
Subject: Re: Incorrect SHA1 checksum for files 4GB+

Posted by [Zbych](#) on Sat, 16 Jun 2018 09:19:29 GMT

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I've made some further tests:

1. reading and writing file using Upp's stream - no difference between original file and copy was detected.
2. replace Upp's sha1 with some random sha1 from git: <https://github.com/clibs/sha1> - now checksum is the same as from sha1sum.
3. optimization level doesn't change result (both Upp's sha1 and git's)

Test app that calculates sha1 using Upp and git version at the same time is attached.

4GB file:

16.06.2018 11:11:27 File '/tmp/file4GB.bin' sha1 calculation started

16.06.2018 11:12:03 UPP SHA1: 1e4aca8da9f53733575cd351347b6a054a098bf5

16.06.2018 11:12:03 GIT SHA1: d43db14ac2c197da7d4d0048105f2af0bcb75f0b

```
$ sha1sum /tmp/file4GB.bin
```

```
d43db14ac2c197da7d4d0048105f2af0bcb75f0b /tmp/file4GB.bin
```

File smaller than 4GB:

16.06.2018 11:17:39 File '/tmp/file4GB-.bin' sha1 calculation started

16.06.2018 11:18:16 UPP SHA1: 30c411fa4ca4ed06b54ecb6143abcd39f2c32591

16.06.2018 11:18:16 GIT SHA1: 30c411fa4ca4ed06b54ecb6143abcd39f2c32591

```
$ sha1sum /tmp/file4GB-.bin
```

```
30c411fa4ca4ed06b54ecb6143abcd39f2c32591 /tmp/file4GB-.bin
```

File Attachments

1) [shaltest.zip](#), downloaded 328 times
