Redmine - Feature #4511
Allow adding user groups as watchers for issues

2010-01-01 13:52 - Michael Ruder

Status:	Closed		**Start date:**	2010-01-01
Priority:	Normal		**Due date:**	
Assignee:	Go MAEDA		**% Done:**	0%
Category:	Issues		**Estimated time:**	0.00 hour
Target version:	4.2.0			
Resolution:	Fixed			

Description

Having the nice user group feature in Redmine 0.9, it would be very handy to be able to add whole group as observers for issues. Currently, only user accounts can be added as observers.

Related issues:

Related to Redmine - Feature # 10121: Watchers - Add Group / Role	**New**	
Related to Redmine - Feature # 13513: Personal watch note on issue	**New**	
Related to Redmine - Feature # 4244: Multiple email addresses for each user	**Closed**	**2009-11-19**
Related to Redmine - Feature # 29501: Allow addition of watcher group via bul...	**Closed**	
Related to Redmine - Patch # 33036: Add missing fixture to IssuesControllerTest	**Closed**	
Related to Redmine - Patch # 33100: Fix a test - Issue watchers are not alway...	**Closed**	
Related to Redmine - Defect # 33935: Locked users in a group receive notifica...	**Closed**	
Duplicated by Redmine - Feature # 24943: Issue watchers to have groups in add...	**Closed**	
Duplicated by Redmine - Feature # 15164: Make it possible to add group as a w...	**Closed**	

Associated revisions

Revision 19498 - 2020-02-06 09:19 - Go MAEDA

Allow adding user groups as watchers for issues (#4511).

Patch by Yuichi HARADA.

Revision 19507 - 2020-02-11 04:33 - Go MAEDA

Add a missing fixture for IssuesControllerTest#test_post_create_with_watchers (#4511).

Revision 19508 - 2020-02-11 04:48 - Go MAEDA

Reverts r19507 (#4511).

Revision 19526 - 2020-02-21 04:57 - Go MAEDA

Add a missing fixture to IssuesControllerTest (#4511, #33036).

Patch by Yuichi HARADA.

Revision 19562 - 2020-03-05 13:48 - Go MAEDA

Fix that IssuesControllerTest occasionally fails (#33100, #4511).

Patch by Vincent Robert.

Revision 19723 - 2020-04-25 09:57 - Go MAEDA

Get the list of new issue watchers using single query and limit the results to 20 (#4511).

Patch by Marius BALTEANU.

Revision 19724 - 2020-04-25 09:59 - Go MAEDA

Use Principal to get users and groups for watchers in watchers controller (#4511).

Patch by Marius BALTEANU.

Revision 19725 - 2020-04-25 10:00 - Go MAEDA

Use principals in acts_as_watchable (#4511).

Patch by Marius BALTEANU.

Revision 19726 - 2020-04-25 10:01 - Go MAEDA

Use scope assignable_watchers (#4511).

Patch by Marius BALTEANU.

Revision 19998 - 2020-09-01 16:08 - Go MAEDA

Locked users in a group receive notifications when the group is added as a watcher (#4511, #33935).

Patch by Yuichi HARADA.

History

#1 - 2010-01-02 16:08 - Felix Schäfer

There's already a FR for this at #2964, as well as some discussion regarding this.

#2 - 2010-01-02 16:14 - Michael Ruder

Not exactly, #2964 is about assigning the issue to multiple users. I read the discussion about it. Right now, there can be only one asignee of an issue and having suddenly several raises indeed some questions.

With observers, there is already the option to add multiple to one issue. My request is about being able not only to add users as observers but entire groups. We often have support issues which several employees of our customer want to follow. Adding them one by one to each issue is a bit of a

hassle. I would like to be able to just create a group and add this group as observer.

#3 - 2010-01-02 17:34 - Felix Schäfer

Michael Ruder wrote:

> *Not exactly, #2964 is about assigning the issue to multiple users.*

Oh, sorry, I misread that you wanted to assign an issue to a group, not make a group observe an issue. My bad.

#4 - 2010-01-15 18:09 - Eric Davis

- Subject changed from Allowing to add user groups as observers for issues to Allowing to add user groups as watchers for issues
- Category changed from Groups to Issues

+1 I would expect they would be added and removed as a group as opposed to adding them as a group and having to remove each member.

Example:

  - Add GroupA - (Developer1 and Developer2)
  - Remove GroupA

#5 - 2010-01-27 17:22 - Pavel Smirnov

this is is think is a really good idea, will save a lot of time

#6 - 2010-01-27 17:29 - Alain V.

I think also this a good idea, will help us a lot!
I vote for this! +1

#7 - 2010-04-01 16:04 - Serge Kosse

I join and vote too.
Very necessary functional, IMHO

#8 - 2010-07-23 21:29 - Enrique Delgado

+1

#9 - 2010-07-27 13:02 - Marcelo Fernandes

+1

#10 - 2010-07-27 14:35 - Nicholas Kulikov

+1

#11 - 2010-08-16 08:46 - Novikov Igor

Would be very functional, will really reduce timecost for big projects... +1

#12 - 2010-09-23 11:02 - Milan Stastny

got this request as issue in our company. Gonna try to make it as a plugin, when done i'll post it here.

#13 - 2010-10-21 17:49 - Milan Stastny

Got this done as a plugin(It is on a Plugin Page) so you are free to check it out.

We decided to do it by Roles, they are easier to modify and can be assigned per Project per User.
It Adds new Permission to the roles page *Display in selection* so when this is checked and there are some users in this role on that project, it shows in the list.

Also added Sellect All and Unsellect all buttons.

#14 - 2011-06-25 08:55 - Stéphane Gourichon

  - +1.
  - Difference between Watcher Selection by Role and Watcher Selection by Group seems interesting. Thank you Milan.
  - Compatibility with versions above 1.0 is untested. Is there any risk in testing ? If trying features on a local copy of my Redmine 1.2 production setup seems to work, is there any risk in pushing that to actual production ?

#15 - 2012-03-01 09:14 - xianguo wei

+1

#16 - 2012-12-19 13:29 - M. K.

+1

#17 - 2012-12-24 13:12 - Arthur Zalevsky

"almost 3 years". But feature is really worth to be done. So +1.

#18 - 2013-01-05 04:41 - HU an

Badly need this great feature for big project! +1

#19 - 2013-01-22 11:59 - Maik Lindner

+1 this feature would be really helpful!

#20 - 2013-02-05 15:27 - Fred Giusto

+1 very useful

#21 - 2013-02-14 16:36 - Davy Tielens

+1 It would really speed up our ticket creation.

#22 - 2013-02-20 07:37 - Yuu YAMASHITA

+1

#23 - 2013-02-21 09:22 - Yuu YAMASHITA

Watcher Selection by Group does not work expectedly on my installation of Redmine 2.2.

I wrote my edition of similar plugin which helps checking watchers by their group. Not yet well tested, but it's working on my Redmine 2.2.

http://www.redmine.org/plugins/watcher_groups

#24 - 2013-03-20 02:15 - Deoren Moor

+1

#25 - 2013-03-20 16:27 - K. F.

http://www.redmine.org/plugins/redmine_watcher_groups - in difference from other solutions, with this plugin notifications are sent to current group members.

#26 - 2013-03-21 15:12 - Dipan Mehta

+1. This is necessary.

#27 - 2014-01-16 00:11 - Anonymous

+1

#28 - 2014-02-08 19:37 - Eugene B

+1

When I have to add 1-2 observers its ok. When I need to add a department which is ~10-15 users and is already at one group this becomes really useful.

#29 - 2014-02-20 14:08 - Vaclav Tůma

K. F. wrote:

> http://www.redmine.org/plugins/redmine_watcher_groups - in difference from other solutions, with this plugin notifications are sent to current group members.

Hi, is this plugin availabe (or will be available) for version 2.4.x ?

#30 - 2014-03-05 07:25 - Toshi MARUYAMA
- Related to Feature #4244: Multiple email addresses for each user added

#31 - 2014-10-21 08:02 - Stephane Lapie

The above plug-in has one pitfall, it does not allow for proper "watcher" search queries : suppose I want to build an issue listing query for which tickets I am watching, from /issues/, at this stage, using this plug-in only shows issues where I (as a User) am explicitely set as a watcher, but does not take in account Groups.
I have made my own customized version of the watcher groups : https://github.com/darksoul42/redmine_watcher_groups which also :
  - works properly with Postgres, now (Removed the ` MySQL-ism from the SQL queries)
  - stores journal entries for watcher groups added/removed to ticket
  - has a Japanese locale
  - coordinates with the Redmine People plug-in from CRM to list group members

However, given it merely relies on the assumption that a Group and a User are deep down the same object, and the Principal->{User,Group} class inheritance to make things works, but basically shoves something in the watcher table that was not endorsed by Redmine via a raw SQL query, this means that for every Redmine upgrade, I have to be especially careful that this design axiom remains true. This sort of feels like a feature that should be built inside of Redmine core, and not as a plug-in.

I currently have a request from my company to implement a watcher query that takes in account watcher groups (which is of course very easy to do since this already works for tickets assigned to a group) :
```
    --- app/models/query.rb.old   2014-10-21 12:21:55.601988870 +0900
    +++ app/models/query.rb   2014-10-21 12:22:22.994264149 +0900
    @@ -546,7 +546,7 @@
        if v.delete("me")
         if User.current.logged?
          v.push(User.current.id.to_s)
    -        v += User.current.group_ids.map(&:to_s) if field == 'assigned_to_id'
    +         v += User.current.group_ids.map(&:to_s) if field == 'assigned_to_id' or field == 'watcher_id'
         else
          v.push("0")
         end
```


Basically what this change does is, get the list of watchable issues from the watchers, when the watcher "user_id" is actually all the group_ids behind that user. This would not impact normal operation, as the Redmine current model does not allow addition via API of anything besides Users to the watchers table.

Given that this code change is located within a loop used to create the SQL query for the search, it can not realistically be implemented with a plugin :

- Method override would mean playing catch-up with core code just to add a "or" condition here
- Chaining alias are only really efficient for pre or post processing, and not usable here

#32 - 2014-10-26 12:26 - Akipii Oga

+1

#33 - 2014-12-18 11:47 - Anonymous

Stephane Lapie wrote:

> *The above plug-in has one pitfall, it does not allow for proper "watcher" search queries : suppose I want to build an issue listing query for which tickets I am watching, from /issues/, at this stage, using this plug-in only shows issues where I (as a User) am explicitly set as a watcher, but does not take in account Groups.*
> *I have made my own customized version of the watcher groups : https://github.com/darksoul42/redmine_watcher_groups which also :   - works properly with Postgres, now (Removed the ` MySQL-ism from the SQL queries)*
> > *- stores journal entries for watcher groups added/removed to ticket*
> > *- has a Japanese locale*
> > *- coordinates with the Redmine People plug-in from CRM to list group members*
>
> *However, given it merely relies on the assumption that a Group and a User are deep down the same object, and the Principal->{User,Group} class inheritance to make things works, but basically shoves something in the watcher table that was not endorsed by Redmine via a raw SQL query, this means that for every Redmine upgrade, I have to be especially careful that this design axiom remains true. This sort of feels like a feature that should be built inside of Redmine core, and not as a plug-in.*
>
> *I currently have a request from my company to implement a watcher query that takes in account watcher groups (which is of course very easy to do since this already works for tickets assigned to a group) :*
> *[...]*
>
> *Basically what this change does is, get the list of watchable issues from the watchers, when the watcher "user_id" is actually all the group_ids behind that user. This would not impact normal operation, as the Redmine current model does not allow addition via API of anything besides Users to the watchers table.*
> *Given that this code change is located within a loop used to create the SQL query for the search, it can not realistically be implemented with a plugin :*
> > *- Method override would mean playing catch-up with core code just to add a "or" condition here*
> > *- Chaining alias are only really efficient for pre or post processing, and not usable here*

I just installed the plugin. Why can I only assign a user group when the issue is already reported?

It would be nice if I can assign a group when I report a new issue.

#34 - 2015-05-13 11:32 - Martin G

+1

#35 - 2015-05-22 17:23 - Benjamin Baumann

If you are looking for a watcher group plugin working at issue update AND at issue creation you can take a look at Alexei Margasov fork of redmine_watcher_plugin : https://github.com/nauphone/redmine_watcher_groups

It's working in my redmine 2.6.1 install.

The group is not notified on the ticket creation though.

#36 - 2015-09-10 16:29 - Inese Ez

Benjamin Baumann wrote:

> *If you are looking for a watcher group plugin working at issue update AND at issue creation you can take a look at Alexei Margasov fork of redmine_watcher_plugin : https://github.com/nauphone/redmine_watcher_groups*
>
> *It's working in my redmine 2.6.1 install.*

as well as on 2.3.4.stable.

> *The group is not notified on the ticket creation though.*

And all groups are visible/selectable without taking into account their restriction to certain projects (on issue creation and when adding watchers).

#37 - 2015-09-17 17:07 - Enderson Maia

Maybe someone could use the work done in chiliproject to back-port to Redmine.

See: https://www.chiliproject.org/issues/802

#38 - 2015-10-27 15:32 - Petr Mlčoch

I make modifications to redmine_watcher_groups plugin to run it with Redmine 3.1.1.
See [[https://github.com/foton/redmine_watcher_groups.git]]

#39 - 2017-01-28 10:27 - Go MAEDA
- Duplicated by Feature #24943: Issue watchers to have groups in addition to users added

#40 - 2017-06-21 11:48 - Stephane Lapie

Up, and a little update.
I updated upon Petr's plugin for Redmine 3.3.3-stable.

Here is my fork, but I also filled a pull request to his repository for good measure.
https://github.com/darksoul42/redmine_watcher_groups

It seems there is one aggravating edge case, as the acts_as_watchable code uses and expects a ActiveRecord_Associations_CollectionProxy (calls to the reset() method), and the current code degraded it as an array, I tried a quick and dirty hack.

Return the array, but with a method that takes in the initial object within its context, and calls the original reset() method.
Hopefully this does whatever cleanup is expected, but still functions properly.

I am more and more convinced that such a deep change should be handled internally by Redmine, instead of going through an arms race with plugins...

#41 - 2017-07-05 14:33 - Andreas Deininger

> *Stephane Lapie wrote:*
>
> *I updated upon Petr's plugin for Redmine 3.3.3-stable.*

Stephane, thanks for your efforts.

> *Here is my fork, but I also filled a pull request to his repository for good measure.*
> [*https://github.com/darksoul42/redmine_watcher_groups*](https://github.com/darksoul42/redmine_watcher_groups)

I installed your fork on a Redmine 3.4.0 instance, and it's causing problems there. Adding a watcher group work likes expected. Also, I can add an user as watcher (core Redmine functionality). If I try to delete the user I just added, Redmine server process exits silently. Maybe you can have a look into this?

#42 - 2017-07-25 13:06 - Stephane Lapie

Andreas,

I just had a look into that, and found that the ActiveRecord_Associations_CollectionProxy object does remain as such (and not degraded into an Array) when there are no watcher groups. Therefore in that case, I should not be defining the reset() method, which would trigger an endless recursion loop and a stack overflow. I suppose this is what you have seen, but could you confirm?

The fix is committed to my github.

#43 - 2017-07-25 15:33 - Cacilda de Miranda Lira

+1

#44 - 2017-07-27 09:39 - László Bokodi

Stephane,

Thanks for this great plugin. I installed on fresh 3.4.2 instance, but autocomplete function not worked for me.
I changed this line in **watcher_groups_controller.rb** from:
    @groups = Group.active.like(params[:q]).find(:all, :limit => 100)

to:
    @groups = Group.sorted.active.like(params[:q]).limit(100)

and autocomplete function started to work.

#45 - 2017-07-27 10:49 - Stephane Lapie

Ah, I see, this must have been an older API call I had missed.

I just integrated it.

Thanks!

#46 - 2017-08-14 12:09 - Andreas Deininger

Stephane Lapie wrote:

> *The fix is committed to my github.*

Stephane, thanks for your efforts.

> *I suppose this is what you have seen, but could you confirm?*

I just installed the master of your github project on an fresh Redmine 3.4.2 instance, and yes, I can confirm that the plugin is working now. That's great!

As far as I can see, there's still a small glitch here. Here is the way to reproduce:
   1. Open an existing ticket with no watchers defined.
   2. In the right bar, click on "Add" (right beneath the heading "Watchers group") to add a watcher group to an existing project. All persons of the watcher group are instantly shown as watchers. That's perfectly fine.
   3. In the right bar, click on "Add" (right beneath the heading "Watchers") to add a single person as watcher. The person is added as watcher, but does not show up instantly in the watchers list. If I reload the page, the person appears in the list of persons watching the issue.

The good thing is that the person is actually added, so it's merely a display issue. Nevertheless, this behaviour might confuse users.

Note: The same applies if I delete an existing watcher (single person) by clicking on the trash bin symbol. The person is only removed from the watchers list after reloading the page.

#47 - 2018-04-25 15:18 - cleber souza
- File Issue page.JPG added

Stephane Lapie wrote:

> *Up, and a little update.*
> *I updated upon Petr's plugin for Redmine 3.3.3-stable.*
>
> *Here is my fork, but I also filled a pull request to his repository for good measure.*
> *https://github.com/darksoul42/redmine_watcher_groups*

> *It seems there is one aggravating edge case, as the acts_as_watchable code uses and expects a ActiveRecord_Associations_CollectionProxy (calls to the reset() method), and the current code degraded it as an array, I tried a quick and dirty hack.*
>
> *Return the array, but with a method that takes in the initial object within its context, and calls the original reset() method.*
> *Hopefully this does whatever cleanup is expected, but still functions properly.*
>
> *I am more and more convinced that such a deep change should be handled internally by Redmine, instead of going through an arms race with plugins...*

Thanks Stephane for this version of the plugin, but in the version of Redmine 3.4.4 stable. The Plugin is installed normally, but when it will access the task screen the error below is displayed.

#48 - 2018-04-25 21:41 - cleber souza

cleber souza wrote:

> *Stephane Lapie wrote:*
>
> > *Up, and a little update.*
> > *I updated upon Petr's plugin for Redmine 3.3.3-stable.*
> >
> > *Here is my fork, but I also filled a pull request to his repository for good measure.*
> > *https://github.com/darksoul42/redmine_watcher_groups*
> >
> > *It seems there is one aggravating edge case, as the acts_as_watchable code uses and expects a ActiveRecord_Associations_CollectionProxy (calls to the reset() method), and the current code degraded it as an array, I tried a quick and dirty hack.*
> >
> > *Return the array, but with a method that takes in the initial object within its context, and calls the original reset() method.*
> > *Hopefully this does whatever cleanup is expected, but still functions properly.*
> >
> > *I am more and more convinced that such a deep change should be handled internally by Redmine, instead of going through an arms race with plugins...*
>
> *Thanks Stephane for this version of the plugin, but in the version of Redmine 3.4.4 stable. The Plugin is installed normally, but when it will access the task screen the error below is displayed.*

Resolved compatibility version: https://github.com/piccio/redmine_watchers_groups

#49 - 2018-05-29 11:00 - Vlad Belkov

+1

#50 - 2018-09-06 07:37 - Go MAEDA
- Duplicated by Feature #15164: Make it possible to add group as a watcher added

#51 - 2018-09-06 07:38 - Go MAEDA
- Related to Feature #29501: Allow addition of watcher group via bulk edit context menu added

#52 - 2018-11-21 11:37 - Sunding Wei

> *cleber souza wrote:*
>
> *...*
>
> *Resolved compatibility version: https://github.com/piccio/redmine_watchers_groups*

Hi Cleber Souza

I installed the plugin you provided for Redmine v3.4.4.stable, it works for creating issues with groups watchers, but when I open the issue I just created, the ruby process takes CPU 100%...I have to uninstall it, do you know what should be the issue?

#53 - 2018-11-22 06:50 - Sunding Wei

I fixed the CPU 100% issue of Cleber Souza codes

Redmine 3.4.4.stable

Original: https://github.com/piccio/redmine_watchers_groups

Fixes

```
diff --git a/lib/redmine_watchers_groups/group_patch.rb b/lib/redmine_watchers_groups/group_patch.rb
index 567f2a0..a3a7bb8 100644
--- a/lib/redmine_watchers_groups/group_patch.rb
+++ b/lib/redmine_watchers_groups/group_patch.rb
@@ -22,7 +22,17 @@ module RedmineWatchersGroups

      unless watcher_ids.empty?
        # simple combinations of watchers
-        simple_watchers_combinations = watcher_ids.repeated_combination(watcher_ids.length).to_a.map(&:uniq).uniq
+        # FIXME: CPU 100%, producing too many combinations
+        # simple_watchers_combinations = watcher_ids.repeated_combination(watcher_ids.length).to_a.map(&:uniq).uniq
+        users = User.where(id: watcher_ids)
+        dict = {}
+        users.each do |user|
+          user.group_ids.each do |gid|
+            ids = dict[gid].to_a.push(user.id)
+            dict[gid] = ids.uniq
+          end
+        end
+        simple_watchers_combinations = dict.values

        simple_watchers_combinations.each do |simple_watchers_combination|
          # the first query find all groups that contains all the current watchers as members through
@@ -48,4 +58,5 @@ module RedmineWatchersGroups
    end

  end
-end
\ No newline at end of file
+end
+
```

#54 - 2018-12-21 09:35 - Jonas De Meulenaere

+1 to have it implemented as a standard feature

#55 - 2019-04-03 09:56 - Thomas Guiot

Sunding Wei wrote:

> *I fixed the CPU 100% issue of Cleber Souza codes*
>
> *Redmine 3.4.4.stable*
> *Original: https://github.com/piccio/redmine_watchers_groups*
>
> *Fixes*
> *[...]*

This plugin crashed the tickets where I used a group as observer. see https://github.com/piccio/redmine_watchers_groups/issues/4

and +1 to have it as a standard feature

#56 - 2019-04-15 08:28 - Gerhard Ferdan

+1 to have it implemented as a standard feature.
We used the https://www.redmine.org/plugins/rmp_group_watchers plugin until now but since updating to V4.x the plugin isn't longer useable

#57 - 2019-07-30 08:50 - Taine Woo

+1

#58 - 2020-01-31 03:23 - Yuichi HARADA
- File 4511-add-group-to-watcher.patch added

Fixed functionality to allow adding groups to the watcher of issues.
I attached a patch.

#59 - 2020-01-31 08:05 - Go MAEDA
- File 4511-add-group-to-watcher-v2.patch added
- File Screenshot_add-watcher.png added
- File Screenshot_watchers-list.png added
- Target version set to Candidate for next major release

Yuichi HARADA wrote:

|

> *Fixed functionality to allow adding groups to the watcher of issues.*
> *I attached a patch.*

Thank you for posting the patch for this long-awaited feature. I tried out the patch and it works fine.

Screenshot_add-watcher.png

Screenshot_watchers-list.png

I slightly updated the patch to fix RuboCop offenses.

#60 - 2020-02-03 09:41 - Go MAEDA

- Target version changed from Candidate for next major release to 4.2.0

Setting the target version to 4.2.0.

#61 - 2020-02-06 06:24 - Yuichi HARADA

- File 4511-add-group-to-watcher-v3.patch added

Sorry, When entering a new issue, the groups of the project members must appear in the Watchers field.
Fixed with the following patch.

```
diff --git a/app/controllers/watchers_controller.rb b/app/controllers/watchers_controller.rb
index c741a9326..e0de27464 100644
--- a/app/controllers/watchers_controller.rb
+++ b/app/controllers/watchers_controller.rb
@@ -122,14 +122,16 @@ class WatchersController < ApplicationController
   end

   def users_for_new_watcher
-    scope = nil
+    scope, scope_groups = nil
     if params[:q].blank? && @project.present?
       scope = @project.users
+      scope_groups = @project.principals.merge(Group.givable)
     else
       scope = User.all.limit(100)
+      scope_groups = Group.givable.limit(100)
     end
     users = scope.active.visible.sorted.like(params[:q]).to_a
-    users += Group.givable.active.visible.sorted.like(params[:q]).to_a
+    users += scope_groups.active.visible.sorted.like(params[:q]).to_a
     if @watchables && @watchables.size == 1
       users -= @watchables.first.watcher_users
     end
diff --git a/app/helpers/issues_helper.rb b/app/helpers/issues_helper.rb
index 34411470f..0f327b77e 100644
--- a/app/helpers/issues_helper.rb
+++ b/app/helpers/issues_helper.rb
```

```
@@ -365,8 +365,11 @@ module IssuesHelper
   # on the new issue form
   def users_for_new_issue_watchers(issue)
     users = issue.watcher_users.select{|u| u.status == User::STATUS_ACTIVE}
-    if issue.project.users.count + Group.givable.count <= 20
-      users = (users + issue.project.users.sort + Group.givable.sort).uniq
+    project = issue.project
+    scope_users = project.users
+    scope_groups = project.principals.merge(Group.givable)
+    if scope_users.count + scope_groups.count <= 20
+      users = (users + scope_users.sort + scope_groups.sort).uniq
     end
     users
   end
diff --git a/lib/plugins/acts_as_watchable/lib/acts_as_watchable.rb b/lib/plugins/acts_as_watchable/lib/acts_as_watchable.rb
index e8dc9ee7b..e37151d8f 100644
--- a/lib/plugins/acts_as_watchable/lib/acts_as_watchable.rb
+++ b/lib/plugins/acts_as_watchable/lib/acts_as_watchable.rb
@@ -31,7 +31,7 @@ module Redmine

   # Returns an array of users that are proposed as watchers
   def addable_watcher_users
-    users = (self.project.users.sort + Group.givable.sort) - self.watcher_users
+    users = (self.project.users.sort + self.project.principals.merge(Group.givable).sort) - self.watcher_users
     if respond_to?(:visible?)
       users.reject! {|user| user.is_a?(User) && !visible?(user)}
     end
```

#62 - 2020-02-06 09:20 - Go MAEDA

- Subject changed from Allowing to add user groups as watchers for issues to Allow adding user groups as watchers for issues

- Status changed from New to Closed

- Assignee set to Go MAEDA

- Resolution set to Fixed

Committed the patch. Thank you for writing the patch for this long-awaited feature.

#63 - 2020-02-21 03:53 - Go MAEDA

- Related to Patch #33036: Add missing fixture to IssuesControllerTest added

#64 - 2020-03-05 13:40 - Go MAEDA

- Related to Patch #33100: Fix a test - Issue watchers are not always sorted by id added

#65 - 2020-04-21 00:08 - Marius BALTEANU

- File 0003-Use-principals-in-acts_as_watchable.patch added

- File 0002-Use-Principal-to-get-users-and-groups-for-watchers-i.patch added

- File 0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch added

- File 0004-Use-scope-assignable_watchers.patch added

- Status changed from Closed to Reopened

I'm reopening this in order to fix some possible performance issues generated by these changes or some unnecessary queries:

1. Removing preload(:email_address) from watchers_list (app/helpers/watchers_helper.rb) generates N+1. For each watcher, it will be triggered a query to take the email address. Below an example of an issue with 5 watchers:

```
D, [2020-04-20T20:26:37.979524 #14] DEBUG -- :   User Load (0.9ms)  SELECT `users`.* FROM `users` INNER JOIN `watchers` ON `users`.`id` = `watchers`.`user_id` WHERE `users`.`type` IN ('User', 'AnonymousUser') AND `watchers`.`watchable_id` = 2 AND `watchers`.`watchable_type` = 'Issue'
D, [2020-04-20T20:26:37.982628 #14] DEBUG -- :   EmailAddress Load (0.6ms)  SELECT `email_addresses`.* FROM `email_addresses` WHERE `email_addresses`.`user_id` = 1 AND `email_addresses`.`is_default` = TRUE LIMIT 1
D, [2020-04-20T20:26:37.988894 #14] DEBUG -- :   CACHE EmailAddress Load (0.1ms)  SELECT `email_addresses`.* FROM `email_addresses` WHERE `email_addresses`.`user_id` = 3 AND `email_addresses`.`is_default` = TRUE LIMIT 1
D, [2020-04-20T20:26:37.991870 #14] DEBUG -- :   EmailAddress Load (0.6ms)  SELECT `email_addresses`.* FROM `email_addresses` WHERE `email_addresses`.`user_id` = 4 AND `email_addresses`.`is_default` = TRUE LIMIT 1
D, [2020-04-20T20:26:37.994146 #14] DEBUG -- :   CACHE EmailAddress Load (0.0ms)  SELECT `email_addresses`.* FROM `email_addresses` WHERE `email_addresses`.`user_id` = 2 AND `email_addresses`.`is_default` = TRUE LIMIT 1
D, [2020-04-20T20:26:37.996693 #14] DEBUG -- :   EmailAddress Load (0.6ms)  SELECT `email_addresses`.* FROM `email_addresses` WHERE `email_addresses`.`user_id` = 8 AND `email_addresses`.`is_default` = TRUE LIMIT 1
I, [2020-04-20T20:26:38.000373 #14]  INFO -- :   Rendered watchers/_watchers.html.erb (92.5ms)
I, [2020-04-20T20:26:38.006492 #14]  INFO -- :   Rendered issues/show.html.erb within layouts/base (1418.9ms)
D, [2020-04-20T20:26:38.010703 #14] DEBUG -- :   Setting Load (0.6ms)  SELECT `settings`.* FROM `settings` WHERE `settings`.`name` = 'app_title' ORDER BY `settings`.`id` DESC LIMIT 1
D, [2020-04-20T20:26:38.028354 #14] DEBUG -- :   CACHE EmailAddress Load (0.0ms)  SELECT `email_addresses`.* FROM `email_addresses` WHERE `email_addresses`.`user_id` = 1 AND `email_addresses`.`is_default` = TRUE LIMIT 1
```

I think we should find a better way to retrieve the watchers in order to avoid all those queries.

2. In app/helpers/issues_helper.rb we can avoid querying the database twice to get the users and then the groups by using the patch *0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch*. Also, the patch limits the results returned from the database to 20 because that is the maximum number of watchers displayed in the new issue form.

3. Same as 2 but in watchers_controller and acts_as_watchable with patches *0002-Use-Principal-to-get-users-and-groups-for-watchers-i.patch* and *0003-Use-principals-in-acts_as_watchable.patch*

Example:

```
D, [2020-04-20T21:05:29.355800 #14] DEBUG -- :   User Load (0.7ms)  SELECT `users`.* FROM `users` WHERE `users`.`type` IN ('User', 'AnonymousUser') AND `users`.`status` = 1 AND `users`.`id` IN (3, 2)
D, [2020-04-20T21:05:29.358191 #14] DEBUG -- :   Group Load (0.7ms)  SELECT `users`.* FROM `users` WHERE `users`.`type` IN ('Group', 'GroupBuiltin', 'GroupAnonymous', 'GroupNonMember') AND `users`.`type` = 'Group' AND `users`.`status` = 1 AND `users`.`id` IN (3, 2)
```

After:

```
D, [2020-04-20T21:09:11.148277 #14] DEBUG -- :   Principal Load (0.9ms)  SELECT `users`.* FROM `users` WHERE `users`.`status` = 1 AND `users`.`id` IN (3, 2) AND `users`.`type` IN ('User', 'Group')
```

4. This patch adds a new scope named assignable_watchers to Principal in order to avoid duplicated logic across multiple files. Any feedback is welcome.

#66 - 2020-04-21 00:16 - Marius BALTEANU

- File deleted (0004-Use-scope-assignable_watchers.patch)

#67 - 2020-04-21 00:32 - Marius BALTEANU

- File 0004-Use-scope-assignable_watchers.patch added

Fixed a minor issue.

Tests [pass](#).

#68 - 2020-04-25 05:15 - Go MAEDA

Marius, thank you for improving the code but I noticed that attachment:0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch change the behavior.

Redmine 2.5 or later does not show watchers checkboxes on the new issue page when more than 20 members belong to the project (#8562). However, after applying the patch, first 20 members/groups are displayed even when the number of members exceeds 20.

#69 - 2020-04-25 09:24 - Marius BALTEANU

- File deleted (0004-Use-scope-assignable_watchers.patch)

#70 - 2020-04-25 09:24 - Marius BALTEANU

- File deleted (0002-Use-Principal-to-get-users-and-groups-for-watchers-i.patch)

#71 - 2020-04-25 09:24 - Marius BALTEANU

- File deleted (0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch)

#72 - 2020-04-25 09:24 - Marius BALTEANU

- File deleted (0003-Use-principals-in-acts_as_watchable.patch)

#73 - 2020-04-25 09:31 - Marius BALTEANU

- File 0004-Use-scope-assignable_watchers.patch added
- File 0003-Use-principals-in-acts_as_watchable.patch added
- File 0002-Use-Principal-to-get-users-and-groups-for-watchers-i.patch added
- File 0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch added

Go MAEDA wrote:

> *Marius, thank you for improving the code but I noticed that attachment:0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch change the behavior.*
>
> *Redmine 2.5 or later does not show watchers checkboxes on the new issue page when more than 20 members belong to the project (#8562). However, after applying the patch, first 20 members/groups are displayed even when the number of members exceeds 20.*

You're right, thanks for pointing this out, I've updated the patch series to fix this.

#74 - 2020-04-25 10:03 - Go MAEDA

- Status changed from Reopened to Closed

Committed the patches attached in #4511#note-73. Thank you.

#75 - 2020-04-25 10:05 - Marius BALTEANU

Regarding first problem (N+1), we don't do anything?

#76 - 2020-06-08 14:03 - Taner Tas

I just need to add groups as watchers like regular user. I tried patches shared in this issue but none of them are applicable for 4.0 version.

```
if subject.present?
    self.add_watcher(project.default_assigned_to) unless watched_by?(project.default_assigned_to)
end
```

Our project default assignees are groups. The custom workflow code above doesn't work because, Redmine 4.0 doesn't accept groups as known type for watchers.

#77 - 2020-09-01 02:58 - Go MAEDA

- Related to Defect #33935: Locked users in a group receive notifications when the group is added as a watcher added

Files

Issue page.JPG	22.6 KB	2018-04-25	cleber souza
4511-add-group-to-watcher.patch	24.2 KB	2020-01-31	Yuichi HARADA
4511-add-group-to-watcher-v2.patch	24.2 KB	2020-01-31	Go MAEDA
Screenshot_add-watcher.png	42.5 KB	2020-01-31	Go MAEDA
Screenshot_watchers-list.png	13.9 KB	2020-01-31	Go MAEDA
4511-add-group-to-watcher-v3.patch	24.6 KB	2020-02-06	Yuichi HARADA
0003-Use-principals-in-acts_as_watchable.patch	1.09 KB	2020-04-25	Marius BALTEANU
0004-Use-scope-assignable_watchers.patch	4.25 KB	2020-04-25	Marius BALTEANU
0002-Use-Principal-to-get-users-and-groups-for-watchers-i.patch	2.36 KB	2020-04-25	Marius BALTEANU
0001-Get-the-list-of-new-issue-watchers-using-single-quer.patch	1.23 KB	2020-04-25	Marius BALTEANU