

## Redmine - Feature #35324

### Preload principal and roles in members#index

2021-05-28 12:29 - Thomas Löber

<b>Status:</b>	Closed	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Go MAEDA	<b>% Done:</b>	0%
<b>Category:</b>	Performance	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	5.0.0		
<b>Resolution:</b>			
<b>Description</b>			
Hi,			
MembersController#index should preload the principal and roles of the members.			
When this data is not preloaded, iterating over the @members array in app/views/members/index.api.rsb causes a lot of database queries.			
A patch is attached.			
Thanks, Thomas			

#### Associated revisions

##### Revision 21052 - 2021-06-27 09:42 - Go MAEDA

Preload principal and roles in members#index (#35324).

Patch by Thomas Löber.

#### History

##### #1 - 2021-06-02 02:30 - Go MAEDA

- Target version set to Candidate for next major release

I have confirmed the issue. Before applying the patch, three SQL statements like the following are executed for each member.

```
Principal Load (0.1ms)  SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ?  [["id", 9], ["LIMIT", 1]]
MemberRole Load (0.5ms)  SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ?
                        [["member_id", 15]]
CACHE Role Load (0.0ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT", 1]]
```

#### Before:

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```
Started GET "/projects/ecookbook/memberships.json" for 127.0.0.1 at 2021-06-02 09:15:54 +0900
Processing by MembersController#index as JSON
  Parameters: {"project_id"=>"ecookbook"}
    (0.2ms)  SELECT MAX("settings"."updated_on") FROM "settings"
  AnonymousUser Load (0.2ms)  SELECT "users".* FROM "users" WHERE "users"."type" = ? AND "users"."lastname" = ? LIMIT ?  [["type", "AnonymousUser"], ["lastname", "Anonymous"], ["LIMIT", 1]]
  Current user: anonymous
  FilterRule Load (0.1ms)  SELECT "settings".* FROM "settings" WHERE "settings"."name" = ? ORDER BY "settings"."id" DESC LIMIT ?  [["name", "plugin_redmine_ip_filter"], ["LIMIT", 1]]
  Project Load (0.1ms)  SELECT "projects".* FROM "projects" WHERE "projects"."identifier" = ? LIMIT ?  [["identifier", "ecookbook"], ["LIMIT", 1]]
    (0.2ms)  SELECT "enabled_modules"."name" FROM "enabled_modules" WHERE "enabled_modules"."project_id" = ?  [["project_id", 1]]
  Role Load (0.5ms)  SELECT "roles".* FROM "roles" WHERE "roles"."builtin" = ? LIMIT ?  [["builtin", 2], ["LIMIT", 1]]
  Member Load (0.3ms)  SELECT "members".* FROM "members" INNER JOIN "users" ON "users"."id" = "members"."user_id" WHERE "members"."project_id" = ? AND "users"."type" IN (?, ?)  [["project_id", 1], [nil, "GroupAnonymous"]]
```

```
, [nil, "GroupNonMember"]]]
  (0.2ms) SELECT COUNT(*) FROM "members" WHERE "members"."project_id" = ? [{"project_id", 1}]
  Member Load (0.2ms) SELECT "members".* FROM "members" WHERE "members"."project_id" = ? ORDER BY "members"."id" ASC LIMIT ? OFFSET ? [{"project_id", 1}, ["LIMIT", 25], ["OFFSET", 0]]
  Rendering members/index.api.rsb
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  MemberRole Load (0.1ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 1}]
  Role Load (0.2ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 1}, ["LIMIT", 1]]
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 3}, ["LIMIT", 1]]
  MemberRole Load (0.1ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 2}]
  Role Load (0.1ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 5}, ["LIMIT", 1]]
  MemberRole Load (0.1ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 4}]
  CACHE Role Load (0.0ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 1}, ["LIMIT", 1]]
  MemberRole Load (0.1ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 11}]
  CACHE Role Load (0.0ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 4}, ["LIMIT", 1]]
  MemberRole Load (0.1ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 12}]
  CACHE Role Load (0.0ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 7}, ["LIMIT", 1]]
  MemberRole Load (0.2ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 13}]
  CACHE Role Load (0.1ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Principal Load (0.2ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 8}, ["LIMIT", 1]]
  MemberRole Load (0.1ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 14}]
  CACHE Role Load (0.0ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Principal Load (0.1ms) SELECT "users".* FROM "users" WHERE "users"."id" = ? LIMIT ? [{"id", 9}, ["LIMIT", 1]]
  MemberRole Load (0.5ms) SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" = ? [{"member_id", 15}]
  CACHE Role Load (0.0ms) SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ? [{"id", 2}, ["LIMIT", 1]]
  Rendered members/index.api.rsb (Duration: 32.0ms | Allocations: 6057)
Completed 200 OK in 49ms (Views: 29.7ms | ActiveRecord: 4.8ms | Allocations: 9100)
```

After:

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```
Started GET "/projects/ecookbook/memberships.json" for 127.0.0.1 at 2021-06-02 09:14:25 +0900
Processing by MembersController#index as JSON
  Parameters: {"project_id"=>"ecookbook"}
  (0.2ms) SELECT MAX("settings"."updated_on") FROM "settings"
  AnonymousUser Load (0.2ms) SELECT "users".* FROM "users" WHERE "users"."type" = ? AND "users"."lastname" = ? LIMIT ? [{"type", "AnonymousUser"}, ["lastname", "Anonymous"], ["LIMIT", 1]]
  Current user: anonymous
  FilterRule Load (0.1ms) SELECT "settings".* FROM "settings" WHERE "settings"."name" = ? ORDER BY "settings"."id" DESC LIMIT ? [{"name", "plugin_redmine_ip_filter"}, ["LIMIT", 1]]
  Project Load (0.1ms) SELECT "projects".* FROM "projects" WHERE "projects"."identifier" = ? LIMIT ? [{"identifier", "ecookbook"}, ["LIMIT", 1]]
  (0.2ms) SELECT "enabled_modules"."name" FROM "enabled_modules" WHERE "enabled_modules"."project_id" = ? [{"project_id", 1}]
  Role Load (0.1ms) SELECT "roles".* FROM "roles" WHERE "roles"."builtin" = ? LIMIT ? [{"builtin", 2}, ["LIMIT", 1]]
  Member Load (0.3ms) SELECT "members".* FROM "members" INNER JOIN "users" ON "users"."id" = "members"."user_
```

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id" WHERE "members"."project_id" = ? AND "users"."type" IN (?, ?)  [["project_id", 1], [nil, "GroupAnonymous"],
, [nil, "GroupNonMember"]]]
  (0.2ms)  SELECT COUNT(*) FROM "members" WHERE "members"."project_id" = ?  [["project_id", 1]]
  Member Load (0.2ms)  SELECT "members".* FROM "members" WHERE "members"."project_id" = ? ORDER BY "members"."
id" ASC LIMIT ? OFFSET ?  [["project_id", 1], ["LIMIT", 25], ["OFFSET", 0]]
  Principal Load (0.4ms)  SELECT "users".* FROM "users" WHERE "users"."id" IN (?, ?, ?, ?, ?, ?, ?, ?)  [[nil,
2], [nil, 3], [nil, 5], [nil, 1], [nil, 4], [nil, 7], [nil, 8], [nil, 9]]
  MemberRole Load (0.3ms)  SELECT "member_roles".* FROM "member_roles" WHERE "member_roles"."member_id" IN (?,
?, ?, ?, ?, ?, ?, ?)  [[nil, 1], [nil, 2], [nil, 4], [nil, 11], [nil, 12], [nil, 13], [nil, 14], [nil, 15]]
  Role Load (0.2ms)  SELECT DISTINCT "roles".* FROM "roles" WHERE "roles"."id" IN (?, ?)  [[nil, 1], [nil, 2]]
  Rendering members/index.api.rsb
  Role Load (0.1ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 1], ["LIMIT", 1]]
  Role Load (0.1ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT", 1]]
  CACHE Role Load (0.0ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT",
1]]
  CACHE Role Load (0.0ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT",
1]]
  CACHE Role Load (0.0ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT",
1]]
  CACHE Role Load (0.0ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT",
1]]
  CACHE Role Load (0.0ms)  SELECT "roles".* FROM "roles" WHERE "roles"."id" = ? LIMIT ?  [["id", 2], ["LIMIT",
1]]
  Rendered members/index.api.rsb (Duration: 12.0ms | Allocations: 2731)
Completed 200 OK in 37ms (Views: 12.3ms | ActiveRecord: 2.8ms | Allocations: 7396)
```

**#2 - 2021-06-03 07:11 - Go MAEDA**

- Target version changed from Candidate for next major release to 5.0.0

Setting the target version to 5.0.0.

**#3 - 2021-06-27 09:42 - Go MAEDA**

- Status changed from New to Closed
- Assignee set to Go MAEDA

Committed the patch. Thank you for your contribution.

**#4 - 2022-03-27 05:03 - Go MAEDA**

- Tracker changed from Patch to Feature

**Files**

members_index_preload.diff	741 Bytes	2021-05-28	Thomas Löber
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