
Subject: plugin/Zip issue with UTF-8

Posted by Tom1 on Wed, 03 Jan 2024 15:21:49 GMT

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Hi,

Just found a character encoding issue with plugin/Zip. When writing Zip files, the gpflag bit 11 should to be set for the filenames to be properly decoded by the reading program. (E.g. Windows 11 File Explorer incorrectly interprets the UTF-8 filenames written by plugin/Zip if the bit is not set.)

Please include the following fix:

```
void Zip::BeginFile(const char *path, Time tm, bool deflate)
{
    ASSERT(!IsFileOpened());
    if(deflate) {
        pipeZLib.Create();
        pipeZLib->WhenOut = THISBACK(PutCompressed);
        pipeZLib->GZip(false).CRC().NoHeader().Compress();
    }
    else {
        crc32.Clear();
        uncompressed = true;
    }
    File& f = file.Add();
    f.version = 21;
    f.gpflag = 0x8 | 1<<11; // Added UTF-8 marker, i.e.: " | 1<<11";
    f.method = deflate ? 8 : 0;
    f.crc = 0;
    f.csize = 0;
    f.usize = 0;
    FileHeader(path, tm);
    if (zip->IsError()) WhenError();
}
```

Found the gpflag bit to set here:

<https://pkware.cachefly.net/webdocs/APPNOTE/APPNOTE-6.3.0.TXT>

Do not know if it is a safe site, but at least the bit to set was correct. Now Windows can read the filenames properly.

Best regards,

Tom

Subject: Re: plugin/Zip issue with UTF-8 and large files

Posted by [Tom1](#) on Thu, 04 Jan 2024 11:43:38 GMT

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Hi,

I managed to create broken ZIP files when adding large data files. It seems, plugin/Zip is missing Zip64 support. Would it be possible to add Zip64 support to handle large files?

I'm not quite sure how the additional records should be done to make it work...

Best regards,

Tom

Subject: Re: plugin/Zip issue with UTF-8 and large files

Posted by [Tom1](#) on Fri, 05 Jan 2024 16:15:01 GMT

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Hi,

I think I managed to add ZIP64 support in plugin/Zip. (Just for Zip now, not for UnZip...)

The above UTF-8 filename fix is also included here.

Please test and report any issues.

Best regards,

Tom

File Attachments

1) [plugin_zip.zip](#), downloaded 151 times

Subject: Re: plugin/Zip issue with UTF-8 and large files

Posted by [Klugier](#) on Sat, 06 Jan 2024 18:42:40 GMT

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Hello Tom,

Could you prepare a PR for the main repository with your changes? This will save us time, and it will allow code review. Also, while merging, you will have credit in the form of being a co-creator.

Klugier

Subject: Re: plugin/Zip issue with UTF-8 and large files

Posted by [Tom1](#) on Sun, 07 Jan 2024 15:17:45 GMT

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Klugier wrote on Sat, 06 January 2024 20:42Hello Tom,

Could you prepare a PR for the main repository with your changes? This will save us time, and it will allow code review. Also, while merging, you will have credit in the form of being a co-creator.

Klugier

Hi,

Sure, why not. I just need step-by-step instructions to do it. As for the credits, I'm not after them. I just want the feature to be part of u++.

Best regards,

Tom

Subject: Re: plugin/Zip issue with UTF-8 and large files

Posted by [Klugier](#) on Sat, 10 Feb 2024 19:07:14 GMT

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Hello Tom,

There are no step by step instructions in our documentation, but the process is the same as for other repositories. You need to have GitHub account and create your own U++ fork. After that you can create dedicated branch to fix or work on the master. Once you will have everything prepared on your branch you need to create PR from fork to upp master branch.

Here is GitHub documentation pages you can find useful:

- <https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/working-with-forks/fork-a-repo>
- <https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/proposing-changes-to-your-work-with-pull-requests/creating-a-pull-request-from-a-fork>

Klugier
