
decisionengine

Release 1.1.1

Fermi Research Alliance, LLC.

Jul 02, 2021

CONTENTS

1	Release Notes	3
2	Developer Documentation	11
3	Jenkins CI pipeline	13
4	Source code	19
5	Indices and tables	21

The decisionengine_modules package contains provider specific implementations of base classes provided by the decision engine framework.

RELEASE NOTES

1.1 Release 1.6.2

Patch level (bug fix) release.

Correction map for GlideinWMS Factory Entries added. (#323, PR#324) Fixed imports and a typo.

1.1.1 Full list of commits since version 1.6.1

4f6e313: Correction map implemented too

bdf4324: releasing 1.6.2-0.1.rc1

53c7d6c: getting ready to release 1.6.2

9a9f99d: Fix import (#321)

d502bf1: fix typo

1.2 Release 1.6.0

In this release:

- Adapt to decisionengine framework migration to setuptools.
- Drop cmake step before running unit tests.
- Enhanced logging.
- Bug fixes.

1.2.1 Issues fixed in this release

275 : (b639a74)

1.2.2 Full list of commits since version 1.5.0

[f93831c](#) : enhanced logging and error handling in util directory (#320)
[798972f](#) : replaced method_whitelist with allowed_methods (as former os deprecated) (#319)
[b8af4b3](#) : Update Jenkins pipeline configuration (#318)
[b639a74](#) : Handle KeyError exception (#317)
[4c9e25e](#) : Add about.py for useful names (#310)
[48e725f](#) : update unittest document
[36b799e](#) : Configure DE Modules to use DE Framework with setuptools (#316)
[45fc425](#) : Move to raw flake8 test action (#315)
[478b0a5](#) : Update gh-actions to best practices (#311)
[6285f49](#) : Drop obsolete github action (#309)
[911fef7](#) : Do a limited pin on dependencies (#308)
[ab096a8](#) : Sync-up .gitignore (#304)
[cd7e668](#) : Move to raw github actions (and codecov.io) (#298)
[4a997d4](#) : Remove building of C++ Logic Engine from unit tests

1.3 Release 1.5.0

In this release:

- New AWS bill calculator
- Bug fixes

1.3.1 Issues fixed in this release

- [271](#) : Change configuration so the bill-calculator-hep-mapsacosta library doesn't write stuff to stdout ([5410c46](#))
- [283](#) : Change DEAccountConstants.py to allow more variables through ([7a65032](#))
- [293](#) : Unit test tests/test_job_q.py is failing ([f5006fb](#))
- [263](#) : Python3 encodes hex strings differently, resulting in malformed htcondor classads ([c16f0](#))
- [289](#) : Travis CI fails after decisionengine transitioned to pybind11 ([2bec1da](#))
- [281](#) : New exception in NERSC newt get_usage ([398dc42](#))

1.3.2 Full list of commits since version 1.4.2

5410c46 : new bill calculator package (#303)

7a65032 : Resolving issue 283 (#301)

1a2c3e4 : Fix syntax errors and pylint bits (#300)

976c4a4 : Minor linting of actions (#297)

c43f311 : Drop redundant action, pep8speaks is already doing this (#296)

10691e4 : Add support to use custom docker layer as base of the docker image (#295)

f5006fb : fix for unit test test_job_q issue 293 (#294)

0b588ef : Update workflow per changes at github (#292)

7841d19 : Updated Jenkins configuration documentation (#291)

c08ffce : edited release notes

c16f0ac : Another fix to malformed strings (#288)

2bec1da : Fix #289 where TravisCI is missing changes from <https://github.com/HEPCloud/decisionengine/commit/ea7ade57ca825afb0afbfa5ebd49820b16786d8b> (#290)

8647bb2 : Update to current python test matrix (#287)

234a78e : update release notes

398dc42 : decisionengine_modules/NERSC/util: Added more 5xx codes to retry (#285)

d2df861 : force docker pull when building the docker container to make sure to use an updated base layer (#280)

9a78d22 : added 1.4.0 release notes

5d3b7ec : Updating Dockerfile for unittest (#279)

e16531e : Provide default for util function. (#278)

02f1738 : set RPM version number to 1.5.0rc and drop py3 suffix (#277)

664b9fe : Add timeout support for unit test on Jenkins for DE modules repo (#274)

e392a3c : Added initial unit test for glide_frontend_element.py (#269)

2f0069f : Updated DE modules Jenkins documentation

1.4 Release 1.4.2

In this release:

- Bug fixes to 1.4.1 release

1.4.1 Issues fixed in this release

- [282](#) : Decision Engine classad encoding problems make multiple exceptions in the factory ([c16f0ac](#))

1.4.2 Full list of commits since version 1.4.1

[c16f0ac](#) : Another fix to malformed strings (#288)

1.5 Release 1.4.1

In this release:

- Bug fixes to 1.4.0 release

1.5.1 Issues fixed in this release

- [281](#) : New exception in NERSC newt get_usage ([4d1301e](#))

1.5.2 Full list of commits since version 1.4.0

[4d1301e](#) : decisionengine_modules/NERSC/util: Added more 5xx codes to retry (#285)

1.6 Release 1.4.0

In this release:

- Works with python3 glideinWMS package
- Uses new AWS bill calculator
- Improved Jenkins CI pipeline

1.6.1 Issues fixes in this release

- [59](#) : Replace AWS Billing and GCE Billing modules with revamped bill Calculator code ([71f25ea](#))
- [246](#) : Modify NERSCAllocation main() so that it can be run standalone ([11ce772](#))
- [263](#) : Python3 encodes hex strings differently, resulting in malformed htcondor classads ([13a24e4](#))
- [255](#) : Add option to config of condor/sources/job_q.py and slots.py ([6f65af4](#))

1.6.2 Full list of commits since version 1.3.0

42f62d3 : remove py3 from package name
6e56c4d : bump version number
6433dba : Add support to test any branch in Jenkins for DE modules repo (#276)
60db1b3 : Accommodate breaking changes to framework's configuration system. (#273)
13a24e4 : Fix263 (#272)
a866e47 : Correct 'file_cache is unavailable when using oauth2client >= 4.0.0' (#267)
2c82064 : Fix requirements.txt for #266 (#268)
6f65af4 : A more generic solution for the issue 255 (#265)
df08cb4 : Speed up tests. (#264)
057e578 : Update Jenkins pipeline to properly test closing PR (#262)
a28f272 : Adding Jenkins pipeline documentation (#261)
71f25ea : T59 (#258)
90b6580 : Updating Jenkins pipeline configuration (#260)
b4bd759 : dealing with 2 columnsindividually (#257)
11ce772 : decisionengine_modules/NERSC: Can run NerscAllocationInfo.py without (#256)
4a70465 : doc: add release notes

1.7 Release 1.3.0

In this release:

- Introduced Jsonnet based configuration system
- Improved error handling

1.7.1 Full list of commits since version 1.2.0

e8c8e24 : Update to split a tuple key into two separate keys, this allows python config file to be JSON compliant config file (#254)
fbb5d28 : add jsonnet dependency in build/scripts/utlis.sh for unit tests (#252)
95a0a32 : decisionengine_modules/glideinwms: Added retry to factory queries (#250)
77f894a : Aws (#249)
3be5be1 : Set theme jekyll-theme-slate
a73e7f8 : Doc (#247)
f8aa96d : Adding editor config file, see <https://editorconfig.org/> (#248)
1ab1720 : Issue no. 237 (#245)
5edc8f9 : Issue 227 (#243)
e6047f2 : GCE channel goes OFFLINE on a timeout (#242)

63e3627 : Aws billing (#241)
c3626b9 : 1.1.3/fix (#239)
ae7c5a6 : Jenkins pipeline improvements (#236)
310befd : T198 (#235)
a65886d : Fix import as reported in : <https://github.com/HEPCloud/decisionengin...> (#232)
93711cc : Run coveralls even if tests fail (#229)
03d763a : Jenkins pipeline improvements (#230)
f48d30f : Fix/223 (#228)
c8aa262 : github ticket 199 (#222)
0323bda : Address : https://github.com/HEPCloud/decisionengine_modules/issues/224 (#226)
62e4df6 : Add support to run CI on Jenkins (#221)
5ab1541 : bump master version to 1.2.0 (for now) (#219)
bc19c65 : decisionengine_modules/NERSC: Added retry loop for NERSC API Calls (#220)
41a50de : Sync up pep8speaks and run_pylint.sh with decisionengine settings (#218)
db4634f : silence pylint error (#217)
1b95141 : Fix whitespace around operator error
746ea38 : ignore W503
8a8b5f4 : remove unused variable
a6668bf : fix PEP8 warnings
13773ee : address pep8 warnings
6bea4ca : silence pylint error
f589895 : Pass sort=True parameter to fix future warning (#215)
a1d0507 : fixing pep8 warning
a10bd17 : debugging one import error
ec501ad : make coveralls.io links work
deab1a7 : T201 (#204)
69f2645 : Add coveragerc
6d8a5f5 : decisionengine_modules/NERSC: Make Nersc API call backward-compatible with old config (#196)
a7e0af9 : Only run Github Actions for python3.6 (#24)

1.8 Release 1.2.0

In this release:

- Switched to python3
- NERSC newt interface adapted to changed NERSC RESTful API
- Improved unit tests
- Added Jenkins CI pipeline

1.9 Patches:

30d928b : clone version 1.2.0 of decisionengine

ae7c5a6 : Jenkins pipeline improvements (#236)

310befd : T198 (#235)

a65886d : Fix import as reported in : <https://github.com/HEPCloud/decisionengine...> (#232)

93711cc : Run coveralls even if tests fail (#229)

03d763a : Jenkins pipeline improvements (#230)

f48d30f : Fix/223 (#228)

c8aa262 : github ticket 199 (#222)

0323bda : Address : https://github.com/HEPCloud/decisionengine_modules/issues/224 (#226)

62e4df6 : Add support to run CI on Jenkins (#221)

5ab1541 : bump master version to 1.2.0 (for now) (#219)

bc19c65 : decisionengine_modules/NERSC: Added retry loop for NERSC API Calls (#220)

41a50de : Sync up pep8speaks and run_pylint.sh with decisionengine settings (#218)

db4634f : silence pylint error (#217)

1b95141 : Fix whitespace around operator error

746ea38 : ignore W503

8a8b5f4 : remove unused variable

a6668bf : fix PEP8 warnings

13773ee : address pep8 warnings

6bea4ca : silence pylint error

f589895 : Pass sort=True parameter to fix future warning (#215)

a1d0507 : fixing pep8 warning

a10bd17 : debugging one import error

ec501ad : make coveralls.io links work

deab1a7 : T201 (#204)

69f2645 : Add coveragerc

6d8a5f5 : decisionengine_modules/NERSC: Make Nersc API call backward-compatible with old config (#196)

[a7e0af9](#) : Only run Github Actions for python3.6 (#24)

DEVELOPER DOCUMENTATION

2.1 Decisionengine_modules

2.1.1 Prerequisites:

```
yum install postgresql11 postgresql11-server  
sudo localedef -v -c -i en_US -f UTF-8 C.UTF-8 # (needed for tests)
```

2.1.2 Test

```
git clone https://github.com/HEPcloud/decisionengine_modules  
./decisionengine_modules/.github/actions/unittest-in-sl7-docker/entrypoint.sh
```


JENKINS CI PIPELINE

3.1 Decisionengine modules CI with Jenkins pipeline

Jenkins dashboard with Decisionengine modules CI results is available [here](#).

A CI build is triggered any time a PR is created/closed or a commit is made to an existing PR. There are also *nightly CI builds* to test a list of predefined branches.

The Jenkins pipeline runs *pep8*, *pylint* and *unit_tests* test suites alongside the *rpmbuild* stage. The Jenkins dashboard looks like this:

Jenkins > CI > decisionengine_modules_pipeline

Pipeline decisionengine_modules_pipeline

DE modules pipeline

Back to Dashboard
Status
Changes
Build with Parameters
Delete Pipeline
Configure
Full Stage View
GitHub
Job Config History
Rename
GitHub PR
Pipeline Syntax
GitHub PR Polling Log
Set Next Build Number

Last Successful Artifacts

pep8_mail_results	1.31 KB	view
pep8_pep8_merge258.log	0 B	view
pep8_pyLint_merge258.log	0 B	view
pep8_results_merge258.log	44 B	view
pyLint_mail_results	1.31 KB	view
pyLint_pep8_merge258.log	0 B	view
pyLint_pyLint_merge258.log	0 B	view
pyLint_results_merge258.log	44 B	view
pytest.log	10.78 KB	view
rpmbuild.tar	210.00 KB	view

Recent Changes

Build History

find

- 189#PR#258** Sep 2, 2020 4:14 PM
- 188#PR#258** Sep 2, 2020 3:31 PM
- 187#PR#258** Sep 2, 2020 3:05 PM
- 186#master** Sep 2, 2020 2:31 AM
- 185#PR#260** Sep 1, 2020 1:38 PM
- #184** Sep 1, 2020 2:31 AM
- #183** Aug 31, 2020 2:31 AM
- #182** Aug 30, 2020 2:31 AM
- #181** Aug 29, 2020 2:31 AM
- #180** Aug 28, 2020 2:31 AM
- #179** Aug 27, 2020 3:54 PM
- #178** Aug 27, 2020 3:54 PM
- #177** Aug 27, 2020 3:39 PM
- #176** Aug 27, 2020 3:39 PM

Stage View

Average stage times:
(Average full run time: ~25min)

	Declarative: Checkout SCM	DE modules tests	pep8	pylint	unit_tests	rpmbuild
189#PR#258	903ms	66ms	4min 28s	22min 26s	10min 36s	3min 16s
Sep 02 16:14	1s	72ms	14min 10s	34min 22s	22min 31s	14min 52s
188#PR#258	539ms	112ms	4min 53s	24min 50s	11min 13s	6min 3s
Sep 02 15:31	850ms	79ms	3min 35s	24min 7s	10min 50s failed	1min 19s
186#master	1s	58ms	3min 27s	21min 55s	9min 3s	22s
Sep 02 02:31	777ms	54ms	7s failed	25s failed	5s failed	4s failed
185#PR#260	494ms	36ms	2min 49s	22min 16s	8min 53s	21s
Sep 01 02:31	618ms	78ms	3min 36s	23min 3s	9min 2s	28s
Aug 31 02:31						

On the bottom left side there is the list of recent CI builds that are named after the PR or the branch tested.

On the bottom right side the dashboard shows for each CI build detailed status for each test suite.

Hovering the mouse over the *status box* for each CI build stage, a tool-tip with a button to access log details shows up.

Next to the build number the symbol gives access to a menu with the list of artifacts stored for that build. Those artifacts include logs and the tarball with RPMs.

From the panel on the left side it is possible to access the PR on GitHub by clicking on the PR icon that looks like this **#258**.

On occasion it could be useful to trigger a manual CI build to test a branch on the official DE GitHub repository or on the user fork. For this purpose, on the top left panel the user can click on the **Build with Parameters** button, and this panel shows up

Pipeline decisionengine_modules_pipeline

This build requires parameters:

DOCKER_IMAGE	<input type="text" value="vitodb/decision-engine-modules-ci;jenkins"/> Docker image name to use. Default is: vitodb/decision-engine-modules-ci;jenkins
DE_MOD_REPO	<input type="text" value="https://github.com/HEPCloud/decisionengine_modules/"/> Decisionengine modules repo. Default is: https://github.com/HEPCloud/decisionengine_modules/
BRANCH	<input type="text" value="master"/> Branch to test. Default is: master
PYTEST_TIMEOUT	<input type="text" value="300"/> Timeout in seconds for unit_tests (it applies to individual unit test) Default is: 300

Build

the user can modify these parameters to customize what code to test with the CI build.

The *DE_MOD_REPO* parameter can point to the user fork or to the main repository.

The *BRANCH* parameter can point to the desired branch to test.

The *PYTEST_TIMEOUT* parameter is the timeout in seconds for *unit_tests*.

When ready, by clicking on the *Build* button, the CI build will start.

The [pipeline configuration](#) is part of the decisionengine_modules repo.

3.1.1 Nightly CI build configuration

The nightly CI build for Decisionengine framework uses this [Jenkins project](#) that triggers a CI build using the Jenkins pipeline described above to test a list of predefined branches.

Jenkins

Jenkins > CI > decisionengine_ci

[Back to Dashboard](#)

[Status](#)

[Changes](#)

[Workspace](#)

[Build Now](#)

[Configure](#)

[Delete Multi-configuration project](#)

[Rebuild Last](#)

[Job Config History](#)

[Rename](#)

[Set Next Build Number](#)

Project decisionengine_ci

Decision Engine CI running inside dedicated docker container

Configurations

[BRANCH=master](#) [BRANCH=1.4](#)

Subprojects

Static

- [decisionengine_modules_pipeline\(non-blocking\)](#)
- [decisionengine_pipeline\(non-blocking\)](#)

Permalinks

- [Last build \(#295\), 7 hr 6 min ago](#)
- [Last stable build \(#295\), 7 hr 6 min ago](#)
- [Last successful build \(#295\), 7 hr 6 min ago](#)
- [Last completed build \(#295\), 7 hr 6 min ago](#)

Build History

[trend](#) ^

find x

#295	Nov 19, 2020 2:23 AM
#294	Nov 18, 2020 2:23 AM
#293	Nov 17, 2020 2:23 AM

Branches to test are defined using the project matrix as shown in the picture below. Each branch in the list (here *master* and *1.4*) spawns an independent CI build.

The screenshot shows the Jenkins Configuration Matrix configuration page. The 'Configuration Matrix' tab is selected. Under the 'User-defined Axis' section, the 'Name' field is set to 'BRANCH' and the 'Values' field is set to 'master 1.4'. There is a red 'X' icon in the top right corner of the axis configuration area and a blue question mark icon next to the values field.

In the *Build* section of the configuration it is set the list of Jenkins subprojects to be triggered, in this case we have *decisionengine_pipeline* and *decisionengine_modules_pipeline*.

The *Parameters* text box is used to override parameters of each Jenkins subproject with a custom value.

In total this Jenkins project triggers 4 CI builds, i.e. 2 branches X 2 Jenkins subprojects.

The screenshot shows the Jenkins Build configuration page. The 'Build' tab is selected. Under the 'Trigger/call builds on other projects' section, the 'Projects to build' field is set to 'decisionengine_pipeline,decisionengine_modules_pipeline'. The 'Block until the triggered projects finish their builds' checkbox is unchecked. Under the 'Predefined parameters' section, the 'Parameters' field is set to 'BRANCH=\${BRANCH}'. There are red 'X' icons in the top right corner of the 'Trigger/call builds on other projects' and 'Predefined parameters' sections, and blue question mark icons next to the 'Projects to build' and 'Parameters' fields.

Finally the *Build Triggers* section is used to setup the schedule for the periodic build, in this case it is scheduled to run at about 2 AM.

Jenkins will choose the actual time depending on the actual load on the system.

General

Advanced Project Options

Source Code Management

Build Triggers

Configuration Matrix

Build Environment

Build

Post-build Actions

Build Triggers

☐ Trigger builds remotely (e.g., from scripts)

☐ Build after other projects are built

☒ Build periodically

Schedule

H 2 * * *

Would last have run at Wednesday, November 4, 2020 2:23:53 AM CST;
would next run at Thursday, November 5, 2020 2:23:53 AM CST.

SOURCE CODE

4.1 Welcome to decisionengine_modules's documentation!

4.1.1 setup module

4.2 Indices and tables

- [genindex](#)
- [modindex](#)
- [search](#)

INDICES AND TABLES

- `genindex`
- `modindex`
- `search`