

Redmine - Defect #32915

Internal Server Error occurred when exporting gantt chart to png on Windows

2020-01-29 05:11 - Anonymous

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	Gantt	Estimated time:	0.00 hour
Target version:		Affected version:	4.1.0
Description			

Redmine 4.0.4 using RMagick was fine.
However, Redmine 4.1.0 using MiniMagick does not work.

production.log of Redmine 4.1.0 is this:

```
Started GET "/redmine/projects/some_project/issues/gantt.png?..." for (IP) at (date)
Processing by GanttsController#show as PNG
  Parameters: {...}
  Current user: admin (id=1)
Completed 500 Internal Server Error in 290ms ( ActiveRecord: 63.0ms)
```

Errno::E2BIG (Arg list too long - convert):

```
lib/redmine/helpers/gantt.rb:381:in `to_image'
app/controllers/gantts_controller.rb:44:in `block (2 levels) in show'
app/controllers/gantts_controller.rb:42:in `show'
```

On Windows, the ImageMagick's "convert" command length is too long, and then error occurred.
I want to shorten the command length or split the command if Redmine keeps using Minimagick.
And there should be some exception code as below:

```
--- a\lib\redmine\helpers\gantt.rb
+++ b\lib\redmine\helpers\gantt.rb
@@ -488,4 +488,15 @@
      end
      img.to_blob
+    rescue
+      MiniMagick::Tool::Convert.new do |gc|
+        # create error message image
+        gc.size('%dx%d' % [200, 50])
+        gc.xc('white')
+        gc.stroke('transparent').fill('red')
+        # and draw error message
+        gc.draw('text %d,%d %s' % [10, 20, Redmine::Utils.shell_quote('Gantt size too big.')])
+        gc << img.path
+      end
+      img.to_blob
+    ensure
+      img.destroy! if img
```

For some reason, I have to keep using Redmine on Windows...

History

#1 - 2020-01-31 05:17 - Anonymous

To work on Windows, divided the MiniMagick "convert" block.

This patch can display up to about 200 issues.

However, the subjects() and lines() functions create "convert" commands internally, so these could't be divided.

```
--- a/lib/redmine/helpers/gantt.rb
+++ b/lib/redmine/helpers/gantt.rb
@@ -386,4 +386,11 @@
     gc.stroke('transparent')
     subjects(:image => gc, :top => (headers_height + 20), :indent => 4, :format => :image)
+
+    gc << img.path
+    gc.call
+
+    end
+
+    # Make blocks smaller for windows
+    MiniMagick::Tool::Convert.new do |gc|
+        gc << img.path
+        gc.font(font_path) if font_path.present?
+        # Months headers
+        month_f = @date_from
+
@@ -472,4 +479,11 @@
     0, 0, subject_width + g_width, g_height + headers_height - 1
   ])
+
+    gc << img.path
+    gc.call
+
+    end
+
+    # Make blocks smaller for windows
+    MiniMagick::Tool::Convert.new do |gc|
+        gc << img.path
+        gc.font(font_path) if font_path.present?
+        # content
+        top = headers_height + 20
```

#2 - 2020-02-07 06:37 - Anonymous

Changed to split MiniMagick's "convert" command on Windows only.

To do so, changed the "convert" object (gc) to an instance variable (@gc), and added an @minimagick_command_max instance variable for the command splitting.

```
@@ -90,4 +90,6 @@
     @max_rows = Setting.gantt_items_limit.blank? ? nil : Setting.gantt_items_limit.to_i
   end
+
+  @gc = nil
+
+  @minimagick_command_max = Redmine::Platform.mswin? ? 1000 : -1
end

@@ -379,11 +381,11 @@
   font_path = Redmine::Configuration['minimagick_font_path'].presence || Redmine::Configuration['rmagick_font_path'].presence
   img = MiniMagick::Image.create(".#{format}", false)
-
-  MiniMagick::Tool::Convert.new do |gc|
-    gc.size('%dx%d' % [subject_width + g_width + 1, height])
-    gc.xc('white')
-    gc.font(font_path) if font_path.present?
+  @gc = MiniMagick::Tool::Convert.new
+  @gc.size('%dx%d' % [subject_width + g_width + 1, height])
+  @gc.xc('white')
+
+  @gc.font(font_path) if font_path.present?
+  # Subjects
-
-  gc.stroke('transparent')
-  subjects(:image => gc, :top => (headers_height + 20), :indent => 4, :format => :image)
+  @gc.stroke('transparent')
+
+  subjects(:image => @gc, :top => (headers_height + 20), :indent => 4, :format => :image, :img_path =
> img.path, :font_path => font_path)
     # Months headers
     month_f = @date_from
@@ -391,14 +393,14 @@
   @months.times do
     width = ((month_f >> 1) - month_f) * zoom
-
-    gc.fill('white')
-    gc.stroke('grey')
-    gc.strokewidth(1)
-    gc.draw('rectangle %d,%d %d,%d' % [
+    @gc.fill('white')
+
+    @gc.stroke('grey')
+
+    @gc.strokewidth(1)
+
+    @gc.draw('rectangle %d,%d %d,%d' % [
         left, 0, left + width, height
```

```

])
gc.fill('black')
gc.stroke('transparent')
gc.strokewidth(1)
gc.draw('text %d,%d %s' %
@gc.fill('black')
@gc.stroke('transparent')
@gc.strokewidth(1)
@gc.draw('text %d,%d %s' %
    left.round + 8, 14, Redmine::Utils::Shell.shell_quote("#{month_f.year}-#{month_f.month}")
])
@@ -417,8 +419,8 @@
    week_f = @date_from + (7 - @date_from.cwday + 1)
    width = (7 - @date_from.cwday + 1) * zoom
    gc.fill('white')
    gc.stroke('grey')
    gc.strokewidth(1)
    gc.draw('rectangle %d,%d %d,%d' %
@gc.fill('white')
@gc.stroke('grey')
@gc.strokewidth(1)
@gc.draw('rectangle %d,%d %d,%d' %
    left, header_height, left + width, 2 * header_height + g_height - 1
])
@@ -427,14 +429,14 @@
    while week_f <= date_to
        width = (week_f + 6 <= date_to) ? 7 * zoom : (date_to - week_f + 1) * zoom
        gc.fill('white')
        gc.stroke('grey')
        gc.strokewidth(1)
        gc.draw('rectangle %d,%d %d,%d' %
@gc.fill('white')
@gc.stroke('grey')
@gc.strokewidth(1)
@gc.draw('rectangle %d,%d %d,%d' %
    left.round, header_height, left.round + width, 2 * header_height + g_height - 1
])
        gc.fill('black')
        gc.stroke('transparent')
        gc.strokewidth(1)
        gc.draw('text %d,%d %s' %
@gc.fill('black')
@gc.stroke('transparent')
@gc.strokewidth(1)
@gc.draw('text %d,%d %s' %
    left.round + 2, header_height + 14, Redmine::Utils::Shell.shell_quote(week_f.cweek.to_s)
])
@@ -450,10 +452,18 @@
    (date_to - @date_from + 1).to_i.times do
        width = zoom
        gc.fill(non_working_week_days.include?(wday) ? '#eee' : 'white')
        gc.stroke('#ddd')
        gc.strokewidth(1)
        gc.draw('rectangle %d,%d %d,%d' %
@gc.fill(non_working_week_days.include?(wday) ? '#eee' : 'white')
@gc.stroke('#ddd')
@gc.strokewidth(1)
@gc.draw('rectangle %d,%d %d,%d' %
    left, 2 * header_height, left + width, 2 * header_height + g_height - 1
])
        # Make blocks smaller for windows
        if (@minimagick_command_max > 0) && (@gc.command.length > @minimagick_command_max)
            @gc << img.path
            @gc.call
            @gc = MiniMagick::Tool::Convert.new
            @gc << img.path
            @gc.font(font_path) if font_path.present?
        end
        left = left + width
        wday = wday + 1
@@ -462,29 +472,45 @@
        end
        # border
        gc.fill('transparent')
        gc.stroke('grey')

```

```

-     gc.strokewidth(1)
-     gc.draw('rectangle %d,%d %d,%d' %
+     @gc.fill('transparent')
+     @gc.stroke('grey')
+     @gc.strokewidth(1)
+     @gc.draw('rectangle %d,%d %d,%d' %
      0, 0, subject_width + g_width, headers_height
    ))
-     gc.stroke('black')
-     gc.draw('rectangle %d,%d %d,%d' %
+     @gc.stroke('black')
+     @gc.draw('rectangle %d,%d %d,%d' %
      0, 0, subject_width + g_width, g_height + headers_height - 1
    ))
    # content
    top = headers_height + 20
-     gc.stroke('transparent')
-     lines(:image => gc, :top => top, :zoom => zoom,
-           :subject_width => subject_width, :format => :image)
+     @gc.stroke('transparent')
+     lines(:image => @gc, :top => top, :zoom => zoom,
+           :subject_width => subject_width, :format => :image, :img_path => img.path, :font_path => font_path)
# today red line
if User.current.today >= @date_from and User.current.today <= date_to
  gc.stroke('red')
  @gc.stroke('red')
  x = (User.current.today - @date_from + 1) * zoom + subject_width
  gc.draw('line %g,%g %g,%g' %
  @gc.draw('line %g,%g %g,%g' %
    x, headers_height, x, headers_height + g_height - 1
  ))
end
gc << img.path
end
@gc << img.path
@gc.call
img.to_blob
rescue
  @gc = MiniMagick::Tool::Convert.new
  # create error message image
  @gc.size('%dx%d' % [600, 120])
  @gc.xc('white')
  @gc.stroke('transparent').fill('red')
  @gc.pointsize(20)
  # and draw error message
  err_message = <<"EOS"
+Image geneneration failed.
+There may be too much issues.
+Please decrease the number of issues.
+EOS
  @gc.draw('text %d,%d %s' % [10, 40, Redmine::Utils::Shell.shell_quote(err_message)])
  @gc << img.path
  img.to_blob
ensure
@@ -803,10 +829,18 @@

```

```

def image_subject(params, subject, options={})
-   params[:image].fill('black')
-   params[:image].stroke('transparent')
-   params[:image].strokewidth(1)
-   params[:image].draw('text %d,%d %s' %
+   @gc.fill('black')
+   @gc.stroke('transparent')
+   @gc.strokewidth(1)
+   @gc.draw('text %d,%d %s' %
     params[:indent], params[:top] + 2, Redmine::Utils::Shell.shell_quote(subject)
   ))
+   # Make blocks smaller for windows
+   if (@minimagick_command_max > 0) && (@gc.command.length > @minimagick_command_max)
+     @gc << params[:img_path]
+     @gc.call
+     @gc = MiniMagick::Tool::Convert.new
+     @gc << params[:img_path]
+     @gc.font(params[:font_path]) if params[:font_path].present?

```

```

+     end
end

@@ -992,6 +1026,6 @@
    # Renders the task bar, with progress and late
    if coords[:bar_start] && coords[:bar_end]
-      params[:image].fill('#aaa')
-      params[:image].draw('rectangle %d,%d %d,%d' % [
+      @gc.fill('#aaa')
+      @gc.draw('rectangle %d,%d %d,%d' % [
        params[:subject_width] + coords[:bar_start],
        params[:top],
@@ -1000,6 +1034,6 @@
    ])
    if coords[:bar_late_end]
-      params[:image].fill('#f66')
-      params[:image].draw('rectangle %d,%d %d,%d' % [
+      @gc.fill('#f66')
+      @gc.draw('rectangle %d,%d %d,%d' % [
        params[:subject_width] + coords[:bar_start],
        params[:top],
@@ -1009,6 +1043,6 @@
end
if coords[:bar_progress_end]
-  params[:image].fill('#00c600')
-  params[:image].draw('rectangle %d,%d %d,%d' % [
+  @gc.fill('#00c600')
+  @gc.draw('rectangle %d,%d %d,%d' % [
    params[:subject_width] + coords[:bar_start],
    params[:top],
@@ -1023,6 +1057,6 @@
    x = params[:subject_width] + coords[:start]
    y = params[:top] - height / 2
-  params[:image].fill('blue')
-  params[:image].draw('polygon %d,%d %d,%d %d,%d %d,%d' % [
+  @gc.fill('blue')
+  @gc.draw('polygon %d,%d %d,%d %d,%d %d,%d' % [
    x - 4, y,
    x, y - 4,
@@ -1034,6 +1068,6 @@
    x = params[:subject_width] + coords[:end] + params[:zoom]
    y = params[:top] - height / 2
-  params[:image].fill('blue')
-  params[:image].draw('polygon %d,%d %d,%d %d,%d %d,%d' % [
+  @gc.fill('blue')
+  @gc.draw('polygon %d,%d %d,%d %d,%d %d,%d' % [
    x - 4, y,
    x, y - 4,
@@ -1045,9 +1079,17 @@
    # Renders the label on the right
    if label
-      params[:image].fill('black')
-      params[:image].draw('text %d,%d %s' % [
+      @gc.fill('black')
+      @gc.draw('text %d,%d %s' % [
        params[:subject_width] + (coords[:bar_end] || 0) + 5, params[:top] + 1, Redmine::Utils::Shell.shell_quote(label)
      ])
    end
+    # Make blocks smaller for windows
+    if (@minimagick_command_max > 0) && (@gc.command.length > @minimagick_command_max)
+      @gc << params[:img_path]
+      @gc.call
+      @gc = MiniMagick::Tool::Convert.new
+      @gc << params[:img_path]
+      @gc.font(params[:font_path]) if params[:font_path].present?
+    end
  end
end

```

#3 - 2020-02-07 08:39 - Go MAEDA

- Subject changed from Internal Server Error occurred when exporting gantt chart to png to Internal Server Error occurred when exporting gantt chart to png on Windows

taca tadocolo wrote:

Changed to split MiniMagick's "convert" command on Windows only.

To do so, changed the "convert" object (gc) to an instance variable (@gc), and added an @minimagick_command_max instance variable for the command splitting.

[...]

hello[] taca tadocolo

"@gc.size("%dx%d" % [subject_width + g_width + 1, height])" build error was occurred.

how to fix it[]