

## Redmine - Patch #4905

### Redmine.pm: add support for Git's smart HTTP protocol

2010-02-23 13:36 - Antonio García-Domínguez

<b>Status:</b>	Closed	<b>Start date:</b>	2010-02-23
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>	SCM extra	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2.1.0		

#### Description

After much hair pulling, I found out why the default access handler in Redmine wasn't working for Git's new [smart HTTP protocol](#) .

Since it normally works with DAV, it tells apart read-only queries by their HTTP method. However, that doesn't work for Git's smart HTTP protocol, as it will use POST even for a simple clone. Instead, read-only queries must be detected using their full, unparsed URL: anything that doesn't belong to the git-receive-pack service is read-only.

This patch adds a new Apache directive to the access handler called RedmineGitSmartHttp, which enables this new mode of operation. Usage instructions are included in the patch.

I'm not sure if this is the best approach, though. Does anyone know of a better way to integrate the Git smart HTTP protocol with Redmine? I've seen plugins which integrate the SSH part in a Github-like fashion, but I can't use SSH over the firewall at \$DAYJOB.

#### Associated revisions

##### Revision 9829 - 2012-06-14 10:13 - Jean-Philippe Lang

Adds support for Git's smart HTTP protocol to Redmine.pm (#4905).

#### History

##### #1 - 2010-02-23 13:42 - Antonio García-Domínguez

Oh, and the old DAV HTTP protocol would be OK, but it has performance problems and can corrupt the repository if you have the wrong version of curl :-/.

##### #2 - 2010-02-23 22:33 - Jean-Philippe Lang

- Category set to SCM

##### #3 - 2010-02-24 17:59 - Antonio García-Domínguez

- File 0001-Redmine.pm-add-Git-smart-HTTP-support-v2.patch added

New patch which fixes a few mistakes in the POD.

##### #4 - 2010-02-24 18:01 - Antonio García-Domínguez

Antonio García-Domínguez wrote:

Oh, and the old DAV HTTP protocol would be OK, but it has performance problems and can corrupt the repository if you have the wrong version of curl :-/.

Forgot to add that smart HTTP can use hooks as well, and doesn't require a cronjob with "git update-server-info". Smart HTTP requires Git 1.6.6+ on server and client.

**#5 - 2010-02-25 10:07 - Antonio García-Domínguez**

- File 0001-Redmine.pm-add-Git-smart-HTTP-support.patch added

Third version, this time with a sample Apache configuration and some tips on where to place the repositories and how they should be named.

**#6 - 2010-03-04 11:11 - Antonio García-Domínguez**

- File 0001-Redmine.pm-add-Git-smart-HTTP-support-v4.patch added

Oops, the last patch was corrupt. Version 4 of the patch fixes this. Sorry!

**#7 - 2010-07-12 23:47 - Felix Schäfer**

Antonio, your patch looks good, though it expects the paths to your repositories to start with /git/. Could you please rework it so that the path under which the repositories reside is configurable in the apache config, possibly defaulting to /git/ as that seems to be the canonical example?

**#8 - 2010-07-13 18:31 - Felix Schäfer**

- File 0001-Redmine.pm-add-Git-smart-HTTP-support-r3840.patch added

I Updated the patch against r3840.

**#9 - 2010-07-19 21:55 - Antonio García-Domínguez**

- File 0001-Redmine.pm-add-Git-smart-HTTP-support-redmine0.9.6.patch added

Felix, there seems to be a slight typo in your patch: both lines 416 and 417 add something. I would normally expect the original line to be removed and the new line to be added.

I recently updated my patch for Redmine 0.9.6 (r3839), so it should be up to date (Redmine.pm's last change is from r3832). It's running smoothly on my installation.

As for the /git/ prefix: would another Apache directive for customizing it be OK?

**#10 - 2010-07-19 22:33 - Felix Schäfer**

Antonio García-Domínguez wrote:

*Felix, there seems to be a slight typo in your patch: both lines 416 and 417 add something. I would normally expect the original line to be removed and the new line to be added.*

Yeah, noticed that too today, was gonna correct that, but it seems you've done that already, thanks :-)

| *As for the /git/ prefix: would another Apache directive for customizing it be OK?*

Well, I was thinking about how svn doesn't need that, and in fact there already is a function `get_project_identifier` which you should be able to get the identifier from, so no need for an additional setting.

**#11 - 2010-07-19 22:47 - Antonio García-Domínguez**

- File `0001-Redmine.pm-add-Git-smart-HTTP-support-simplified.patch` added

After thinking it over, I didn't like having to specify the URL prefix two times in the Apache config. It would look like this:

```
<Location /git>
  RedmineGitSmartHttp yes
  RedmineGitURLPrefix /git
</Location>
```

It just breaks DRY :-/. Instead, I have relaxed the regexp that checks whether a request is a write operation, so it will work with any prefix. I went from this:

```
my $is_read_only = $uri !~ /\^\/git\.*V[^\^]*git\-\-receive\-\-pack$/o;
```

to this, which only checks the last path component and the query string:

```
my $is_read_only = $uri !~ /\^\/.*git\-\-receive\-\-pack$/o;
```

**#12 - 2010-07-19 22:50 - Antonio García-Domínguez**

Felix Schäfer wrote:

| *Yeah, noticed that too today, was gonna correct that, but it seems you've done that already, thanks :-)*

No problem :-).

| *Well, I was thinking about how svn doesn't need that, and in fact there already is a function `get_project_identifier` which you should be able to get the identifier from, so no need for an additional setting.*

Yeah, I saw it on the `authn` handler code. But that'd only get me the project ID, and not the path in the `<Location>` block (`/git/` here), which is what I really need. However, I have fixed the patch so it won't need this prefix (see my previous comment).

**#13 - 2010-07-19 22:55 - Felix Schäfer**

Antonio García-Domínguez wrote:

Felix Schäfer wrote:

Well, I was thinking about how svn doesn't need that, and in fact there already is a function `get_project_identifier` which you should be able to get the identifier from, so no need for an additional setting.

Yeah, I saw it on the `authn` handler code. But that'd only get me the project ID, and not the path in the `<Location>` block (`/git/` here), which is what I really need. However, I have fixed the patch so it won't need this prefix (see my previous comment).

Sorry, got that backwards, but I still don't like the regex being that lax. Anyway, from the aforementioned method, I can see you can get the location from the request object `$r->location`, why not just use that as a prefix to your regex as is done in said method?

#### #14 - 2010-07-19 23:14 - Antonio García-Domínguez

Well, duh! :-D

I spent a while on the Apache site trying to find the appropriate method and I just found it after reading your post and checking that function. [Here](#).

OK, I'll get on it :-).

#### #15 - 2010-07-19 23:55 - Antonio García-Domínguez

- File `0001-Redmine.pm-add-Git-smart-HTTP-support-use-location.patch` added

OK, one more try: this patch uses `$location` as you suggested instead of a fixed prefix. The only caveat is that the path in the `<Location>` block cannot have a trailing slash. I have modified the documentation at the beginning of the file to mention this.

#### #16 - 2010-07-20 00:03 - Felix Schäfer

Antonio García-Domínguez wrote:

The only caveat is that the path in the `<Location>` block cannot have a trailing slash. I have modified the documentation at the beginning of the file to mention this.

Again referencing the already existing commit, why not just `m{^$location/*[^/]+/[^]*git\-receive\-\pack$}o?`

#### #17 - 2010-07-20 00:04 - Felix Schäfer

Felix Schäfer wrote:

Again referencing the already existing commit

And by commit I mean function `x_X`

#### #18 - 2010-07-20 10:03 - Antonio García-Domínguez

- File `0001-Redmine.pm-add-Git-smart-HTTP-support.patch` added

Hmm, let's try and get that regexp as tight as possible. We need to watch out for these two URLs:

- `/info/refs?service=git-receive-pack`: Git performs a GET on this URL before actually trying to push, and it needs the same authentication as an actual push.
- `/git-receive-pack`: this is the service where Git will POST the changes to.

We can't do both with your regexp, I'm afraid. Here's a patch with a revised regexp that accepts these two cases and nothing else, and also allows for trailing slashes in the Location block.

**#19 - 2010-07-21 10:23 - Felix Schäfer**

If `http://myserv.er/my/location/project-identifier/info/refs?service=git-receive-pack` really is the only path that git needs to read from the repo, this should work :-). I'll try to install it on my redmine later on.

**#20 - 2010-07-22 02:11 - Antonio García-Domínguez**

Felix Schäfer wrote:

*If `http://myserv.er/my/location/project-identifier/info/refs?service=git-receive-pack` really is the only path that git needs to read from the repo, this should work :-). I'll try to install it on my redmine later on.*

And `http://myserv.er/my/location/project-identifier/git-receive-pack`, don't forget :-).

**#21 - 2010-07-22 19:19 - Felix Schäfer**

The patch works great, maybe the messages could be somewhat unified though: not being in a private project yields "fatal: Authentication failed" while being in the project and not having commit access yields "error: Cannot access URL <https://git.fachschaften.org/sandbox-git/>, return code 22 fatal: git-http-push failed".

**#22 - 2010-07-23 11:26 - Antonio García-Domínguez**

I agree with you, but I'm not a Git developer :-/. That's why I placed those instructions in the documentation of Redmine.pm. Perhaps we could add your remarks as a small troubleshooting section?

**#23 - 2010-07-23 11:32 - Felix Schäfer**

No, it's just a minor annoyance, we can dig in back later if this really becomes a problem.

**#24 - 2010-08-04 22:03 - Antonio García-Domínguez**

If the patch is OK, do you think it could be merged to trunk sometime in the near future? If possible, I'd like to stop having to juggle it around every time I update Redmine :-/.

**#25 - 2010-08-04 22:59 - Felix Schäfer**

That's Eric's or JPLang's call :-)

Eric, this patch floats my boat and it looks good to me, there's even some [\[\[HowTo\\_configure\\_Redmine\\_for\\_advanced\\_git\\_integration|documentation\]\]](#) to it ;-) Anything more you need to include it?

**#26 - 2010-08-11 16:38 - Nicolas Sebrecht**

Hi,

I'm stuck by an error when trying to do anything with the last patch. I've followed the related documentation.

```
$ git clone http://my.hostname/test
Cloning into test...
fatal: http://my.hostname/test/info/refs not found: did you run git update-server-info on the server?
```

Run the command did nothing and the config.ru file looks good (checked).

I have the following version tools in the server side:

- git 1.7.2.1.44.g721e7
- redmine 1.0.0

Any idea?

**#27 - 2010-08-11 17:43 - Felix Schäfer**

Nicolas Sebrecht wrote:

| *Any idea?*

Please visit the forums (or IRC, I'm thegcat over there) for configuration help. Please also include some more information about your setup, thanks.

**#28 - 2010-08-12 10:12 - Nicolas Sebrecht**

Felix Schäfer wrote:

| *Please visit the forums (or IRC, I'm thegcat over there) for configuration help. Please also include some more information about your setup, thanks.*

The thread <http://www.redmine.org/boards/2/topics/15962> did help me. I was missing the trailing "/public" for the DocumentRoot field in my apache virtualhost.

Thanks.

**#29 - 2010-10-27 12:05 - Enrique Garcia**

Hi,

I'm interested on this patch. However I'm confused. There 9 patch files.

Which one should I use?

Can anyone please remove the deprecated patches, or mark them somehow?

**#30 - 2010-11-01 07:12 - Antonio García-Domínguez**

Hi Enrique,

I would love to do something about the old patches, but I can't :-(. In any case, you should use the very last one (the 2010-07-20 10:03 one).

**#31 - 2011-01-04 05:52 - Lee Fay**

- File *LeeF-Redmine.pm.patch* added

Hello, I've made a very minor addition to the patch, it allows the repositories to have ".git" at the end, like when served from gitosis. I haven't tested it extensively, but it's worked for everything I've done so far. This patch should also not break compatibility with SVN authentication.

Please let me know if there is something wrong with I have done.

**#32 - 2011-01-29 08:35 - michael fox**

I finally got this working, but here's the problem:

Redmine allows you to name your git repo anything, but Redmine.pm script assumes that the repo name is the same as the name of the project identifier.

So, I was trying to make it work with a project with identifier "testr" and a repo called "/repo/testrepo.git"

And I kept getting 401, and I couldn't figure out why.

Finally I figured out I needed to create a symlink /repo/testr to /repo/testrepo.git and suddenly it worked.

So, there's you're workaround if you're experiencing this problem.

I don't know if I can do a patch on my own, but here's a start:

```
sub get_project_identifier {
    my $r = shift;

    my $location = $r->location;
    $location =~ /http://[^\s]*(.*)/refs/;
    my $repo = $1;

    #not sure how to do SQL in perl, but something like:
    #select project_id from repositories where url='$repo';

    return $project_id;
}
```

```
select project_id from repositories where url='/repo/testrepo.git';
```

**#33 - 2011-01-29 08:54 - Felix Schäfer**

michael fox wrote:

```
| [...] Redmine.pm script assumes that the repo name is the same as the name of the project identifier.
```

The svn version does, and so does the patch.

**#34 - 2011-01-29 12:01 - michael fox**

Ok. Maybe you'll like this one better.

I was having a problem where a user that was not authorized to commit was able to commit anyway.

I traced it back to this regular expression:

```
my $is_read_only = $uri !~ m{^\$location/"[^"]+/(info/refs\?service=)?git\-\receive\-\pack$}o;
```

The problem occurs when there is an extra slash like:

```
"GET /repo/testr//info/refs?service=git-receive-pack HTTP/1.1"
```

Then, somehow according to the logic of the script, it is okay for that person to commit.

This slight change fixes the problem (+ after the / before info):

```
my $is_read_only = $uri !~ m{^\$location/"[^"]+/(info/refs\?service=)?git\-\receive\-\pack$}o;
```

**#35 - 2011-02-04 01:38 - Radek Antoniuk**

- Assignee set to Jean-Philippe Lang

As this is waiting for input from JP I am assigning it to you to get the attention :-)

This patch looks good and I think it should be merged into the current branch. Jean-Philippe, any thoughts on that?

**#36 - 2011-02-24 22:26 - Christian Gutierrez**

Hi, i think that patch works great with simple projects, but it doesn't work with nested projects, if i have a principal project called project1, and create a



second project called project2 as a subproject of project1, then, in my directory's repository i use project1/project2 as a git repository but, when i do "git push origin master" from a remote host i get:

```
error: Cannot access URL http://user@server.example.com/git/project1/project2/, return code 22
fatal: git-http-push failed
```

Maybe i'm doing something wrong?

#### #37 - 2011-02-25 09:28 - Felix Schäfer

Christian Gutierrez wrote:

| *Maybe i'm doing something wrong?*

1. you shouldn't checkout a repository into another repository,
2. the URLs must all be protocol://host/location/identifier, where identifier is the identifier of the project.

In your case, I think the authentication bit will only work if you put the repository for project2 to <http://user@server.example.com/git/project2/>.

#### #38 - 2011-02-25 16:06 - Christian Gutierrez

Felix, thanks for your reply, it works with symbolic links.

#### #39 - 2011-03-24 07:29 - Toshi MARUYAMA

- Category changed from SCM to SCM extra
- Assignee deleted (Jean-Philippe Lang)

#### #40 - 2011-03-28 13:22 - Julien Mellerin

Hello,

I am trying to apply this patch to the current latest release of Redmine (1.1.2). But the only result I get is the following message :

Only garbage was found in the patch input.

So I guess the patch is incompatible with this release. Is there a way to fix this ?

Thanks,

#### #41 - 2011-03-30 14:43 - Dieter Blomme

I get the issue that several Hunk (1 through 8) failed

#### #42 - 2011-03-31 12:39 - Antonio García-Domínguez

- File 0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix.patch added

Dieter, Julien: that's odd, because my latest patch applied cleanly (with "git apply (patch)") on top of the 1.1.2 tag of the Git mirror of the Redmine code repository. LeeF's also worked, except you had to be inside extra and it added trailing whitespace to line 138.

In any case, here's a new patch. This patch applies cleanly with "git apply" on top of the 1.1.2 tag in the Redmine Git clone. The patch is based on LeeF's patch, but removes some trailing whitespace in line 138 and adds Michael Fox's security fix in message #34. Please try it out :-).

**#43 - 2011-04-01 14:12 - Julien Mellerin**

Thanks Antonio. I was using "patch -p1 < the\_patch\_file". Using "git apply" worked for me.

**#44 - 2011-04-02 16:20 - Fabrice Estiévenart**

Hello,

I followed the instructions for smart git http integration and applied 0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix.patch on my redmine 1.0.1. When I try to access git.mydomain.com, I get the following message in my Apache error log:

Use of uninitialized value \$identifier in substitution (s///) at /usr/lib/perl5/Apache/Redmine.pm line 486

I suppose this variable is not nicely initialized in the preceding instruction...

Could you please help me ? Thank you

Fabrice

**#45 - 2011-04-03 23:56 - Antonio García-Domínguez**

Are you simply trying to visit <http://git.mydomain.com> or <http://git.mydomain.com/>? That won't work: the auth code expects URLs to start with something like <http://git.mydomain.com/myproject>, where myproject is your project's ID. By the way, you can't really browse through the URLs for smart HTTP access for Git with a regular browser, like SVN: you need to use a proper Git client.

According to the patch, the code around line 486 is this:

```
my $location = $r->location;
my ($identifier) = $r->uri =~ m{$location/*([^\./]+)};
$identifier =~ s/\./git/;
$identifier;
```

If you get that error in line 486 (`$identifier =~ s/\./git/;`), that's because `$identifier` wasn't initialized in the previous line. That can only be if the URI does not match the `$location/*([^\./]+)` regexp, and I can only think of two URLs which do not match that regexp: <http://git.mydomain.com> and <http://git.mydomain.com/>.

**#46 - 2011-04-07 14:20 - Marcel Eeken**

Hey,

I had this working for a long time. But recently i changed something and don't know exactly what i did wrong, so i tried a clean installation of redmine to test but can't seem to get it to work anymore. I followed this guide [\[\[HowTo\\_configure\\_Redmine\\_for\\_advanced\\_git\\_integration\]\]](#) and only implemented the basic access so no authentication is required but i keep getting 401 errors.

This is what i get on the client side:

```
$ git ls-remote http://git.website.com/duneinterface
```

```
error: The requested URL returned error: 401 while accessing http://git.website.com/duneinterface/info/refs
```

```
fatal: HTTP request failed
```

In this is what i see in the logs

```
ip - - [07/Apr/2011:14:17:34 +0200] "GET /duneinterface/info/refs?service=git-upload-pack HTTP/1.1" 401 283 "-"  
"git/1.7.0.2.msysgit.0.14.g956d7"
```

```
ip - - [07/Apr/2011:14:17:35 +0200] "GET /duneinterface/info/refs HTTP/1.1" 401 283 "-" "git/1.7.0.2.msysgit.0.14.g956d7"
```

#### **#47 - 2011-04-09 17:19 - Antonio García-Domínguez**

Those URLs are read-only, according to the patch. They should only produce 401 errors if the project is private and you haven't set up the appropriate files with your credentials (see the instructions at the beginning of the patch), or if you don't have read access to the project.

#### **#48 - 2011-05-12 12:19 - Be Fio**

Love the patch! Would really like to see this be a standard feature!!!

#### **#49 - 2011-05-13 00:16 - Be Fio**

- *File 0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix-redminetrunk.patch added*

Updated the patch for Redmine trunk

#### **#50 - 2011-06-01 10:12 - Loïs PUIG**

Hi, love this patch and works perfectly if accessing git repositories from <http://git.mydomain.com/myrepo.git>, but what about if i want my repos to be accessible from a subdir like <http://git.mydomain.com/git/myrepo.git> ?

Can anyone explain how to modify Redmine.pm to do so please ?

Thanks a lot ... :)

#### **#51 - 2011-06-01 10:17 - Felix Schäfer**

Loïs PUIG wrote:

```
| Can anyone explain how to modify Redmine.pm to do so please ?  
| Thanks a lot ... :)
```

You don't need to modify Redmine.pm for it, change your apache config to say <Location /git/> instead of <Location />.

Thanks for your help :)

| You don't need to modify Redmine.pm for it, change your apache config to say <Location /git/> instead of <Location />.

Well i did, and i'm allowed to access my repos with this config

```
SetEnv GIT_PROJECT_ROOT /srv/gitosis/repositories
SetEnv GIT_HTTP_EXPORT_ALL
AliasMatch ^/git/(.*objects/[0-9a-f]{2}/[0-9a-f]{38})$ /srv/gitosis/repositories/$1
AliasMatch ^/git/(.*objects/pack/pack-[0-9a-f]{40}.(pack|idx))$ /srv/gitosis/repositories/$1
ScriptAlias /git/ /usr/lib/git-core/git-http-backend/
<Location /git>
  Options All
  AllowOverride All
  Order allow,deny
  Allow from all
</location>
```

but not with this one

```
PerlLoadModule Apache::Redmine
SetEnv GIT_PROJECT_ROOT /srv/gitosis/repositories
SetEnv GIT_HTTP_EXPORT_ALL
AliasMatch ^/git/(.*objects/[0-9a-f]{2}/[0-9a-f]{38})$ /srv/gitosis/repositories/$1
AliasMatch ^/git/(.*objects/pack/pack-[0-9a-f]{40}.(pack|idx))$ /srv/gitosis/repositories/$1
ScriptAlias /git/ /usr/lib/git-core/git-http-backend/
<Location /git>
  Options All
  AllowOverride All
  AuthType Basic
  AuthName "Redmine git repositories"
  Require valid-user
  PerlAccessHandler Apache::Authn::Redmine::access_handler
  PerlAuthenHandler Apache::Authn::Redmine::authen_handler
  RedmineDSN "DBI:mysql:database=redmine;host=localhost"
  RedmineDbUser "redmine"
  RedmineDbPass "mypassword"
  RedmineGitSmartHttp yes
</location>
```

ig get

Use of uninitialized value \$identifier in substitution (s///) at /usr/lib/perl5/Apache/Redmine.pm line 486.\n

in the log file

Any ideas ?

**#53 - 2011-06-01 10:26 - Loïs PUIG**

Antonio García-Domínguez wrote:

| the auth code expects URLs to start with something like <http://git.mydomain.com/myproject>, where myproject is your project's ID.

**#54 - 2011-06-01 10:40 - Felix Schäfer**

Loïs PUIG wrote:

| Any ideas ?

Redmine.pm expects the path part of the URL to be \$LOCATION/\$PROJECT\_NAME, so your stuff should work if you have a project with the identifier myrepo. If you have and it doesn't work (notice: being admin doesn't give you special rights, you must explicitly be a member of the project and have repo read rights), try <Location /git/> instead of <Location /git>.

**#55 - 2011-06-01 11:20 - Loïs PUIG**

| try <Location /git/> instead of <Location /git>.

It wasn't that but i finally got it !! I needed to add the following line to the location directive

```
Order allow,deny
Allow from all
```

and now it works perfectly... Here is the config..

```
PerlLoadModule Apache::Redmine
SetEnv GIT_PROJECT_ROOT /srv/gitoris/repositories
SetEnv GIT_HTTP_EXPORT_ALL
AliasMatch ^/git/(.*objects/[0-9a-f]{2}/[0-9a-f]{38})$ /srv/gitoris/repositories/$1
AliasMatch ^/git/(.*objects/pack/pack-[0-9a-f]{40}.*(pack|idx))$ /srv/gitoris/repositories/$1
ScriptAlias /git/ /usr/lib/git-core/git-http-backend/
<Location /git>
  Options None
  AllowOverride None
  Order allow,deny
  Allow from all
  AuthType Basic
  AuthName "Redmine git repositories"
  Require valid-user
  PerlAccessHandler Apache::Authn::Redmine::access_handler
  PerlAuthenHandler Apache::Authn::Redmine::authen_handler
  RedmineDSN "DBI:mysql:database=redmine;host=localhost"
  RedmineDbUser "redmine"
  RedmineDbPass "mypassword"
```

```
RedmineGitSmartHttp yes
</location>
```

Anyway a big thanks for your bloody quick support, i really appreciated feeling being supported.. Long life to Redmine, a damn nice App!!

#### #56 - 2011-07-01 15:01 - Thimios Dimopoulos

Hi,

I am running Redmine version: Redmine 1.1.3.devel.5759 from redmine trunk and git version 1.7.4.1 on ubuntu natty.  
I am not using gitosis or gitolite, but creating the repositories with reposman and serving them with git-http-backend as described in [http://www.redmine.org/projects/redmine/wiki/HowTo\\_configure\\_Redmine\\_for\\_advanced\\_git\\_integration](http://www.redmine.org/projects/redmine/wiki/HowTo_configure_Redmine_for_advanced_git_integration).

I applied 0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix-redminetrunk.patch on Redmine.pm.

I have the following Virtualhost configuration, inspired by the one posted by Loïs PUIG:

```
<VirtualHost *:80>
  ServerName git.thimios-host.thimios.com

  ErrorLog /var/log/githosting/error.log
  CustomLog /var/log/githosting/access.log combined

  PerlLoadModule Apache::Redmine
  SetEnv GIT_PROJECT_ROOT /home/thimios/Work/repositories/git
  SetEnv GIT_HTTP_EXPORT_ALL
  AliasMatch ^/git/(.*)objects/[0-9a-f]{2}/[0-9a-f]{38})$ /home/thimios/Work/repositories/git/$1
  AliasMatch ^/git/(.*)objects/pack/pack-[0-9a-f]{40}.(pack|idx)$ /home/thimios/Work/repositories/git/$1
  ScriptAlias /git/ /usr/lib/git-core/git-http-backend/
  <Location /git>
    Options None
    AllowOverride None
    Order allow,deny
    Allow from all
    AuthType Basic
    AuthName "Redmine git repositories"
    Require valid-user
    PerlAccessHandler Apache::Authn::Redmine::access_handler
    PerlAuthenHandler Apache::Authn::Redmine::authn_handler
    RedmineDSN "DBI:mysql:database=redmine;host=localhost"
    RedmineDbUser "redmine"
    RedmineDbPass "r3dm1n3"
    RedmineGitSmartHttp yes
  </location>
</VirtualHost>
```

But, when I try to clone a repository, I get the following error:

```
thimios@thimios-host:/tmp$ git clone http://git.thimios-host.thimios.com/test1
Cloning into test1...
error: The requested URL returned error: 501 while accessing http://git.thimios-host.thimios.com/test1/info/refs

fatal: HTTP request failed
```

There is a warning when restarting apache:

```
[warn] Useless use of AllowOverride in line 17 of /etc/apache2/sites-enabled/githostinghttpbackend
```

There is nothing in the apache logs. It shouldn't be a permissions problem, since www-data user has read-write access to the complete directory tree of the repository. Any ideas about what the problem could be or where to look for more debugging info?

thanks a lot

#### **#57 - 2011-07-11 02:03 - Antonio García-Domínguez**

Sorry for the late reply :-(. Have you tried changing the LogLevel to something a bit more verbose, like "info"?

#### **#58 - 2011-10-30 16:56 - Antonio García-Domínguez**

Just a quick heads up: what are the chances of integrating this patch into trunk in the near future? I've been applying it since Redmine 0.8.x, and it's worked pretty well for me. It also seems to be used by quite a few people, judging from the comments here.

#### **#59 - 2011-11-22 10:33 - Markus Schlichting**

Hi,  
thanks a lot for this, I highly appreciate it :-)  
Just did an test installation with Redmine on Ubuntu 11.10 Server and this git integration is great :)

Two Questions left:

Has someone gone a step further and automated the initialization of the git repository on creation of a new project in redmine? And wiring the repository path to the new project? That would be just perfect :)

I'm planning to use this setup with SSL . I hope it would be just activating HTTPS/SSL in Apache. Would you expect more difficulties?

Would love to see this in the main release :)  
Thanks a lot for your work!

#### **#60 - 2011-11-22 14:09 - Antonio García-Domínguez**

Markus Schlichting wrote:

```
| thanks a lot for this, I highly appreciate it :-)  
| Just did an test installation with Redmine on Ubuntu 11.10 Server and this git integration is great :)
```

I'm glad you like it :-).

*Two Questions left:*

*Has someone gone a step further and automated the initialization of the git repository on creation of a new project in redmine? And wiring the repository path to the new project? That would be just perfect :)*

I think you can automate that, using reposman.rb with the proper options. Look at [\[\[HowTo Automate repository creation\]\]](#) for hints. There are a few undocumented options for reposman.rb that have to do with Git, I think. The only limitation is that you cannot generate both SVN and Git repositories automatically: you have to pick between SVN or Git.

*I'm planning to use this setup with SSL . I hope it would be just activating HTTPS/SSL in Apache. Would you expect more difficulties?*

Not really, but remember to disable weak ciphers and SSL 2.0. For instance, I use this in my Apache virtual host:

```
SSLCipherSuite HIGH:MEDIUM
```

```
SSLProtocol all -SSLv2
```

Make sure your `~/netrc` is only readable by your own user account and nobody else. Oh, and if you use a self-signed certificate or your CA is not in `/etc/ssl/certs` (or wherever your OpenSSL CA certificate store is), you'll probably have to tell Git not to verify the chain of trust of the certificate using something like `git config --global http.sslVerify no`.

#### #61 - 2011-11-22 14:17 - Felix Schäfer

Markus Schlichting wrote:

*Two Questions left:*

*Has someone gone a step further and automated the initialization of the git repository on creation of a new project in redmine? And wiring the repository path to the new project? That would be just perfect :)*

As Antonio said, you can use reposman, or the [redmine scm plugin](#)

*I'm planning to use this setup with SSL . I hope it would be just activating HTTPS/SSL in Apache. Would you expect more difficulties?*

Except the "sslVerify no" part (I wouldn't set this globally...) for self-signed certificates, it should all work well.

#### #62 - 2011-12-21 16:34 - Herve Leroux

Hi,

The last version of the patch :

```
0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix-redminetrunk.patch
```

doesn't work on the 1.3.0 version of Redmine :

```
patch < ~/0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix-redminetrunk.patch
```



patching file Redmine.pm

Hunk #2 succeeded at 219 with fuzz 1.

Hunk #3 succeeded at 261 (offset 1 line).

Hunk #5 succeeded at 313 (offset 1 line).

Hunk #6 FAILED at 431.

Hunk #7 FAILED at 450.

Hunk #8 succeeded at 509 with fuzz 1 (offset 25 lines).

2 out of 8 hunks FAILED -- saving rejects to file Redmine.pm.rej

**expected :**

```
-          if ($hashed_password eq $salted_password && ((defined $read_only_methods{$method} && $permissions =~ /:browse_repository/) ||  
$permissions =~ /:commit_access/)) {
```

**found :**

```
          if ($hashed_password eq $salted_password && (($access_mode eq "R" && $permissions =~ /:browse_repository/) ||  
$permissions =~ /:commit_access/)) {
```

**for information :** line 441

```
my $access_mode = request_is_read_only($r) ? "R" : "W";
```

**I would suggest to update this line to :**

```
my $access_mode = defined $read_only_methods{$r->method} ? "R" : "W";
```

Could anyone confirm or update the patch ?

Best,

Hervé Leroux

**#63 - 2011-12-21 16:40 - Herve Leroux**

my mistake, you should have read the following :

**for information :** line 441

```
my $access_mode = defined $read_only_methods{$r->method} ? "R" : "W";
```

**I would suggest to update this line to :**

```
my $access_mode = $request_is_read_only($r) ? "R" : "W";
```

**#64 - 2011-12-22 16:14 - Antonio García-Domínguez**

- File 0001-Redmine.pm-update-patch-4905-to-Redmine-1.3.0.patch added

Herve Leroux wrote:

*my mistake, you should have read the following :*

**for information :** line 441

```
my $access_mode = defined $read_only_methods{$r->method} ? "R" : "W";
```

**I would suggest to update this line to :**

```
my $access_mode = $request_is_read_only($r) ? "R" : "W";
```

Thanks for the information! I have updated the patch according to your instructions. It looks good, but I don't have a Redmine 1.3.0 installation around here to test it on. Could you try it, please?

**#65 - 2011-12-23 19:02 - Miloš Kozák**

- File log added

Hello,

First of all Thank you for you work. I am running Redmine 1.3 and your recent 1.3 patch but I am getting an error line:

```
[error] [client PUBLIC_IP] Undefined subroutine &Apache::Authn::Redmine::request_is_ready_only called at /usr/lib/perl5/Apache/Redmine.pm line 441.\n
```

Which affects even my SVN repositories.. I have Debian 6.0 and all software is from apt or gem. Anyone has an idea how to fix this situation? If any one wanted more informations drop me a line..

I offer a benefit for getting this bug down.. :)

Miloš

**#66 - 2011-12-28 12:57 - Antonio García-Domínguez**

- File *0001-Redmine.pm-update-patch-4905-to-Redmine-1.3.0-fixed.patch* added

Hi Milos,

Sorry about that! There was a typo in the original patch. Could you try this one?

Antonio

**#67 - 2011-12-28 15:56 - Miloš Kozák**

Thanks. It works.

Funny things is I went through the code and mislooked this type even though I remember I spot on that!

Miloš

**#68 - 2011-12-29 12:10 - der kaan**

Hi,

just installed the latest patch and started a few tests with it. Now a registered user has access to all git repositories (just needs to know the repo-name).

I played around with Redmine + Git + this patch a few weeks before and if I remember correct, then users needed to be assigned to a project + has to have a least a developer role.

Is this correct or did this change?

Cheers,  
derkaan

**#69 - 2011-12-29 20:24 - Antonio García-Domínguez**

der kaan wrote:

*just installed the latest patch and started a few tests with it. Now a registered user has access to all git repositories (just needs to know the repo-name).  
I played around with Redmine + Git + this patch a few weeks before and if I remember correct, then users needed to be assigned to a project + has to have a least a developer role.  
Is this correct or did this change?*

It depends on whether it's a public project or not. Basically, we're reusing the same logic Redmine uses for SVN repositories, but instead of looking at the HTTP method, we look at the URL to be served by the Git smart-http handler. To sum it up:

- Public projects: anyone can fetch, but only members with write access can push.
- Private projects: only members with read access can fetch, and only members with write access can push.

Do you mean that any registered user can push without having write access, and that any registered user can fetch from a private project without having read access? In that case, it'd be a regression. Could you try the same with SVN repositories?

If it happens with SVN repos as well, that'd be a regression in the original Redmine.pm, and you'd need to report it as a separate bug.

If it only happens with Git repositories, then maybe something changed in the URLs served by Git's smart-http protocol. Could you please indicate which versions of Git are you using at the client and server sides?

**#70 - 2011-12-30 08:54 - der kaan**

Thanks for the perfect info + Setting the project to private solved my issue.

**#71 - 2012-04-17 04:06 - Anonymous**

I don't think the latest patch is working for Redmine v1.4.0 for multiple repos per project. But even the SVN itself is not working. I've asked about it at <http://www.redmine.org/boards/2/topics/30043>.

p/s: The patch is also throwing some error due to the latest changes for Redmine.pm ( <https://github.com/edavis10/redmine/commit/f071b39d268a52aca556782aadadef7856158d31#extra/svn/Redmine.pm>)

**#72 - 2012-04-17 10:23 - Antonio García-Domínguez**

aurorius woot wrote:

*I don't think the latest patch is working for Redmine v1.4.0 for multiple repos per project. But even the SVN itself is not working. I've asked about it at <http://www.redmine.org/boards/2/topics/30043>.  
  
p/s: The patch is also throwing some error due to the latest changes for Redmine.pm (*

<https://github.com/edavis10/redmine/commit/f071b39d268a52aca556782aadadef7856158d31#extra/svn/Redmine.pm>

Have you seen this paragraph on your second link?

A projet repository must be named with the projet identifier. In case of multiple repositories for the same project, use the project identifier and the repository identifier separated with a dot:

```
/var/svn/foo  
/var/svn/foo.otherrepo
```

Seems like using sample.svn1 and sample.svn2 instead of sample-svn1 and sample-svn2 should work.

I'll try to update the patch in a bit :-).

#### #73 - 2012-04-17 10:50 - Anonymous

Oh my, I didn't read about it properly, I'm too focus on the changes at the 410th line. It's actually working right now. Thanks a lot for the fast reply.

#### #74 - 2012-04-17 11:40 - Antonio García-Domínguez

- File *Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch* added

In any case, here is an updated patch :-). If you could try it out on a fresh Redmine install, it'd be great. I don't have any Redmine 1.4.0 installations over here.

#### #75 - 2012-04-17 12:10 - Anonymous

Antonio García-Domínguez wrote:

```
| In any case, here is an updated patch :-). If you could try it out on a fresh Redmine install, it'd be great. I don't have any Redmine 1.4.0 installations  
| over here.
```

That's fast, lol. BTW, I don't a fresh Redmine installation at the moment, sorry about that. But the good news is that the patch does work for my current Redmine v1.4.0. Things that I've tested:

1. git clone <http://git.server/myrepo.git>
2. git pull and push are working correctly
3. git clone <http://username@git.server/myrepo.git> also works
4. svn checkout and commit is also working
5. also works for a project with one svn and one git repo under the project
6. all authentications come from the Redmine itself.

This is my httpd-vhosts.conf, maybe it can help someone in the future:

```
<VirtualHost *:80>  
  ServerName git.myserver
```

```
DocumentRoot /opt/git
```

```
SetEnv GIT_PROJECT_ROOT /opt/git
```

```
SetEnv GIT_HTTP_EXPORT_ALL
```

```
SetEnv REMOTE_USER=$REDIRECT_REMOTE_USER
```

```
ScriptAlias /usr/libexec/git-core/git-http-backend/
```

```
AliasMatch ^(/.*objects/[0-9a-f]{2}/[0-9a-f]{38})$ /opt/git/$1
```

```
AliasMatch ^(/.*objects/pack/pack-[0-9a-f]{40}\.(pack|idx))$ /opt/git/$1
```

```
PerlLoadModule Apache::Redmine
```

```
ScriptAliasMatch \
```

```
"(?:x)^/(.*(HEAD | \
```

```
info/refs | \
```

```
objects/(info/[^/]+ | \
```

```
[0-9a-f]{2}/[0-9a-f]{38} | \
```

```
pack/pack-[0-9a-f]{40}\.(pack|idx)) | \
```

```
git-(upload|receive)-pack))$" \
```

```
/usr/libexec/git-core/git-http-backend/$1
```

```
<Directory /usr/libexec/git-core/>
```

```
Options +ExecCGI
```

```
Allow From All
```

```
</Directory>
```

```
<Location "/">
```

```
AuthType Basic
```

```
AuthName "Redmine Git repositories"
```

```
Require valid-user
```

```
PerlAccessHandler Apache::Authn::Redmine::access_handler
```

```
PerlAuthenHandler Apache::Authn::Redmine::authen_handler
```

```
RedmineDSN "DBI:mysql:database=redmine;host=localhost"
```

```
RedmineDbUser "redmine"
```

```
#RedmineDbPass "password"
```

```
RedmineGitSmartHttp yes
```

```
</Location>
```

```
</VirtualHost>
```

I'm planning to write a full tutorial for this implementation (when I have the time). Anyway, thanks a lot for the fast reply (again) XD

**#76 - 2012-04-25 19:26 - Edwin Mckain**

- Assignee set to Antonio García-Domínguez

Hey everyone!

I'm still a newbie with Redmine, and I want to patch my Redmine.pm file, I'm using Redmine 1.4.1.

I already downloaded the last path (Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch) I put it into my /redmine folder (where the test, extra folders are).

I'm trying to patch it using the following command:

```
patch -p1 <Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch
```

*but it is not working these are the messages that I receive:*

```
patching file extra/svn/Redmine.pm
Hunk #1 FAILED at 102.
Hunk #2 FAILED at 151.
Hunk #3 FAILED at 188.
Hunk #4 FAILED at 204.
Hunk #5 FAILED at 212.
Hunk #6 FAILED at 338.
6 out of 6 hunks FAILED -- saving rejects to file extra/svn/Redmine.pm.rej
```

What am I doing wrong?

Thanks in advance!

#### **#77 - 2012-04-25 19:37 - Edwin Mckain**

Edwin Mckain wrote:

*Hey everyone!*

*I'm still a newbie with Redmine, and I want to patch my Redmine.pm file, I'm using Redmine 1.4.1.*

*I already downloaded the last path (Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch) I put it into my /redmine folder (where the test, extra folders are).*

*I'm trying to patch it using the following command:*

```
patch -p1 <Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch
```

*but it is not working these are the messages that I receive:*

```
patching file extra/svn/Redmine.pm
Hunk #1 FAILED at 102.
Hunk #2 FAILED at 151.
Hunk #3 FAILED at 188.
Hunk #4 FAILED at 204.
Hunk #5 FAILED at 212.
Hunk #6 FAILED at 338.
6 out of 6 hunks FAILED -- saving rejects to file extra/svn/Redmine.pm.rej
```

*What am I doing wrong?*

*Thanks in advance!*

BTW I'm following this tutorial in order to automated Git with Redmine on CentOS 6.2, here is the link:

<http://www.dreu.info/blog/install-redmine-with-automated-git-on-centos-redhat/>

**#78 - 2012-04-27 18:27 - Takashi Okamoto**

- File *Redmine.pm-update-patch-4905-to-Redmine-1.4.1-support-multiscm.patch* added

I added support the multi-repositories.

**#79 - 2012-04-28 00:30 - Takashi Okamoto**

- File *Redmine.pm-update-patch-4905-to-Redmine-1.4.1-support-multiscm-2.patch* added

I fixed the bug by a name including underscore.

My patch is based on *Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch*.

**#80 - 2012-04-28 03:40 - Toshi MARUYAMA**

- File *trunk-r9557-strip-dot-git.diff* added

Redmine trunk r9557 supports multiple scms.

I don't know why note-79 patch uses SQL "like".

DOT is confused with bare repository ".git".

This is a patch to strip ".git".

**#81 - 2012-04-28 05:15 - Takashi Okamoto**

My patch is based on *Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch*.

At least, it doesn't work with git sub repositories.

This issues is discussed long time. I wonder why you don't apply git-http-backend feature. I always confused git-http-backend when every upgrade. Maybe all of the users who use git-http-backend are same.

**#82 - 2012-04-28 10:16 - Toshi MARUYAMA**

Takashi Okamoto wrote:

| *At least, it doesn't work with git sub repositories.*

Did you read note-72 ?

| *This issues is discussed long time. I wonder why you don't apply  
git-http-backend feature. I always confused git-http-backend when  
every upgrade. Maybe all of the users who use git-http-backend are same.*

Because I don't use git mainly.  
And there is no test of Redmine.pm.  
source:trunk/test

ChiliProject imported this issue patch.  
<https://www.chiliproject.org/issues/245>  
But, there is a few feedback to ChiliProject.

If many uses want to import this patch, it maybe to able to import it.  
But I don't know that JPL wants it.

#### #83 - 2012-04-29 01:22 - Anonymous

How do you define many? Git is gaining significant users over the past few years especially with the pricy Github. I'd really love (maybe others too), to see this patch to be made official without having to reply to this thread everytime a new version is released. But of course, I'm not good enough to develop it, if there's anything a normal dev can do about ths feature, just post it.

#### #84 - 2012-04-29 02:19 - Toshi MARUYAMA

aurorius woot wrote:

| *How do you define many?*

#61 had many feedback and many watchers.  
This issue is lesser than #61.

#### #85 - 2012-05-01 13:22 - Antonio García-Domínguez

Toshi MARUYAMA wrote:

| *Redmine trunk r9557 supports multiple scms.  
I don't know why note-79 patch uses SQL "like".  
DOT is confused with bare repository ".git".  
This is a patch to strip ".git".*

I had assumed that the [regexp in line 411](#) already did that:

```
my ($identifier) = $r->uri =~ m{${location}/*(^/.)+};
```

Shouldn't that implicitly strip anything after the first dot? The character class is negated, so /foo.something/bar or /foo.git/bar should be both matched to the "foo" identifier cleanly. That's why I dropped the line that stripped the ".git" suffix.

According to note 75, the patch from note 74 worked as-is (and worked on the 1.4.0 sources at the time).

Takashi Okamoto: why did you switch to using a SQL query? Wouldn't that retrieve the project's name (and not its short ID)? I'm a bit confused.

#### #86 - 2012-05-01 13:36 - Antonio García-Domínguez



Edwin Mckain wrote:

*BTW I'm following this tutorial in order to automated Git with Redmine on CentOS 6.2, here is the link:*

<http://www.dreu.info/blog/install-redmine-with-automated-git-on-centos-redhat/>

I'm sorry to hear that, but I can't seem to reproduce the issue :-/. I just applied the patch from note 74 cleanly on top of [Redmine 1.4.1](#), using  
patch -p1 < Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch

**#87 - 2012-05-06 01:27 - Anonymous**

Toshi MARUYAMA wrote:

*aurorius woot wrote:*

*How do you define many?*

*#61 had many feedback and many watchers.*

*This issue is lesser than #61.*

But there are issues such as #3831 and others with low feedbacks that has been accepted into the trunk. Maybe put this issue as a candidate for the next major release?

**#88 - 2012-05-06 11:41 - Toshi MARUYAMA**

aurorius woot wrote:

*Toshi MARUYAMA wrote:*

*aurorius woot wrote:*

*How do you define many?*

*#61 had many feedback and many watchers.*

*This issue is lesser than #61.*

*But there are issues such as #3831 and others with low feedbacks that has been accepted into the trunk. Maybe put this issue as a candidate for the next major release?*

Redmine core feature has test.

So, we can maintain if git changes behavior.

- source:tags/1.4.1/test/unit/lib/redmine/scm/adapters/git\_adapter\_test.rb
- source:tags/1.4.1/lib/redmine/scm/adapters/git\_adapter.rb#L393

PDF plugin is not maintained, but Redmine contains all sources.

source:tags/1.4.1/vendor/plugins/rfpdf

And many patches are posted to redmine.org.

If git smart http protocol changes behavior,

who can maintain without test?

**#89 - 2012-05-25 10:54 - AndzinSan Dono**

Hi,

I follow all this "tutorial". But when I am trying login server is request it again and again. Seems like bad login/pass, but I am sure that login and pass are correct.

I have redmine 1.3.3, patch for redmine.pm v1.3.0 - maybe this is error.

Can you help me?

**#90 - 2012-06-02 19:09 - Antonio García-Domínguez**

AndzinSan Dono wrote:

*I follow all this "tutorial". But when I am trying login server is request it again and again. Seems like bad login/pass, but I am sure that login and pass are correct.*

*I have redmine 1.3.3, patch for redmine.pm v1.3.0 - maybe this is error.*

*Can you help me?*

Sorry for the delay, I was off on a trip. Have you checked that you're a member of the project with the appropriate access level, and that the repository is available at /svn/short\_project\_id? To avoid leaking unwanted information, the authentication hook will not report any of these problems, but simply reject your authentication attempt.

**#91 - 2012-06-02 19:14 - AndzinSan Dono**

Antonio García-Domínguez wrote:

*Sorry for the delay, I was off on a trip. Have you checked that you're a member of the project with the appropriate access level, and that the repository is available at /svn/short\_project\_id? To avoid leaking unwanted information, the authentication hook will not report any of these problems, but simply reject your authentication attempt.*

I fix it, but now I dont remember how :D

**#92 - 2012-06-11 17:19 - Lluís Vilanova**

Toshi MARUYAMA wrote:

*Redmine core feature has test.*

*So, we can maintain if git changes behavior. - source:tags/1.4.1/test/unit/lib/redmine/scm/adapters/git\_adapter\_test.rb*

*- source:tags/1.4.1/lib/redmine/scm/adapters/git\_adapter.rb#L393*

[...]

*If git smart http protocol changes behavior,*

*who can maintain without test?*

But does Redmine.pm have tests for other SCMs? (e.g., subversion). For that you would need to actually execute the external SCM client applications to perform queries against a test server properly configured with apache, redmine and Redmine.pm. After a quick look at the project, I couldn't find such tests.

What I mean is that adding git smart-server support into Redmine.pm has the same amount of tests than the current Redmine.pm for subversion (as far as I could see). Of course, I can understand that the main developers of Redmine could feel uncomfortable by accepting a patch for a feature that none of them is using and that has no regression test.

#### #93 - 2012-06-12 21:45 - Jean-Philippe Lang

I've started writing automated tests for Redmine.pm (r9826). They run against a running Apache+mod\_perl+mod\_dav\_svn. They're not yet part of the CI server but they should be as soon as possible.

Could someone have a look at these tests and provide similar tests for git (at least one that do read operations like #test\_read\_commands and one that writes like #test\_write\_commands) so that this patch could finally get merged. No matter if you're not able to actually run them, a draft will be fine.

#### #94 - 2012-06-12 22:38 - Lluís Vilanova

- File repository\_git\_test.rb added

This should be something to begin with.

#### #95 - 2012-06-13 20:00 - Jean-Philippe Lang

I guess I have to install the git-http-backend CGI to actually run tests with the smart HTTP protocol?

#### #96 - 2012-06-13 20:51 - Lluís Vilanova

This is the snippet for the apache configuration I have for my *VirtualHost*:

```
SetEnv GIT_PROJECT_ROOT /home/code/git
SetEnv GIT_HTTP_EXPORT_ALL 1
ScriptAliasMatch \
    "(?x)^/git/(.*(HEAD | \
        info/refs | \
        objects/(info/[^\s]+ | \
            [0-9a-f]{2}/[0-9a-f]{38} | \
            pack/pack-[0-9a-f]{40}\.(pack|idx)) | \
            git-(upload|receive)-pack))$" \
    /usr/lib/git-core/git-http-backend/$1
ScriptAlias /git/ /usr/lib/cgi-bin/gitweb.cgi/
AliasMatch ^/gitweb/$ /dev/null

<Location /git>
    AuthType Basic
    AuthName "Project membership authentication"
    Require valid-user
```

```
PerlAccessHandler Apache::Authn::Redmine::access_handler
PerlAuthenHandler Apache::Authn::Redmine::authen_handler
RedmineDSN "DBI:mysql:database=redmine_default;host=127.0.0.1"
RedmineDbUser "redmine"
RedmineDbPass "..."
RedmineCacheCredsMax 50
RedmineGitSmartHttp yes
</Location>
```

The ScriptAlias line is just to divert all non-git operations to the gitweb CGI, and the previous ScriptAliasMatch diverts relevant operations to the smart server (which comes with the git package itself in Debian). I'm not sure if this setup is exactly the same as shown in the current Redmine docs.

I also have the configs for Bazaar and Mercurial (and Subversion) if you want to try.

**#97 - 2012-06-14 10:15 - Jean-Philippe Lang**

- Status changed from New to Closed
- Assignee changed from Antonio García-Domínguez to Jean-Philippe Lang
- Target version set to 2.1.0

Committed in r9829, thanks.

**#98 - 2012-06-29 09:03 - Vasily Bezruchkin**

- Status changed from Closed to Reopened
- Assignee deleted (Jean-Philippe Lang)

Greetings,

Do you have any ideas how to patch redmine 2.0.3 version? I tried to apply patch but it looks it didn't go well.

Any advice?

Thanks in advance.

**#99 - 2012-06-29 09:56 - Toshi MARUYAMA**

- Status changed from Reopened to Closed

Do not reopen with unrelated matters.

You need to cherry-pick all related revisions from trunk to 2.0-stable.

**#100 - 2012-07-16 21:53 - Sebastien B**

I also have Redmine 2.0.3 and I tried many patches for Git's smart HTTP protocol but none works.

I noticed that my Redmine.pm file is empty!

I have the following errors:

```
patching file Redmine.pm
Hunk # 1 FAILED at 93.
Hunk # 2 FAILED at 142.
Hunk # 3 FAILED at 179.
Hunk # 4 FAILED at 195.
Hunk # 5 FAILED at 203.
Hunk # 6 FAILED at 329.
Hunk # 7 FAILED at 400.
7 out of 7 hunks FAILED - saving rejects to file Redmine.pm.rej
```

What does it mean "You need to cherry-pick all related revisions from trunk to 2.0-stable."?

#### #101 - 2012-07-17 00:45 - Toshi MARUYAMA

- File 2.0-stable.diff added

Sebastien B wrote:

| *What does it mean "You need to cherry-pick all related revisions from trunk to 2.0-stable."?*

```
$ hg clone -U https://bitbucket.org/redmine/redmine
$ cd redmine
$ hg update 2.0-stable
$ hg pare
changeset: 8800:1d5a579f92e1
branch: 2.0-stable
user: jplang
date: Sun Jul 15 15:56:23 2012 +0000
summary: Merged r9984 from trunk.
$ hg log -r 660939a6e6fd
changeset: 8548:660939a6e6fd
user: jplang
date: Thu Jun 14 08:13:53 2012 +0000
summary: Adds support for Git's smart HTTP protocol to Redmine.pm (#4905).
$ hg trans 660939a6e6fd
applying 660939a6e6fd
660939a6e6fd transplanted to 0f66bfa74dcf
$ hg export -r tip > ~/Desktop/2.0-stable.diff
```

#### #102 - 2012-07-18 19:29 - Wojtek ...

which patch file is suitable for version 1.4.4? I've tried Redmine.pm-update-patch-4905-to-Redmine-1.4.1-support-multiscm-2.patch but this one doesn't seem to work (constant authentication failed)

#### #103 - 2012-09-14 08:23 - Vincent Metalhead

- Status changed from Closed to Reopened

I'm running 1.4.4 too and I've got the exact same problem.

**#104 - 2012-09-14 09:03 - Etienne Massip**

- *Status changed from Reopened to Closed*

This feature will be part of version:2.1.0.

**#105 - 2012-09-14 09:44 - Vincent Metalhead**

- *File Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2.patch added*

OK, looking forward to 2.1.0

But in the meantime allow me to add my four chars to the patch for those who are using 1.4.4 *now*. :-)

```
- $sth->execute("%/.$identifier);  
+ $sth->execute("%/.$identifier.%');
```

One of the SQL queries didn't take bare repositories into account.

---

/edit: The correct RedmineDbWhereClause is something along the lines of

```
RedmineDbWhereClause "AND roles.id IN (1,4)"
```

This is a really thoughtful and mighty feature. :-)

**#106 - 2012-09-14 13:04 - Vincent Metalhead**

- *File Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2--improved.patch added*

After further testing I found some limitations of my version of the patch.

This improved version of the patch can handle similarly named repository identifiers.  
(i.e. project and project-subproject)

**#107 - 2012-09-14 14:23 - Vincent Metalhead**

- *File Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2--improved2.patch added*

Found a bug. (Is it really a bug?)

In Line 530 the project *name* is used instead of the project *identifier*. (SELECT name FROM projects ...)  
Which means that a project's name must match the (main) repositories identifier.

This (hopefully last) patch corrects that. Sorry for the noise.

#### #108 - 2012-09-18 17:18 - Ales Zabala Alava

I have tested Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2--improved2.patch and seems to be broken sometimes with multiple repositories per project.

The apache logs show this:

```
DBD::Pg::st execute failed: ERROR: more than one row returned by a subquery used as an expression at /usr/lib/perl5/Apache2/Redmine.pm line 533.
```

```
DBD::Pg::st fetchrow_array failed: no statement executing at /usr/lib/perl5/Apache2/Redmine.pm line 537.
```

The repositories actually in my project are those:

SCM	Identifier	Main repository	Repository
Mercurial	eraikin	*	/var/local/hg/eraikin
Git	eraikingit		/var/local/git/eraikin

It works fine for projects with only one repository :-)

#### #109 - 2012-09-18 18:22 - Vincent Metalhead

Works for my configuration:

```
Git wizzan /var/lib/gitolite/repositories/wizzan.git/
Git wizzan-external-code /var/lib/gitolite/repositories/wizzan-external-code.git/
```

But you can try the following: Change line 530 of your Redmine.pm from

```
SELECT identifier FROM projects WHERE id = (SELECT project_id FROM repositories WHERE url LIKE ? OR url LIKE ? OR url LIKE ? OR url LIKE ?);
```

to

```
SELECT identifier FROM projects WHERE id IN (SELECT project_id FROM repositories WHERE url LIKE ? OR url LIKE ? OR url LIKE ? OR url LIKE ?);
```

Turn the = into an **IN**.

If that fixes your problem. I'll update the patch.

**#110 - 2012-09-23 04:33 - Ales Zabala Alava**

I have tested again and works.

It seems the patch was fine from the start, I just misunderstood and tried to access the repositories using the identifier, not the url :-/

Thanks for the fast response!

**#111 - 2013-05-06 14:42 - Peter Panther**

After updating redmine from 1.4.7 to 2.3.1 i can't access (clone) my git repos.

```
error: The requested URL returned error: 500 while accessing https://<user>@<server>/git/<projectid>/info/refs
fatal: HTTP request failed
```

Subversion checkout with the same user works without any problem.

The Apache log shows

```
[Mon May 06 14:26:27 2013] [error] [client <ip>] No Authn provider configured
[Mon May 06 14:26:27 2013] [error] [client <ip>] No Authn provider configured
```

The apache/git config meets the requirements described in the header of Redmine.pm.

Is anybody out there running a working Redmine.pm(from V2.3) with Git?  
Any ideas/recommendation?

Thanks a lot

**#112 - 2013-05-06 15:50 - Peter Panther**

Replacing DECLINED with AUTH\_REQUIRED seems to solve the problem

#11475 gave me the hint ....

**Files**

0001-Redmine.pm-add-Git-smart-HTTP-support.patch	4.02 KB	2010-02-23	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support-v2.patch	4.1 KB	2010-02-24	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support.patch	5.13 KB	2010-02-25	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support-v4.patch	5.13 KB	2010-03-04	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support-r3840.patch	4.92 KB	2010-07-13	Felix Schäfer
0001-Redmine.pm-add-Git-smart-HTTP-support-redmine0.9.6.patch	5.68 KB	2010-07-19	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support-simplified.patch	5.66 KB	2010-07-19	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support-use-location.patch	5.82 KB	2010-07-19	Antonio García-Domínguez
0001-Redmine.pm-add-Git-smart-HTTP-support.patch	6.42 KB	2010-07-20	Antonio García-Domínguez
LeeF-Redmine.pm.patch	5.96 KB	2011-01-04	Lee Fay
0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix.patch	6.57 KB	2011-03-31	Antonio García-Domínguez



0001-merged-LeeF-s-patch-with-Michael-Fox-s-security-fix-redminetrunk-2011-05-12	6.02 KB	2011-05-12	Be Fio
0001-Redmine.pm-update-patch-4905-to-Redmine-1.3.0.patch	5.35 KB	2011-12-22	Antonio García-Domínguez
log	39.3 KB	2011-12-23	Miloš Kozák
0001-Redmine.pm-update-patch-4905-to-Redmine-1.3.0-fixed.patch	5.35 KB	2011-12-28	Antonio García-Domínguez
Redmine.pm-update-patch-4905-to-Redmine-1.4.0.patch	5.25 KB	2012-04-17	Antonio García-Domínguez
Redmine.pm-update-patch-4905-to-Redmine-1.4.1-support-multiscm-2.patch	5.15 KB	2012-04-27	Takashi Okamoto
Redmine.pm-update-patch-4905-to-Redmine-1.4.1-support-multiscm-2.patch	5.58 KB	2012-04-27	Takashi Okamoto
trunk-r9557-strip-dot-git.diff	7.29 KB	2012-04-28	Toshi MARUYAMA
repository_git_test.rb	7.22 KB	2012-06-12	Lluís Vilanova
2.0-stable.diff	8.93 KB	2012-07-16	Toshi MARUYAMA
Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2.patch	5.6 KB	2012-09-14	Vincent Metalhead
Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2-improved.patch	6.1 KB	2012-09-14	Vincent Metalhead
Redmine.pm-1.4.4-based-on-1.4.1-multiscm-2-improved2.patch	6.11 KB	2012-09-14	Vincent Metalhead