursive insert

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)

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

15 May 2013 15:13

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

email on data loading works: #MSG-57 fixed

1. [MSG-107](#) fixed
2. [MSG-104](#) fixed
3. [MSG-106](#) fixed

---

## MSG-57 — send email on successful data insert

Daniel Zhang (張道博)  
13 May 2013 15:54

Commit made by **Daniel Zhang (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 **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

1. [MSG-107](#) fixed
2. [MSG-104](#) fixed
3. [MSG-106](#) fixed

---

## MSG-103 — Support export of data to cloud storage

## MSG-105 — create testing suite runner script

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

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

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

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
```

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

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-89 — fix cursor error in recursive insert

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

Daniel Zhang (張道博)  
10 May 2013 14:59

The error have been caused by an interruption of the network connection.

---

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

Daniel Zhang (張道博)  
10 May 2013 16:50

The test completed successfully.

```
time python ~/dzmbp-maui-smart-grid/src/recursiveInsertData.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-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/recursiveInsertData.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
```

Daniel Zhang (張道博)

The permissions problem cleared up when switching to Macfusion vs SFTP.

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

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-86 — Skip log files during recursive insert

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

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

Daniel Zhang (張道博)  
08 May 2013 18:36

Commit made by **Daniel Zhang (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 **Daniel Zhang (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-82 — write recursive insert script

Daniel Zhang (張道博)  
08 May 2013 18:23

Commit made by **Daniel Zhang (張道博)** on 2013-05-08T21:23:28-07:00  
<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)  
09 May 2013 15:24

Commit made by **Daniel Zhang (張道博)** on 2013-05-09T18:24:23-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c8a09bf2fff6dea42d3e03f0c7524ee65db2de5b>

| recursive insert works: #MSG-82 fixed

---

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

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-80 — provide updated full structure dump for meco\_v2

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-79 — Change foreign keys to cascade delete and update

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

Daniel Zhang (張道博)  
06 May 2013 17:53

Commit made by **Daniel Zhang (張道博)** on 2013-05-06T20:51:36-07:00

<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-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
```

Daniel Zhang (張道博)  
06 May 2013 16:00

Commit made by **Daniel Zhang (張道博)** on 2013-05-06T19:00:26-07:00  
<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-77 — test insertion of test data to meco\_v3

Daniel Zhang (張道博)  
07 May 2013 15:05

Data is being successfully inserted.

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

Daniel Zhang (張道博)  
24 Apr 2013 14:56

Commit made by **Daniel Zhang (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 **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-45 — Event Data

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-73 — process event text

The separate event text is not being handled.

Daniel Zhang (張道博)  
02 May 2013 16:16

Commit made by **Daniel Zhang (張道博)** on 2013-05-02T19:16:38-07:00  
<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-75 — fix test\_\_\_\_mecoxmlparser.py after breakage from refactoring

Daniel Zhang (張道博)  
02 May 2013 13:13

Commit made by **Daniel Zhang (張道博)** on 2013-05-02T16:13:39-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/47e9816d1af03a07433709c012c0ec6993f33c2d>

| fixing parse test: #MSG-75 in progress

---

Daniel Zhang (張道博)  
02 May 2013 13:34

'None' is being incorrectly used as a foreign key.

-----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 00:00:00:00:00:00:00:00
meter_name 100000
meter_data_id DEFAULT
sql=insert into "MeterData"
(util_device_id,meter_data_id,created,mac_id,meter_name) values
('100000',DEFAULT,NOW(), '00:00:00:00:00:00:00:00','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-74 — verify that foreign keys are generated for event data

## MSG-48 — change insertion code to handle event data

Daniel Zhang (張道博)  
30 Apr 2013 15:27

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

---

## MSG-49 — Provide parsing of event data

Daniel Zhang (張道博)  
25 Apr 2013 16:08

Commit made by **Daniel Zhang (張道博)** on 2013-04-25T19:08:03-07:00  
<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-72 — verify event data is processed by testing suite

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

Daniel Zhang (張道博)

Event data is being loaded to the testing database.

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

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-66 — migrate test\_meco to meco\_v3

Setup test\_meco using the meco\_v3 schema.

Daniel Zhang (張道博)  
25 Apr 2013 14:48

Commit made by **Daniel Zhang (張道博)** on 2013-04-25T17:48:28-07:00  
<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-62 — add foreign keys to event data tables

Daniel Zhang (張道博)  
24 Apr 2013 16:35

Commit made by **Daniel Zhang (張道博)** on 2013-04-24T19:35:41-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f7b228e909139c7ce651e5652eea6efad9fbfb2b>

| added foreign keys: #MSG-62 fixed

---

## MSG-46 — create tables for event data

## MSG-59 — create sequences for event data tables

**MSG-61** — Establish table ownership for sequences

**MSG-63** — add primary keys to event tables

**MSG-50** — update schema diagram

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

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-58** — setup remote login for enter encryption passphrase

**MSG-44** — remove testing\_meterdata table

Daniel Zhang (張道博)  
23 Apr 2013 14:27

The testing meter data table will be removed from meco\_v3.

Daniel Zhang (張道博)  
23 Apr 2013 15:14

Commit made by **Daniel Zhang (張道博)** on 2013-04-23T18:13:12-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/df3d63cb6e9b3a1e0e335cb5efc6eaa488d5cac2>

| removing references to testing meter data table: #MSG-44 in progress

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

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-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

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

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

Daniel Zhang (張道博)  
18 Apr 2013 12:25

Database name must match testing\_db\_name exactly.

---

Daniel Zhang (張道博)  
19 Apr 2013 14:34

Commit made by **Daniel Zhang** (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-28 — fix test\_\_\_\_mecodbinsserter.py

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

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

Daniel Zhang (張道博)  
02 Apr 2013 17:47

Commit made by **Daniel Zhang** 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

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Daniel Zhang (張道博)  
02 Apr 2013 18:07

Commit made by **Daniel Zhang** 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

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Daniel Zhang (張道博)  
03 Apr 2013 10:45

Commit made by **Daniel Zhang** on 2013-04-03T13:45:41-07:00  
<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

---

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

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

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Daniel Zhang (張道博)  
16 Apr 2013 12:54

All db executes are now through the db utils.

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

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

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

Daniel Zhang (張道博)  
11 Apr 2013 16:57

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.

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

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

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

## 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 **Daniel Zhang (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 **Daniel Zhang (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 **Daniel Zhang (張道博)** on 2013-04-11T21:24:19-07:00  
<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 **Daniel Zhang (張道博)** on 2013-04-13T00:53:44-07:00  
<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-30 — fix test\_\_\_\_mecodbutil.py

Daniel Zhang (張道博)  
06 Apr 2013 15:48

Commit made by **Daniel Zhang** on 2013-04-06T18:48:11-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0f11122ae0108239cf43f7c18ead18ccbd38516c>

change table name: #MSG-30 Fixed

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

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 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/77f90dd3cbeadd9e4feec6cebf677cf38784ca80">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/77f90dd3cbeadd9e4feec6cebf677cf38784ca80</a>    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 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d05bf15f3a84739bfe2dbca5ed947ffb604cc500">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/d05bf15f3a84739bfe2dbca5ed947ffb604cc500</a>    add sequence to update testing table: #MSG-29 fixed

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

Daniel Zhang (張道博) 17 Apr 2013 13:25	The same sample data used for the parser test is being used by the dupe check test.
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## MSG-16 — write equality verification test when dropping reading data due to duplication

Daniel Zhang (張道博) 17 Apr 2013 13:24	This has been accomplished in test___mecodupecheck.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-20 — meco\_v2

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

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-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 <a href="https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0791eaa0ba2f8398806f52a446f67a4dc47531c5">https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0791eaa0ba2f8398806f52a446f67a4dc47531c5</a>    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)	Commit made by <b>Daniel Zhang</b> on 2013-04-02T01:34:57-07:00

| adjust weather script: #MSG-18 Fixed

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**MSG-23** — insert oct 2012

**MSG-22** — insert sep 2012

**MSG-21** — insert aug 2012

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

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

**MSG-24** — add creation timestamp to meter data table

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>

| 1. **MSG-24** In Progress

| adding creation timestamp upon insert

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**MSG-19** — eliminate duplicate data insertion in 2012 data

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

Daniel Zhang (張道博)  
25 Mar 2013 01:44

Commit made by **Daniel Zhang** on 2013-03-25T04:40:24-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fbff88b9cc88d4d814b34de737d45add9d7aa0c4>

| changing dupe handling method, focusing on reading branch: #MSG-13 In Progress

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Daniel Zhang (張道博)  
25 Mar 2013 01:49

removed rollback when dupes are present. testing on meterName-endTime-channel is lower level than meterName-endTime.

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Daniel Zhang (張道博)  
25 Mar 2013 11:07

Commit made by **Daniel Zhang** on 2013-03-25T14:07:15-07:00  
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fe29ca7966c091c0deb2ea06a9884b5d52c881c7>

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

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## MSG-11 — intercept duplicate channel data

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

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

Daniel Zhang (張道博) 20 Mar 2013 16:39	dupe checking can be accomplished by referencing the meter data id and the end_time (reading branch) or the read_time (register branch)
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## MSG-4 — perform dupe check prior to insertion

Daniel Zhang (張道博) 21 Mar 2013 17:44	dupe checking on meter name and interval end time works but there exists duplicate channel data in the raw data
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## MSG-6 — insert test data to test\_meco database

Daniel Zhang (張道博) 15 Mar 2013 16:04	insert of testing data works fine
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## MSG-7 — reduce static test data set

## MSG-1 — setup test XML source data for test\_\_\_\_mecoxmlparser.py