

Redmine - Defect #8707

Reposman: wrong constant name

2011-06-29 12:16 - Tommaso Visconti

Status:	Closed	Start date:	2011-06-29
Priority:	High	Due date:	
Assignee:	Jean-Philippe Lang	% Done:	0%
Category:	SCM extra	Estimated time:	0.00 hour
Target version:	1.2.3	Affected version:	1.2.0
Resolution:	Fixed		

Description

I recently upgraded Redmine to version 1.2.0 and now I noticed that reposman stops to work. I call that script every 10 minutes to create git repos for new project.

It ends with a dark message and the -v flag isn't verbose at all! :)

```
~# ruby /var/www/redmine-1.2/extra/svn/reposman.rb --redmine localhost --svn-dir /repositories/git-root/ --owner www-data --group developers --url /repositories/git-root/ --scm git -v querying Redmine for projects...
```

Unable to connect to <http://localhost/sys/>: wrong constant name Pizzu-dev

I can't understand if the error is due to the "wrong constant name" (which is a git branch) or to the upgrade to 1.2.0

This is my conf:

```
~# RAILS_ENV=production script/about
```

About your application's environment

Ruby version 1.8.7 (i486-linux)

RubyGems version 1.3.7

Rack version 1.1.2

Rails version 2.3.11

Active Record version 2.3.11

Active Resource version 2.3.11

Action Mailer version 2.3.11

Active Support version 2.3.11

Application root /var/www/redmine-1.2

Environment production

Database adapter mysql

Database schema version 20110511000000

About your Redmine plugins

Mylyn Connector plugin 2.7.1.stable

Related issues:

Has duplicate Redmine - Defect #10563: reposman.rb fails to add svn reposit...

Closed

Associated revisions

Revision 7956 - 2011-11-27 18:30 - Jean-Philippe Lang

Do not include extra_info attribute in SysController responses because it breaks reposman activeresource client (#8707).

History

#1 - 2011-06-29 13:48 - Toshi MARUYAMA

- Category set to SCM extra

#2 - 2011-06-29 14:01 - Toshi MARUYAMA

Could you try without Mylyn Connector plugin?

#3 - 2011-06-29 14:31 - Tommaso Visconti

same behaviour without the plugin

#4 - 2011-06-29 15:35 - Toshi MARUYAMA

I can't reproduce.

```
$ ruby extra/svn/reposman.rb --redmine localhost:7000 --svn-dir /tmp/test --owner bbbbbb --group bbbbbb --url /tmp/test --scm git -v -k 123
querying Redmine for projects...
retrieved 1 projects
treating project Pizzu-dev
Initialized empty shared Git repository in /tmp/test/aaaaaaaa/
repository /tmp/test/aaaaaaaa registered in Redmine with url /tmp/test/aaaaaaaa
repository /tmp/test/aaaaaaaa created
```

#5 - 2011-06-29 16:10 - Tommaso Visconti

The strange fact is that Pizzu-dev isn't a project. We have a git branch with that name (lowercase) and nothing more. I reproduced it with irb, the error is generated from line 198 of reposman.rb:

```
irb(main):072:0> projects = Project.find(:all, :params => {:key => $api_key})
NameError: wrong constant name Pizzu-dev
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1373:in `const_defined?'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1373:in `find_or_create_resource_for'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1232:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1219:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1219:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:965:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1233:in `new'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1233:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1219:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1219:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:965:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1233:in `new'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1233:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1219:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:1219:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:965:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:889:in `new'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:889:in `instantiate_record'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:885:in `instantiate_collection'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:885:in `collect!'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:885:in `instantiate_collection'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:857:in `find_every'
from /usr/lib/ruby/gems/1.8/gems/activerecord-3.0.0/lib/active_resource/base.rb:777:in `find'
from (irb):72
```

but with the original line, with the \$api_key

#6 - 2011-06-29 16:35 - Tommaso Visconti

Sorry, the last line is an error:

~~"but with the original line, with the \$api_key"~~

Just to specify, I uninstalled versions 3.0.0 (rails, activerecord, activerecord, ecc.) and the error is the same:

```
irb(main):082:0> projects = Project.find(:all, :params => {:key => $api_key})
NameError: wrong constant name Pizzu-dev
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1139:in `const_defined?'
,
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1139:in `find_or_create_resource_for'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1040:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `new'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `new'
```

```

from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `new'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:669:in `new'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:669:in `instantiate_rec
ord'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:665:in `instantiate_col
lection'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:665:in `collect!'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:665:in `instantiate_col
lection'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:642:in `find_every'
from /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:585:in `find'
from (irb):82
from /usr/lib/ruby/1.8/rdoc/markup/simple_markup/inline.rb:150

```

#7 - 2011-06-29 17:03 - Tommaso Visconti

Thinking the problem was the dash '-' in the name of the branch I deleted the branch, but it still doesn't work, probably because the repository has some merges from that branch to master.

This is really blocking the work in my office, we must create every repo by hand!

#8 - 2011-06-29 18:51 - Tommaso Visconti

Ok, the problem seems ActiveResource (or Module) which can't transform string into constants when there's a dash ('-') or a dot ('.'), I've found a workaround.

In the file /usr/lib/ruby/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb, line 1131, change:

```
resource_name = name.to_s.camelize
```

with:

```
resource_name = name.to_s.gsub('-', '_').gsub('.', '_').camelize
```

I had problem with the dash, but without the second gsub i got the problem:

```
wrong constant name Release1.0
```

so i added the second gsub, probably that string needs more sanitization.

With this workaround reposman works fine, but i think we must understand what's happening here: is a problem with the upgrade to 2.0, is a problem with active_resource or ruby? I bet it's the first option, both ruby and active_record are the same as when reposmen worked well.

Maybe some strings should be formatted before be sent to ActiveResource.

If you give me some hints I can try to fix it

#9 - 2011-07-03 17:24 - Jean-Philippe Lang

I can not reproduce either. Any error showing up in your Redmine server log file when you run reposman?

#10 - 2011-07-03 23:48 - Tommaso Visconti

Nothing strange from production.log:

```

Processing SysController#projects to xml (for 127.0.0.1 at 2011-07-03 23:47:00) [GET]
Parameters: {"key"=>"XXXXXXXXXXXXXXXXXXXX"}
Completed in 659ms (View: 0, DB: 2) | 200 OK [http://localhost/sys/projects.xml?key=XXXXXXXXXXXXXXXXXXXX]

```

#11 - 2011-07-12 20:33 - Anonymous

I have the same problem with a fresh 1.20 installation and svn

```

Ruby version 1.8.7 (i686-linux)
RubyGems version 1.3.7
Rack version 1.1.1
Rails version 2.3.11
Active Record version 2.3.11
Active Resource version 2.3.11
Action Mailer version 2.3.11

```

Active Support version 2.3.11
Edge Rails revision unknown
Application root /var/www/railsapp
Environment production
Database adapter mysql
Database schema version 20110511000000

```
/var/www/railsapp/extra/svn/reposman.rb -t -v -r localhost -s /srv/repos/svn -o www-data -g www-data -u file:///srv/repos/svn --scm subversion
```

running in test mode
querying Redmine for projects...
Unable to connect to <http://localhost/sys/>: wrong constant name Devel-20110614

I don't know what is Devel-20110614, is not a project.

#12 - 2011-07-12 21:40 - Tommaso Visconti

I don't know what it is in SVN (in GiT the name was the name of a branch) but the problem is the dash '-' in that name

#13 - 2011-08-03 11:40 - Jean-Sébastien Pédrón

I confirm this issue. We're using Redmine 1.2.0 with Git repositories.

```
Unable to connect to http://.../sys/: wrong constant name Full-details
```

And "full-details" is a branch in one project.

This started when we upgraded from Redmine 1.1.2 to 1.2.0.

I'm not a Ruby developer but I'm ready to provide informations and test patches to debug this problem.

#14 - 2011-08-24 14:41 - Tommaso Visconti

Problem solved with the upgrade to version 1.2.1

#15 - 2011-08-24 15:03 - Pedro Henrique Rogge Breis

This problem is not resolved in version 1.2.1 of Redmine. I have that version installed on my server, and the error persists. The reposman for GIT doesn't work.

#16 - 2011-08-24 15:07 - Tommaso Visconti

In my case the problem was resolved with the upgrade to 1.2.1, so the cause should be probably searched in a mixture of redmine version, gems installed and some voodoo... :)

#17 - 2011-09-27 22:02 - Stephan Heck

I've just run into the very same problem with 1.2.0. The update to 1.2.1. did NOT fix the problem. Same error ;-(

```
Unable to connect to http://myhost.com/redmine/sys/: wrong constant name somebranch-name
```

As far as I can see it has nothing to do with git or svn ~~> if you have a branch containing a dash~~ the problem pops up. In our case we want reposman to create a svn repository and the "problem dash branch" which brings up the error is a git repo...

Any ideas?

#18 - 2011-09-28 15:12 - Orlando Stein Jr

I have the same problem with version 1.2.1 with branch. The correct gems are installed.

#19 - 2011-10-13 11:59 - Jean-Sébastien Pédrón

Could someone with a working instance of 1.2.1 post the output of "gem list" and "RAILS_ENV=production script/about", please? Maybe we can isolate the working vs. non-working versions.

We just upgraded to 1.2.1 and the problem is still present. Here's the output of those two commands:

```
# gem list

*** LOCAL GEMS ***

abstract (1.0.0)
actionmailer (3.0.9, 2.3.11, 2.3.5)
actionpack (3.0.9, 2.3.11, 2.3.5)
```

```
activemodel (3.0.9)
activerecord (3.0.9, 2.3.11, 2.3.5)
activeresource (3.0.9, 2.3.11, 2.3.5)
activesupport (3.0.9, 2.3.11, 2.3.5)
arel (2.0.10)
builder (3.0.0, 2.1.2)
bundler (1.0.15)
coderay (0.9.8)
erubis (2.6.6)
i18n (0.6.0, 0.5.0, 0.4.2)
mail (2.2.19)
mime-types (1.16)
oniguruma (1.1.0)
plist (3.1.0)
polyglot (0.3.1)
rack (1.3.0, 1.2.3, 1.1.2, 1.0.1)
rack-mount (0.6.14)
rack-test (0.5.7)
rails (3.0.9, 2.3.11, 2.3.5)
railties (3.0.9)
rake (0.9.2)
rdoc (3.8)
rubygems-update (1.8.5)
svn2git (2.1.0)
textpow (0.10.1)
thor (0.14.6)
treetop (1.4.9)
tzip (0.3.29)
ultraviolet (0.10.2)
```

```
# RAILS_ENV=production script/about
About your application's environment
Ruby version      1.8.7 (x86_64-linux)
RubyGems version  1.3.7
Rack version      1.1.2
Rails version     2.3.11
Active Record version 2.3.11
Active Resource version 2.3.11
Action Mailer version 2.3.11
Active Support version 2.3.11
Application root  /var/lib/redmine
Environment       production
Database adapter  mysql
Database schema version 20110511000000
```

```
About your Redmine plugins
Redmine Ultraviolet Syntax highlighting plugin 0.0.3
Redmine DocPu plugin 0.0.2
Redmine Hudson plugin 1.0.7
Redmine Changeset Email Plugin 0.1.0
```

#20 - 2011-10-13 17:32 - Jean-Sébastien Pédrón

Someone here investigated a bit reposman.rb. I don't know if it can help but here's what he found.

reposman.rb defines a Project class which inherits from ActiveRecord::Base (line 183). On line 196, the call Project.find(:all, ...) raises the exception. ActiveRecord::Base fails to parse the output of "http://.../sys/projects.xml?key=...", especially the content of the element "extra-info". For instance, our projects.xml contains an entry like this:

```
<project>
  ...
  <repository>
    <extra-info type="yaml">---
branches:
  comments:
    last_scmid: 0c9ac39f8d6aa678fa2604cbe3d2254a6db9b366
  full-details:
    last_scmid: dal16c93bc0b010c673f09d2119d072ccb4ccaf5
  master:
    last_scmid: bd639029d0f193a92cee663b5efca4e3cb493792
db_consistent:
  ordering: 0
</extra-info>
  ...
```

```
</repository>
</project>
```

Note the branch named "full-details". If we run reposman.rb, it exits with the following error:

```
Unable to connect to http://.../sys/: wrong constant name Full-details
```

Here's the full stacktrace we have (same as Tommaso Visconti):

```
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1139:in `const_defined?'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1139:in `find_or_create_resource_for'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1040:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `new'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `new'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `new'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1041:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `each'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:1027:in `load'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:726:in `initialize'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:669:in `new'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:669:in `instantiate_record'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:665:in `instantiate_collection'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:665:in `collect!'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:665:in `instantiate_collection'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:642:in `find_every'
/var/lib/gems/1.8/gems/activerecord-2.3.11/lib/active_resource/base.rb:585:in `find'
/var/lib/redmine/extra/svn/reposman.rb:196
```

#21 - 2011-11-11 16:18 - Antonio García-Domínguez

We've also run into this problem since we upgraded to Redmine 1.2.1. reposman.rb produces the following output, and refuses to create any new SVN repositories:

```
Unable to connect to https://localhost/redmine/sys/: wrong constant name Flow-based-algo
```

Incidentally, 'flow-based-algo' is the name of a branch we have in a Git repository.

#22 - 2011-11-11 18:54 - Antonio García-Domínguez

Jean-Sébastien Pédrón wrote:

Someone here investigated a bit reposman.rb. I don't know if it can help but here's what he found.

Yes, it seems that it's because it can't properly deserialize the YAML data inside the extra-info field. This extra-info field was added in [r5762](#), so that explains why we're seeing that problem now.

Looking at [source:trunk/app/models/repository/git.rb](#), it should deserialize into a regular Ruby Hash, but it looks like Rails is trying to load its contents as ActiveRecord resources. I've added a few puts calls around the find_or_create_resource_for(key) call in active_resource/base.rb:1040 and I'm getting this output:

```
Entry: repository -> path_encodingproject_id26url/srv/git/activebpel/id29log_encodingext...
Resource: Project::Repository
Entry: extra_info -> branchesmasterlast_scmidbf2cd48792d2d623eca6ac89029d40948e87ae98add...
Resource: Project::Repository::ExtraInfo
Entry: branches -> masterlast_scmidbf2cd48792d2d623eca6ac89029d40948e87ae98add-jetty-pro...
Resource: Project::Repository::ExtraInfo::Branches
Entry: add-jetty-project -> last_scmid48e6a08d95bf07595c54c07f6e668d13029f6b76
```

I have tried to make sure Rails sees :extra_info as a Hash, changing [source:trunk/app/models/repository.rb](#) to:

```
serialize :extra_info, Hash
```

but it doesn't seem to make any difference, and it seems like it could have [issues with nil values](#). Am I missing something?

#23 - 2011-11-11 19:49 - Antonio García-Domínguez

In the end, I had to resort to a similar workaround to note 8. I edited line 1139 of `active_resource/base.rb` so it read:

```
resource_name = name.to_s.gsub(/\W+/, '_').camelize
```

Basically, this will turn any sequence of non-alphanumeric characters in the key to an underscore.

Shouldn't we report this upstream? I'm not quite sure of how to do it, though: Rails' Github repository doesn't list 2.3.x as a milestone for reporting new issues.

#24 - 2011-11-11 19:57 - Antonio García-Domínguez

Before I forget: the above workaround is required since ActiveRecord interprets the name of the branch as the name of a class.

#25 - 2011-11-27 18:32 - Jean-Philippe Lang

- Status changed from *New* to *Resolved*
- Assignee set to *Jean-Philippe Lang*
- Target version set to *1.2.3*
- Resolution set to *Fixed*

I was able to reproduce. Fixed in [r7956](#) by removing `extra_info` for XML responses as it's not needed by `reposman`.

#26 - 2011-11-29 22:08 - Jean-Philippe Lang

- Status changed from *Resolved* to *Closed*

Merged in 1.2-stable in [r7995](#).