Redmine - Defect #21182
Project.uniq.visible raises an SQL error under certain conditions
2015-11-08 21:53 - Redmine CRM

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
</tr>
<tr>
<td>Assignee:</td>
<td>Jean-Philippe Lang</td>
</tr>
<tr>
<td>Category:</td>
<td>Code cleanup/refactoring</td>
</tr>
<tr>
<td>Target version:</td>
<td>3.2.0</td>
</tr>
<tr>
<td>Resolution:</td>
<td>Fixed</td>
</tr>
<tr>
<td>Start date:</td>
<td></td>
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<tr>
<td>Due date:</td>
<td></td>
</tr>
<tr>
<td>% Done:</td>
<td>0%</td>
</tr>
<tr>
<td>Estimated time:</td>
<td>0.00 hour</td>
</tr>
<tr>
<td>Affected version:</td>
<td>3.1.1</td>
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Description

Hi! Recently the issue in Redmine core was discovered by our team. To reproduce it just run Project.uniq.visible in console having at least single project and AnonymousGroup added to it as member.

I have tested it under:

Environment:
- Redmine version 3.1.1.devel
- Ruby version 2.2.2-p95 (2015-04-13) [x86_64-darwin14]
- Rails version 4.2.4
- Environment development
- Database adapter PostgreSQL

SCM:
- Subversion 1.7.20
- Git 2.4.9

Redmine plugins:
- no plugin installed

Stack trace:

```
PG::InvalidColumnReference: ERROR: for SELECT DISTINCT, ORDER BY expressions must appear in select list
LINE 1: ..."user_id" = $1 AND (projects.status<>9) ORDER BY projects.n...
  ^
: SELECT DISTINCT "projects".id FROM "projects" INNER JOIN "members" ON "projects"."id" = "members"."project_id" WHERE "members"."user_id" = $1 AND (projects.status<>9) ORDER BY projects.name
ActiveRecord::StatementInvalid: PG::InvalidColumnReference: ERROR: for SELECT DISTINCT, ORDER BY expressions must appear in select list
LINE 1: ..."user_id" = $1 AND (projects.status<>9) ORDER BY projects.n...
  ^
: SELECT DISTINCT "projects".id FROM "projects" INNER JOIN "members" ON "projects"."id" = "members"."project_id" WHERE "members"."user_id" = $1 AND (projects.status<>9) ORDER BY projects.name
from /Users/k41n/.rbenv/versions/2.2.2/lib/ruby/gems/2.2.0/gems/activerecord-4.2.4/lib/active_record/connection_adapters/postgresql_adapter.rb:641:in `prepare'
from /Users/k41n/.rbenv/versions/2.2.2/lib/ruby/gems/2.2.0/gems/activerecord-4.2.4/lib/active_record/connection_adapters/postgresql_adapter.rb:641:in `prepare_statement'
from /Users/k41n/.rbenv/versions/2.2.2/lib/ruby/gems/2.2.0/gems/activerecord-4.2.4/lib/active_record/connection_adapters/postgresql_adapter.rb:641:in `prepare_statement'
```

2020-06-15
Problem was initially reported by [https://bitbucket.org/ViruZzz/](https://bitbucket.org/ViruZzz/) who is developing plugins for Redmine. One of customers complained about plugin raising exception above under certain circumstances. After investigation I think I found the problem.

Plugin contains model named `Contact` having following association:

```
has_and_belongs_to_many :projects, lambda { uniq }
```

Sometimes it uses `visible` scope to filter out projects visible to current user, giving effectively chain of `uniq` and `visible`. That causes exception.

After taking a dive in depth of ActiveRecord I discovered that `Principal` model sets order for projects table ([https://github.com/redmine/redmine/blob/master/app/models/principal.rb#L32](https://github.com/redmine/redmine/blob/master/app/models/principal.rb#L32)) which gets merged to entire relation conflicting with `uniq` which adds `SELECT DISTINCT(id)` to query.

That entire case is quite rare, it happens only if `AnonymousGroup` is added as member to some public project.

However, I made a patch, removing that order by name from principal association. I have totally no idea who and why added it there, maybe it is something vital, maybe not. However there is issue and I am attaching one of the solutions which works for me.

All tests are passing.

### Associated revisions

**Revision 14857 - 2015-11-09 19:01 - Jean-Philippe Lang**

Fixed that Project uniq.visible errors under certain conditions (#21182).

Patch by Redmine CRM.

### History

#### #1 - 2015-11-08 21:58 - Redmine CRM

- File `fix_project uniq_visible.diff` added

Sorry, diff somehow got previous commit, probably because I am bad with git diffs, PFA fixed one

#### #2 - 2015-11-08 22:13 - Jean-Philippe Lang
Fix committed in r14857, with slight changes to the test.
Thanks for pointing this out!

Files

<table>
<thead>
<tr>
<th>Files</th>
<th>Size</th>
<th>Date</th>
<th>Redmine CRM</th>
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<tbody>
<tr>
<td>fix_project_uniq_visible.diff</td>
<td>2.51  KB</td>
<td>2015-11-08</td>
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<tr>
<td>fix_project_uniq_visible.diff</td>
<td>1.72  KB</td>
<td>2015-11-08</td>
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