

Forum:[Hack Forums](#)

Thread: [\[Small challenge\] how to fix this error \(small gzip source\)](#)

DeStilleGast - October 16, 2015, 7:34 am

Hello HackForums people,

For a while I have seen many "Help me" topics and not much "challenges" so I got here a challenge for you guys and also maybe some usefull code

Here is a piece of code that gives a "OutOfMemory" error:

Button 1

Code Dim openFile As New OpenFileDialog

 openFile.InitialDirectory = New DirectoryInfo(Application.StartupPath).FullName

 If openFile.ShowDialog = Windows.Forms.DialogResult.OK Then

 File.Create(openFile.FileName & ".gz").Dispose()

 File.WriteAllBytes(openFile.FileName & ".gz",

Compress(File.ReadAllBytes(openFile.FileName).ToArray))

 End If

Compress function

Code Public Function Compress(ByVal Raw() As Byte) As Byte()

 Using memory As MemoryStream = New MemoryStream()

 Using gzip As GZipStream = New GZipStream(memory, CompressionMode.Compress, True)

 gzip.Write(Raw, 0, Raw.Length)

 End Using

 Return memory.ToArray

 End Using

End Function

Trying to compress a big file (600MB) will result in this:

If done correctly it will result is this:

The ".pak" file is the original file.

The ".pak.gz" file is the compressed file.

THIS IS NOT A HELP REQUEST, I JUST WANT TO CHALLENGE SOME PEOPLE HERE and also to give a small source for gzip (haven't seen it here yet)

If need I can provide a video with the error (with source) and I my solution (without showing the source).

Also I WILL release the source at some time.

Multibyte - October 16, 2015, 7:56 am

The code you provided is working fine for me:

Josh? - October 16, 2015, 7:57 am

Compress function literally stolen from another site...

DeStilleGast - October 16, 2015, 8:06 am

(Oct 16, 2015 07:56 AM)Multibyte Wrote: [\[CITE\]](#) The code you provided is working fine for me:
<picture>True, but it doesn't work work on BIG files

(Oct 16, 2015 07:57 AM)Josh? Wrote: [\[CITE\]](#) Compress function literally stolen from another site...
True, the code here is from an another site, I never said it was my code

Dentmen - October 16, 2015, 8:40 am

i bet its memory problem try junk cleaner or sumthing
ram out of memory check your ram usage during this

DeStilleGast - October 16, 2015, 8:49 am

(Oct 16, 2015 08:40 AM)Dentmen Wrote: [\[CITE\]](#) i bet its memory problem try junk cleaner or
sumthing
ram out of memory check your ram usage during this
Correct, but I got already the solution, its your task to fix it.
And if you can see, it is imposible to cleanup (with this sample) the memory.

I got 8GB ram on this computer. and there is minimal 2GB free while it is compressing 600MB. So its
not the problem with my RAM.

Sho?kwave - October 16, 2015, 9:22 am

Well, I don't really believe that this is a challenge. I believe you're just stuck and you're to proud to
ask for help.

Getting help is fine and nothing to be embarrassed of.

Regardless here is my "solution" I split the file into 2mb chunks, compressed the chunk and
appended it to the output file, very simple and only uses about 20k memory and ~12 CPU on my
machine

```
Code Imports System.IO
Imports System.IO.Compression
```

```
Module Module1
```

```
Sub Main()
    CompressLargeFile("bigfile.dat", "bigfile.gz", 2048 * 1024)
End Sub
```

```
Private Sub CompressLargeFile(input As String, output As String, bufferSize As Integer)
    Dim FileSize As Long = New FileInfo(input).Length
    Dim ChunksRequired As Integer = FileSize / bufferSize
    Using FileStream As FileStream = New FileStream(input, FileMode.Open, FileAccess.Read)
        While FileStream.Position < FileStream.Length
            Dim Chunk As Byte() = New Byte(bufferSize) {}
            If FileStream.Length - FileStream.Position < Chunk.Length Then
                Array.Resize(Chunk, FileStream.Length - FileStream.Position)
            End If
            FileStream.Read(Chunk, 0, Chunk.Length)
            If ChunksRequired < ChunksRequired Then
                ChunksRequired += 1
            End If
        End While
    End Using
End Sub
```

```

        End If
        Chunk = Compress(Chunk)
        Dim AppendStream As New FileStream(output, FileMode.Append, FileAccess.Write)
        AppendStream.Write(Chunk, 0, Chunk.Length)
        AppendStream.Close()
    End While
End Using
End Sub

```

```

Private Function Compress(Raw() As Byte) As Byte()
    Using memory As MemoryStream = New MemoryStream()
        Using gzip As GZipStream = New GZipStream(memory, CompressionMode.Compress,
True)
            gzip.Write(Raw, 0, Raw.Length)
        End Using
        Return memory.ToArray
    End Using
End Function

```

End Module

I think the file I compressed was already compressed as it's from GTA's game resources.

If you want I can comment the code, but it's pretty self explanatory.

Odus - October 16, 2015, 9:29 am

(Oct 16, 2015 09:22 AM)Shockwave™ Wrote: [\[CITE\]](#) Well, I don't really believe that this is a challenge. I believe you're just stuck and you're too proud to ask for help.

Getting help is fine and nothing to be embarrassed of.
I'm with this as well. Post your solution.

DeStilleGast - October 16, 2015, 9:52 am

(Oct 16, 2015 09:22 AM)Shockwave™ Wrote: [\[CITE\]](#) Well, I don't really believe that this is a challenge. I believe you're just stuck and you're too proud to ask for help. Then you haven't read the whole post, I know a solution that works. You can blame me if it isn't, but I got already a working code:

Proof:

(Used another recorder since my WIP recorder didn't work correct)

And yes, I'm also a little bit curious how other people are using/fixing this.

(Oct 16, 2015 09:29 AM)Odus Wrote: [\[CITE\]](#) I'm with this as well. Post your solution.
Aw but that ruins my challenge ?

```

Code Using toOpen As Stream = IO.File.OpenRead(Arg)
        Using toWrite As Stream = IO.File.OpenWrite(Arg & ".gz")
            Using gzip As GZipStream = New GZipStream(toWrite,
CompressionMode.Compress, True)
                gzip.Write(GetStreamAsByteArray(toOpen), 0, toOpen.Length)
            End Using
        End Using

```

End Using

GC.Collect()Note: Arg is from the arguments (so I can proceed more the 1 files at once)

And to get the bytes from the Stream I got this function

```
Code Private Function GetStreamAsByteArray(ByVal stream As System.IO.Stream) As Byte()  
    Dim streamLength As Integer = Convert.ToInt32(stream.Length)  
    Dim fileData As Byte() = New Byte(streamLength) {}
```

```
    stream.Read(fileData, 0, streamLength)
```

```
    Return fileData
```

```
End Function
```

Maybe not the best code, but it works fine for me ATM

Odus - October 16, 2015, 10:11 am

(Oct 16, 2015 09:52 AM)DeStilleGast Wrote: [\[CITE\]](#) Aw but that ruins my challenge ?

Most challenges actually come with the challenger's (right word?) solution. Those actually up for the challenge won't look and those who can't will try and improve using it.

I've seen people make the challenge without and the thread quickly fills up with posts saying "just make it a help thread". That's why I asked you to post your solution.

DeStilleGast - October 16, 2015, 10:13 am

(Oct 16, 2015 10:11 AM)Odus Wrote: [\[CITE\]](#) Most challenges actually come with the challenger's (right word?) solution. Those actually up for the challenge won't look and those who can't will try and improve using it.

I've seen people make the challenge without and the thread quickly fills up with posts saying "just make it a help thread". That's why I asked you to post your solution.

Kinda true what you said there.?

BahNahNah - October 16, 2015, 5:00 pm

The error is self explanatory, you are trying to use too much memory.

You should be using a file stream, not a memory stream.