Pulp - Story #1

Task # 1014 (CLOSED - CURRENTRELEASE): Short Term Improvements for Pulp's use of MongoDB

As a user, I can have Pulp attempt use auto_retry application wide using the 'unsafe_autoretry' parameter

12/18/2014 05:12 PM - Anonymous

Status:	CLOSED - CURRENTRELEASE		**Start date:**	
Priority:	Normal		**Due date:**	
Assignee:	amacdona@redhat.com		**% Done:**	0%
Category:			**Estimated time:**	0:00 hour
Sprint/Milestone:				
Platform Release:	2.7.0		**Tags:**	Pulp 2
Groomed:	No		**Sprint:**	
Sprint Candidate:	Yes		**Quarter:**	

Description

Pulp used to use have an auto_retry decorator on mongoDB queries that was used everywhere and could result in duplicate records. Collections that have been converted to mongoengine in Pulp 2.7.0+ do not have the auto_retry decorator behavior at all currently.

The auto_retry behavior should be able to be enabled/disabled by the user. This story introduces a boolean 'unsafe_autoretry' setting in the the [database] section of server.conf which enabled/disables the use of auto_retry on both mongoengine Documents and non-mongoengine collections. The parameter will default to False. If set to True, all mongoDB queries will use an auto_retry decorator. Both mongoengine Documents and non-mongoengine Collections need to use the same retry decorator so that its behavior can be kept consistent.

To effectively decorate mongoengine it needs to be done during the *init* of each mongoengine model. This would cause a lot of duplication so it's recommended to have all mongoengine objects that inherit directly from Document inherit from a new class you will create called AutoRetryDocument. AutoRetryDocument should contain the *init* that does the decorating and takes *args and **args similar to:

```
class AutoRetryDocument(Document):

    _decorated_methods = (<figure out which methods to decorate>)

    def __init__(self, *args, **kwargs):
        super(AutoRetryDocument, self).__init__(*args, **kwargs)
        # do the decorating here similar to https://github.com/pulp/pulp/blob/d17e9e5c3fe2a3a2b81e
f252304984c40003b7b7/server/pulp/server/db/connection.py#L210
```

Associated revisions

Revision 805211fb - 09/15/2015 08:37 PM - Austin Macdonald

Introduce unsafe_autoretry setting

re #1

Revision 805211fb - 09/15/2015 08:37 PM - Austin Macdonald

Introduce unsafe_autoretry setting

re #1

History

#1 - 12/18/2014 09:45 PM - rbarlow

- Tracker changed from Story to Task

#3 - 01/06/2015 03:16 PM - bmbouter

- Subject changed from [Task] Test mongoengine connection with no auto-retry and an HA mongoengine configuration to Test mongoengine connection with no auto-retry and an HA mongoengine configuration

#4 - 01/08/2015 04:04 PM - bmbouter

- Description updated

#5 - 01/08/2015 04:05 PM - bmbouter

- Description updated

#6 - 01/08/2015 04:07 PM - bcourt

- Priority changed from Normal to High

#7 - 02/09/2015 05:59 PM - bmbouter

- Tags Sprint Candidate added

#8 - 03/06/2015 03:39 PM - mhrivnak

- Priority changed from High to Normal

#9 - 03/06/2015 04:14 PM - bmbouter

- Description updated

#10 - 03/06/2015 04:20 PM - rbarlow

- Description updated

#11 - 03/06/2015 04:21 PM - rbarlow

- Description updated

#12 - 03/16/2015 05:15 PM - bmbouter

- Tags Groomed added

#13 - 03/27/2015 08:13 PM - bmbouter

- Description updated

#14 - 05/04/2015 09:46 PM - bmbouter

- Groomed set to Yes

- Tags deleted (Groomed)

#15 - 05/04/2015 09:55 PM - bmbouter

- Sprint Candidate set to Yes

- Tags deleted (Sprint Candidate)

#16 - 05/29/2015 08:54 PM - rbarlow

- Status changed from NEW to ASSIGNED

- Assignee set to rbarlow

#17 - 05/29/2015 08:54 PM - rbarlow

- Tags Easy Fix added

Brian told me this would be super easy…

#18 - 05/29/2015 09:07 PM - dkliban@redhat.com

- Parent task set to #1014

#19 - 06/05/2015 02:51 PM - rbarlow

- Blocked by Issue #1012: If the first database seed listed in server.conf is not the current Primary replica, Pulp will not be able to write to the database added

#20 - 06/15/2015 08:57 PM - rbarlow

- Status changed from ASSIGNED to NEW

- Assignee deleted (rbarlow)

#21 - 07/13/2015 11:30 PM - bmbouter

- Checklist item changed from to [ ] non-mongoengine collections do/don't decorate pymongo methods based on this setting, [ ] mongoengine methods are/aren't decorated based on this setting, [ ] release note on the new setting introduced, [ ] commented setting introduced in server.conf (false is default), [ ] setting key and value defaults work if setting in server.conf is commented, [ ] setting description added to server.conf, [ ] create AutoRetryDocument, [ ] have all Pulp mongoengine documents inherit from AutoRetryDocument, [ ] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine

- Tracker changed from Task to Story

- Subject changed from Test mongoengine connection with no auto-retry and an HA mongoengine configuration to As a user, I can have Pulp attempt use auto_retry application wide using the 'unsafe_autoretry' parameter

- Description updated

- Groomed changed from Yes to No

- Tags deleted (Easy Fix)

#22 - 07/13/2015 11:31 PM - bmbouter

- Checklist item changed from [ ] non-mongoengine collections do/don't decorate pymongo methods based on this setting, [ ] mongoengine methods are/aren't decorated based on this setting, [ ] release note on the new setting introduced, [ ] commented setting introduced in server.conf (false is default), [ ] setting key and value defaults work if setting in server.conf is commented, [ ] setting description added to server.conf, [ ] create AutoRetryDocument, [ ] have all Pulp mongoengine documents inherit from AutoRetryDocument, [ ] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine to [ ] non-mongoengine collections do/don't decorate pymongo methods based on this setting, [ ] mongoengine methods are/aren't decorated based on this setting, [ ] release note on the new setting introduced, [ ] commented setting introduced in server.conf (false is default), [ ] setting key and value defaults work if setting in server.conf is commented, [ ] setting description added to server.conf, [ ] create AutoRetryDocument, [ ] have all Pulp mongoengine documents inherit from AutoRetryDocument, [ ] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine, [ ] both mongoengine and non-mongoengine use the same retry_decorator (not two retry decorators)

- Description updated

#23 - 07/13/2015 11:41 PM - bmbouter

- Blocked by deleted (Issue #1012: If the first database seed listed in server.conf is not the current Primary replica, Pulp will not be able to write to the database)

#24 - 07/14/2015 10:55 PM - bmbouter

- Platform Release set to 2.7.0

#25 - 09/11/2015 05:01 PM - amacdona@redhat.com

- Status changed from NEW to ASSIGNED

- Assignee set to amacdona@redhat.com

#26 - 09/15/2015 05:41 PM - amacdona@redhat.com

- Checklist item changed from [ ] setting description added to server.conf to [x] setting description added to server.conf

#27 - 09/15/2015 05:41 PM - amacdona@redhat.com

- Checklist item changed from [x] setting description added to server.conf to [ ] setting description added to server.conf

#28 - 09/15/2015 06:19 PM - amacdona@redhat.com

- Checklist item changed from [ ] non-mongoengine collections do/don't decorate pymongo methods based on this setting, [ ] mongoengine methods are/aren't decorated based on this setting, [ ] release note on the new setting introduced, [ ] commented setting introduced in server.conf (false is default), [ ] setting key and value defaults work if setting in server.conf is commented, [ ] setting description added to server.conf, [ ] create AutoRetryDocument, [ ] have all Pulp mongoengine documents inherit from AutoRetryDocument, [ ] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine, [ ] both mongoengine and non-mongoengine use the same retry_decorator (not two retry decorators) to [x] non-mongoengine collections do/don't decorate pymongo methods based on this setting, [x] mongoengine methods are/aren't decorated based on this setting, [x] release note on the new setting introduced, [x] commented setting introduced in server.conf (false is default), [x] setting key and value defaults work if setting in server.conf is commented, [x] setting description added to server.conf, [x] create AutoRetryDocument, [x] have all Pulp mongoengine documents inherit from AutoRetryDocument, [ ] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine, [x] both mongoengine and non-mongoengine use the same retry_decorator (not two retry decorators), [ ] modify plugins that have been converted to mongoengine to inherit from AutoRetryDocument

- Status changed from ASSIGNED to POST

https://github.com/pulp/pulp/pull/2043

#29 - 09/17/2015 05:17 PM - amacdona@redhat.com

- Status changed from POST to MODIFIED

https://github.com/pulp/pulp/pull/2043

#30 - 09/17/2015 05:17 PM - amacdona@redhat.com

- Checklist item changed from [ ] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine to [x] update the mongoengine conversion guide [0] to identify this inheritance as a requirement [0]: https://fedorahosted.org/pulp/wiki/ConvertingModelsToMongoengine

#31 - 09/17/2015 05:17 PM - amacdona@redhat.com

- Checklist item changed from [ ] modify plugins that have been converted to mongoengine to inherit from AutoRetryDocument to [x] modify plugins that have been converted to mongoengine to inherit from AutoRetryDocument

#32 - 10/22/2015 04:59 PM - dkliban@redhat.com

- Status changed from MODIFIED to 5

#33 - 02/08/2016 07:53 PM - rbarlow

- Status changed from 5 to CLOSED - CURRENTRELEASE

#34 - 04/15/2019 11:23 PM - bmbouter

- Tags Pulp 2 added