Installed Redmine 4.1.0.stable from scratch following RedmineInstall guide.

Created a new project / tracker / issues. Have done the configuration.

Now having a Redmine issue with Gantt. Directly after installation, the Gantt Tab is showing the following.

"500 - An error occurred while executing the query and has been logged. Please report this error to your Redmine administrator."

Looking for a workaround to get the Gantt Tab working.

Redmine:

- 4.1.0.stable
- Ruby:
  - 2.5.7-p206 (2019-10-01) [x64-mingw32]
- Rails:
  - 5.2.4.1
- Database:
  - MS SQL Server 2017 (RTM) - 14.0.1000.169 (X64) Express Edition
- Webserver:
  - MS IIS Reverse Proxy -> Puma
- OS:
  - VM Windows Server 2016 Standard 10.0 <X64> (Build 14393: ) (Hypervisor)
- Redmine plugins:
  - redhopper 2.0.0

```
production.log:

Started GET "/projects/projektmanagement-it/issues/gantt" for 127.0.0.1 at 2019-12-30 23:07:36 +0100
Processing by GanttsController#show as HTML
  Parameters: {"project_id"=>"projektmanagement-it"}
  Current user: amerzsa (id=5)
  Rendering gantts/show.html.erb within layouts/base
  Rendered queries/_filters.html.erb (10.7ms)
  Rendered queries/_columns.html.erb (3.4ms)
  Rendered gantts/show.html.erb within layouts/base (65.9ms)
Query::StatementInvalid: TinyTds::Error: A column has been specified more than once in the order by list. Columns in the order by list must be unique.
  EXEC sp_executesql N'SELECT  
  [issues].[id] AS t0_r0,  
  [issues].[tracker_id] AS t0_r1,  
  [issues].[project_id] AS t0_r2,  
  [issues].[subject] AS t0_r3,  
  [issues].[description] AS t0_r4,  
  [issues].[due_date] AS t0_r5,  
  [issues].[category_id] AS t0_r6,  
  [issues].[status_id] AS t0_r7,  
  [issues].[assigned_to_id] AS t0_r8,  
  [issues].[priority_id] AS t0_r9,  
  [issues].[fixed_version_id] AS t0_r10,  
  [issues].[author_id] AS t0_r11,  
  [issues].[lock_version] AS t0_r12,  
  [issues].[created_on] AS t0_r13,  
  [issues].[updated_on] AS t0_r14,  
  [issues].[start_date] AS t0_r15,  
  [issues].[done_ratio] AS t0_r16,
```
SQL Statement with issue in ORDER BY:

```sql
EXEC sp_executesql N'SELECT [issues].[id] AS t0_r0,
    [issues].[tracker_id] AS t0_r1,
    [issues].[project_id] AS t0_r2,
    [issues].[subject] AS t0_r3,
    [issues].[description] AS t0_r4,
    [issues].[due_date] AS t0_r5,
    [issues].[category_id] AS t0_r6,
    [issues].[status_id] AS t0_r7,
    [issues].[assigned_to_id] AS t0_r8,
    [issues].[priority_id] AS t0_r9,
    [issues].[fixed_version_id] AS t0_r10,
    [issues].[author_id] AS t0_r11,
    [issues].[lock_version] AS t0_r12,
    [issues].[created_on] AS t0_r13,
    [issues].[updated_on] AS t0_r14,
    [issues].[start_date] AS t0_r15,
    [issues].[done_ratio] AS t0_r16
FROM [issues] INNER JOIN [projects] ON [projects].id = [issues].project_id
WHERE (projects.status <> 9 AND EXISTS (SELECT 1 AS one FROM enabled_modules em WHERE em.project_id = projects.id AND em.name='issue_tracking')) AND ((issues.status_id IN (SELECT id FROM issue_statuses WHERE is_closed=0)) AND projects.id = 1)  ORDER BY projects.lft ASC, issues.id ASC, issues.id DESC OFFSET 0 ROWS FETCH NEXT @0 ROWS ONLY', N'@0 int', @0 = 500
```
[issues].[estimated_hours] AS t0_r17,
[issues].[parent_id] AS t0_r18,
[issues].[root_id] AS t0_r19,
[issues].[lft] AS t0_r20,
[issues].[rgt] AS t0_r21,
[issues].[is_private] AS t0_r22,
[issues].[closed_on] AS t0_r23,
[issue_statuses].[id] AS t1_r0,
[issue_statuses].[name] AS t1_r1,
[issue_statuses].[is_closed] AS t1_r2,
[issue_statuses].[position] AS t1_r3,
[issue_statuses].[default_done_ratio] AS t1_r4,
[projects].[id] AS t2_r0,
[projects].[name] AS t2_r1,
[projects].[description] AS t2_r2,
[projects].[homepage] AS t2_r3,
[projects].[is_public] AS t2_r4,
[projects].[parent_id] AS t2_r5,
[projects].[created_on] AS t2_r6,
[projects].[updated_on] AS t2_r7,
[projects].[identifier] AS t2_r8,
[projects].[status] AS t2_r9,
[projects].[lft] AS t2_r10,
[projects].[rgt] AS t2_r11,
[projects].[inherit_members] AS t2_r12,
[projects].[default_version_id] AS t2_r13,
[projects].[default_assigned_to_id] AS t2_r14,
[users].[id] AS t3_r0,
[users].[login] AS t3_r1,
[users].[hashed_password] AS t3_r2,
[users].[firstname] AS t3_r3,
[users].[lastname] AS t3_r4,
[users].[admin] AS t3_r5,
[users].[status] AS t3_r6,
[users].[last_login_on] AS t3_r7,
[users].[language] AS t3_r8,
[users].[auth_source_id] AS t3_r9,
[users].[created_on] AS t3_r10,
[users].[updated_on] AS t3_r11,
[users].[type] AS t3_r12,
[users].[identity_url] AS t3_r13,
[users].[mail_notification] AS t3_r14,
[users].[salt] AS t3_r15,
[users].[must_change_passwd] AS t3_r16,
[users].[passwd_changed_on] AS t3_r17,
[trackers].[id] AS t4_r0,
[trackers].[name] AS t4_r1,
[trackers].[is_in_chlog] AS t4_r2,
[trackers].[position] AS t4_r3,
[trackers].[is_in_roadmap] AS t4_r4,
[trackers].[fields_bits] AS t4_r5,
[trackers].[default_status_id] AS t4_r6,
[trackers].[description] AS t4_r7,
Related issues:
Related to Redmine - Defect # 30009: Empty sort criteria for issue query give... Closed
Related to Redmine - Defect # 29581: Issues in paginated views may be lost be... Closed
Duplicated by Redmine - Defect # 32808: Gantt Query Error 500 Closed
Duplicated by Redmine - Defect # 33224: SQL Server: A column has been specifi... Closed

Associated revisions
Revision 19636 - 2020-04-02 08:22 - Go MAEDA
Remove duplicate keys from sort criteria (#32737).

Patch by Go MAEDA.

**Revision 19637 - 2020-04-02 09:52 - Go MAEDA**

Fix that viewing gantt causes SQL error with SQL Server (#32737).

Patch by Pavel Rosický.

**Revision 19638 - 2020-04-02 09:55 - Go MAEDA**

Merged r19636 from trunk to 4.1-stable (#32737).

**Revision 19639 - 2020-04-02 09:56 - Go MAEDA**

Merged r19637 from trunk to 4.1-stable (#32737).

**History**

#1 - 2020-01-05 10:25 - Go MAEDA

I have confirmed that the query edit form can set the same field more than once as sort criteria and the same column appears multiple times in the ORDER BY clause as a result.

I think the following checks (at least the first one) should be added.

- Don't add the same column to ORDER BY clause more than once
- Reject specifying the same field more than twice for sort criteria in the query edit form

#2 - 2020-01-15 08:07 - Tobias Pitzer

Go MAEDA wrote:

I have confirmed that the query edit form can set the same field more than once as sort criteria and the same column appears multiple times in the ORDER BY clause as a result.

I think the following checks (at least the first one) should be added.

- Don't add the same column to ORDER BY clause more than once
- Reject specifying the same field more than twice for sort criteria in the query edit form

Is there any workaround on this?

#3 - 2020-01-15 10:32 - Go MAEDA

- Duplicated by Defect #32808: Gantt Query Error 500 added

#4 - 2020-01-22 09:40 - Yuichi HARADA
Go MAEDA wrote:

I think the following checks (at least the first one) should be added.

- Don't add the same column to ORDER BY clause more than once
- Reject specifying the same field more than twice for sort criteria in the query edit form

Exclude the same column from the ORDER BY clause.
I attached a patch.

#5 - 2020-01-22 10:49 - Dean Yeh

Yuichi HARADA wrote:

Go MAEDA wrote:

I think the following checks (at least the first one) should be added.

- Don't add the same column to ORDER BY clause more than once
- Reject specifying the same field more than twice for sort criteria in the query edit form

Exclude the same column from the ORDER BY clause.
I attached a patch.

Thank you, Yuichi HARADA.
It works on my Redmine. :)

#6 - 2020-01-27 11:10 - Go MAEDA
- File 32737-remove-duplicate-keys.patch added

Maybe also this patch will work.

#7 - 2020-01-27 13:00 - Go MAEDA
- File 32737-remove-duplicate-keys.patch added

#8 - 2020-01-27 13:00 - Go MAEDA
- File deleted (32737-remove-duplicate-keys.patch)

#9 - 2020-01-27 13:00 - Go MAEDA
- Related to Defect #30009: Empty sort criteria for issue query gives error added

#10 - 2020-01-27 13:14 - Go MAEDA
- Subject changed from Gantt Tab - 500 - An error occurred while executing the query - A column has been specified more than once in the order by list to Duplicate sort keys for issue query cause SQL error with SQL Server
- Category changed from Gantt to Issues
Go MAEDA wrote:

| Maybe also this patch will work. |

Execute tests on SQL Server, 12 test failures (500: Internal Server Error. I think duplicate ORDER BY clauses are involved) and 16 execution errors (duplicate ORDER BY clause) occurred.
- test/unit/lib/redmine/helpers/gantt_test.rb
- test/functional/gantts_controller_test.rb

```
{{collapse(Test results...)}

dev-trunk $ RAILS_ENV=test bundle exec rake test

(snip)

...E

Error:

Redmine::Helpers::GanttHelperTest#test_#subjects_version_should_be_rendered:
Query::StatementInvalid: TinyTds::Error: A column has been specified more than once in the order by list. Columns in the order by list must be unique.: EXEC sp_executesql N'SELECT [issues].[id] AS t0_r0, [issues].[tracker_id] AS t0_r1, [issues].[project_id] AS t0_r2, [issues].[subject] AS t0_r3, [issues].[description] AS t0_r4, [issues].[due_date] AS t0_r5, [issues].[category_id] AS t0_r6, [issues].[status_id] AS t0_r7, [issues].[assigned_to_id] AS t0_r8, [issues].[priority_id] AS t0_r9, [issues].[fixed_version_id] AS t0_r10, [issues].[author_id] AS t0_r11, [issues].[lock_version] AS t0_r12, [issues].[created_on] AS t0_r13, [issues].[updated_on] AS t0_r14, [issues].[start_date] AS t0_r15, [issues].[done_ratio] AS t0_r16, [issues].[estimated_hours] AS t0_r17, [issues].[parent_id] AS t0_r18, [issues].[root_id] AS t0_r19, [issues].[lft] AS t0_r20, [issues].[rgt] AS t0_r21, [issues].[is_private] AS t0_r22, [issues].[closed_on] AS t0_r23, [issue_statuses].[id] AS t1_r0, [issue_statuses].[name] AS t1_r1, [issue_statuses].[is_closed] AS t1_r2, [issue_statuses].[position] AS t1_r3, [issue_statuses][default_done_ratio] AS t1_r4, [projects][id] AS t2_r0, [projects][name] AS t2_r1, [projects][description] AS t2_r2, [projects][homepage] AS t2_r3, [projects][is_public] AS t2_r4, [projects][parent_id] AS t2_r5, [projects][created_on] AS t2_r6, [projects][updated_on] AS t2_r7, [projects][identifier] AS t2_r8, [projects][status] AS t2_r9, [projects][lft] AS t2_r10, [projects][rgt] AS t2_r11, [projects][inherit_members] AS t2_r12, [projects][default_version_id] AS t2_r13, [projects][default_assignee_to_id] AS t2_r14, [users][id] AS t3_r0, [users][login] AS t3_r1, [users][hashed_password] AS t3_r2, [users][firstname] AS t3_r3, [users][lastname] AS t3_r4, [users][admin] AS t3_r5, [users][status] AS t3_r6, [users][last_login_on] AS t3_r7, [users][language] AS t3_r8, [users][auth_source_id] AS t3_r9, [users][created_on] AS t3_r10, [users][updated_on] AS t3_r11, [users][type] AS t3_r12, [users][identity_url] AS t3_r13, [users][mail_notification] AS t3_r14, [users][salt] AS t3_r15, [users][must_change_password] AS t3_r16, [users][password_changed_on] AS t3_r17, [trackers][id] AS t4_r0, [trackers][name] AS t4_r1, [trackers][is_in_chlog] AS t4_r2, [trackers][position] AS t4_r3, [trackers][is_in_roadmap] AS t4_r4, [trackers][fields_bits] AS t4_r5, [trackers][default_status_id] AS t4_r6, [trackers][description] AS t4_r7, [enumerations][id] AS t5_r0, [enumerations][name] AS t5_r1, [enumerations][position] AS t5_r2, [enumerations][is_default] AS t5_r3, [enumerations][type] AS t5_r4, [enumerations][active] AS t5_r5, [enumerations][project_id] AS t5_r6, [enumerations][parent_id] AS t5_r7, [enumerations][position_name] AS t5_r8, [issue_categories][id] AS t6_r0, [issue_categories][project_id] AS t6_r1, [issue_categories][name] AS t6_r2, [issue_categories][assigned_to_id] AS t6_r3, [versions][id] AS t7_r0, [versions][project_id] AS t7_r1, [versions][name] AS t7_r2, [versions][description] AS t7_r3, [versions][effective_date] AS t7_r4, [versions][created_on] AS t7_r5, [versions][updated_on] AS t7_r6, [versions][wiki_page_title] AS t7_r7, [status][id] AS t7_r8, [status][sharing] AS t7_r9 FROM [issues] INNER JOIN [projects] ON projects.id = issues.project_id INNER JOIN [issue_statuses] ON issue_statuses.id = issues.status_id LEFT OUTER JOIN [projects] ON users.id = issues.assigned_to_id LEFT OUTER JOIN [trackers] ON trackers.id = issues.tracker_id LEFT OUTER JOIN [enumerations] ON enumerations.id = issues.priority_id AND enumerations.type IN ('IssuePriority') LEFT OUTER JOIN [issue_categories] ON [issue_categories].id = issues.category_id LEFT OUTER JOIN [versions] ON [versions].id = issues.fixed_version_id WHERE (projects.status <> 9 AND EXISTS (SELECT 1 AS one FROM enabled_modules em WHERE em.project_id = projects.id AND em.name='issue_tracking')) AND (issue_statuses.id IN (SELECT id FROM issue_statuses WHERE is_closed=0)) AND projects.id = 162) ORDER BY projects.lft ASC, issues.id ASC, issues.id DESC OFFSET 0 ROWS FETCH NEXT 0 ROWS ONLY', 'N''@0

 because result is too long to show here.}
```
Error:
Redmine::Helpers::GanttHelperTest#test_number_of_rows_should_not_exceed_max_rows_option:
Query::StatementInvalid: TinyTds::Error: A column has been specified more than once in the order by list. Columns in the order by list must be unique.: EXEC sp_executesql N'SELECT [issues].[id] AS t0_r0, [issues].[tracker_id] AS t0_r1, [issues].[project_id] AS t0_r2, [issues].[subject] AS t0_r3, [issues].[description] AS t0_r4, [issues].[due_date] AS t0_r5, [issues].[category_id] AS t0_r6, [issues].[status_id] AS t0_r7, [issues].[assigned_to_id] AS t0_r8, [issues].[priority_id] AS t0_r9, [issues].[fixed_version_id] AS t0_r10, [issues].[author_id] AS t0_r11, [issues].[lock_version] AS t0_r12, [issues].[created_on] AS t0_r13, [issues].[updated_on] AS t0_r14, [issues].[start_date] AS t0_r15, [issues].[done_ratio] AS t0_r16, [issues].[estimated_hours] AS t0_r17, [issues].[parent_id] AS t0_r18, [issues].[root_id] AS t0_r19, [issues].[lt] AS t0_r20, [issues].[gt] AS t0_r21, [issues].[is_private] AS t0_r22, [issues].[closed_on] AS t0_r23, [issue_statuses].[id] AS t1_r0, [issue_statuses].[name] AS t1_r1, [issue_statuses].[is_closed] AS t1_r2, [issue_statuses].[position] AS t1_r3, [issue_statuses].[default_done_ratio] AS t1_r4, [projects].[id] AS t2_r0, [projects].[name] AS t2_r1, [projects].[description] AS t2_r2, [projects].[homepage] AS t2_r3, [projects].[is_public] AS t2_r4, [projects].[parent_id] AS t2_r5, [projects].[created_on] AS t2_r6, [projects].[updated_on] AS t2_r7, [projects].[identifier] AS t2_r8, [projects].[status] AS t2_r9, [projects].[lt] AS t2_r10, [projects].[gt] AS t2_r11, [projects].[inherit_members] AS t2_r12, [projects].[default_version_id] AS t2_r13, [projects].[default_assigned_to_id] AS t2_r14, [users].[id] AS t3_r0, [users].[login] AS t3_r1, [users].[hashed_password] AS t3_r2, [users].[firstname] AS t3_r3, [users].[lastname] AS t3_r4, [users].[admin] AS t3_r5, [users].[status] AS t3_r6, [users].[mail_notification] AS t3_r7, [users].[language] AS t3_r8, [users].[auth_source_id] AS t3_r9, [users].[created_on] AS t3_r10, [users].[updated_on] AS t3_r11, [users].[type] AS t3_r12, [users].[identity_url] AS t3_r13, [users].[mail_notification] AS t3_r14, [users].[salt] AS t3_r15, [users].[must_change_passwd] AS t3_r16, [users].[passwd_changed_on] AS t3_r17, [trackers].[id] AS t4_r0, [trackers].[name] AS t4_r1, [trackers].[is_in_chlog] AS t4_r2, [trackers].[position] AS t4_r3, [trackers].[is_in_roadmap] AS t4_r4, [trackers].[fields_bits] AS t4_r5, [trackers].[default_status_id] AS t4_r6, [trackers].[description] AS t4_r7, [enumerations].[id] AS t5_r0, [enumerations].[name] AS t5_r1, [enumerations].[position] AS t5_r2, [enumerations].[is_default] AS t5_r3, [enumerations].[type] AS t5_r4, [enumerations].[active] AS t5_r5, [enumerations].[project_id] AS t5_r6, [enumerations].[parent_id] AS t5_r7, [enumerations].[position_name] AS t5_r8, [issue_categories].[id] AS t6_r0, [issue_categories].[project_id] AS t6_r1, [issue_categories].[name] AS t6_r2, [issue_categories].[assigned_to_id] AS t6_r3, [versions].[id] AS t7_r0, [versions].[name] AS t7_r1, [versions].[description] AS t7_r2, [versions].[effective_date] AS t7_r3, [versions].[created_on] AS t7_r4, [versions].[updated_on] AS t7_r5, [versions].[wiki_page_title] AS t7_r6, [versions].[status] AS t7_r7, [versions].[sharing] AS t7_r8, [versions].[is_private] AS t7_r9, FROM [issues] INNER JOIN [projects] ON [projects].id = [issues].[project_id] INNER JOIN [issue_statuses] ON [issue_statuses].[id] = [issues].[status_id] LEFT OUTER JOIN [users] ON [users].[id] = [issues].[assigned_to_id] LEFT OUTER JOIN [trackers] ON [trackers].[id] = [issues].[tracker_id] LEFT OUTER JOIN [enumerations] ON [enumerations].[id] = [issues].[priority_id] AND [enumerations].[type] IN (N''IssuePriority'') LEFT OUTER JOIN [issue_categories] ON [issue_categories].[id] = [issues].[category_id] LEFT OUTER JOIN [versions] ON [versions].[id] = [issues].[fixed_version_id] WHERE (projects.status <> 9 AND EXISTS (SELECT 1 AS one FROM enabled_modules em WHERE em.project_id = projects.id AND em.name=''issue_tracking'')) AND ((issues.status_id IN (SELECT id FROM issue_statuses WHERE is_closed=0)) AND projects.id = 169) ORDER BY projects.lft ASC, issues.id ASC, issues.id DESC OFFSET 0 ROWS FETCH NEXT 500 ROWS ONLY', N"@0 = 500

2022-12-26
bin/rails test test/unit/lib/redmine/helpers/gantt_test.rb:79

(snip)

Failure:
GanttsControllerTest#test_gantt_should_work [/Users/harada/_work_/redmine/git/dev-trunk/test/functional/gantt_controller_test.rb:41]:
Expected response to be a <2XX: success>, but was a <500: Internal Server Error>

bin/rails test test/functional/gantts_controller_test.rb:33
F

Failure:
GanttsControllerTest#test_gantt_should_not_disclose_private_projects
[/Users/harada/_work_/redmine/git/dev-trunk/test/functional/gantts_controller_test.rb:117]:
Expected response to be a <2XX: success>, but was a <500: Internal Server Error>

bin/rails test test/functional/gantts_controller_test.rb:115
(snip)

Finished in 924.631252s, 5.3632 runs/s, 24.4162 assertions/s.
4959 runs, 22576 assertions, 12 failures, 16 errors, 4 skips
You have skipped tests. Run with --verbose for details.
dev-trunk $
}

#12 - 2020-02-25 14:44 - Sascha Merz
Will this issue be solved in 4.1.1?
We as a team are using Redmine as our project management solution on a daily basis. To have Gantt is a key feature for us.
Thank you. Sascha

#13 - 2020-03-31 16:57 - Marius BALTEANU
- Duplicated by Defect #33224: SQL Server: A column has been specified more than once added

#14 - 2020-03-31 18:32 - Pavel Rosický
- File gantt.rb.patch added

for reference #29581 caused the issue

patches 32737-remove-duplicate-keys.patch and gantt.rb.patch should be applied

#15 - 2020-04-01 10:04 - Marius BALTEANU
- Target version set to 4.1.1
We should fix this in version: "4.1.1" together with #30285.

#16 - 2020-04-01 10:11 - Marius BALTEANU
- Description updated

#17 - 2020-04-02 05:02 - Yuichi HARADA

Pavel Rosický wrote:

```
for reference #29581 caused the issue

patches 32737-remove-duplicate-keys.patch and gantt.rb.patch should be applied
```

That's great. All tests completed successfully by combining 32737-remove-duplicate-keys.patch and gantt.rb.patch. However, since the relative path of gantt.rb was unknown, I was rebuilt gantt.rb.patch.

diff --git a/lib/redmine/helpers/gantt.rb b/lib/redmine/helpers/gantt.rb
index 16f180090..206cdea24 100644
--- a/lib/redmine/helpers/gantt.rb
+++ b/lib/redmine/helpers/gantt.rb
@@ -151,7 +151,7 @@ module Redmine
   def issues
     @issues ||= @query.issues(
       :include => [:assigned_to, :tracker, :priority, :category, :fixed_version],
-      :order => "#{Project.table_name}.lft ASC, #{Issue.table_name}.id ASC",
+      :order => ["#{Project.table_name}.lft ASC", "#{Issue.table_name}.id ASC"],
       :limit => @max_rows
     )
   end
```

#18 - 2020-04-02 08:46 - Go MAEDA
- Related to Defect #29581: Issues in paginated views may be lost because sorting criteria are not unique added

#19 - 2020-04-02 09:59 - Go MAEDA
- Status changed from New to Closed
- Assignee set to Go MAEDA
- Resolution set to Fixed

Committed the patch. Thank you to everyone involved in testing and fixing the issue.

Files

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>production.log</td>
<td>27.2 KB</td>
<td>2020-01-02</td>
<td>Sascha Merz</td>
</tr>
<tr>
<td>32737_exclude_same_column_from_orderby.patch</td>
<td>2.41 KB</td>
<td>2020-01-22</td>
<td>Yuichi HARADA</td>
</tr>
<tr>
<td>32737-remove-duplicate-keys.patch</td>
<td>1.51 KB</td>
<td>2020-01-27</td>
<td>Go MAEDA</td>
</tr>
<tr>
<td>gantt.rb.patch</td>
<td>529 Bytes</td>
<td>2020-03-31</td>
<td>Pavel Rosický</td>
</tr>
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</table>