# Redmine - Feature #42574

## Optimize autocomplete issue listing triggered by typing "##" by eager loading trackers

2025-04-12 10:44 - Go MAEDA

| | | | |
|---|---|---|---|
| **Status:** | Closed | **Start date:** | |
| **Priority:** | Normal | **Due date:** | |
| **Assignee:** | Go MAEDA | **% Done:** | 0% |
| **Category:** | Performance | **Estimated time:** | 0.00 hour |
| **Target version:** | 5.1.8 | | |
| **Resolution:** | Fixed | | |

**Description**

When using the autocomplete feature to list issues by typing "##", an N+1 query occurs for loading associated trackers. Each issue's tracker is queried individually.

The attached patch fixes the problem by eager-loading the tracker association.

Before:

```
  Issue Load (1.2ms)  SELECT `issues`.* FROM `issues` INNER JOIN `projects` ON `projects`.`id` = `
issues`.`project_id` WHERE `issues`.`project_id` = 1 AND (projects.status <> 9 AND projects.status
 <> 10 AND EXISTS (SELECT 1 AS one FROM enabled_modules em WHERE em.project_id = projects.id AND e
m.name='issue_tracking')) AND (issues.subject LIKE '%c%') ORDER BY `issues`.`id` DESC LIMIT 10
  ↳ app/controllers/auto_completes_controller.rb:36:in 'AutoCompletesController#issues'
  Tracker Load (0.4ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` = 1 LIMIT 1
  ↳ app/controllers/auto_completes_controller.rb:77:in 'block in AutoCompletesController#format_is
sues_json'
  CACHE Tracker Load (0.0ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` = 1 LIMIT
1
  ↳ app/controllers/auto_completes_controller.rb:77:in 'block in AutoCompletesController#format_is
sues_json'
  CACHE Tracker Load (0.0ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` = 1 LIMIT
1
  ↳ app/controllers/auto_completes_controller.rb:77:in 'block in AutoCompletesController#format_is
sues_json'
  CACHE Tracker Load (0.0ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` = 1 LIMIT
1
  ↳ app/controllers/auto_completes_controller.rb:77:in 'block in AutoCompletesController#format_is
sues_json'
  Tracker Load (0.5ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` = 2 LIMIT 1
  ↳ app/controllers/auto_completes_controller.rb:77:in 'block in AutoCompletesController#format_is
sues_json'
  CACHE Tracker Load (0.0ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` = 1 LIMIT
1
  ↳ app/controllers/auto_completes_controller.rb:77:in 'block in AutoCompletesController#format_is
sues_json'
```

After:

```
  Issue Load (1.2ms)  SELECT `issues`.* FROM `issues` INNER JOIN `projects` ON `projects`.`id` = `
issues`.`project_id` WHERE `issues`.`project_id` = 1 AND (projects.status <> 9 AND projects.status
 <> 10 AND EXISTS (SELECT 1 AS one FROM enabled_modules em WHERE em.project_id = projects.id AND e
m.name='issue_tracking')) ORDER BY `issues`.`id` DESC LIMIT 10
  ↳ app/controllers/auto_completes_controller.rb:39:in 'AutoCompletesController#issues'
  Tracker Load (0.6ms)  SELECT `trackers`.* FROM `trackers` WHERE `trackers`.`id` IN (1, 2)
```

**Associated revisions**

**Revision 23660 - 2025-04-16 08:50 - Go MAEDA**

Optimize autocomplete issue listing triggered by typing "##" by eager loading trackers (#42574).

Patch by Go MAEDA (user:maeda).

**Revision 23661 - 2025-04-17 03:22 - Go MAEDA**

Merged r23660 from trunk to 6.0-stable (#42574).

**Revision 23662 - 2025-04-17 03:22 - Go MAEDA**

Merged r23660 from trunk to 5.1-stable (#42574).

## History

**#1 - 2025-04-13 09:01 - Go MAEDA**

*- Tracker changed from Defect to Feature*

*- Subject changed from N+1 query when listing issues in autocomplete to Optimize autocomplete issue listing triggered by typing "##" by eager loading trackers*

**#2 - 2025-04-14 07:56 - Marius BĂLTEANU**

*- Target version changed from Candidate for next minor release to 5.1.8*

**#3 - 2025-04-16 08:50 - Go MAEDA**

*- Status changed from New to Resolved*

*- Assignee set to Go MAEDA*

*- Resolution set to Fixed*

Committed the patch in [r23660](#).

**#4 - 2025-04-17 03:23 - Go MAEDA**

*- Status changed from Resolved to Closed*

Merged the change into the stable branches in [r23661](#) and [r23662](#).

## Files

| | | | |
|---|---|---|---|
| fix-N+1-in-AutoCompletesController.patch | 705 Bytes | 2025-04-12 | Go MAEDA |