

**git\_comments:**

1. now set non db backed vars on ti

**git\_commits:**

1. **summary:** [AIRFLOW-437] Send TI context in kill zombies  
**message:** [AIRFLOW-437] Send TI context in kill zombies Fix to provide proper TI context while calling ti.handle\_failure during kill\_zombies, as without the context handler\_failure is of no use and its equivalent of marking those TIs as failed directly. This patch had conflicts when merged, resolved by Committer: Ash Berlin-Taylor <ash\_github@firemirror.com> Closes #1796 from msumit/AIRFLOW-437-2

**github\_issues:**

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**github\_pulls:**

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#### github\_pulls\_comments:

1. ## [Current coverage](https://codecov.io/gh/apache/incubator-airflow/pull/1796?src=pr) is 65.71% (diff: 100%) >  
Merging [#1796](https://codecov.io/gh/apache/incubator-airflow/pull/1796?src=pr) into [master]  
(https://codecov.io/gh/apache/incubator-airflow/branch/master?src=pr) will increase coverage by \*\*0.31%\*\* ``  
diff @@ master #1796 diff @@ ===== Files 143 124 -19  
Lines 9883 9589 -294 Methods 0 0 Messages 0 0 Branches 0 0  
===== - Hits 6463 6301 -162 + Misses 3420 3288 -132  
Partials 0 0 `` > Powered by [Codecov](https://codecov.io?src=pr). Last update [afed622...6bebe73]  
(https://codecov.io/gh/apache/incubator-airflow/compare/afed622d83cb833b1ac5202ba0247e92bca8b890...6bebe73874b5a9d6a246ded9aa3191a39546c938?  
src=pr)
2. @bolkedebuin @r39132 plz check again and let me know if its fine, then I can do a final rebase.
3. **body:** caveat a few minor nit-picks, +1  
**label:** code-design
4. @msumit please update within the next 5 days else this will be closed for inactivity
5. @r39132 as per me this PR is complete (we are running this code in prod from past 3months).. plz let me know  
when to do final rebase..
6. @jlowin @criccomini @bolkedebuin What are your thoughts on this PR?
7. @msumit If this is still active, can you rebase? Or would you like to close this and reopen a fresh PR?
8. @r39132 yeah the change is still relevant and valid, and we are using the same in our prod from past 1.5+yrs. I can  
rebase if the community thinks it's useful for them, otherwise, we can close this PR.
9. Looks relevant.. why not send an email to the dev list to get some votes on this PR.. and proceed from there?
10. Folks, facing a strange issue, the spec I wrote is working on my laptop, but not on travis. `` \$ nosetests  
tests/models.py:DagBagTest.test\_kill\_zombies . ----- Ran 1  
test in 0.180s OK [2018-06-03 22:19:22,250] {settings.py:188} DEBUG - Disposing DB connection pool (PID  
98334) `` It used to work earlier, when I had `job\_id` as a param in `\_\_init\_\_` of `TaskInstance`, which I removed  
and setting it explicitly from the tests. Could Travis is using somekind of DB caching while doing join calls, cause  
in Rails world its quite common with RSpec.
11. I see the same failure as Travis on my laptop: `` (airflow) (themisto python/incuba...irflow  
PR\_TOOL\_MERGE\_PR\_1796\_MASTER:\*)% nosetests tests/models:DagBagTest.test\_kill\_zombies F  
===== FAIL: Test that

- kill zombies call TIs failure handler with proper context -----  
Traceback (most recent call last): File "/Users/ash/.virtualenvs/airflow/lib/python3.5/site-packages/mock/mock.py", line 1305, in patched return func(\*args, \*\*kwargs) File "/Users/ash/code/python/incubator-airflow/tests/models.py", line 1420, in test\_kill\_zombies ANY) File "/Users/ash/.virtualenvs/airflow/lib/python3.5/site-packages/mock/mock.py", line 925, in assert\_called\_with raise AssertionError('Expected call: %s\nNot called' % (expected,)) AssertionError: Expected call: handle\_failure(<ANY>, True, <ANY>) Not called ```
12. @ashb fixed the spec. Travis is all green except one K8 spec, something which is not even touched in this PR.
  13. I got the specs passed in my personal build though <https://travis-ci.org/msumit/airflow/builds/388172642>
  14. Thanks, all merged to master now.
  15. Thanks @ashb

## github\_pulls\_reviews:

1. **body:** Why is this hardcoded?  
**label:** code-design
2. As the variable `ti` is coming out of a db query and doesn't flow through TIs `\_\_init\_\_` method, cause of that all fields which are not backed by db didn't get initialise and throws error in `ti.get\_template\_context` later.
3. Sure but that does answer my question. What if test\_mode needs to be true? Can that be the case?
4. yeah, may be.. changed it to fetch from config..
5. test\_mode is set per instance and not by the configuration, eg. by run. I'm not sure how "test\_mode" behaves in context of killing a zombie. Is it really required? If it is it needs to be derived differently
6. @bolkedebuin I believe that if `test\_mode` is true then that `ti` would never have been picked by `kill\_zombie` code, so I'd it `False` initially.
7. **body:** Could also be ``` python 'Marked zombie job {ti} as {ti.state}'.format(ti=ti) ``` to stick with `{}` style formatting.  
**label:** code-design
8. There should be a space after `TI,` and before `handle\_failure`
9. **body:** @gwax read somewhere (may be in landscape warnings) to use `%s` instead of `format` with loggers.  
**label:** code-design
10. will do that
11. 🍌, I missed this was in a logger call.
12. @bolkedebuin can we take a decision on this? As per my understanding it should be always `False` here , otherwise that `TI` won't end up in `kill\_zombie` method. @mistercrunch @r39132 @criccomini can you guys throw some more light on it.
13. @msumit stick with .format . Landscape is old fashioned here.
14. @msumit It should definitely not come the global config. Please explain why it would always be False here (you could be right, didn't trace it throughout the code).
15. @bolkedebuin as per my understanding, if a task ran in `test\_mode` it would not have db entries... and as `kill\_zombie` picks up `TIs` via a db query, its guaranteed that all entries it picked are not of `test\_mode`...
16. **body:** @bolkedebuin : even if we are using `{}` style, we would want to update logger and pass the arguments separately. The advantage to using `%` style with the current logger configuration is that it is possible to use structured logging and access the parameters separately from the string.  
**label:** code-design
17. @gwax Format provides support for specifying format params both positionally and via named (i.e. keyword) params : <http://stackoverflow.com/questions/17895835/format-strings-and-named-arguments-in-python>
18. @msumit not sure I see how `job\_id` is being used
19. @jlowin `job\_id` is being used only for testing purposes (see line 216 at tests/models.py).. as `kill\_zombie` do a db query against `TI` and `LJ` tables, and I need a valid value there to return some rows out of query..
20. Got it. Looks ok to me.
21. @mistercrunch what does `TaskInstance.job\_id` do? it seems to be used in a few places but I can't find any place that sets it... is it a foreign key of some kind?
22. It's important, the Job abstraction is actually the one looking for an external kill signal when clearing running tasks
23. What's this change for? It seems somewhat related to the this PR?
24. Won't handle failure already emit a log line saying it's marking the task as up for retry/failed?
25. Rather: you add a param to the constructor but don't seem to use it (and the pattern the rest of the code uses is just to set `ti.job\_id = job\_id`
26. Okay, I saw the previous comments on this. Rather than adding a new form to the constructor we should just set the property on the instance in the tests (around line 1363)
27. @ashb yes it does, but in `handle\_failure` we call `task.on\_failure\_callback(context)` which might change the state of the `ti` (which happens in our case). Hence a final msg about status of zombie job would be helpful.
28. What do the log lines look like with this in place please?
29. @ashb here you go. ``` {models.py:367} INFO - Finding 'running' jobs without a recent heartbeat {models.py:371} INFO - Failing jobs without heartbeat after 2018-06-03 11:48:43.206777+00:00 {models.py:1694} ERROR -

- <TaskInstance: example\_python\_operator.sleep\_for\_0 2018-06-03 10:41:18+00:00 [running]> detected as zombie {models.py:1722} INFO - Marking task as FAILED. {models.py:398} INFO - Marked zombie job <TaskInstance: example\_python\_operator.sleep\_for\_0 2018-06-03 10:41:18+00:00 [failed]> as failed `` In one of our case we use `handle\_failure` to change the state of TI to success (4th log line), which eventually changes the line 5 accordingly.
30. @ashb thanks for the suggestion. Changed the spec code, so no changes required in here.
  31. This looks incorrect - log.exception basically does this already (but includes useful traceback). Is there some reason we need this change?
  32. **body:** Oh were we actually logging the error twice? I think this line should stay (unmodified) and the log at the end just removed.  
**label:** code-design
  33. sorry, I somehow thought that `error` is just a string (prolly it was when I first wrote it), and as we are passing a string error message, was seeing `NoneType: None` at the end of the log. Will revert it back. And yes, we were printing the same message twice so removed the last one.
  34. Oh - I now see what is going on with the `log.error` vs `log.exception` - the other place handle\_failure is used is for a task actually failing, after an exception has been raised. `log.exception` is the same as `log.error(..., exc\_info=True)` which just automatically includes exception info. If this produces sensible logging output now I think this PR looks good now.
  35. yeah, the log is giving correct msg, that we `got a zombie` instead of announcing it dead already. As at this point no one is sure what task's handle\_failure would be doing, so finally we are stating that after we are pass through it. Here is one such [example](https://github.com/apache/incubator-airflow/blob/master/airflow/contrib/hooks/qubole\_hook.py#L98).

#### jira\_issues:

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3. Issue resolved by pull request #1796 [https://github.com/apache/incubator-airflow/pull/1796]
4. User 'msumit' has created a pull request for this issue: https://github.com/apache/incubator-airflow/pull/1796