

Maui Smart Grid Issues Report - Daniel Zhang (張道博)

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From: Maui-Smart-Grid

Bug

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

Comments

Daniel Zhang (張道博)
06 Apr 2013 16:15

Commit made by **Daniel Zhang** on 2013-04-06T19:15:06-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2a616743cd2c0502795fb7619209b4a2a9928d00>

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

Daniel Zhang (張道博)
16 Apr 2013 12:54

All db executes are now through the db utils.

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

Comments

Daniel Zhang (張道博)
22 Apr 2013 16:08

Commit made by **Daniel Zhang (張道博)** on 2013-04-22T19:08:25-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f47069a4b4ebc9c4b45d2553f64b7d9c0f12c0af>

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

MSG-71 — update test____mecodbutil.py to meco_v3

Comments

Daniel Zhang (張道博)
29 Apr 2013 15:09

Commit made by **Daniel Zhang (張道博)** on 2013-04-29T18:09:22-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9d8a00c885bf6e2fd3ca435962a4dc949c5bcc8d>

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

MSG-105 — create testing suite runner script

MSG-153 — database connection messages are conflicting

Example from test____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.

Comments

Daniel Zhang (張道博) 31 May 2013 14:56	The test is likely accessing both databases. It should only access the testing database.
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MSG-164 — concise logs are not showing meaningful values for duplicates during insert

See #MSG-160.

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

Comments

Daniel Zhang (張道博) 13 Jun 2013 18:35	An isolated test using test data: meco_v3-energy-test-data_with_missing_interval.xml.gz meco_v3-energy-test-data.xml.gz resulted in all readings being inserted. Results with actual data cannot be confirmed yet. The attachment shows a discrepancy between secondary loading to meco_v3 versus primary loading to meco_v4.
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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.
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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.
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Daniel Zhang (張道博) 22 Jun 2013 01:33	Loading 2013-Mar original data to v4 results in the reading/meter counts matching indicating the re-extracted data has less readings than the original+re-extracted. No missing readings are detected as a result of loading.
---	---

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

Comments

Daniel Zhang (張道博) 21 Jun 2013 16:10	Commit made by Daniel Zhang (張道博) on <i>2013-06-21T19:10:28-07:00</i> https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/103ad7ab30ae7a9e0e6b68dced73eebb0b5df11f the operational class had TEST_SCRIPT=True: #MSG-209 fixed
---	---

MSG-210 — logger error occurs during send mail

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

Sending multipart email.

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

Traceback (most recent call last):

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

File "/home/daniel/dzmbp-maui-smart-grid/src/meconotifier.py", line 164, in
sendMailWithAttachments

sys.logger.log('No exceptions occurred.\n', 'info')

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

Feature

MSG-2 — Testing

Comments

Daniel Zhang (張道博) 14 May 2013 13:20	All tests pass.
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MSG-3 — Data Insertion

MSG-20 — meco_v2

MSG-45 — Event Data

Comments

Daniel Zhang (張道博)
24 Apr 2013 14:55

Commit made by **Daniel Zhang** (張道博) on
2013-04-24T17:55:03-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/52f40d3577deab1c18a6a8333c0b393eb13a06f2>

| creating v3: #MSG-45 in progress

MSG-56 — Notifications

MSG-122 — Views

MSG-156 — MECO Data Loading

MSG-175 — Weather Data Loading

MSG-190 — Data Export

MSG-198 — Logging

MSG-216 — Database Maintenance

Task

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

MSG-4 — perform dupe check prior to insertion

Comments

Daniel Zhang (張道博)
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

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

Comments

Daniel Zhang (張道博)
15 Mar 2013 16:05

meter ids should be recorded once and only once

Daniel Zhang (張道博)
21 Mar 2013 17:44

this may not be necessary

MSG-6 — insert test data to test_meco database

Comments

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

MSG-7 — reduce static test data set

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

Comments

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

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

Comments

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

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

Comments

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

MSG-11 — intercept duplicate channel data

Comments

Daniel Zhang (張道博) there appear to be duplicates of reading data in the raw data.
22 Mar 2013 16:44 these need to be intercepted and prevented from being inserted
into the database.

Daniel Zhang (張道博) using a combined meterName-IntervalEndTime-channel field is
22 Mar 2013 16:46 possible to ensure data integrity.

Daniel Zhang (張道博) the reading branch is covered for duplicates now.
25 Mar 2013 01:47

MSG-13 — add additional check to verify that duplicate rows to be discarded have

equivalent data in the database

Comments

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
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.
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

MSG-14 — check for duplicates on the register branch

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

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

Comments

Daniel Zhang (張道博) 17 Apr 2013 13:24	This has been accomplished in 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-17 — move debug option to local config

Comments

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
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| moving debug option: #MSG-17 In Progress

Daniel Zhang (張道博) The debugging option works through the local configuration.
07 Jun 2013 13:34

MSG-18 — create meco_v2 from latest development

Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang** on 2013-03-26T21:06:14-07:00
26 Mar 2013 18:06 <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/0791eaa0ba2f8398806f52a446f67a4dc47531c5>

| adding tables for meco_v2: #MSG-18 In Progress

Daniel Zhang (張道博) still need to add kahalui weather data
01 Apr 2013 10:47

Daniel Zhang (張道博) Commit made by **Daniel Zhang** on 2013-04-02T01:34:57-07:00
01 Apr 2013 22:35 <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9fe44c81b3e1f0d1aab1f7d38a2263781e04c00a>

| adjust weather script: #MSG-18 Fixed

MSG-19 — eliminate duplicate data insertion in 2012 data

MSG-21 — insert aug 2012

MSG-22 — insert sep 2012

MSG-23 — insert oct 2012

MSG-24 — add creation timestamp to meter data table

Comments

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

| #MSG-24 In Progress

| adding creation timestamp upon insert

MSG-25 — change parser to use in-memory file object instead of file on disk

this is for gzip support

MSG-27 — transfer views from meco_v1 to meco_v2

Comments

-
- | | |
|---|--|
| Daniel Zhang (張道博)
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 |
| <hr/> | |
| 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 |
| <hr/> | |
| 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-28 — fix test____mecodbinsserter.py

Comments

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

 adding testing meter data table: #MSG-28 fixed |
|---|---|

MSG-29 — fix test____mecodbread.py

Comments

-
- | | |
|---|-----------------------|
| Daniel Zhang (張道博)
05 Apr 2013 18:01 | mapper needs updating |
|---|-----------------------|

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

MSG-30 — fix test____mecodbutil.py

Comments

Daniel Zhang (張道博) 06 Apr 2013 15:48	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
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MSG-31 — fix test____mecoxmlparser.py

Comments

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)	Commit made by Daniel Zhang (張道博) on

10 Apr 2013 17:57

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

MSG-33 — determine correct cursor usage

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

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

Comments

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

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

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

Database test_meco is erased prior to running tests on it.

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

Daniel Zhang (張道博)	The current truncated testing data set is based on export data
07 Jun 2013 13:33	from 2013-Apr.

MSG-36 — fix test____mecodupecheck.py**Comments**

Daniel Zhang (張道博)	Commit made by Daniel Zhang (張道博) on
16 Apr 2013 12:52	2013-04-16T15:52:45-07:00

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

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

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

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

Comments

Daniel Zhang (張道博)
09 Apr 2013 17:40

Commit made by **Daniel Zhang** (張道博) on
2013-04-09T20:39:58-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8816e738197b8d1e953715531be2213ed502979a>

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

Daniel Zhang (張道博)
09 Apr 2013 18:35

Commit made by **Daniel Zhang** (張道博) on
2013-04-09T21:35:02-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c25de2cd02ad44fd461744180b7c8a21ee4d738a>

adding full meco_v2 structure dump: #MSG-37 in progress

MSG-38 — verify that test____mecoxmlparser.py is using test_meco as its database

Comments

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.

MSG-39 — verify database name in eraseTestMeco()

Comments

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-40 — switch all testing operations to test_meco

All database operations during testing should use the testing database or test_meco

exclusively. This is accomplished by setting the Testing argument to True for supported classes.

The classes that accept the testing argument are:

meco db connect and meco xml parser

Comments

Daniel Zhang (張道博)
22 Apr 2013 14:43

Commit made by **Daniel Zhang (張道博)** on
2013-04-22T17:42:56-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/f993a9687d2475300e916c490ff679cfb1a0d9b9>

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

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

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

Comments

Daniel Zhang (張道博)
17 Apr 2013 13:27

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

Daniel Zhang (張道博)
17 Apr 2013 16:04

Commit made by **Daniel Zhang (張道博)** on
2013-04-17T19:03:55-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/fc7d67a13fb0d9539ca2d23eeec914914d5a35e4>

tightened required config permissions: #MSG-41 fixed

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

2013_03_18_download
2013_03_25_download
2013_04_01_download
2013_04_08_download
2013_04_15_download

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

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

Comments

Daniel Zhang (張道博) 07 Jun 2013 13:35	The local debugging option works correctly when its value is properly evaluated.
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MSG-44 — remove testing_meterdata table

Comments

Daniel Zhang (張道博) 23 Apr 2013 14:27	The testing meter data table will be removed from meco_v3.
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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
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| removing references to testing meter data table: #MSG-44 in progress

Daniel Zhang (張道博) 23 Apr 2013 15:17	The test suite passes.
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Daniel Zhang (張道博) 23 Apr 2013 16:08	Testing MeterData was removed from test_meco and all tests still pass.
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MSG-46 — create tables for event data

MSG-48 — change insertion code to handle event data

Comments

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.
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MSG-49 — Provide parsing of event data

Comments

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-
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[Grid/commit/d3c038593fe68432bd40c1a83a129ea1cea1fe76](#)

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

Daniel Zhang (張道博)
30 Apr 2013 15:29

Event data is parsed as a result of getting the relevant tests to work.

MSG-50 — update schema diagram

Comments

Daniel Zhang (張道博)
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-51 — Determine an official location for data that has been, or will be, inserted to the database

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

MSG-57 — send email on successful data insert**Comments**

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-58 — setup remote login for enter encryption passphrase**MSG-59** — create sequences for event data tables**MSG-60** — provide SQL dump file for meco_v3**Comments**

Daniel Zhang (張道博)
24 Apr 2013 14:56

Commit made by **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
1. MSG-60 fixed

MSG-61 — Establish table ownership for sequences

MSG-62 — add foreign keys to event data tables

Comments

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
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added foreign keys: #MSG-62 fixed

MSG-63 — add primary keys to event tables

MSG-66 — migrate test_meco to meco_v3

Setup test_meco using the meco_v3 schema.

Comments

Daniel Zhang (張道博) 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-67 — Create new test data set based on latest data that includes event data

Comments

Daniel Zhang (張道博) 29 Apr 2013 13:45	Commit made by Daniel Zhang (張道博) on 2013-04-29T16:45:20-07:00 https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/8113f32019f7fc9d3c876c2b4dd55c4d05206386
---	---

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

Daniel Zhang (張道博)
29 Apr 2013 13:57

Commit made by **Daniel Zhang** (張道博) on
2013-04-29T16:57:08-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/98b6492ed15f46c991d53366f8b0a833cc4a8e01>

reduced test data by removing intervals: #[msg-67](#) fixed

NumberIntervals is now incorrectly specified.

Daniel Zhang (張道博)
29 Apr 2013 13:59

Commit made by **Daniel Zhang** (張道博) on
2013-04-29T16:59:26-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/2376b494c6d7f7b1ff51509723c89d13f00444b4>

further reduction of test data set for faster testing: #[MSG-67](#) fixed

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

MSG-69 — update test____mecoxmlparser.py to meco_v3

Comments

Daniel Zhang (張道博)
29 Apr 2013 15:48

Commit made by **Daniel Zhang** (張道博) on
2013-04-29T18:48:26-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/ad8d7a5525e060a68668b0e682dd390ded3e527c>

updated parser test for v3: #[MSG-69](#) fixed

MSG-70 — update test____mecodupecheck.py to meco_v3

Comments

Daniel Zhang (張道博)
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>

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

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

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

Comments

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

MSG-73 — process event text

The separate event text is not being handled.

Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (張道博)** on
02 May 2013 16:16 *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) Commit made by **Daniel Zhang (張道博)** on
03 May 2013 14:49 *2013-05-03T17:49:46-07:00*
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1c907083aae7e24c31f44ddb9bf6b1bf97b4df76>

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

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

MSG-75 — fix test____mecoxmlparser.py after breakage from refactoring

Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (張道博)** on
02 May 2013 13:13 *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) 'None' is being incorrectly used as a foreign key.

02 May 2013 13:34

-----MeterData

```
{'UtilDeviceID': 'util_device_id', 'MacID': 'mac_id', 'MeterName':  
'meter_name', '_pkey': 'meter_data_id'}
```

```
{'MeterName': '100000', 'UtilDeviceID': '100000', 'MacID':  
'00:00:00:00:00:00:00:00'}
```

```
util_device_id 100000
```

```
mac_id 00:00:00:00:00:00:00:00
```

```
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,'2013-04-14
```

```
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,'2013-04-14
```

```
The error is: invalid input syntax for integer: "None"
```

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

^

table name = RegisterData
 column name = register_data_id
 SQL execute failed using select
 currval(pg_get_serial_sequence('RegisterData','register_data_id'))
 The error is: current transaction is aborted, commands ignored
 until end of transaction block

Daniel Zhang (張道博)
 02 May 2013 13:53

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

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

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

This reverts commit
 47e9816d1af03a07433709c012c0ec6993f33c2d.

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

Comments

Daniel Zhang (張道博)
 13 May 2013 14:41

Local environment testing can be accomplished by adding the
 MECO src path to PYTHONPATH.

MSG-77 — test insertion of test data to meco_v3

Comments

Daniel Zhang (張道博)
 07 May 2013 15:05

Data is being successfully inserted.

MSG-78 — fix get last sequence ID for parser

parsing xml in ./meco_v3-energy-test-data.xml

Traceback (most recent call last):

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

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

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

pkeyCol)

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

psycopg2.ProgrammingError: no results to fetch

Comments

Daniel Zhang (張道博)
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-79 — Change foreign keys to cascade delete and update

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

Comments

Daniel Zhang (張道博)
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
1. MSG-60 fixed

MSG-80 — provide updated full structure dump for meco_v2

Comments

Daniel Zhang (張道博)
07 May 2013 13:52

Commit made by **Daniel Zhang (張道博)** on
2013-05-07T16:52:09-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9e971ce0b639b4ca0fc0f115f4dab4efa260540c>

updating meco_v2: #MSG-80 fixed

MSG-81 — Test insertion of actual data to meco_v3

Comments

Daniel Zhang (張道博)
07 May 2013 15:53

Data was successfully inserted.

Inserting data to database meco_v3.
parsing xml in ./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz
{0}[0](6878){0}[1](10313){0}[2](20739){0}[3](24174){0}[4](27609)
{0}[5](31044){0}[6](34479){0}[7](37915){0}[8](44788)
parsing xml in ./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz
{0}[0](51662){0}[1](55097){0}[2](61971){0}[3](65407){0}[4](72280)
{0}[5](75715){0}[6](82611){0}[7](89485){0}[8](92921)
real 3m46.910s
user 0m48.983s
sys 0m59.076s

MSG-82 — write recursive insert script

Comments

Daniel Zhang (張道博)
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-83 — Add command line option for file name to insert data script

Comments

Daniel Zhang (張道博)
08 May 2013 18:36

Commit made by **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-84 — add xml file pre-checking to recursive insert script

Comments

Daniel Zhang (張道博)
10 May 2013 15:03

The intention is to not process files that may not contain valid data.

Daniel Zhang (張道博)
13 May 2013 14:33

The script has support for filtering the log files. No further filtering will be performed at this time.

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

Comments

Daniel Zhang (張道博)
13 May 2013 14:55

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

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

updating documentation for configuration file: #MSG-85 fixed

MSG-86 — Skip log files during recursive insert

Log files are denoted as *.log.xml.

Comments

Daniel Zhang (張道博)
10 May 2013 01:18

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

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

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

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

Comments

Daniel Zhang (張道博)
10 May 2013 16:50

The test completed successfully.

```
time python ~/dzmbp-maui-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-88 — reduce complexity in walkTheTreeFromRoot**Comments**

Daniel Zhang (張道博)
05 Jun 2013 16:09

Commit made by **Daniel Zhang** (張道博) on
2013-06-05T19:09:43-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c317a6a96c959499022f81f49dd35eed80cc9b2c>

determine table name per element: #MSG-88 in progress

Daniel Zhang (張道博)
05 Jun 2013 17:35

Commit made by **Daniel Zhang** (張道博) on
2013-06-05T20:34:52-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9f42ab58ebac2581d4d085c67bee25ba432666d4>

extracted insert data processing: #MSG-88 in progress

Daniel Zhang (張道博)
21 Jun 2013 13:48

walkTheTreeFromRoot has been reworked to be more clearly expressed.

MSG-89 — fix cursor error in recursive insert

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

Comments

Daniel Zhang (張道博)
10 May 2013 14:59

The error have been caused by an interruption of the network connection.

MSG-90 — fix insert execution exception

insertScript = /home/daniel/dzmbp-maui-smart-grid/src/insertData.py
./20130415-77fdd50d-4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz

Traceback (most recent call last):

File "/home/daniel/dzmbp-maui-smart-grid/src/recursivelyInsertData.py", line 66, in <module>
call([insertScript, "-filepath", fullPath])
File "/usr/lib/python2.7/subprocess.py", line 493, in call
return Popen(*popenargs, **kwargs).wait()
File "/usr/lib/python2.7/subprocess.py", line 679, in __init__
errread, errwrite)

```
File "/usr/lib/python2.7/subprocess.py", line 1249, in _execute_child
    raise child_exception
OSError: [Errno 13] Permission denied
```

Comments

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

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

Comments

Daniel Zhang (張道博) 13 May 2013 15:38	<p>Results of old data + isolated event data:</p> <p>Inserting data to database meco_v3.</p> <p>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.</p> <p>parsing xml in ./MSGeventsJan30-1-1.xml.gz</p> <p>Inserting data to database meco_v3.</p> <p>parsing xml in ./MSGeventsJan30-2-1.xml.gz</p> <p>Inserting data to database meco_v3.</p> <p>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</p>
Daniel Zhang (張道博) 13 May 2013 16:22	<p>Two folder test was successful:</p> <p>Inserting data to database meco_v3.</p>

```
parsing xml in ./2013_02_04_DataDownloaded_wCurtis
/MSGdataDec30-2-1.xml.gz
{0}[0](14739){0}[1](29512){0}[2](44240){0}[3](58968){0}[4](73697)
{0}[5](88425){0}[6](103153){0}[7](117881){0}[8](132614)
Inserting data to database meco_v3.
```

```
parsing xml in ./2013_02_04_DataDownloaded_wCurtis
/MSGdataDec30-1-1.xml.gz
{dupe on insert
  }{3776}[0](19449){0}[1](34177){0}[2](48905){0}[3](63638){0}[4]
  (78368){0}[5](93103){0}[6](107832){0}[7](122565){dupe on
  insert
>}{29632}[8](174362)
Inserting data to database meco_v3.
```

```
parsing xml in ./2013_04_08_download/20130408-f02e1048-
f11e-4004-a90e-2f1e1a05fbfe-1-1.xml.gz
{0}[0](137770)
Inserting data to database meco_v3.
```

```
parsing xml in ./2013_04_08_download/20130408-f02e1048-
f11e-4004-a90e-2f1e1a05fbfe-2-1.xml.gz
{0}[0](123946){0}[1](131074){0}[2](134552)
real 18m5.586s
user 4m34.625s
sys 0m40.019s
```

MSG-92 — pass mecodbconnect object instead of raw conn to mecodbinsert

The following definition can be changed:

```
def insertData(self, conn, tableName, columnsAndValues, fKeyVal = None,
    withoutCommit = 0):
```

MSG-93 — add destructors to db connecting classes

Comments

Daniel Zhang (張道博)
20 May 2013 16:14

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

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

| adding destructor for db closing: #MSG-93 fixed

MSG-100 — be able to send an email message

Comments

Daniel Zhang (張道博)
14 May 2013 16:12

Commit made by **Daniel Zhang** (張道博) on
2013-05-14T19:12:04-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/3646d81ff6f6fa71b112ea9f3913f30007407da9>

| email sending works: #MSG-100 fixed

MSG-101 — add notifications for testing suite

MSG-102 — update config file documentation with notification parameters

Comments

Daniel Zhang (張道博)
30 May 2013 13:32

Commit made by **Daniel Zhang** (張道博) on
2013-05-30T16:32:03-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/61e1b48a1c59ca3602ae16ae22c66cb334b871d9>

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

MSG-103 — Support export of data to cloud storage

MSG-104 — add email notification option to recursive insert

Comments

Daniel Zhang (張道博)
15 May 2013 14:39

Commit made by **Daniel Zhang** (張道博) on
2013-05-15T17:39:23-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9f0a5be70187def145d7476157bbd72089447c35>

| adding email notification: #MSG-104 in progress

Daniel Zhang (張道博)
15 May 2013 15:13

Commit made by **Daniel Zhang** (張道博) on
2013-05-15T18:13:25-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart->

[Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd](#)

email on data loading works: #MSG-57 fixed

1. MSG-107 fixed
2. MSG-104 fixed
3. MSG-106 fixed

MSG-106 — perform test run of data loading notification

Comments

Daniel Zhang (張道博)
15 May 2013 15:13

Commit made by **Daniel Zhang (張道博)** on
2013-05-15T18:13:25-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd>

email on data loading works: #MSG-57 fixed

1. MSG-107 fixed
2. MSG-104 fixed
3. MSG-106 fixed

MSG-107 — add db name to notification body

Comments

Daniel Zhang (張道博)
15 May 2013 15:13

Commit made by **Daniel Zhang (張道博)** on
2013-05-15T18:13:25-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd>

email on data loading works: #MSG-57 fixed

1. MSG-107 fixed
2. MSG-104 fixed
3. MSG-106 fixed

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

Comments

Daniel Zhang (張道博)
30 May 2013 16:14

Commit made by **Daniel Zhang (張道博)** on
2013-05-30T19:14:36-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/bc2e43f5b2ef5f17026b0a1fb5a44d0a25aa06dd>

[Grid/commit/155b085c4fcedb539ff0d4ca37705f90998f1a1c](#)

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

MSG-109 — load energy data to production meco_v3

Comments

Daniel Zhang (張道博)
24 May 2013 13:45

Commit made by **Daniel Zhang** (張道博) on
2013-05-24T16:45:28-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6efd622fd3aedc485331a14ef0dfc6e1265c6593>

data is loaded: #MSG-109 fixed

Uploading diagram of result counts.

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

Comments

Daniel Zhang (張道博)
15 May 2013 15:36

Commit made by **Daniel Zhang** (張道博) on
2013-05-15T18:35:53-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/9cc4e425ac6f32b68f57a828f52f2f9e7c7cf35b>

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

MSG-111 — add explicit testing argument to recursive insert

Comments

Daniel Zhang (張道博)
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-112 — perform 14MB data loading test on test_meco

Comments

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

Comments

Daniel Zhang (張道博)
17 May 2013 16:16

Commit made by **Daniel Zhang (張道博)** on
2013-05-17T19:16:23-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c66c98d16fa59fb7d1781a76c55b618fb6fdeb0e>

| adjusting notification message: #MSG-113 fixed

MSG-114 — prepare full v3 data set for loading

Separate data by months.

MSG-115 — verify reading counts

Comments

Daniel Zhang (張道博)
20 May 2013 13:43

Loading 2013_04_01_download, 2013_04_08_download,
2013_04_15_download to test_meco.

Daniel Zhang (張道博)
20 May 2013 14:10

Insert result:

```
src/recursivelyInsertData.py -testing > insert-log.txt
Testing mode is ON.
```

Inserting data to database test_meco.

```
parsing xml in ./2013_04_01_download/20130401-a589a5b7-
bdee-4a5e-8c39-21324efa37c0-2-1.xml.gz
```

```
{0}[0](6874){0}[1](10309){0}[2](13744){0}[3](17184){0}[4](27504)
{0}[5](30939){0}[6](37839){0}[7](48154){0}[8](51589)
Inserting data to database test_meco.
```

```
parsing xml in ./2013_04_01_download/20130401-a589a5b7-
bdee-4a5e-8c39-21324efa37c0-1-1.xml.gz
{0}[0](6876){0}[1](17196){0}[2](20631){0}[3](27503){0}[4](30939)
{0}[5](34375){0}[6](37810){0}[7](48122){0}[8](51557)
Inserting data to database test_meco.
```

```
parsing xml in ./2013_04_08_download/20130408-f02e1048-
f11e-4004-a90e-2f1e1a05fbfe-1-1.xml.gz
{0}[0](137770)
Inserting data to database test_meco.
```

```
parsing xml in ./2013_04_08_download/20130408-f02e1048-
f11e-4004-a90e-2f1e1a05fbfe-2-1.xml.gz
{0}[0](123946){0}[1](131074){0}[2](134552)
Inserting data to database test_meco.
```

```
parsing xml in ./2013_04_15_download/20130415-77fdd50d-
4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz
{0}[0](6874){0}[1](10309){0}[2](17183){0}[3](20619){0}[4](27492)
{0}[5](30927){0}[6](37823){0}[7](44697){0}[8](48133)
Inserting data to database test_meco.
```

```
parsing xml in ./2013_04_15_download/20130415-77fdd50d-
4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz
{0}[0](6878){0}[1](10313){0}[2](20739){0}[3](24174){0}[4](27609)
{0}[5](31044){0}[6](34479){0}[7](37915){0}[8](44788)
real 14m40.411s
user 3m24.729s
sys 0m33.342s
```

Daniel Zhang (張道博)
20 May 2013 15:32

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

MSG-116 — verify local daily backup is present

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

MSG-118 — re-verify reading counts

The following check is evaluating to true unexpectedly:

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

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

Comments

Daniel Zhang (張道博)
20 May 2013 17:25

Load results:

Inserting data to database test_meco.

parsing xml in ./2013_04_01_download/20130401-a589a5b7-bdee-4a5e-8c39-21324efa37c0-2-1.xml.gz

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

Closing the DB connection to test_meco.

Inserting data to database test_meco.

parsing xml in ./2013_04_01_download/20130401-a589a5b7-bdee-4a5e-8c39-21324efa37c0-1-1.xml.gz

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

Closing the DB connection to test_meco.

Inserting data to database test_meco.

```
parsing xml in ./2013_04_08_download/20130408-f02e1048-  
f11e-4004-a90e-2f1e1a05fbfe-1-1.xml.gz  
{0}[0](137770)*commit*  
Closing the DB connection to test_meco.
```

Inserting data to database test_meco.

```
parsing xml in ./2013_04_08_download/20130408-f02e1048-  
f11e-4004-a90e-2f1e1a05fbfe-2-1.xml.gz  
{0}[0](123946){0}[1](131074){0}[2](134552)*commit*  
Closing the DB connection to test_meco.
```

Inserting data to database test_meco.

```
parsing xml in ./2013_04_15_download/20130415-77fdd50d-  
4768-44fb-b8e1-50d8eafaa114-2-1.xml.gz  
{0}[0](6874){0}[1](10309){0}[2](17183){0}[3](20619){0}[4](27492)  
{0}[5](30927){0}[6](37823){0}[7](44697){0}[8](48133){0}[9](72207)  
{0}[10](75643){0}[11](79078){0}[12](82514){0}[13](85950){0}[14]  
(89385){0}[15](96508){0}[16](103381){0}[17](106895){0}[18]  
(110330){0}[19](113765){0}[20](117200){0}[21](120636){0}[22]  
(124065){0}[23](127500){0}[24](130935){0}[25](134726){0}[26]  
(138203)*commit*  
Closing the DB connection to test_meco.
```

Inserting data to database test_meco.

```
parsing xml in ./2013_04_15_download/20130415-77fdd50d-  
4768-44fb-b8e1-50d8eafaa114-1-1.xml.gz  
{0}[0](6878){0}[1](10313){0}[2](20739){0}[3](24174){0}[4](27609)  
{0}[5](31044){0}[6](34479){0}[7](37915){0}[8](44788){0}[9](48223)  
{0}[10](51659){0}[11](55094){0}[12](58529){0}[13](61964){0}[14]  
(72407){0}[15](75842){0}[16](79278){0}[17](82713){0}[18](86148)  
{0}[19](93021){0}[20](99895){0}[21](103330){0}[22](106845){0}[23]  
(110280){0}[24](117154){0}[25](120590){0}[26](134333){0}[27]  
(137768){0}[28](145125)*commit*  
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-119 — determine correct usage of configOptionValue

Comments

Daniel Zhang (張道博)
21 May 2013 14:56

Commit made by **Daniel Zhang** (張道博) on
2013-05-21T17:55:53-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/363ca88371b2a54e52bf271eb2cf58a21f3d2829>

evaluating boolean config values: #MSG-119 fixed

MSG-120 — update structure for meco_v2

Comments

Daniel Zhang (張道博)
21 May 2013 15:42

Commit made by **Daniel Zhang** (張道博) on
2013-05-21T18:41:52-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/59eff552d1d647bd7c3f90b0ae51a94aed27050f>

added count of readings and meters views; updated
view_readings: #MSG-120 fixed

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

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

Comments

Daniel Zhang (張道博)
22 May 2013 16:23

Commit made by **Daniel Zhang** (張道博) on
2013-05-22T19:23:10-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/6e8a153e05894d21956345155417f4c391cd9d77>

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

MSG-124 — create reading-meter count graph script

Comments

Daniel Zhang (張道博)
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-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.

Comments

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-126 — Be able to send an email attachment

Comments

Daniel Zhang (張道博)
22 May 2013 17:18

Commit made by **Daniel Zhang** (張道博) on
2013-05-22T20:18:00-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/b05144c0fe1b17aac7444934355109561e8c24bf>

attachments work: #MSG-126 fixed

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

Comments

Daniel Zhang (張道博)
23 May 2013 01:54

Commit made by **Daniel Zhang (張道博)** on
2013-05-23T04:54:41-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/76cd5925099da76b9705c04a1911eb3476c0b6de>

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

MSG-128 — add plotting to recursive insert

Comments

Daniel Zhang (張道博)
23 May 2013 01:54

Commit made by **Daniel Zhang (張道博)** on
2013-05-23T04:54:41-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/76cd5925099da76b9705c04a1911eb3476c0b6de>

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

Daniel Zhang (張道博)
23 May 2013 02:44

Commit made by **Daniel Zhang (張道博)** on
2013-05-23T05:44:33-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/42e7d1916f02b95f290f0ea91f55c27048b89af3>

corrected use of attachment: #MSG-128 fixed

MSG-129 — handle plot failure case during loading

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

Comments

Daniel Zhang (張道博)
05 Jun 2013 16:21

Commit made by **Daniel Zhang** (張道博) on
2013-06-05T19:21:01-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/99b173c563006e42bde0ffdaa420126e9d4f295>

generating error on plot failure: #MSG-129 fixed

MSG-130 — Add weather data loading to notifications**Comments**

Daniel Zhang (張道博)
06 Jun 2013 16:44

Commit made by **Daniel Zhang** (張道博) on
2013-06-06T19:44:09-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5ab3297a3cb1d2899d581ce8ffb4eb8e9321de42>

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

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

Daniel Zhang (張道博)
05 Jun 2013 15:55

Commit made by **Daniel Zhang** (張道博) on
2013-06-05T18:55:00-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/e069526be7b0d2ec012c8a051a22dcb33007ce0e>

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

1. MSG-140 fixed
2. MSG-139 fixed

MSG-132 — load static location and meter records**MSG-133** — load weather data**Comments**

Daniel Zhang (張道博)
06 Jun 2013 16:28

Loaded:

KahuluiQCLCD_2012_08.csv
KahuluiQCLCD_2012_09.csv
KahuluiQCLCD_2012_10.csv
KahuluiQCLCD_2012_11.csv

MSG-134 — transfer views from v2

Comments

Daniel Zhang (張道博)
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>

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

MSG-136 — post reading-meter plot to documentation

Comments

Daniel Zhang (張道博)
24 May 2013 15:23

Plot was added.

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

MSG-137 — add parallel notes to documentation

Comments

Daniel Zhang (張道博)
03 Jun 2013 16:54

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

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

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

MSG-138 — add gridlines to count plot

Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang (張道博)** on

29 May 2013 15:57

2013-05-29T18:57:43-07:00

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

added gridlines: #MSG-138 fixed

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

Comments

Daniel Zhang (張道博)

05 Jun 2013 15:55

Commit made by **Daniel Zhang** (張道博) on

2013-06-05T18:55:00-07:00

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

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

1. MSG-140 fixed
2. MSG-139 fixed

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

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

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.

Comments

Daniel Zhang (張道博)
29 May 2013 14:49

Commit made by **Daniel Zhang (張道博)** on 2013-05-29T17:49:10-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/83531e60585482a39e36c200faa4cb022ee42442>

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

MSG-143 — have db destructor message handle testing mode

MSG-144 — provide source data monitoring service

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

MSG-145 — test support for testing mode in notifications

Comments

Daniel Zhang (張道博)
30 May 2013 16:05

Commit made by **Daniel Zhang (張道博)** on 2013-05-30T19:04:55-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5ab379da1c6b2376ef91fce85dfe6f67a68a0d3a>

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

TypeError: 'LazyImporter' object is not callable

Daniel Zhang (張道博)
18 Jun 2013 15:57

Logging configuration, including that of providing notice for testing mode, is handled on a class-by-class. Therefore, issues related to logging should address specific classes.

MSG-146 — create script for PV data loading

MSG-147 — fix /src/tests/test____mecoconfig.py

Comments

Daniel Zhang (張道博)
31 May 2013 15:33

Commit made by **Daniel Zhang (張道博)** on
2013-05-31T18:32:58-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/693c5c3b5630d69c596c08878ee47fef3ec5600a>

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

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

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

Comments

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

Comments

Daniel Zhang (張道博)
03 Jun 2013 17:03

Tail of the insert log is:

```
SQL execute was successful.
table name = Interval
column name = interval_id
SQL execute was successful.
SQL execute was successful.
Duplicate meter-endtime-channel exists.
SQL execute was successful.
table name = Reading
column name = reading_id
SQL execute failed using select
currval(pg_get_serial_sequence('Reading','reading_id')).
The error is: currval of sequence "reading_id_seq" is not yet
defined in this session
```

Daniel Zhang (張道博)
04 Jun 2013 14:02

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)

Commit made by **Daniel Zhang (張道博)** on

04 Jun 2013 15:25

2013-06-04T18:25:30-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/c84a20ec5c7558d247901f6a22cb3e4f9b858fba>

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

MSG-158 — report sql failures through stderr during loading

MSG-159 — create separate plot during testing mode

Comments

Daniel Zhang (張道博)
12 Jun 2013 14:53

Commit made by **Daniel Zhang (張道博)** on
2013-06-12T17:52:21-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/81f8482b06e692639b7a8508b44577fd86daf40f>

Adding support for testing mode to mecoplotting: #MSG-159 in progress

Daniel Zhang (張道博)
12 Jun 2013 16:09

Commit made by **Daniel Zhang (張道博)** on
2013-06-12T19:09:45-07:00

<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/1bf4ff0ba00b4f32d3c03b719fec906656986f71>

pass testing to plotter: #MSG-159 in progress

MSG-160 — load month-long data set

Comments

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](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](25
0423){dupe on insert==>}*commit*{9968}[17](265152){dupe on
insert==>}*commit*{9968}[18](279881){dupe on
insert==>}*commit*{9
968}[19](294611){dupe on insert==>}*commit*{9968}
[20](309345){dupe on insert==>}*commit*{9968}
[21](324074){dupe on insert==>}
}*commit*{9968}[22](338807){dupe on insert==>}*commit*{9968}
[23](353541){dupe on insert==>}*commit*{9968}
[24](368270){dupe o
n insert==>}*commit*{9968}[25](383004){dupe on
insert==>}*commit*{9968}[26](397732){dupe on
insert==>}*commit*{9968}[27](412
461){dupe on insert==>}*commit*{9968}[28](427189){dupe on
insert==>}*commit*{9968}[29](441918){dupe on
insert==>}*commit*{99
68}[30](456979){dupe on insert==>}*commit*{9968}
[31](471708){dupe on insert==>}*commit*{9968}
[32](486436){dupe on insert==>}
• commit*{9968}[33](501165){dupe on insert==>}*commit*{9968}
[34](515899){dupe on insert==>}*commit*{9968}
[35](530627){dupe on
insert==>}*commit*{9968}[36](545356){dupe on
insert==>}*commit*{9968}[37](560084){dupe on
insert==>}*commit*{2476}[38](5657
65){dupe on insert==>}*commit*{2476}[39](571114){dupe on
insert==>}*commit*{2476}[40](576474){dupe on
insert==>}*commit*{9968}[41](591389){dupe on
insert==>}*commit*{9968}[42](606299)*commit*

```

Closing the DB connection to meco_v3.

Inserting data to database meco_v3.

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

```
{dupe on insert==>}*commit*{9968}[0](14730){dupe on
insert==>}*commit*{9968}[1](29480){dupe on insert==>}*commit*
{9968}[2](44208){dupe on insert==>}*commit*{9968}
[3](58936){dupe on insert==>}*commit*{9968}[4](73665){dupe on
insert==>}*commit*{9968}[5](88399){dupe on insert==>}*commit*
{9968}[6](103128){dupe on insert==>}*commit*{9968}
[7](117862){dupe on insert==>}*commit*{9968}[8](132596){dupe
on insert==>}*commit*{9968}[9](147325){dupe on
insert==>}*commit*{9968}[10](162054){dupe on
insert==>}*commit*{9968}[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-161 — create v4 structure**Comments**

Daniel Zhang (張道博)
04 Jun 2013 16:25

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

adding meco_v4 structure: #MSG-161 fixed

MSG-162 — insert 2013_06_03_All_of_May_2013 to v4**Comments**

Daniel Zhang (張道博)
04 Jun 2013 17:01

Results are:

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

Inserting data to database meco_v4.

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

- commit*{0}[0](14735)*commit*{0}[1](29468)*commit*{0}[2](44197)*commit*{0}[3](58926)*commit*{0}[4](73655)*commit*{0}[5](88384)*commit*{0}[6](103113)*commit*{0}[7](117841)*commit*{0}[8](132570)*commit*{0}[9](147304)*commit*{0}[10](162038)*commit*{0}[11](176772)*commit*{0}[12](191502)*commit*{0}[13](206232)*commit*{0}[14](220960)*commit*{0}[15](235688)*commit*{0}[16](250423)*commit*{0}[17](265152)*commit*{0}[18](279881)*commit*{0}[19](294611)*commit*{0}[20](309345)*commit*{0}[21](324074)*commit*{0}[22](338807)*commit*{0}[23](353541)*commit*{0}[24](368270)*commit*{0}[25](383004)*commit*{0}[26](397732)*commit*{0}[27](412461)*commit*{0}[28](427189)*commit*{0}[29](441918)*commit*{0}[30](456979)*commit*{0}[31](471708)*commit*{0}[32](486436)*commit*{0}[33](501165)*commit*{0}[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-163 — add timestamp to plot

Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on

11 Jun 2013 16:37

2013-06-11T19:37:38-07:00

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

| added timestamp to plot: #MSG-163 fixed

MSG-165 — add test for static meter record loading**MSG-166** — add test for static location record loading**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

MSG-168 — add log legend

Comments

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

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

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

MSG-172 — add test for weather data loading

MSG-173 — cleanup views

Comments

Daniel Zhang (張道博)
06 Jun 2013 16:46

Commit made by **Daniel Zhang** (張道博) on
2013-06-06T19:46:42-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/5a6ab85ef69977a3269de83f2fa6725a6f2770ef>

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

MSG-174 — Update dependencies in the documentation

Comments

Daniel Zhang (張道博)
11 Jun 2013 13:19

Fixed in <https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/38420a8dca2e8f99162ee4dda1461238357b49ee>.

MSG-176 — support recursive insert of weather data

MSG-177 — support weather data plot notification

MSG-178 — support duplicate checking during weather data loading

MSG-179 — Add database name to plot**Comments**

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-181 — Create test data set with a missing interval**Comments**

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-183 — fix email setting during testing for recursive insert

Email is getting sent without the email option.

Comments

Daniel Zhang (張道博)

Commit made by **Daniel Zhang** (張道博) on

12 Jun 2013 14:33

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-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

MSG-185 — be able to generate plots from the command-line using mecoplotting

MSG-186 — support db name adding to plot when running mecoplotting as script

Comments

Daniel Zhang (張道博)

Support is provided for in #MSG-179.

12 Jun 2013 15:51

MSG-188 — reduce quantity of db connections

Example:

recursivelyInsertData.py --testing > insert-log.txt Using database meco_v4.

Opened DB connection to meco_v4.

Using database meco_v4.

Opened DB connection to meco_v4.

Opened DB connection to meco_v4.

Closing the DB connection to meco_v4.

Using database meco_v4.

Opened DB connection to meco_v4.

Opened DB connection to meco_v4.

Testing mode is ON.

Testing Mode is ON.

Testing Mode is ON.

Using database test_meco.

Opened DB connection to test_meco.

Opened DB connection to test_meco.

Inserting data to database test_meco.

Parsing XML in ./meco_v3-energy-test-data_with_missing_interval.xml.gz.

{dupe on insert==>}{28}[0][121]*

Closing the DB connection to test_meco.

Using database meco_v4.

Opened DB connection to meco_v4.

Testing Mode is ON.

Using database test_meco.

Opened DB connection to test_meco.

Opened DB connection to test_meco.

Closing the DB connection to test_meco.

Closing the DB connection to meco_v4.

Closing the DB connection to meco_v4.

Closing the DB connection to meco_v4.

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

Comments

Daniel Zhang (張道博)
14 Jun 2013 14:49

Commit made by **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

Comments

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-191 — create db dump script

MSG-192 — regenerate meco_v4 to clean up views

MSG-193 — report count of readings inserted before the last reading

Need last end_time and last MeterData creation time.

Comments

Daniel Zhang (張道博) #MSG-208 may be sufficient.
20 Jun 2013 15:37

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

Comments

Daniel Zhang (張道博) Commit made by **Daniel Zhang (張道博)** on
15 Jun 2013 01:57 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 width=46) (actu
-> Sort (cost=256592.58..256677.03 rows=33782 width=46) (actual t
    Sort Key: "Interval".end_time
    Sort Method: external merge  Disk: 166688kB
-> Hash Join (cost=9431.69..253012.00 rows=33782 width=46)
    Hash Cond: ("Reading".interval_id = "Interval".interval_id)
-> Seq Scan on "Reading" (cost=0.00..193374.57 rows=33782 width=46)
    Filter: ((channel = 1::smallint) OR (channel = 4::smallint))
-> Hash (cost=8802.15..8802.15 rows=29563 width=48) (actual cost=8802.15..8802.15 rows=29563 width=48)
    Buckets: 2048  Batches: 256 (originally 4)  Memory: 16384kB
-> Nested Loop (cost=53.25..8802.15 rows=29563 width=48)
    -> Hash Join (cost=53.25..102.33 rows=2048 width=48)
        Hash Cond: ("IntervalReadData".meter_id = "Interval".meter_id)
        -> Seq Scan on "IntervalReadData" (cost=0.00..102.33 rows=2048 width=48)
        -> Hash (cost=52.96..52.96 rows=2304 width=48)
            Buckets: 1024  Batches: 1  Memory: 16384kB
            -> Nested Loop (cost=18.01..52.96 rows=2304 width=48)
                -> Hash Anti Join (cost=18.01..52.96 rows=2304 width=48)
                    Hash Cond: (("Location".location_id <> "IntervalReadData".location_id))
                    -> Seq Scan on "Location" (cost=0.00..102.33 rows=2048 width=48)
                    -> Hash (cost=11.00..11.00 rows=2304 width=48)
                        Buckets: 1024  Batches: 1  Memory: 16384kB
                        -> Seq Scan on "IntervalReadData" (cost=0.00..102.33 rows=2048 width=48)
                -> Bitmap Heap Scan on "Interval" (cost=0.00..18.01 rows=2304 width=48)
                    Recheck Cond: (meter_id = "IntervalReadData".meter_id)
                    -> Bitmap Index Scan on "Interval_meter_id_idx" (cost=0.00..18.01 rows=2304 width=48)
                        Index Cond: (meter_id = "IntervalReadData".meter_id)
            -> Index Scan using interval_read_data_id_idx on "IntervalReadData" (cost=0.00..102.33 rows=2048 width=48)
                Index Cond: (interval_read_data_id = "Interval".interval_id)

Total runtime: 10122.929 ms
(30 rows)
```

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)

Corrected in #MSG-195.

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

Daniel Zhang (張道博)
17 Jun 2013 00:28

Commit made by **Daniel Zhang (張道博)** on
2013-06-17T03:28:16-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/883ef7967464c3d5d3f31cbe38182a8ff21c8efd>

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

Daniel Zhang (張道博)
17 Jun 2013 00:29

```
-----
Subquery Scan on dz_energy_voltages_for_houses_without_pv (cost=256592.58..257774.95 rows=33782 width=46)
-> GroupAggregate (cost=256592.58..257774.95 rows=33782 width=46)
    -> Sort (cost=256592.58..256677.03 rows=33782 width=46) (actual time=10.17..10.20 sec)
        Sort Key: "LocationRecords".device_util_id, "Interval".interval_id
        Sort Method: external merge  Disk: 166688kB
    -> Hash Join (cost=9431.69..253012.00 rows=33782 width=46)
        Hash Cond: ("Reading".interval_id = "Interval".interval_id)
        -> Seq Scan on "Reading" (cost=0.00..193374.57 rows=29563 width=46)
            Filter: ((channel = 1::smallint) OR (channel = 2::smallint))
        -> Hash (cost=8802.15..8802.15 rows=29563 width=46)
            Buckets: 2048  Batches: 256 (originally 4)
            -> Nested Loop (cost=53.25..8802.15 rows=29563 width=46)
                -> Hash Join (cost=53.25..102.33 rows=29563 width=46)
                    Hash Cond: ("IntervalReadData".interval_id = "Interval".interval_id)
                    -> Seq Scan on "IntervalReadData" (cost=0.00..102.33 rows=29563 width=46)
                    -> Hash (cost=52.96..52.96 rows=29563 width=46)
                        Buckets: 1024  Batches: 128
                        -> Nested Loop (cost=18.00..52.96 rows=29563 width=46)
                            -> Hash Anti Join (cost=18.00..52.96 rows=29563 width=46)
                                Hash Cond: ("IntervalReadData".interval_id = "Interval".interval_id)
                                -> Seq Scan on "IntervalReadData" (cost=0.00..102.33 rows=29563 width=46)
                                -> Hash (cost=52.96..52.96 rows=29563 width=46)
                                    Buckets: 1024  Batches: 128
                                    -> Seq Scan on "IntervalReadData" (cost=0.00..102.33 rows=29563 width=46)
                            -> Bitmap Heap Scan (cost=18.00..52.96 rows=29563 width=46)
                                Recheck Cond: ("IntervalReadData".interval_id = "Interval".interval_id)
                                -> Bitmap Index Scan on "IntervalReadData_idx" (cost=0.00..18.00 rows=29563 width=0)
                                    Index Cond: ("IntervalReadData".interval_id = "Interval".interval_id)
            -> Index Scan using interval_read_data_idx on "IntervalReadData" (cost=0.00..18.00 rows=29563 width=46)
                Index Cond: (interval_read_data.interval_id = "Interval".interval_id)

Total runtime: 45500.305 ms
(31 rows)
```

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

Comments

Daniel Zhang (張道博) Current reporting is aligning exactly.

20 Jun 2013 16:55

MSG-197 — Prevent timeout during automated DB operations

MSG-199 — change testing mode output to use logging

Example:

```
time python -u ~/dzmbp-maui-smart-grid/src/recursiveInsertData.py --testing > insert-log.txt
```

Testing mode is ON.

Testing Mode is ON.

Inserting data to database test_meco.

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

Current situation:

Insert to empty:

=====

Inserting data to database test_meco.

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

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

real 5m27.510s

user 1m4.592s

sys 1m23.421s

Insert to loaded:

=====

Inserting data to database test_meco.

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

```
{dupe on insert==>}*{2680}[0][3431]{dupe on insert==>}*{2684}[1][6877]{dupe on insert==>}*
{8052}[2][17246]{dupe on insert==>}*{2684}[3][20682]{dupe on insert==>}*{2684}
[4][24128]{dupe on insert==>}*{2684}[5][27564]{dupe on insert==>}*{6840}[6][36301]{dupe on
insert==>}*{2684}[7][39736]{dupe on insert==>}*{5368}[8][46608]{dupe on insert==>}*{2684}
[9][50043]{dupe on insert==>}*{2684}[10][53478]{dupe on insert==>}*{2684}[11][56913]{dupe
on insert==>}*{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
```

Comments

Daniel Zhang (張道博)
18 Jun 2013 17:35

Commit made by **Daniel Zhang (張道博)** on
2013-06-18T20:33:36-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart-Grid/commit/dec003af970ace6bc642f10ec9d58a15f0351ed8>

debugging insert discrepancy: #MSG-200 In Progress

Daniel Zhang (張道博)
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-201 — fix floating point equality check in mecodupecheck

Comments

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-202 — clean up unused views in meco_v3

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

Example:

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

```
{0}[0][3431]<3430>{*}[0][1][6877]<3446>{*}[0][2][17246]<10368>{*}[0][3][20682]<3435>{*}[0][4][24128]<3446>{*}[0][5][27564]<3435>{*dupe on insert==>}{1472}[6][36301]<7262>{*}[0][7][39736]<3435>{*}[0][8][46608]<6872>{*}[0][9][50043]<3435>{*}[0][10][53478]<3435>{*}[0][11][56913]<3435>{*}[0][12][63788]<6875>{*}[0][13][67223]<3435>{*}[0][14][70658]<3435>{*}[0][15][74229]<3571>{*}[0][16][77675]<3446>{*}[0][17][81126]<3446>{*}[0][18][84562]<3435>{*}[0][19][87997]<3435>{*}[0][20][91432]<3435>{*}[0][21][94867]<3435>{*}[0][22][98302]<3435>{*}[0][23][101737]<3435>{*}[0][24][105172]<3435>{*}[0][25][108686]<3514>{*}[0][26][112121]<3435>{*}[0][27][115567]<3446>{*}[0][28][119014]<3446>{*}[0][29][122461]<3446>{*}[0][30][125896]<3435>{*}[0][31][129326]<3430>{*}[0][32][136464]<0>*
```

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

Comments

Daniel Zhang (張道博)
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-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>*

Comments

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>{*0}(12)[63781]
<6875,62309>{*0}(13)[67216]<3435,65744>{*0}(14)[70651]
<3435,69179>{*0}(15)[74222]<3571,72750>{*0}(16)[77668]
<3446,76196>{*0}(17)[81114]<3446,79642>{*0}(18)[84549]

```
<3435,83077>{*}(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-205 — update data insert documentation

MSG-206 — rewrite location records

Comments

Daniel Zhang (張道博) 20 Jun 2013 15:28	<p>Loading static location record data in file 01e25a6c-95cf-4741-ac63-f7df530808e2-LOCATION.tsv to database meco_v3.</p> <p>Processed 97 lines.</p> <p>Finished inserting location records.</p>
---	--

MSG-207 — rewrite meter records

Comments

Daniel Zhang (張道博) 20 Jun 2013 15:29	<p>Loading static meter record data in file 01e25a6c-95cf-4741-ac63-f7df530808e2-METER.tsv to database meco_v3.</p> <p>Processed 99 lines.</p>
---	--

MSG-208 — count inserted readings separately

Comments

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-211 — Provide separate script-based method of plotting

MSG-212 — determine duplicate register records

Comments

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-213 — eliminate duplicate log messages

Comments

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-214 — add count of register duplicates to concise log

Comments

Daniel Zhang (張道博)
26 Jun 2013 13:46

Commit made by **Daniel Zhang** (張道博) on
2013-06-26T16:45:52-07:00
<https://github.com/Hawaii-Smart-Energy-Project/Maui-Smart->

[Grid/commit/f616051190191f6892adc5c33db1f3179ac5d0b2](#)

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

MSG-215 — determine remaining dupes

37 are dupes:

Parsing XML in ./meco_v3-energy-test-data.xml.gz.

```
{re-dupe==>}{rd-dupe==>}{32rd,56re}{0}[125]<0rd,0re,37,37>—{0rd,0re}{0}[125]  
<0rd,0re,0,37>*
```

Comments

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

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

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

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