

## Partial files encrypted (1 KB file size) when using PGP Encrypt action


### THE INFORMATION IN THIS ARTICLE APPLIES TO:

- EFT Server any

### SYMPTOM

When using the PGP Encrypt action I see a partial file or a 1KB file at random times. Sometimes files are encrypted correctly, sometimes a 1KB file is shown.

Name	Date modified	Type	Size
Sub1.zip.pgp	3/29/2024 9:44 AM	PGP File	1 KB
Sub2.zip	3/29/2024 9:44 AM	Compressed (zipped)...	26,524 KB
Sub2.zip.pgp	3/29/2024 9:44 AM	PGP File	1 KB



Consider the following workflow.

#### 1. Files are compress by Process A

Enable this rule: **Use Case 1 - Archive [Scheduler (Timer) Event]**

Comment: Execute a specified action one time or repeat at a specified interval.

Actions (required):

- Protocol: Upload\*
- Protocol: Download\*
- Protocol: Synchronize\*

Rule Builder:

- Due every Weekday at 9:07:28 AM (next run: 9:07:28 AM 4/1/2024) [high\_availability]
- Compress file(s) 'D:\temp\UC1\Sub1\\*. \*' to 'D:\temp\UC1\Archive\Sub1.zip' ↕
- Compress file(s) 'D:\temp\UC1\Sub2\\*. \*' to 'D:\temp\UC1\Archive\Sub2.zip' ↕

#### 2. A Process B (Folder monitor) PGP encrypts each ZIP file added into the archive directory .

Enable this rule: **Use Case 1 - Encrypt [Folder Monitor]**

Comment: Monitor a specified folder then execute an action. NOTE: use the "File Uploaded" event instead when monitoring folders for files added to the se HTTP/S protocols.

Actions (required):

- Protocol: Upload\*
- Protocol: Download\*
- Protocol: Synchronize\*
- Protocol: AS2\*
- Protocol: Email

Rule Builder:

- Monitor folder: D:\temp\UC1\Archive [high\_availability]
- If File Change does equal to added ↕ and If File Name does not match \*.pgp ↕
- Encrypt file '%FS.PATH%' ↕

In this scenario the issue is related to a race condition between the PGP action and the Compress that generates the zip file. The reason is random why this works sometime or under some situations, is when the PGP action is trying to read the file it fails to do so, since the ZIP action hasn't finished closing the file.

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This is a workflow design problem, a folder monitors triggers order by the OS, sometimes it could be a small delay between trigger and the action. If Process A is able to compress and close the file before the Process B is trigger, the rule will work for example when small files are compress the rule works.

We also can confirm that there is an error in the EFT log file.

```
KeyId: E35D3F30418CDC9A
Public-key algorithm: ElGamal
Symmetric algorithm: TripleDES
Field1: 008DECA3871A391BE083B5284834DA2B024127643498BC7DE4FB32D5E166B8A878D800DDFFFC5080FA4CCA0A0A8DE556D7535815FA2B4D81477C25C1AA4717B24131869F1C14DDC2B0E852648E530CC725712ECB84DAC04EEC5A4DA5DD586035BE0F4266895005733B8BED06FFE22AA7ADF9E2571F9F77304F49A2B3B9E2A565B49B0D10BF9F16DE05E7B6176ACB27A142CCFBF32821B99AF440CB1F6A034383A60B7E418B18F25B1671318CDA48ADE804EA6726E9DDB26BA6CFAA14EC57F52D25E021D5C3EE6EBA475710606CF7C2303641DCE29F73D298AA
Field2: 008A23EB0DCD3E096165F0390FFF74F75B841826E786DA51C62508F00ED15ED2F3F6DD98F1A24919A389416CFB7F07CBE9D68E07E1E68B36A16312D4DEDDDBEB97FC2543BE8DB2F15608873267F03A728703C58348A02D0450C5EBA7610E7B70129E6255803EABC1075B8441FEC8CC605E6060F866A72DE288FBD2760CA68C294330363B6BD513FC7847E0861F40D7AAFACAABA682BB23D79AD2A1D025850BCE18465988F16EE7599D65CC1B08ED21C2C3A6F34DDB3308E9B9461F019F631306380357E1EF8B1C7495210812049D53B6CABA056C39D03EEBA46F
2024-03-29 09:44:05,402 TRACE 22636 PGP.Adapter FireStatus: Starting to write PGPLiteralDataPacket
2024-03-29 09:44:05,402 TRACE 22636 PGP.Adapter FireStatus: packet tag: 11, Literal Data Packet, len: 14
Format: Binary
Filename: Sub2.zip
Modification Date: 29-Mar-2024 09:44:05
Data: [Dynamic Data]
2024-03-29 09:44:05,402 TRACE 22636 PGP.Adapter FireStatus: Error[115]: Can't read from file
2024-03-29 09:44:05,403 TRACE 22636 PGP.Adapter FireStatus: Finished reading data from file "D:\temp\UC1\Archive\Sub2.zip"
2024-03-29 09:44:05,403 TRACE 22636 PGP.Adapter FireStatus: Finished writing data to file "D:\temp\UC1\Archive\Sub2.zip.pgp"
2024-03-29 09:44:05,403 TRACE 22636 PGP.Adapter FireStatus: Closing Delphi input stream
2024-03-29 09:44:05,403 TRACE 22636 PGP.Adapter FireStatus: Closing Delphi output stream
2024-03-29 09:44:05,403 TRACE 22636 PGP.Adapter FireStatus: Closing input stream
2024-03-29 09:44:05,403 TRACE 22636 PGP.Adapter FireStatus: Closing output stream
2024-03-29 09:44:05,403 ERROR 22636 PGP.Adapter Error encrypt: 115 Error string: Can't read from file
```

## RESOLUTION

Most of the time that you see a partial file instead of its expected file size is due a **wrong custom business logic, workflow design issue, poor error handling or network issues.**

Unless the behavior occurs **consistently (not random) for all of rules/actions** that could indicate an application or environment issue.

In this case since it occurs randomly its related to a design issue. There are different ways to solve this issue and each one will depend on your business requirements.

**Option 1.** Use the PGP Action after each Compress action in the same event rule and use error handling in case that any of it fails.

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**Option 2.** Use a Move (Rename) File Action to move the ZIP files into the folder monitor path. Since the Move (Rename) file operation is atomic or transactional this guarantee that the file will be move after the ZIP action completes and folder monitor won't trigger until the file was moved. Avoid rely on file added when you are depending on the non-transactional file operation like create, append, write, upload, download, compress, encrypt, scan, as the folder monitor will trigger before the file is ready to be processed.

The image shows a screenshot of the EFT Rule Builder interface. The top section is titled "Enable this rule: Use Case 1 - Archive With Move [Scheduler (Timer) Event]". Below this is a "Comment" field with the text "Execute a specified action one time or repeat at a specified interval." The "Actions (required):" list on the left includes various protocols and actions like "Protocol: Upload\*", "Protocol: Download\*", "Protocol: Synchronize\*", "Protocol: AS2\*", "Protocol: Email", "Protocol: Listing to Dataset\*", "Cloud: Upload\*", "Cloud: Download\*", "Cloud: REST/Web Services\*", "Compression\*", "Cryptography: OpenPGP\*", "CSV: Export to Dataset\*", "CSV: Import from Dataset\*", and "File: Scan". The "Rule Builder" section shows a sequence of actions: "Compress file(s) 'D:\temp\UC1\Sub1\\*.zip' to 'D:\temp\UC1\Sub1\Sub1.zip'", followed by "if action FAILED then Stop processing this rule", then "Perform file Rename operation", followed by "Compress file(s) 'D:\temp\UC1\Sub2\\*.zip' to 'D:\temp\UC1\Sub2\Sub2.zip'", followed by "if action FAILED then Stop processing this rule", and finally "Perform file Rename operation". A red arrow points from the "Perform file Rename operation" step in the Rule Builder to the "File Operation" dialog box. The "File Operation" dialog box is titled "Rename" and has two panes. The left pane shows the "File(s) to rename:" field with the value "%FS.COMPRESSED\_PATH%" and a "Filters" button. The right pane shows the "New filename:" field with the value "D:\temp\UC1\Archive\Sub1.zip" and a "Matching filename:" dropdown set to "Overwrite". A red arrow points from the "File(s) to rename:" field to the "New filename:" field.

Below are some links to our documentation on how EFT Folder Monitor rules are created to help you understand the rules and action behavior and its order of execution.

\* [Folder Monitor Event](#)

\* [Order in which Actions are Executed](#)

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\* [Order in which Event Rules are Executed](#)

Finally, if you have purchased [Expert Services](#) contract and need assistance on refactoring or changing event rules or workflow design, please contact your **expert advisor** directly to assist you.

GlobalSCAPE Knowledge Base

<https://kb.globalscape.com/Knowledgebase/11610/Partial-files-encrypted-1-KB...>