After install mysql, redmine, I try to set DB and find a problem in mysql 5.7.

```
root@lenovo:/usr/local/src/redmine-2.5.2# RAILS_ENV=production rake db:migrate
```

```
-- create_table("attachments", {force=>true})
```

```
rake aborted!
```

An error has occurred, all later migrations canceled:

```
Mysql2::Error: All parts of a PRIMARY KEY must be NOT NULL: if you need NULL in a key, use UNIQUE instead: CREATE TABLE `attachments` (`id` int(11) DEFAULT NULL auto_increment PRIMARY KEY, `container_id` int(11) DEFAULT 0 NOT NULL, `container_type` varchar(30) DEFAULT '' NOT NULL, `filename` varchar(255) DEFAULT '' NOT NULL, `disk_filename` varchar(255) DEFAULT '' NOT NULL, `filesize` int(11) DEFAULT 0 NOT NULL, `content_type` varchar(60) DEFAULT '', `digest` varchar(40) DEFAULT '' NOT NULL, `downloads` int(11) DEFAULT 0 NOT NULL, `author_id` int(11) DEFAULT 0 NOT NULL, `created_on` datetime) ENGINE=InnoDB
```

But, redmine is compatible mysql-5.6.19 and work perfectly.
Revision 14085 - 2015-03-14 11:16 - Toshi MARUYAMA
add MySQL 5.6 and 5.7 environments to travis (#17460, #19344)

Revision 14128 - 2015-03-17 00:20 - Toshi MARUYAMA
add MariaDB 5.5 environment to travis (#17460, #19344, #19395)

History

#1 - 2014-08-03 13:56 - Go MAEDA
This is caused by a change of MySQL 5.7.3-m13. Please see the following URL for details.

mysql - Creating tables and problems with primary key in Rails - Stack Overflow

The workaround is included in Rails 4.1. But current Redmine is based on Rails 3.2, so it seems that we have to rely on monkey patch for now.

#2 - 2014-08-04 08:18 - Etienne Massip
- Target version set to Candidate for next minor release

Don't know what to do with this one, guess the patch can't be avoided?

#3 - 2014-11-03 09:35 - Go MAEDA
- Target version deleted (Candidate for next minor release)

Probably this issue will be resolved in Redmine 3.0.0 because it is based on Rails 4.1.

#4 - 2014-11-03 21:41 - Enderson Maia
Same problem here using redmine-2.6.0.

```ruby
# mysql --version
mysql Ver 5.7.5-m15 for linux-glibc2.5 on x86_64 (MySQL Community Server (GPL))
# bundle exec rails --version
Rails 3.2.19
# ruby --version
ruby 2.1.2p95 (2014-05-08 revision 45877) [x86_64-linux-gnu]
```

#5 - 2014-11-03 21:47 - Enderson Maia
If you're gonna wait for Rails 4 in Redmine 3, maybe an update to the docs to inform it's not compatible with this specific version of MySQL.

#6 - 2014-11-11 10:15 - Jean-Philippe Lang
- Target version set to 3.0.0

Note about this incompatibility added to RedmineInstall.

#7 - 2015-02-15 10:12 - Jean-Philippe Lang
- Tracker changed from Defect to Feature
- Subject changed from Redmine 2.5.2 incompatible with mysql-5.7.3-m13 to MySQL 5.7 support

There are still some issues with mysql 5.7 and Rails 4.2:

1. it does not pass the issue concurrency test (dead locks), although the 5.7 changelog does not mention any changes to the lock mechanism
2. timestamps rounding issues after reload that trigger failures in AccountTest#test_user_with_must_change_passwd_should_be_able_to_change_its_password. Here is an example that shows a timestamp returning a different value after reload:

```ruby
irb(main):044:0> u=User.first
irb(main):045:0> u.created_on = "2015-02-15 09:38:59.767393"
=> "2015-02-15 09:38:59.767393"
irb(main):046:0> u.save
=> true
irb(main):047:0> u.created_on
=> Sun, 15 Feb 2015 09:38:59 UTC +00:00
irb(main):048:0> u.reload
irb(main):049:0> u.created_on
=> Sun, 15 Feb 2015 09:39:00 UTC +00:00
```
A workaround was committed in r14011 for 2.

#8 - 2015-02-18 13:15 - Jean-Philippe Lang
- Target version changed from 3.0.0 to Candidate for next major release

Jean-Philippe Lang wrote:

1. it does not pass the issue concurrency test (dead locks), although the 5.7 changelog does not mention


InnoDB uses a new, faster algorithm to detect deadlocks.

#9 - 2015-03-11 13:02 - Toshi MARUYAMA

Jean-Philippe Lang wrote:

InnoDB uses a new, faster algorithm to detect deadlocks.

#10 - 2015-03-11 13:04 - Toshi MARUYAMA
- Related to Defect #19344: MySQL 5.6: IssueNestedSetConcurrencyTest#test_concurrency : always fails added

#11 - 2015-03-11 13:07 - Toshi MARUYAMA

Jean-Philippe Lang wrote:

1. it does not pass the issue concurrency test (dead locks)

#19344 says MySQL 5.6 too.

#12 - 2015-03-16 21:20 - Jean-Philippe Lang

Toshi MARUYAMA wrote:

#19344 says MySQL 5.6 too.

Indeed, the CI server runs MySQL 5.1.

I had a deeper look at the deadlocks issue and it seems to work when doing SELECT * ... FROM UPDATE instead of SELECT id ... FOR UPDATE. Here is a patch for current trunk tested with mysql5.7, the concurrency test passes for me. Could you give it a try?

#13 - 2015-03-16 21:20 - Jean-Philippe Lang
- File mysql5.7_deadlocks_fix.patch added

#14 - 2015-03-17 13:45 - Toshi MARUYAMA

On my CentOS7 mariadb-5.5.41-2.el7_0.x86_64:

clean r14128:

$ ruby test/unit/issue_nested_set_concurrency_test.rb
Run options: --seed 12276

# Running:
F.

Finished in 19.053029s, 0.1050 runs/s, 0.4199 assertions/s.

1) Failure:
IssueNestedSetConcurrencyTest#test_concurrency [test/unit/issue_nested_set_concurrency_test.rb:45]:
Expected "Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction:
SELECT `issues`.'id' FROM `issues` WHERE (root_id IN (SELECT root_id FROM issues WHERE id IN (319,316))) ORDER BY `issues`.'id' ASC FOR UPDATE" to be nil.

2 runs, 8 assertions, 1 failures, 0 errors, 0 skips

r14128 with note-13 patch.
$ ruby test/unit/issue_nested_set_concurrency_test.rb
Run options: --seed 50424

# Running:

F.

Finished in 5.455071s, 0.3666 runs/s, 1.2832 assertions/s.

1) Failure:
IssueNestedSetConcurrencyTest#test_concurrency [test/unit/issue_nested_set_concurrency_test.rb:45]:
Expected "Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction:
SELECT `issues`.* FROM `issues` WHERE `issues`.'root_id' = 432
ORDER BY `issues`.'id' ASC FOR UPDATE" to be nil.

2 runs, 7 assertions, 1 failures, 0 errors, 0 skips

#15 - 2015-03-17 17:37 - Toshi MARUYAMA
This change passes test half times, but fails half times on my MariaDB 5.5.

diff --git a/lib/redmine/nested_set/issue_nested_set.rb b/lib/redmine/nested_set/issue_nested_set.rb
--- a/lib/redmine/nested_set/issue_nested_set.rb
+++ b/lib/redmine/nested_set/issue_nested_set.rb
@@ -158,7 +158,8 @@ module Redmine
module Redmine
  self.class.reorder(:id).where!(:root_id => sets_to_lock).lock(lock).ids
  else
-    sets_to_lock = [id, parent_id].compact
+    self.class.reorder(:id).where("root_id IN (SELECT root_id FROM #{self.class.table_name} WHERE id IN (?))", sets_to_lock).lock.ids
+    root_ids = self.class.where(:id => sets_to_lock).select(:root_id).to_a
  end
end

$ ruby test/unit/issue_nested_set_concurrency_test.rb
Run options: --seed 63128

# Running:

..

Finished in 25.875842s, 0.0773 runs/s, 0.3865 assertions/s.

2 runs, 10 assertions, 0 failures, 0 errors, 0 skips

$ ruby test/unit/issue_nested_set_concurrency_test.rb
Run options: --seed 40861

# Running:

FF

Finished in 6.222392s, 0.3214 runs/s, 0.6428 assertions/s.

1) Failure:
IssueNestedSetConcurrencyTest#test_concurrency [test/unit/issue_nested_set_concurrency_test.rb:45]:
Expected "Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction:
UPDATE `issues` SET lft = CASE WHEN lft > 9 THEN lft - 2 ELSE lft END, rgt = CASE WHEN rgt > 9 THEN rgt - 2 ELSE rgt END WHERE `issues`.'root_id' = 4249 AND (lft > 9 OR rgt > 9)" to be nil.

2) Failure:
IssueNestedSetConcurrencyTest#test_concurrent_subtasks_creation [test/unit/issue_nested_set_concurrency_test.rb:61]:
Expected "Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction:
UPDATE `issues` SET lft = CASE WHEN lft >= 18 THEN lft + 2 ELSE lft END, rgt = CASE WHEN rgt >= 18 THEN rgt + 2 ELSE rgt END WHERE `issues`.'root_id' = 4263 AND (lft >= 18 OR rgt >= 18)" to be nil.

2 runs, 4 assertions, 2 failures, 0 errors, 0 skips

#16 - 2015-03-17 18:53 - Jean-Philippe Lang
Toshi, your patch does not do what it's supposed to.
You may want to write:

```ruby
root_ids = self.class.where(:id => sets_to_lock).pluck(:root_id)
```

instead of:

```ruby
root_ids = self.class.where(:id => sets_to_lock).select(:root_id).to_a
```

which returns records without their ids. The lock after that does nothing:

```sql
SELECT `issues`.* FROM `issues` WHERE `issues`.'root_id' IS NULL FOR UPDATE
```

#17 - 2015-03-17 19:07 - Jean-Philippe Lang

I've isolated the log for a thread that triggers a dead lock. It ends with:

```sql
BEGIN
SELECT 'issues'.'id' FROM 'issues' WHERE 'issues'.'root_id' = 778 ORDER BY 'issues'.'id' ASC FOR UPDATE
ROLLBACK
ERROR: Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction:
SELECT 'issues'.'id' FROM 'issues' WHERE 'issues'.'root_id' = 778 ORDER BY 'issues'.'id' ASC FOR UPDATE
```

As we can see, the thread starts a transaction, has no lock yet and gets a dead lock error on the first lock. Anyone knows what would explain that?

#18 - 2015-03-17 20:00 - Toshi MARUYAMA

Jean-Philippe Lang wrote:

```
Toshi, your patch does not do what it's supposed to.
```

You may want to write:

```ruby
root_ids = self.class.where(:id => sets_to_lock).pluck(:root_id)
```

instead of:

```ruby
root_ids = self.class.where(:id => sets_to_lock).select(:root_id).to_a
```

which returns records without their ids. The lock after that does nothing:

SELECT 'issues'.'id' FROM 'issues' WHERE 'issues'.'root_id' IS NULL FOR UPDATE

This changes fails 3/4 times.

```diff
diff --git a/lib/redmine/nested_set/issue_nested_set.rb b/lib/redmine/nested_set/issue_nested_set.rb
--- a/lib/redmine/nested_set/issue_nested_set.rb
+++ b/lib/redmine/nested_set/issue_nested_set.rb
@@ -158,7 +158,8 @@ module Redmine
       sets_to_lock = [id, parent_id].compact
 -      self.class.reorder(:id).where("root_id IN (SELECT root_id FROM #{self.class.table_name} WHERE id IN (?)"), sets_to_lock).lock.ids
 +      root_ids = self.class.where(:id => sets_to_lock).pluck(:root_id).compact.uniq
 +      self.class.where(:root_id => root_ids).lock.ids
 end

 $ ruby test/unit/issue_nested_set_concurrency_test.rb
```

# Running:

```
# Running:

Finished in 20.314407s, 0.0985 runs/s, 0.4430 assertions/s.
```

1) Failure: IssueNestedSetConcurrencyTest#test_concurrency [test/unit/issue_nested_set_concurrency_test.rb:45]; Expected "Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction: SELECT 'issues'.'id' FROM 'issues' WHERE 'issues'.'root_id' = 7049 FOR UPDATE" to be nil.
This is code from source:tags/2.6.3/lib/plugins/awesome_nested_set/lib/awesome_nested_set/model/transactable.rb.

diff --git a/lib/redmine/nested_set/issue_nested_set.rb b/lib/redmine/nested_set/issue_nested_set.rb
--- a/lib/redmine/nested_set/issue_nested_set.rb
+++ b/lib/redmine/nested_set/issue_nested_set.rb
@@ -148,7 +148,29 @@
 module Redmine
 end

+def in_tenacious_transaction(&block)
+  retry_count = 0
+  begin
+    transaction(&block)
+    rescue ActiveRecord::StatementInvalid => error
+      raise unless error.message =~ /Deadlock found when trying to get lock/
+      raise unless retry_count < 10
+      retry_count += 1
+      logger.info "Deadlock detected on retry #{retry_count}, restarting transaction"
+      sleep(rand(retry_count)*0.1) # Aloha protocol
+    retry
+  end
+
+  def lock_nested_set
+    if self.class.connection.adapter_name =~ /mysql/i
+      in_tenacious_transaction { lock_nested_set_in_tenacious_transaction }
+    else
+      lock_nested_set_in_tenacious_transaction
+    end
+  end
+
+  def lock_nested_set_in_tenacious_transaction
+    if self.class.connection.adapter_name =~ /sqlserver/i
+      lock = "WITH (ROWLOCK HOLDLOCK UPDLOCK)"
+    else
+      lock = "WITH (ROWLOCK HOLDLOCK UPDLOCK)"
+    end
+    # Custom lock for SQLServer
+
Note-20 is wrong because it uses nested transaction and parent transaction does not use lock.
This is fix.

diff --git a/lib/redmine/nested_set/issue_nested_set.rb b/lib/redmine/nested_set/issue_nested_set.rb
--- a/lib/redmine/nested_set/issue_nested_set.rb
+++ b/lib/redmine/nested_set/issue_nested_set.rb
@@ -148,7 +148,29 @@
 module Redmine
 end

+def get_lock_mysql(&block)
+  retry_count = 0
+  begin
+    yield
+    rescue ActiveRecord::StatementInvalid => error
+      raise unless error.message =~ /Deadlock found when trying to get lock/
+      raise unless retry_count < 10
+      retry_count += 1
+      logger.info "Deadlock detected on retry #{retry_count}, restarting transaction"
+      sleep(rand(retry_count)*0.1) # Aloha protocol
+    retry
+  end
+
+  def lock_nested_set
+    if self.class.connection.adapter_name =~ /mysql/i
+      get_lock_mysql { get_lock }
+    else
+      get_lock

#21 - 2015-03-18 07:07 - Toshi MARUYAMA

Note-20 is wrong because it uses nested transaction and parent transaction does not use lock.
This is fix.
#22 - 2015-03-18 08:23 - Jean-Philippe Lang
Toshi, the idea of the implementation of nested sets in 3.0.0 is to start the transaction by locking all the rows that might be updated or used to compute shifts in the transaction, in order to prevent deadlocks and inconsistencies. I won’t commit that workaround until I figure out why it doesn’t work as I expect (note-17) in recent versions of MySQL.

#23 - 2015-03-19 05:00 - Toshi MARUYAMA
I think MySQL uses Gap Locks, so we cannot avoid deadlock.

I tried READ COMMITTED on MariaDB 5.5, but deadlock raised. I don’t know the reason.

#24 - 2017-02-01 18:28 - Dave Martin
Do current versions of Redmine still not support MySQL 5.7?

#25 - 2017-03-21 16:38 - Toshi MARUYAMA
#23318#note-18 patch reduces test failure times from about 100% to 50% on my CentOS7 mariadb-5.5.52-1.el7.x86_64.

#26 - 2017-04-21 18:11 - Stephane Evr
Latest versions of Ubuntu server only provide the 5.7 package, version 5.5 is really difficult to install on it:
https://askubuntu.com/questions/763240/is-it-possible-to-install-mysql-5-5-or-5-6-on-ubuntu-16-04

#27 - 2017-04-23 15:45 - Stephane Evr
Here are some logs from MySQL 5.7:

```
mysql> select * FROM INNODB_LOCKS \G;
*************************** 1. row ***************************
lock_id: 56163:265:12:54
lock_trx_id: 56163
lock_mode: X
lock_type: RECORD
lock_table: 'redmine_test'.'issues'
lock_index: index_issues_on_root_id_and_lft_and_rgt
lock_space: 265
lock_page: 12
lock_rec: 54
lock_data: 653, 1, 20, 653

2 rows in set, 1 warning (0.00 sec)
```

```
mysql> SHOW ENGINE INNODB STATUS \G;
------------------------
LATEST DETECTED DEADLOCK
------------------------
2017-04-23 14:38:12 0x7f308c273700
*** (1) TRANSACTION:
TRANSACTION 56161, ACTIVE 0 sec starting index read
mysql tables in use 2, locked 1
LOCK WAIT 2 lock struct(s), heap size 1136, 1 row lock(s)
MySQL thread id 9, OS thread handle 139846486136576, query id 1081 localhost root Sending data
SELECT `issues`.'id' FROM `issues` WHERE (root_id IN (SELECT root_id FROM issues WHERE id IN (658,655)))
```
R BY 'issues'.id ASCII FOR UPDATE

*** (1) WAITING FOR THIS LOCK TO BE GRANTED:
RECORD LOCKS space id 265 page no 12 n bits 160 index_issues_on_root_id_and_lft_and_rgt of table 'redmine_test'.issues' trx id 56161 lock_mode X waiting

Record lock, heap no 47 PHYSICAL RECORD: n_fields 4; compact format; info bits 32
  0: len 4; hex 8000028d; asc ;;
  1: len 4; hex 80000001; asc ;;
  2: len 4; hex 80000016; asc ;;
  3: len 4; hex 8000028d; asc ;;

*** (2) TRANSACTION:
TRANSACTION 56159, ACTIVE 0 sec updating or deleting mysql tables in use 1, locked 1
  5 lock struct(s), heap size 1136, 60 row lock(s), undo log entries 1
MySQL thread id 7, OS thread handle 139846486537984, query id 1134 localhost root updating
UPDATE 'issues' SET lft = CASE WHEN lft > 5 THEN lft - 2 ELSE lft END, rgt = CASE WHEN rgt > 5 THEN rgt - 2 ELSE rgt END WHERE 'issues'.root_id = 653 AND (lft > 5 OR rgt > 5)

*** (2) HOLDS THE LOCK(S):
RECORD LOCKS space id 265 page no 12 n bits 160 index_issues_on_root_id_and_lft_and_rgt of table 'redmine_test'.issues' trx id 56159 lock_mode X

Record lock, heap no 1 PHYSICAL RECORD: n_fields 1; compact format; info bits 0
  0: len 8; hex 7375707265756d; asc supremum;;

Record lock, heap no 47 PHYSICAL RECORD: n_fields 4; compact format; info bits 32
  0: len 4; hex 8000028d; asc ;;
  1: len 4; hex 80000001; asc ;;
  2: len 4; hex 80000016; asc ;;
  3: len 4; hex 8000028d; asc ;;

*** (2) WAITING FOR THIS LOCK TO BE GRANTED:
RECORD LOCKS space id 265 page no 12 n bits 160 index_issues_on_root_id_and_lft_and_rgt of table 'redmine_test'.issues' trx id 56159 lock_mode X locks gap before rec insert intention waiting

Record lock, heap no 47 PHYSICAL RECORD: n_fields 4; compact format; info bits 32
  0: len 4; hex 8000028d; asc ;;
  1: len 4; hex 80000001; asc ;;
  2: len 4; hex 80000016; asc ;;
  3: len 4; hex 8000028d; asc ;;

*** WE ROLL BACK TRANSACTION (1)

#28 - 2017-04-24 13:11 - Stephane Evr

Should we put the index on :issues => [:root_id, :lft, :rgt] as unique? I think this would play a role in the number of records being locked when we do something such as:

In remove_from_nested_set:

In add_to_nested_set:
  self.class.where(root_id => root_id).where("lft > ? OR rgt >= ?", lft, rgt).update_all(...)  

Or is a reorder needed before the update_all clause?

#29 - 2017-05-18 22:22 - Mark Anderson

Am about to make the move to Ubuntu 16.04. Can I install Redmine 3.3 and stick with MySQL 5.7 now?

#30 - 2017-05-18 22:56 - Deoren Moor

Mark Anderson wrote:

Am about to make the move to Ubuntu 16.04. Can I install Redmine 3.3 and stick with MySQL 5.7 now?

For what it is worth, we have been using an Ubuntu 16.04 + MariaDB 10.0.x setup for over six months now without any obvious issues.

- web server: Ubuntu 16.04, nginx/Pasenger, mysql-client 5.7.x
- database server: MariaDB 10.0.x

#31 - 2017-05-19 12:42 - Pavel Rosický
Stéphane Thomas: Evr - Hi, the index on :issues => [:root_id, :lft, :rgt] should be definitely unique.

To avoid duplicate entries during shifts I added an additional reorder statement:

```ruby
remove_from_nested_set
  .reorder('lft desc')
add_to_nested_set
  .reorder('lft asc')
```

but it didn’t help anyway, I think it's because shifts are overlapping, especially during creating & deleting records at the same time.

unfortunately awesome_nested_set has the same issue

locking all issues instead of subtree works correctly (no deadlocks), but it should be definitely avoided for performance reasons

```ruby
self.class.reorder(:id).lock
log
```

# Running:

```
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on update, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863660
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863660
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on update, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on update, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
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Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107872360
Deadlock detected on getting lock, restarting transaction retry #1 thread: 107863880
```

Finished in 14.603111s, 0.1370 runs/s, 0.6848 assertions/s.

2 runs, 10 assertions, 0 failures, 0 errors, 0 skips

#32 - 2018-06-08 10:39 - yossi edri

Hi,
what is the highest tested version of MySql that is supported in Redmine 3.x - 4.x
thanks

#33 - 2018-06-19 16:38

yossi edri wrote:

```
Hi,
what is the highest tested version of MySql that is supported in Redmine 3.x - 4.x
thanks
```

Salam

redmine 3.2 work by last version of mysql but redmine 3.3 and higher not work well with mysql 5.5 or higher

#34 - 2018-06-25 18:14 - Alexandr Kirilov

Just installed Redmine in following ports for FreeBSD. There are included mysql56, and the lowest version available from ports is mysql55. I've been trying Redmine with mysql80. Seems working for the case of mysql. But I got this issue - [http://www.redmine.org/boards/2/topics/55693](http://www.redmine.org/boards/2/topics/55693).
Does it make sense to retry the transaction inside the Issue class?

In app/models/issue.rb:

```ruby
def self.transaction(options={}, &block)
  retry_count = 0
  begin
    super
    rescue ActiveRecord::StatementInvalid => error
      raise if connection.adapter_name !~ /mysql/
      raise if error.message !~ /Deadlock found when trying to get lock/
      raise if retry_count == 10
      retry_count += 1
      wait_ms = rand(retry_count * 100)
      if logger
        logger.info("Deadlock found when saving #{self}: ")
        "Waiting for #{wait_ms} ms before restarting the transaction (retry #{retry_count})")
      end
      sleep(wait_ms / 1000.0)
      retry
    end
  end
```

- Has duplicate Defect #28414: Does Redmine compatible with MySQL 5.7 or not? added

Even if the problem with deadlocks still exists on MySQL 5.7, I think that it is safe to say that Redmine 4.0 officially supports MySQL 5.7 and to close this issue.

CI server run the tests on MySQL 5.7 and the install documentation has been updated.

What do you think?

Loose tangent: Does the same also apply to MariaDB? FWIW, I've run Redmine on MariaDB 10.0 for years without (apparent) issue, hoping to upgrade to a newer MariaDB release in the near future.

- Marius BĂLTEANU

Deoren Moor wrote:

Even if the problem with deadlocks still exists on MySQL 5.7, I think that it is safe to say that Redmine 4.0 officially supports MySQL 5.7 and to close this issue.

CI server run the tests on MySQL 5.7 and the install documentation has been updated.

What do you think?

Loose tangent: Does the same also apply to MariaDB? FWIW, I've run Redmine on MariaDB 10.0 for years without (apparent) issue, hoping to upgrade to a newer MariaDB release in the near future.

- Deoren Moor

No, it applies only to MySQL 5.7. MariaDB is not supported (or at least officially) and an user reported some failing tests (please see #30367).

- Marius BĂLTEANU

Marius BALTEANU wrote:

Even if the problem with deadlocks still exists on MySQL 5.7, I think that it is safe to say that Redmine 4.0 officially supports MySQL 5.7 and to
close this issue.

CI server run the tests on MySQL 5.7 and the install documentation has been updated.

What do you think?

Tests skip on MySQL (r16926).

#41 - 2020-04-05 18:14 - Marius BĂLTEANU
Toshi MARUYAMA wrote:

Marius BALTEANU wrote:

Even if the problem with deadlocks still exists on MySQL 5.7, I think that it is safe to say that Redmine 4.0 officially supports MySQL 5.7 and to close this issue.

CI server run the tests on MySQL 5.7 and the install documentation has been updated.

What do you think?

Tests skip on MySQL (r16926).

Yes, but the CI uses MySQL 5.7 so is quite strange to say we do not support MySQL 5.7, but we run the tests against MySQL 5.7.

#42 - 2023-05-24 10:08 - Ivan Cenov
Newer versions of MySQL, after 5.7 are still not applicable? MySQL 8.x.x etc? Also does mysql2 gem support higher versions of MySQL?

#43 - 2023-10-23 20:08 - Marius BĂLTEANU
- Status changed from New to Closed
- Assignee set to Marius BĂLTEANU
- Target version deleted (Candidate for next major release)
- Resolution set to Fixed

MySQL 5.7 is supported for some time with a known concurrency issue (Mysql2::Error: Deadlock found when trying to get lock; try restarting transaction). I'm closing this.

#44 - 2023-11-21 00:01 - Marius BĂLTEANU
This concurrency issue is fixed in the upcoming Redmine 5.1.1 (it will be released soon) and 6.0.0, but it may require some changes to the database settings, please see all the comments from #39437 and the MySQL configuration page.

Files

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
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<tbody>
<tr>
<td>mysql5.7_deadlocks_fix.patch</td>
<td>1.54 KB</td>
<td>2015-03-16</td>
<td>Jean-Philippe Lang</td>
</tr>
<tr>
<td>issue_nested_set.rb.patch</td>
<td>4.86 KB</td>
<td>2017-05-19</td>
<td>Pavel Rosický</td>
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