### redmineorg-copy202205 - Vote #77877

### Firebird and RedDatabase support

2022/05/09 18:06 - Admin Redmine

ステータス:	New	開始日:	2022/05/09
優先度:	低め	期日:	
担当者:		進捗率:	0%
カテゴリ:	Database_21	予定工数:	0.00時間
対象パージョン:		作業時間:	0.00時間
Redmineorg_URL:	https://www.redmine.org/issues/24013	status_id:	1
category_id:	21	tracker_id:	2
version_id:	0	plus1:	0
issue_org_id:	24013	affected_version:	
author_id:	159089	closed_on:	
assigned_to_id:	0	affected_version_id:	
comments:	25		

### 説明

I made a patch that adds support for firebird and RedDatabase(based on firebird).

Biggest problem that occurs when trying to run redmine with activerecord-fb-adapter that redmine uses in string constants firebird keywords.

journals

It is too hard to see difference in patch. Could you split patch to two patches?

## only indent and white space change

# main change

Here is clear patch. These small changes allows redmine work with firebird.

Did you run tests and confirm other databases do not break tests?

## http://www.redmine.org/builds/index.html

I'm sorry few tests failed. So i'll fix it and upload only fully working patch.

New version of patch. Other dbs tests working.

From blog written in Japanese:

http://qiita.com/jnchito/items/630b9f038c87298b5756

https://github.com/rails/rails/issues/16978#issuecomment-56211310

First thing, @arel\_table@ is private API of Rails and should not be used in applications.

#### http://bikeshed.fm/74#comment-2830227073

In this podcast I heard Arel is going to be a public API in Rails 5.1, correct? Does that mean Rails developers will be allowed to use it in applications?

I got an answer from Sean: Yes, it will be stable after 5.1

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### https://twitter.com/sgrif/status/763830491204026368

Oh. I'll change arel\_table usage.

Fixed arel\_table usage.

For completeness' sake:

- Upstream ("activerecord-fb-adapter": <a href="https://github.com/rowland/activerecord-fb-adapter">https://github.com/rowland/activerecord-fb-adapter</a>/issues /70 (Problem with db migration)
- Upstream pull request: https://github.com/rowland/activerecord-fb-adapter/pull/73 (Redmine support)

Note from quick visual patch scan: it seems it is missing adaptations to the @Gemfile@, the configuration stubs ( <a href="mailto:config/database.vml.example">config/database.vml.example</a>) and the documentation (<a href="mailto:doc/INSTALL">doc/INSTALL</a>) reflecting the proposed extension of DB support.

Given that Firebird is an extremely limited and feature-poor alternative to MySQL or Postgres, who would want to use Firebird? I say this as a person with 10 years professional Firebird (and Interbase) experience.

Firebird is itself an open source fork of the Borland/Embarcadero Interbase product.

Warren Postma wrote:

Given that Firebird is an extremely limited and feature-poor alternative to MySQL or Postgres, who would want to use Firebird? I say this as a person with 10 years professional Firebird (and Interbase) experience.

Firebird is itself an open source fork of the Borland/Embarcadero Interbase product.

I'm sorry but when Firebird became feature-poor? Did you checked latest version 3.0?

These are patches which remained attachment:Firebird\_support\_v3.patch after r16008 and r16009.

I think attachment:issue-24013-r16009-db-migrate.diff breaks existing system.

Fixed issue number of patch files.

Right now i'm trying to find better solution to support Firebird.

The biggest problem to make it looks native. Because of large count of hardcoded queries with Firebird's keywords.

Example of queries changes to fit firebird: Before:

```
JournalDetail.

where(["property = 'attr' AND prop_key = 'assigned_to_id' AND value = ?", id.to_s]).

update_all(['value = ?', substitute.id.to_s])
```

After:

```
JournalDetail.

where(:property => 'attr', :prop_key => 'assigned_to_id', :value => id.to_s).

update_all(:value => substitute.id.to_s)
```

Main problem is subqueries or part of queries(where, select, etc) like this:

```
# Returns a JOIN clause that is added to the query when sorting by custom values
```

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```
def join_for_order_statement(custom_field)
    alias_name = join_alias(custom_field)

"LEFT OUTER JOIN #{CustomValue.table_name} #{alias_name}" +

" ON #{alias_name}.customized_type = '#{custom_field.class.customized_class.base_class.name}'" +

" AND #{alias_name}.customized_id = #{custom_field.class.customized_class.table_name}.id" +

" AND #{alias_name}.custom_field_id = #{custom_field.id}" +

" AND (#{custom_field.visibility_by_project_condition})" +

" AND #{alias_name}.value <> ''" +

" AND #{alias_name}.id = (SELECT max(#{alias_name}_2.id) FROM #{CustomValue.table_name} #{alias_name} "WHERE #{alias_name}_2.customized_type = #{alias_name}.customized_type" +

" AND #{alias_name}_2.customized_id = #{alias_name}.customized_id" +

" AND #{alias_name}_2.custom_field_id = #{alias_name}.custom_field_id)"

end
```

In this code fragment i can't find good solution to replace

#{alias\_name}.value

Any suggestions? I'll appreciate any help

Here changes to support firebird at actual trunk.

Also decimal precision fix

I think i forgot about some migration files. But i'll fix that later.

Here some fixes to use symbols instead of strings.

Value keyword replaced in application\_controller

Any news about this patch? is it stable? integrated? It would be nice to use Firebird with Redmine too:)

Thanks!

#### 履歴

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- カテゴリ を Database\_21 にセット

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