Redmine - Defect #40099
User api filtering by status=* broke on upgrade from 5.0 to 5.1
2024-01-23 13:35 - Joan J

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
<th>Start date:</th>
<th></th>
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<tr>
<td>Priority:</td>
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<td>Due date:</td>
<td></td>
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<tr>
<td>Assignee:</td>
<td>Marius BĂLTEANU</td>
<td>% Done:</td>
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<tr>
<td>Category:</td>
<td>REST API</td>
<td>Estimated time:</td>
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<td>Target version:</td>
<td>5.1.2</td>
<td>Affected version:</td>
<td>5.1.1</td>
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Description
I am testing the migration path from 5.0.5 to 5.1.1, we use an api call to get all users (active or not), since the user api shows only the active accounts we where using "status=" or "status=*") as a modifier to get all the fields

I've got the "status=" from this issue https://www.redmine.org/issues/32090

On 5.1.1, for any call with "status=" we get with the http code 422:

```
{
  "errors": [
    "Status cannot be blank"
  ]
}
```

When I am using the filter "status=" the exit code is 500, and on the logs i see:

```
I, [2024-01-23T13:20:22.820689 #2787502]  INFO -- : [0a29895f-ece3-4229-9e91-eeee48cdc573] Completed 500 Internal Server Error in 21ms (ActiveRecord: 5.1ms | Allocations: 3061)
F, [2024-01-23T13:20:22.822546 #2787502] FATAL -- : [0a29895f-ece3-4229-9e91-eeee48cdc573] [0a29895f-ece3-4229-9e91-eeee48cdc573] ActiveRecord::StatementInvalid (PG::InvalidTextRepresentation: ERROR:  invalid input syntax for type integer: "*")
    LINE 1: ...1, $2) AND (users.status <> 0) AND ((users.status IN ("")))
^
): [0a29895f-ece3-4229-9e91-eeee48cdc573]
[0a29895f-ece3-4229-9e91-eeee48cdc573] app/controllers/users_controller.rb:64:in `index'
```

Related issues:
Related to Redmine - Patch #40124: Remove deprecated empty status param to ge... | Closed
-->
Has duplicate Redmine - Feature #32090: REST API: users: add support for stat... | Closed

Associated revisions
Revision 22623 - 2024-01-25 05:58 - Marius BĂLTEANU
Add test cases for status=*, status= and status=|1|3 (#40099).
Patch by Jens Krämer (@jkraemer) and Marius BĂLTEANU (@marius.balteanu).

Revision 22624 - 2024-01-25 06:08 - Marius BĂLTEANU
Enable "any" and "none" operators for status filter in User listing (#40099).
Patch by Jens Krämer (@jkraemer).

Revision 22625 - 2024-01-25 06:10 - Marius BĂLTEANU
Restores API compatibility to legacy status when status param is sent blank (status=) and it should return all users (#40099).

Revision 22632 - 2024-01-25 13:57 - Marius BĂLTEANU
Merged r22623, r22624 and r22625 from trunk to 5.1-stable (#40099).

Revision 22633 - 2024-01-25 16:31 - Marius BĂLTEANU
Adds deprecation warning when an empty status param (status=) is used to get all users from API (#40099).

Revision 22634 - 2024-01-25 16:32 - Marius BĂLTEANU
Merged r22633 from trunk to 5.1-stable (#40099).

Revision 22647 - 2024-01-27 02:47 - Go MAEDA
Fix RuboCop offense Layout/SpaceAfterComma (#40099).

History

#1 - 2024-01-23 14:42 - Marius BĂLTEANU
- Status changed from New to Confirmed

Users list was improved in Redmine 5.0 by using the same query mechanism as we have for issues, projects, etc (#37674) with filters and columns. In order to keep the compatibility to legacy status and name query params, the API was adapted in r22343, but as I see now, the behaviour for status= was not kept. If you change your query to status=1 it should return all active users. From my point of view, I prefer to not bring back the behaviour with status= because I find it not intuitive.

I will take a look on the 500 error, it should not happen.

Please let me know what do you think about the first part.

#2 - 2024-01-23 15:21 - Joan J
Marius BALTEANU wrote in #note-1:

Users list was improved in Redmine 5.0 by using the same query mechanism as we have for issues, projects, etc (#37674) with filters and columns. In order to keep the compatibility to legacy status and name query params, the API was adapted in r22343, but as I see now, the behaviour for status= was not kept. If you change your query to status=1 it should return all active users. From my point of view, I prefer to not bring back the behaviour with status= because I find it not intuitive.

I will take a look on the 500 error, it should not happen.

Please let me know what do you think about the first part.

I agree that "status=" is quite ugly and counterintuitive, for me it can go, having the status=* as with the issues if fine (or any other way to get the full list)

#3 - 2024-01-24 03:57 - Marius BĂLTEANU
Joan J wrote in #note-2:

I agree that "status=" is quite ugly and counterintuitive, for me it can go, having the status=* as with the issues if fine (or any other way to get the full list)

It seems that the only way to retrieve all users regardless their status using a single API request is to use the following query syntax
users.json?f[]=status_id&op[status_id]==&v[status_id][]=1&v[status_id][]=2&v[status_id][]=3

I think we should add the "any" operator to status filter in order to enable the =* operator.

Also:

- I still need to investigate why short filters are not working for users listing
- If the the 500 error happens only on Postgresql because on MySQL is ok

#4 - 2024-01-24 08:36 - Jens Krämer
Looks like with MySQL, the '*' in where status IN ("*") is cast to 0 so the query does not error out but gives just the anonymous user (which has status=0 in my local test db).

Interestingly enough, at Planio we are adding the user status filter as :list_optional in UserQuery, which allows querying for any status with ?f[]=status&op[status]=*. I'm not entirely sure why that did not make into the core patch. Probably we changed this at a later time:

```ruby
diff --git a/app/models/user_query.rb b/app/models/user_query.rb
index bfb44cdad3...5051ceabe5 100644
--- a/app/models/user_query.rb
+++ b/app/models/user_query.rb
@@ -40,7 +40,7 @@ class UserQuery < Query
     def initialize_available_filters

     @@ -40,7 +40,7 @@ class UserQuery < Query
                 def initialize_available_filters
```

2024-04-14
add_available_filter "status",
-     type: :list, values: ->{ user_statuses_values }
+     type: :list Optional, values: ->{ user_statuses_values }
add_available_filter "auth_source_id",
-     type: :list, values: ->{ auth_sources_values }
+     type: :list Optional, values: ->{ auth_sources_values }
add_available_filter "is_member_of_group",

With that, a quick fix for the API to support the status= short query parameter would be:

```ruby
unless request.format.html?
if status_id = params[:status].presence
-     @query.add_filter 'status', '=', [status_id]
+     if status_id == '*'
+         @query.add_filter 'status', '*'
+     else
+         @query.add_filter 'status', '=', [status_id]
+     end
end
if name = params[:name].presence
-     @query.add_filter 'name', '~', [name]
diff --git a/test/integration/api_test/users_test.rb b/test/integration/api_test/users_test.rb
index 1a1682f32..3a38cfad1 100644
--- a/test/integration/api_test/users_test.rb
+++ b/test/integration/api_test/users_test.rb
@@ -90,6 +90,13 @@
users = User.where(status: 3)
assert_equal users.size, json['users'].size
+   get '/users.json', headers: credentials('admin'), params: { status: '*' }
+   assert_response :success
+   json = ActiveSupport::JSON.decode(response.body)
+   assert json.key?('users')
+   users = User.logged
+   assert_equal users.size, json['users'].size
+   get '/users.json', headers: credentials('admin'), params: { name: 'jsmith' }
+   assert_response :success
+   json = ActiveSupport::JSON.decode(response.body)
```

#5 - 2024-01-25 04:48 - Marius BĂLTEANU
- Assignee set to Marius BĂLTEANU
- Target version set to 5.1.2

#6 - 2024-01-25 06:16 - Marius BĂLTEANU

Jens, I've added your test case and 2 other test cases to cover:

- the case when status is blank (status=), which should return all users as 
- the case when status=*, which should return all users as it works for other entities that support the "any" operator.
- the case when status=1|3, which should return all users with status 1 or 3 as it works for other entities that support the "any" operator.

The last two cases should be handled internally by short filters syntax, but their are not working because of r22343.

In r22625, I've simplified the fix to make all 3 test cases to pass.

Also:
1. We should update the wiki page after we close this.
2. For Redmine 6.0, I don't think we should support the awkward status= syntax, I'm in favour to add a deprecation message in 5.1.2 together with these fixes and then remove it in 6.0.0.

What do you think? I'll merge this to 5.1-stable branch after your review.

#7 - 2024-01-25 09:33 - Jens Krämer

This looks great, nice to let the non-blank status parameter values just pass through to be handled by add_short_filter. And yes regarding the deprecation of status=.
#8 - 2024-01-25 16:36 - Marius BĂLTEANU
- Status changed from Confirmed to Resolved
- Resolution set to Fixed

Joan J. the issue reported is now fixed and it will be available in 5.1.2.

#9 - 2024-01-25 16:39 - Marius BĂLTEANU
Jens Krämer wrote in #note-7:

This looks great, nice to let the non-blank status parameter values just pass through to be handled by add_short_filter. And yes regarding the deprecation of status=.

All done. The removal is part of #40124.

#10 - 2024-01-25 16:39 - Marius BĂLTEANU
- Related to Patch #40124: Remove deprecated empty status param to get all users from API added

#11 - 2024-01-25 16:39 - Marius BĂLTEANU
- Has duplicate Feature #32090: REST API: users: add support for status=* added

#12 - 2024-02-13 23:39 - Marius BĂLTEANU
- Status changed from Resolved to Closed

We just need to update API docs after the release.