How to verify the checksum of a downloaded file in Windows

Here is a way of verifying the checksum, for example, of a BIOS update file that would be downloaded from Dell Support website for the purpose of updating the BIOS on the motherboard of a particular model Dell PowerEdge T110 II Server.

Dell's recommendation with respect to the downloaded file:

To ensure the integrity of your download, please verify the checksum value.

MD5: 7c68c361de9a3b38fa5aa2cb6e70e1d2

SHA1: 6e58d7caccb6a626d5ffc8f702bb444358ea5c5d

SHA-256: f1ec6eea936a0fffed580e6c301149054cd4918113d0aea3b800945c607027bf

Steps to verify the checksum.

1. In Windows, open a command prompt; that is, search to run “cmd” or “cmd.exe” (without the quotes), or open the top search results for cmd.exe or command prompt. A command prompt window should open as follows.

```
Microsoft Windows [Version 10.0.19045.3803]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Username>
```

1. Change to the subdirectory path where the downloaded file is located

```
C:\Users\Username> cd c:\users\pc\downloads\T110-
II_BIOS_5R0T5_WN64_2.10.0_01\
```

2. Run the CertUtil -hashfile command and insert the filename of the downloaded file and append either SHA256 or MD5 or SHA1

```
c:\Users\Username\Downloads\T110-II_BIOS_5R0T5_WN64_2.10.0_01> certUtil -
hashfile T110-II_BIOS_5R0T5_WN64_2.10.0_01.EXE SHA256

SHA256 hash of T110-II_BIOS_5R0T5_WN64_2.10.0_01.EXE:
f1ec6eea936a0fffed580e6c301149054cd4918113d0aea3b800945c607027bf

CertUtil: -hashfile command completed successfully.
```

```
c:\Users\Username\Downloads\T110-II_BIOS_5R0T5_WN64_2.10.0_01>
```

3. Visually compare the generated hash checksum value in the above example to the expected given SHA-256 checksum value. If they match, then you have verified the integrity of the downloaded file.

```
Generated SHA256:
f1ec6eea936a0fffed580e6c301149054cd4918113d0aea3b800945c607027bf

Expected SHA-256:
f1ec6eea936a0fffed580e6c301149054cd4918113d0aea3b800945c607027bf
```

Here is another example, this time generating an MD5 checksum.

```
c:\Users\Username\Downloads\T110-II_BIOS_5R0T5_WN64_2.10.0_01> certUtil -
hashfile T110-II_BIOS_5R0T5_WN64_2.10.0_01.EXE MD5

MD5 hash of T110-II_BIOS_5R0T5_WN64_2.10.0_01.EXE:
7c68c361de9a3b38fa5aa2cb6e70e1d2

CertUtil: -hashfile command completed successfully.

c:\Users\Username\Downloads\T110-II_BIOS_5R0T5_WN64_2.10.0_01>
```

Visually compare the expected MD5 checksum value with the generated MD5 checksum value:

```
Expected MD5: 7c68c361de9a3b38fa5aa2cb6e70e1d2

Generated MD5: 7c68c361de9a3b38fa5aa2cb6e70e1d2
```

From:
https://installconfig.com/ - **Install Config Wiki**

Permanent link:
https://installconfig.com/doku.php?id=verify_checksum_downloaded_file_windows&rev=1704533589

Last update: **2024/01/06 09:33**