

## Redmine - Feature #7056

### Download all attachments at once

2010-12-06 18:26 - Chris Haverman

<b>Status:</b>	Closed	<b>Start date:</b>	2010-12-06
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Go MAEDA	<b>% Done:</b>	0%
<b>Category:</b>	Attachments	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	4.2.0		
<b>Resolution:</b>	Fixed		
<b>Description</b>			
Did a quick search to see if this had been reported; didn't see anything.			
Basically I'd like there to be a way to download all attachments to an issue in a single click rather than each one separately.			
<b>Related issues:</b>			
Related to Redmine - Feature # 8708: Provide a "download multiple files at on...		<b>Reopened</b>	<b>2011-06-29</b>
Duplicated by Redmine - Feature # 2662: Download a document		<b>Closed</b>	<b>2009-02-04</b>

#### Associated revisions

##### Revision 19601 - 2020-03-21 06:59 - Go MAEDA

Download all attachments at once (#7056).

Patch by Mizuki ISHIKAWA.

##### Revision 19602 - 2020-03-21 07:07 - Go MAEDA

Update locales (#7056).

##### Revision 19603 - 2020-03-22 03:23 - Go MAEDA

Update rubyzip to 2.3 (#7056).

##### Revision 19609 - 2020-03-23 06:52 - Go MAEDA

Display bulk\_download\_max\_size in human-readable representation (#7056).

Patch by Go MAEDA.

##### Revision 19631 - 2020-04-01 11:14 - Go MAEDA

Replace File#readable? with Attachment#readable? (#7056).

##### Revision 19635 - 2020-04-02 07:52 - Go MAEDA

Replace File#readable? with Attachment#readable? (#7056).

Revision 19688 - 2020-04-11 09:58 - Go MAEDA

Fix that bulk download raises Errno::EACCES on Windows (#7056).

Patch by Yuichi HARADA.

## History

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**#1 - 2010-12-15 18:10 - zac folk**

I agree, this would be really useful.

**#2 - 2013-02-14 13:40 - Motaz Abuthiab**

+1

**#3 - 2013-11-18 11:51 - Nicolas QUETGLAS**

+1

**#4 - 2015-03-08 03:19 - Go MAEDA**

- Related to Feature #8708: Provide a "download multiple files at once" feature added

**#5 - 2017-05-14 15:12 - Nikolay Yurchenko**

+1

**#6 - 2018-07-09 11:21 - Klément Grisel**

+1

**#7 - 2018-10-11 07:30 - Mizuki ISHIKAWA**

- File compress\_the\_all\_attachments\_in\_issue.patch added

In order to realize this feature, I thought of compressing and downloading Issue's attachment.  
By applying this patch, you can download all of the attached files as a zip file. (using gem rubyzip)

Non-ascii file names are garbled in older versions (Windows 7, Windows Vista, Windows XP).  
Windows 7 is scheduled to end support in 2020.

<https://github.com/rubyzip/rubyzip/wiki/Files-with-non-ascii-filenames>

Any feedback on this patch is welcome.

**#8 - 2018-10-31 15:44 - Go MAEDA**

Thank you for posting the patch. Could you explain why `attachments_to_zip` method creates temporary files in `Attachment.storage_path` instead of `tmp` directory?

**#9 - 2018-11-02 04:41 - Go MAEDA**

I think the patch should consider the free space of the disk. Suppose that the total size of attachments of the issue is 1GB. If the free space of the disk is less than 1GB, the creation of a zip archive will fail and the server may stop working due to disk full.

Here are some ideas to avoid the problem.

- Show an error message indicates no sufficient disk space if the total size of attachments exceeds the free disk space
- Create and send a zip archive without creating a temporary file

**#10 - 2018-12-25 03:47 - Mizuki ISHIKAWA**

- *File compress\_the\_all\_attachments\_in\_issue\_v2.patch added*
- *File error\_message.png added*

Go MAEDA wrote:

*Thank you for posting the patch. Could you explain why `attachments_to_zip` method creates temporary files in `Attachment.storage_path` instead of `tmp` directory?*

There was no particular reason. I changed the temporary file storage location to the `tmp` directory.

Go MAEDA wrote:

*I think the patch should consider the free space of the disk. Suppose that the total size of attachments of the issue is 1GB. If the free space of the disk is less than 1GB, the creation of a zip archive will fail and the server may stop working due to disk full.*

*Here are some ideas to avoid the problem.*

- *Show an error message indicates no sufficient disk space if the total size of attachments exceeds the free disk space*
- *Create and send a zip archive without creating a temporary file*

Thank you for your feedback.

Because I could not think of a good way to check disk space, I thought about limiting the maximum capacity of temporary files.

The maximum capacity of temporary file can be set in `configuration.yml`.

By doing this setting, it is impossible to create a temporary file larger than the assumption of the server administrator.

`error_message.png`

**#11 - 2019-02-28 13:09 - Go MAEDA**

- *Target version set to Candidate for next major release*

**#12 - 2019-12-19 05:31 - Go MAEDA**

Mizuki ISHIKAWA wrote:

| Non-ascii file names are garbled in older versions (Windows 7, Windows Vista, Windows XP).

I don't think this is a problem because Windows 7 is going to reach EOL next month (2020-01-14).

<https://www.microsoft.com/en-us/microsoft-365/windows/end-of-windows-7-support>

**#13 - 2019-12-20 01:57 - Mizuki ISHIKAWA**

- File *compress\_the\_all\_attachments\_in\_issue\_v3.patch* added

I modified the patch to apply to the latest trunk.

**#14 - 2020-02-18 08:43 - Go MAEDA**

- File *screenshot-v4.png* added

- File *compress\_the\_all\_attachments\_in\_issue\_v4.patch* added

I have changed the patch:

- Add a label to the bulk download button
- Move the button to below the attachments list (like [usability plugin](#))
- Updated messages
- Raised the default value for `bulk_download_max_size` to 512MB

screenshot-v4.png

**#15 - 2020-03-05 04:50 - Go MAEDA**

- Duplicated by Feature #2662: *Download a document* added

**#16 - 2020-03-07 16:12 - Go MAEDA**

- File *compress\_the\_all\_attachments\_in\_issue\_v5.patch* added

I have updated the patch. Moved `bulk_download_max_size` setting from `configuration.yml` to `/settings` GUI for consistency.

**#17 - 2020-03-08 00:23 - Go MAEDA**

- Target version changed from *Candidate for next major release* to *4.2.0*

Setting the target version to 4.2.0.

**#18 - 2020-03-14 05:39 - Go MAEDA**

- File *compress\_the\_all\_attachments\_in\_issue\_v6.patch* added

Slightly updated the patch:

- Changed the method name `Attachment.attachments_to_zip` to `Attachment.archive_attachments` because `attachments_to_zip` is too specific. No one knows if the feature uses ZIP format forever, so I think the method name should not depend on a specific archive format

- Changed the text for label\_download\_all\_attachments from "Download all attached files" to simpler "Download all files"

**#19 - 2020-03-15 03:26 - Go MAEDA**

- File attachments-that-causes-EntryExistsError@2x.png added
- File compress\_the\_all\_attachments\_in\_issue\_v7.patch added

The patch may raise Zip::EntryExistsError when you try to download a ZIP file if a file that has "(2)" suffix in its basename is attached.

attachments-that-causes-EntryExistsError@2x.png

```
Started GET "/attachments/issues/32/download" for 127.0.0.1 at 2020-03-15 10:59:03 +0900
Processing by AttachmentsController#download_all as HTML
.
.
.
Completed 500 Internal Server Error in 28ms (ActiveRecord: 4.9ms)
```

Zip::EntryExistsError (add failed. Entry testfile(2).txt already exists):

```
app/models/attachment.rb:362:in `block (2 levels) in archive_attachments'
app/models/attachment.rb:355:in `each'
app/models/attachment.rb:355:in `block in archive_attachments'
app/models/attachment.rb:354:in `archive_attachments'
app/controllers/attachments_controller.rb:139:in `block in download_all'
app/controllers/attachments_controller.rb:138:in `download_all'
lib/redmine/sudo_mode.rb:64:in `sudo_mode'
```

I have fixed the above issue. Also, I have changed the "(n)" suffix for duplicate filenames to start from 1 instead of 2. It is the same behavior as Chrome and Firefox do when downloading files with the same name.

**#20 - 2020-03-15 14:13 - Marius BALTEANU**

- File download.png added

I like this feature.

What do you think if we show the link next to edit attached files icon (as Mizuki proposed first time) in order to keep the links grouped?  
download.png

I don't find very UX friendly to have the Edit button to the right and the "Download all" button under attachments and thumbnails.

**#21 - 2020-03-15 14:18 - Marius BALTEANU**

- Related to deleted (Feature #8708: Provide a "download multiple files at once" feature)

**#22 - 2020-03-15 14:18 - Marius BALTEANU**

- Duplicated by Feature #8708: Provide a "download multiple files at once" feature added

**#23 - 2020-03-15 14:21 - Marius BALTEANU**

Also, we should add a test for the new route added by this patch.

**#24 - 2020-03-15 14:58 - Marius BALTEANU**

- Duplicated by deleted (Feature #8708: Provide a "download multiple files at once" feature)

**#25 - 2020-03-15 14:59 - Marius BALTEANU**

- Related to Feature #8708: Provide a "download multiple files at once" feature added

**#26 - 2020-03-16 07:41 - Go MAEDA**

Marius BALTEANU wrote:

| *What do you think if we show the link next to edit attached files icon (as Mizuki proposed first time) in order to keep the links grouped?*

I prefer the current position because the position you suggest is very far from the list of files and many people may not notice this useful feature. But it is OK to move the button to the right if we can move this patch forward by doing that.

**#27 - 2020-03-16 09:37 - Marius BALTEANU**

Go MAEDA wrote:

| *Marius BALTEANU wrote:*

| | *What do you think if we show the link next to edit attached files icon (as Mizuki proposed first time) in order to keep the links grouped?*

| | *I prefer the current position because the position you suggest is very far from the list of files and many people may not notice this useful feature. But it is OK to move the button to the right if we can move this patch forward by doing that.*

I agree with you that having all the action icons in the right corner is maybe not the best option, but this is in the current UI and we cannot just drop some action icons in other places. We should keep the consistency and if we do a change to resolve the distance, we should do it for all the icons because there is no difference between the Edit icon and Delete icon. In all other screens we have the icons one after each other. From my point of view, we can commit this if we move the icon and add the missing test.

**#28 - 2020-03-17 02:57 - Mizuki ISHIKAWA**

- File `compress_the_all_attachments_in_issue_v8.patch` added

- File `diff_v7_and_v8.patch` added

Thanks for contributions for releasing this feature.

I updated the patch.

- Add tests to `test/integration/routing/attachments_test.rb`

- Move icon position to original position

**#29 - 2020-03-21 07:03 - Go MAEDA**

- Subject changed from `Download All Attachments in Issue` to `Download all attachments at once`

- Status changed from `New` to `Closed`

- Assignee set to `Go MAEDA`

- Resolution set to Fixed

Committed the patch. Thank you for improving Redmine.

**#30 - 2020-03-22 05:25 - Go MAEDA**

- File *human-readable-file-size.patch* added
- File *file-size-before@2x.png* added
- File *file-size-after@2x.png* added
- Status changed from *Closed* to *Reopened*

The attached patch *human-readable-file-size.patch* fixes the format of file size in the message *error\_bulk\_download\_size\_too\_big* to human-readable.

**Before:**

*file-size-before@2x.png*

**After:**

*file-size-after@2x.png*

**#31 - 2020-03-23 06:53 - Go MAEDA**

- Status changed from *Reopened* to *Closed*

Go MAEDA wrote:

*The attached patch human-readable-file-size.patch fixes the format of file size in the message error\_bulk\_download\_size\_too\_big to human-readable.*

Committed the patch in r19609.

**#32 - 2020-03-24 21:52 - Pavel Rosický**

- File *download\_all\_fix.patch* added

unfortunately, this feature doesn't work on Windows.

Error:

AttachmentTest#test\_archive\_attachments:

```
Errno::EACCES: Permission denied @ rb_file_s_rename - (c:/redmine/tmp/attachments_zip20200324-12432-yknlax20200324-12432-1qjlddf,
c:/redmine/tmp/attachments_zip20200324-12432-yknlax)
  app/models/attachment.rb:355:in `archive_attachments'
  test/unit/attachment_test.rb:284:in `block in test_archive_attachments'
  test/unit/attachment_test.rb:283:in `test_archive_attachments'
```

I've attached a quick fix.

#33 - 2020-03-25 03:27 - Go MAEDA

- Status changed from Closed to Reopened

#34 - 2020-04-08 04:11 - Yuichi HARADA

- File zip-create-via-stream.patch added

Pavel Rosický wrote:

```
| unfortunately, this feature doesn't work on Windows.
```

```
| [...]
```

Thanks for reporting this problem.

I fixed it to create a zip file via stream. No temporary file is needed.

```
diff --git a/app/controllers/attachments_controller.rb b/app/controllers/attachments_controller.rb
index b69dcf983..0c76490b2 100644
```

```
--- a/app/controllers/attachments_controller.rb
```

```
+++ b/app/controllers/attachments_controller.rb
```

```
@@ -137,16 +137,16 @@ class AttachmentsController < ApplicationController
```

```
  end
```

```
  def download_all
```

```
  - Tempfile.create('attachments_zip-', Rails.root.join('tmp')) do |tempfile|
```

```
  -   zip_file = Attachment.archive_attachments(tempfile, @attachments)
```

```
  -   if zip_file
```

```
  -     send_data(
```

```
  -       File.read(zip_file.path),
```

```
  -       :type => 'application/zip',
```

```
  -       :filename => "#{@container.class.to_s.downcase}-#{@container.id}-attachments.zip"
```

```
  -     else
```

```
  -       render_404
```

```
  -     end
```

```
  + zip_data = Attachment.archive_attachments(@attachments)
```

```
  + if zip_data
```

```
  +   file_name = "#{@container.class.to_s.downcase}-#{@container.id}-attachments.zip"
```

```
  +   send_data(
```

```
  +     zip_data,
```

```
  +     :type => Redmine::MimeType.of(file_name),
```

```
  +     :filename => file_name
```

```
  +   )
```

```
  + else
```

```
  +   render_404
```

```
  end
```

```
end
```

```
diff --git a/app/models/attachment.rb b/app/models/attachment.rb
```

```
index b5a3332ac..734b8f7fa 100644
```

```
--- a/app/models/attachment.rb
```

```
+++ b/app/models/attachment.rb
```

```
@@ -346,28 +346,28 @@ class Attachment < ActiveRecord::Base
```

```
  Attachment.where("created_on < ? AND (container_type IS NULL OR container_type = ')", Time.now - age).destroy_all
```



```

end

- def self.archive_attachments(out_file, attachments)
+ def self.archive_attachments(attachments)
  attachments = attachments.select(&:readable?)
  return nil if attachments.blank?

  Zip.unicode_names = true
  archived_file_names = []
- Zip::File.open(out_file.path, Zip::File::CREATE) do |zip|
+ Zip::OutputStream.write_buffer do |zos|
  attachments.each do |attachment|
    filename = attachment.filename
    # rename the file if a file with the same name already exists
    dup_count = 0
    while archived_file_names.include?(filename)
      dup_count += 1
-     basename = File.basename(attachment.filename, '.*')
      extname = File.extname(attachment.filename)
+     basename = File.basename(attachment.filename, extname)
      filename = "#{basename}#{dup_count}#{extname}"
    end
- zip.add(filename, attachment.diskfile)
+ zos.put_next_entry(filename)
+ zos << IO.binread(attachment.diskfile)
    archived_file_names << filename
  end
- end
- out_file
+ end.string
end

# Moves an existing attachment to its target directory

```

### #35 - 2020-04-08 11:40 - Pavel Rosický

Yuichi HARADA thanks, it looks good!

but I'm getting a warning

```
zlib(finalizer): the stream was freed prematurely.
```

the output StringIO should be closed

### #36 - 2020-04-08 12:11 - Pavel Rosický

- File *zip-create-via-stream2.patch* added

### #37 - 2020-04-09 09:11 - Yuichi HARADA

- File zip-create-via-stream-v3.patch added

Pavel Rosický wrote:

*Yuichi HARADA thanks, it looks good!*

*but I'm getting a warning*

*[...]*

*the output StreamIO should be closed*

Thanks for pointing it out.

I had forgotten to perform StringIO#close . Fixed a patch.

**#38 - 2020-04-11 09:59 - Go MAEDA**

- Status changed from Reopened to Closed

Pavel Rosický wrote:

*unfortunately, this feature doesn't work on Windows.*

*[...]*

*I've attached a quick fix.*

Committed a fix for the issue in r19688. Thank you.

## Files

compress_the_all_attachments_in_issue.patch	8.93 KB	2018-10-11	Mizuki ISHIKAWA
compress_the_all_attachments_in_issue_v2.patch	12.9 KB	2018-12-25	Mizuki ISHIKAWA
error_message.png	287 KB	2018-12-25	Mizuki ISHIKAWA
compress_the_all_attachments_in_issue_v3.patch	12.9 KB	2019-12-20	Mizuki ISHIKAWA
screenshot-v4.png	104 KB	2020-02-18	Go MAEDA
compress_the_all_attachments_in_issue_v4.patch	13.5 KB	2020-02-18	Go MAEDA
compress_the_all_attachments_in_issue_v5.patch	13.2 KB	2020-03-07	Go MAEDA
compress_the_all_attachments_in_issue_v6.patch	13.2 KB	2020-03-14	Go MAEDA
attachments-that-causes-EntryExistsError@2x.png	50.7 KB	2020-03-15	Go MAEDA
compress_the_all_attachments_in_issue_v7.patch	13.2 KB	2020-03-15	Go MAEDA
download.png	152 KB	2020-03-15	Marius BALTEANU
diff_v7_and_v8.patch	2.32 KB	2020-03-17	Mizuki ISHIKAWA
compress_the_all_attachments_in_issue_v8.patch	13.4 KB	2020-03-17	Mizuki ISHIKAWA
human-readable-file-size.patch	1.85 KB	2020-03-22	Go MAEDA
file-size-before@2x.png	68 KB	2020-03-22	Go MAEDA
file-size-after@2x.png	67.1 KB	2020-03-22	Go MAEDA
download_all_fix.patch	3.81 KB	2020-03-24	Pavel Rosický
zip-create-via-stream.patch	4.61 KB	2020-04-08	Yuichi HARADA
zip-create-via-stream2.patch	5.06 KB	2020-04-08	Pavel Rosický

