Tool Validation Report

<Tool>

<Version>

Released: <release date>

<Company Logo>

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# Executive Summary

<Tool> was run in its default configuration against the test image <test image>

The below table is a summary of the test files that <Tool> carved from this image.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| File Type | Number of Test Files | Exact match | Usable match | Not found | False positive | Invalid file |
| 7z | 5 |  |  |  |  |  |
| AVI | 5 |  |  |  |  |  |
| BMP | 6 |  |  |  |  |  |
| DOC | 4 |  |  |  |  |  |
| DOCX | 4 |  |  |  |  |  |
| GIF | 5 |  |  |  |  |  |
| JPEG | 7 |  |  |  |  |  |
| MOV | 5 |  |  |  |  |  |
| MP3 | 5 |  |  |  |  |  |
| MP4 | 6 |  |  |  |  |  |
| PDF | 6 |  |  |  |  |  |
| PNG | 6 |  |  |  |  |  |
| PPT | 3 |  |  |  |  |  |
| PPTX | 3 |  |  |  |  |  |
| TIFF | 5 |  |  |  |  |  |
| WAV | 6 |  |  |  |  |  |
| WMV | 5 |  |  |  |  |  |
| XLS | 3 |  |  |  |  |  |
| XLSX | 3 |  |  |  |  |  |
| ZIP | 5 |  |  |  |  |  |
| Total | **97** |  |  |  |  |  |
| Percentage |  |  |  |  |  |  |

<Summary of results>

# Introduction

We provide this report to document our tool validation process against <Tool> version <Version>.

## Scope

This report documents the results obtained by testing the file carving tool <Tool>, version <Version>, against the raw image file: Khyrenz-FileCarvingImage-USB-logical-2GB-formatted.dd. This image file, as well as a full list of files contained within deleted space in this image, are provided at: https://www.khyrenz.com/resources/.

<Tool> was run on a <OS and OS version> system and the default configuration was used.

## Measuring Test Results

How well the tool performs against expected results is categorized as follows:

1. Exact match: Number of carved files that match on SHA1 file hash to an original test file
2. Usable match: Number of carved files that can be successfully opened and viewed, and appear similar to an original test file, so can be reasonably determined to be a ‘usable’ version of an original
3. Not found: No carved files match the hash or appear similar to any original files
4. False positive: A carved file is a valid file and can be opened/viewed, but is not similar to an original file (for example, may be an embedded file within an original file)
5. Invalid file: A carved file that cannot be opened or viewed

# Test Data

The raw image file Khyrenz-FileCarvingImage-USB-logical-2GB-formatted.dd[[[1]](#endnote-1)] contains a selection of test files of varying file formats within deleted space in a 2GB FAT16 volume. It was generated using FTK Imager 4.2.0.13[[[2]](#endnote-2)].

## Test File Summary

A summary of test files added to the USB before it was re-formatted to remove filesystem metadata is provided below. A more detailed list of individual files is provided in Appendix 1 - Test Files to be Carved.

|  |  |
| --- | --- |
| File Type | Number of Test Files |
| 7z | 5 |
| AVI | 5 |
| BMP | 6 |
| DOC | 4 |
| DOCX | 4 |
| GIF | 5 |
| JPEG | 7 |
| MOV | 5 |
| MP3 | 5 |
| MP4 | 6 |
| PDF | 6 |
| PNG | 6 |
| PPT | 3 |
| PPTX | 3 |
| TIFF | 5 |
| WAV | 6 |
| WMV | 5 |
| XLS | 3 |
| XLSX | 3 |
| ZIP | 5 |
| Grand Total | **97** |

# Test Results

The table below shows details regarding the files carved from the test image by <Tool>.

| Type | Filename | SHA1 | Exact match | Usable match | Not found | False positive | Invalid file |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 7z | AVI-7z | fd4d1be9e8ffec39701d358898fed10437b0561b |  |  |  |  |  |
| 7z | BMP.7z | e13b931da505c1c51ed6653273de8d9d2df67dcc |  |  |  |  |  |
| 7z | DOC-XLS-PPT.7z | edb13fe1559ba71696bb309840bfcf0022228799 |  |  |  |  |  |
| 7z | GIF.7z | a70caf5187b383aa5364cfc97b5db8287fa3aa54 |  |  |  |  |  |
| 7z | JPEG.7z | 4cceb50966356b852883b9925fcc9e58f410fa2a |  |  |  |  |  |
| AVI | 1280.avi | 8351e1bd6f08fe3419907140edd6fcbf00acc46e |  |  |  |  |  |
| AVI | Bubble Turning Into Ice.avi | 85bc9cafcacdd41f9b81ace58bd33fba0c432c7d |  |  |  |  |  |
| AVI | file\_example\_AVI\_1920\_2\_3MG.avi | 573400d5d649e6ce8d9c02723e70618a17cd631f |  |  |  |  |  |
| AVI | file\_example\_AVI\_480\_750kB.avi | a188ed66e68f77729b8cfac92913427ab6b1677f |  |  |  |  |  |
| AVI | sample-avi-file.avi | 246eecb4053487a61914510389ec300bdaf7f3c6 |  |  |  |  |  |
| BMP | GRN.BMP | b367e7e0d95e6f1bd769f39bc0b5e2e7d4a6bb62 |  |  |  |  |  |
| BMP | MARBLES.BMP | eec5e6afdd264d6ff867d038aa274c4bc42619b4 |  |  |  |  |  |
| BMP | RAY.BMP | e44237a11ee0d4b1cb63e1876dc4040b805e43b6 |  |  |  |  |  |
| BMP | sample\_5184×3456.bmp | bf6c6aa681f20a1dd561bad7945d441d771b418a |  |  |  |  |  |
| BMP | Small Sample BMP Image File Download.bmp | 1eb09379dfb4bc35511aa5a1db83e652c5c64604 |  |  |  |  |  |
| BMP | Yellow\_star.bmp | 4f2e9da3e1a467fe0182d05d7accdd28ee7f76fb |  |  |  |  |  |
| DOC | file-sample\_1MB.doc | 8f3498bfbe75fb34e809fc7ced3f4cc6f4acc92c |  |  |  |  |  |
| DOC | SampleDOCFile\_200kb.doc | 0f1e886f7399fe033c3190bcda7927550c22da8e |  |  |  |  |  |
| DOC | SampleDOCFile\_5000kb.doc | e9e798cac0a97648c95c21cfa9545659d6d0c2a3 |  |  |  |  |  |
| DOC | USB connection artifacts.doc | 4665ec3e161f882f1430f862d7a14e6b12ddf6ec |  |  |  |  |  |
| DOCX | 15-MB-docx-file-download.docx | 00da85c39ff564d6fc34b0449323a2ef253de8fc |  |  |  |  |  |
| DOCX | file-sample\_500kB.docx | 9a0881226460bf5d0ea17b29a843c0320b9dd11e |  |  |  |  |  |
| DOCX | sample-docx-file-for-testing.docx | 37537e74599278cd26c2a29237cefe067e237f8d |  |  |  |  |  |
| DOCX | Using WSL.docx | 3661e7dd597f5931a494335a643513f0198efb6f |  |  |  |  |  |
| GIF | giphy (1).gif | a6768bff9c6d5c9cbc37ce55bf432109f321fab9 |  |  |  |  |  |
| GIF | giphy (2).gif | d0012d8bf6f633972049e917ede588880d416b95 |  |  |  |  |  |
| GIF | giphy.gif | 799521e3a568a270b6259fa7c1565d7adec96c18 |  |  |  |  |  |
| GIF | How+do+i+computer+i+decided+to+try+my+hands\_81418e\_4707807.gif | fd2911bff16a8522b7f07a0eca1aeb08292b1b4f |  |  |  |  |  |
| GIF | undefined - Imgur.gif | 2c3f083d36904cc56f8c46cffb64108943d8d45a |  |  |  |  |  |
| JPEG | file\_example\_JPG\_500kB.jpg | 25472d494500707b4510868df469352dc7cd1845 |  |  |  |  |  |
| JPEG | IMG\_2375.JPG | 967cac602f8e01eaf614bee93b8b0c850f22936d |  |  |  |  |  |
| JPEG | IMG\_3385\_cropped.jpg | 5fb543b4c8037b48c48fadf8a39f408046c6f7ee |  |  |  |  |  |
| JPEG | IMG\_3973.JPG | e5f6d316d896db29eabb073db8022eb2edc7d2fe |  |  |  |  |  |
| JPEG | IMG\_3977.JPG | df58316a3b334379b88dbc41b1313a952810bd45 |  |  |  |  |  |
| JPEG | istockphoto-1304263738-170667a.jpg | 1febe282f23e1a15ac100358eb2b700212eee44b |  |  |  |  |  |
| JPEG | photo-1533450718592-29d45635f0a9.jfif | f096a046c3692ab714c28b267f94f4efe9a7c22b |  |  |  |  |  |
| MOV | 720.mov | ac16247bc6746661d19eb5832b5b3eed397d97a0 |  |  |  |  |  |
| MOV | Cloud Formation Video.mov | a5c0fbd44b6352161e5b6f2aa26f00d5888a3951 |  |  |  |  |  |
| MOV | file\_example\_MOV\_480\_700kB.mov | 682963a12b9b0742651e486a5f697fa949f9daf2 |  |  |  |  |  |
| MOV | sample\_960x400\_ocean\_with\_audio.mov | faa748ae6d2a31e21e4d65a0bd17e425affed954 |  |  |  |  |  |
| MOV | sample-mov-file.mov | 126fc405911d33832f88d5dd2fc3942e9a71e896 |  |  |  |  |  |
| MP3 | file\_example\_MP3\_700KB.mp3 | dae94d2ae419b398c977f27f4190680715ae10c3 |  |  |  |  |  |
| MP3 | Kalimba.mp3 | ba795c011958b7c8c628abba468bd762beda403e |  |  |  |  |  |
| MP3 | sample3.mp3 | 787cc2c7ef51d56d9118d723229d8fdafdbefad5 |  |  |  |  |  |
| MP3 | sample4.mp3 | e3f539fd64c27bcb8f6fc68486761b6b1d16549a |  |  |  |  |  |
| MP3 | Symphony No.6 (1st movement).mp3 | 9663ba6ca1d35c2ac59e94d51775ce775e518dac |  |  |  |  |  |
| MP3 |  |  |  |  |  |  |  |
| MP4 | file\_example\_MP4\_1920\_18MG.mp4 | a8ddbbcacc224b427f5b7ca14bdf41b692291730 |  |  |  |  |  |
| MP4 | giphy360p (1).mp4 | 7a65df084f0400e89fac78f247a76fc4b45d851c |  |  |  |  |  |
| MP4 | giphy360p.mp4 | c578124221db590a00bb507202e2dbdb765dccc2 |  |  |  |  |  |
| MP4 | sample\_1280x720\_surfing\_with\_audio.mp4 | 406ecad499e84370fa8bfd3db88aa548eeddc3e1 |  |  |  |  |  |
| MP4 | sample\_960x540.mp4 | 1ae8b2fcce5b37d8a0d6afe21a0ed9757cf78cbc |  |  |  |  |  |
| MP4 | sample-mp4-file.mp4 | bfe8feaec39f112dfcc53bbc98a1c17309e0f941 |  |  |  |  |  |
| PDF | file-example\_PDF\_1MB.pdf | cec8ad914b1e9db83626b98e8d98512616975fdf |  |  |  |  |  |
| PDF | file-sample\_150kB.pdf | 6703901978dcb3dbf2d9915e1d3e066cfe712b0a |  |  |  |  |  |
| PDF | pdf.pdf | c1f95108a34228535a9262085e784d7c3e27fc68 |  |  |  |  |  |
| PDF | PinePhone\_Data\_Locations\_Cheatsheet\_khedley.pdf | 074e4fec07c65977f9e0281bae45377ebe800bd3 |  |  |  |  |  |
| PDF | PinePhone\_Poster\_khedley.pdf | a403c9c57dff103b1893d27f1efe05bcaf9fbd9b |  |  |  |  |  |
| PDF | sample.pdf | bfd009f500c057195ffde66fae64f92fa5f59b72 |  |  |  |  |  |
| PNG | 2cd43b\_16d40260a2274e6fb87d101c321eac17\_mv2.png | 32b7bf753e866e0d7b41419af529ab3c1ebe3aa3 |  |  |  |  |  |
| PNG | 2cd43b\_daa95a985dde42a3af5a63b597f45ac9\_mv2.png | 045d49e8c7f4184ef19a69122f58aaa431f44e6a |  |  |  |  |  |
| PNG | pngwing.com (1).png | cc5bf259f661d72b5ca78b9e6f58efb3eeafee28 |  |  |  |  |  |
| PNG | pngwing.com.png | 8317e78a842bc9fdbbf3c83e66326693a489fe3d |  |  |  |  |  |
| PNG | transparent-maple-leaf-5f8ec1dd91fa41.5756612016031912615979.png | db0e388e61bf72e5742fedb5389e6ecf90f07372 |  |  |  |  |  |
| PNG | transparent-owl-icon-autumn-icon-60b5ed32573f44.5876030416225354743574.png | 29b523ab7c3dd585430e13f383293bcb84d7749d |  |  |  |  |  |
| PPT | file\_example\_PPT\_1MB.ppt | 3d30846c0c62832fd05d1c424fb650cf4da6ae23 |  |  |  |  |  |
| PPT | file\_example\_PPT\_250kB.ppt | cb8ea4114148bc57e7317b3d0aa72ebe53dbe386 |  |  |  |  |  |
| PPT | PinePhone Forensics.ppt | 74485b034c11b8c57d7c3a372e97a34adf02aa44 |  |  |  |  |  |
| PPTX | 160930-artificial-intelligence-template-16x9.pptx | 4203a60c4b88f7aad96720be8d5171e2afacf10e |  |  |  |  |  |
| PPTX | pptx1.pptx | c666363ec2d45b7a1c911427f7690c1bb6313c2a |  |  |  |  |  |
| PPTX | pptx2.pptx | c3f3e076c62eee7bf82ed32325faa0d5f79f1596 |  |  |  |  |  |
| TIFF | CCITT\_1.TIF | a21eef750984d91aaddba931361bbebe44a23568 |  |  |  |  |  |
| TIFF | file\_example\_TIFF\_10MB.tiff | 837ae56fd74b69427b7b9511f1065616ffbc3b9e |  |  |  |  |  |
| TIFF | FLAG\_T24.TIF | 4c06fdc1b38c4283835b8f89687390042f84a92b |  |  |  |  |  |
| TIFF | Sample-Tiff-File-download-for-Testing.tiff | 3c560462efd9f4182b0da5c3192258384390424c |  |  |  |  |  |
| TIFF | Tiff-Image-File-Download.tiff | dd85696006a32f8f7fa25755f8cef99c8150196f |  |  |  |  |  |
| WAV | BabyElephantWalk60.wav | b816c31a23ae448bb0890f5221f256a90d0e9745 |  |  |  |  |  |
| WAV | bird\_caw2.wav | 49f1e127edbcef4adf8ad89a297a8adca5735b63 |  |  |  |  |  |
| WAV | crickets.wav | fb7ece704403a47692b6c2625324d2b11764ed6d |  |  |  |  |  |
| WAV | Fanfare60.wav | 762d3a658519190f4b5f1374964f959d419cf875 |  |  |  |  |  |
| WAV | file\_example\_WAV\_5MG.wav | 40955508715da2d5bd78546fc8ed9edcca07100e |  |  |  |  |  |
| WAV | taunt.wav | 2988a818ebd6a373ca37ecd0a0bf9123880c5758 |  |  |  |  |  |
| WMV | 1280.wmv | 814a49657d5e01a0f171634ddebc664c98a8a6ec |  |  |  |  |  |
| WMV | file\_example\_WMV\_480\_1\_2MB.wmv | 1c4d2e7cce26714dcda87cc52fbca695b377b389 |  |  |  |  |  |
| WMV | sample\_3840x2160.wmv | 6ee26e2c8d98aa6d3e62dc323ec48e03ba392a2b |  |  |  |  |  |
| WMV | sample-wmv-file.wmv | a59d51d161b52196aebde4f9c1585c206a9b08a3 |  |  |  |  |  |
| WMV | Video2.WMV | 66d457ecfcb8ee65c9f841f77ae737ab91aaa11c |  |  |  |  |  |
| XLS | file\_example\_XLS\_10.xls | e0cdb9c8a7da39f9787729345fd9bd617d02d539 |  |  |  |  |  |
| XLS | file\_example\_XLS\_5000.xls | 3a0d4a8ecb77244d1580b15cb9f0766c8317b073 |  |  |  |  |  |
| XLS | USB\_artifacts.xls | 39a4a8f0a789578d55951d3fc3e00a5ec86d6b16 |  |  |  |  |  |
| XLSX | file\_example\_XLSX\_1000.xlsx | 0dce77a811e9f631913c88e1b04391a868fcc93d |  |  |  |  |  |
| XLSX | file\_example\_XLSX\_50.xlsx | c94997094ad00f9f38017fd94a1d44a1241003b6 |  |  |  |  |  |
| XLSX | sample3.xlsx | 4c82c22ee2a7478fc0d0ddea5d3c9565ff269520 |  |  |  |  |  |
| ZIP | DOCX-XLSX-PPTX.zip | 3bc958d3d36c67342d4a209def63d69a3b9c55ca |  |  |  |  |  |
| ZIP | MOV.zip | d45075b85ebb217305ab6bac10e7f6e9a1edceb9 |  |  |  |  |  |
| ZIP | MP3.zip | 7a144bc05232c3e693669e1ef6121ac3b94d3128 |  |  |  |  |  |
| ZIP | PDF.zip | a1aa6a40d9161d0dc9fc546c8b239689055cb464 |  |  |  |  |  |
| ZIP | PNG.zip | 0a342d01ac70cb9cae28252805bceed415f949f9 |  |  |  |  |  |
| Totals | | |  |  |  |  |  |

# Appendix 1 - Test Files to be Carved

| Type | Filename | Origin | Size (KB) | SHA1 |
| --- | --- | --- | --- | --- |
| 7z | AVI-7z | Created from AVI folder containing files above | 20,393 | fd4d1be9e8ffec39701d358898fed10437b0561b |
| 7z | BMP.7z | Created from BMP folder containing files above | 35,524 | e13b931da505c1c51ed6653273de8d9d2df67dcc |
| 7z | DOC-XLS-PPT.7z | Created from DOC-XLS-PPT folder containing files above | 6,933 | edb13fe1559ba71696bb309840bfcf0022228799 |
| 7z | GIF.7z | Created from GIF folder containing files above | 10,674 | a70caf5187b383aa5364cfc97b5db8287fa3aa54 |
| 7z | JPEG.7z | Created from JPEG folder containing files above | 10,790 | 4cceb50966356b852883b9925fcc9e58f410fa2a |
| AVI | 1280.avi | <https://www.appsloveworld.com/avi-video-clips-free-download/> | 11,006 | 8351e1bd6f08fe3419907140edd6fcbf00acc46e |
| AVI | Bubble Turning Into Ice.avi | <https://www.appsloveworld.com/avi-video-clips-free-download/> | 8,850 | 85bc9cafcacdd41f9b81ace58bd33fba0c432c7d |
| AVI | file\_example\_AVI\_1920\_2\_3MG.avi | <https://file-examples.com/index.php/sample-video-files/sample-avi-files-download/> | 2,227 | 573400d5d649e6ce8d9c02723e70618a17cd631f |
| AVI | file\_example\_AVI\_480\_750kB.avi | <https://file-examples.com/index.php/sample-video-files/sample-avi-files-download/> | 726 | a188ed66e68f77729b8cfac92913427ab6b1677f |
| AVI | sample-avi-file.avi | <https://www.learningcontainer.com/sample-avi-video-file-download/> | 8,130 | 246eecb4053487a61914510389ec300bdaf7f3c6 |
| BMP | GRN.BMP | <https://www.fileformat.info/format/bmp/sample/index.htm> | 85 | b367e7e0d95e6f1bd769f39bc0b5e2e7d4a6bb62 |
| BMP | MARBLES.BMP | <https://www.fileformat.info/format/bmp/sample/index.htm> | 4,165 | eec5e6afdd264d6ff867d038aa274c4bc42619b4 |
| BMP | RAY.BMP | <https://www.fileformat.info/format/bmp/sample/index.htm> | 1,407 | e44237a11ee0d4b1cb63e1876dc4040b805e43b6 |
| BMP | sample\_5184×3456.bmp | <https://filesamples.com/formats/bmp> | 52,489 | bf6c6aa681f20a1dd561bad7945d441d771b418a |
| BMP | Small Sample BMP Image File Download.bmp | <https://www.learningcontainer.com/sample-bmp-file-for-testing/> | 977 | 1eb09379dfb4bc35511aa5a1db83e652c5c64604 |
| BMP | Yellow\_star.bmp | Created by khedley | 574 | 4f2e9da3e1a467fe0182d05d7accdd28ee7f76fb |
| DOC | file-sample\_1MB.doc | <https://file-examples.com/index.php/sample-documents-download/sample-doc-download/> | 1,003 | 8f3498bfbe75fb34e809fc7ced3f4cc6f4acc92c |
| DOC | SampleDOCFile\_200kb.doc | <https://sample-videos.com/download-sample-doc-file.php> | 200 | 0f1e886f7399fe033c3190bcda7927550c22da8e |
| DOC | SampleDOCFile\_5000kb.doc | <https://sample-videos.com/download-sample-doc-file.php> | 5,001 | e9e798cac0a97648c95c21cfa9545659d6d0c2a3 |
| DOC | USB connection artifacts.doc | Created by khedley | 42 | 4665ec3e161f882f1430f862d7a14e6b12ddf6ec |
| DOCX | 15-MB-docx-file-download.docx | <https://www.learningcontainer.com/sample-docx-file-for-testing/> | 32,913 | 00da85c39ff564d6fc34b0449323a2ef253de8fc |
| DOCX | file-sample\_500kB.docx | <https://file-examples.com/index.php/sample-documents-download/sample-doc-download/> | 539 | 9a0881226460bf5d0ea17b29a843c0320b9dd11e |
| DOCX | sample-docx-file-for-testing.docx | <https://www.learningcontainer.com/sample-docx-file-for-testing/> | 3,818 | 37537e74599278cd26c2a29237cefe067e237f8d |
| DOCX | Using WSL.docx | Created by khedley | 15 | 3661e7dd597f5931a494335a643513f0198efb6f |
| GIF | giphy (1).gif | <https://giphy.com/gifs/hatutah-seasame-street-yippers-GsiBgbwZAsWsg> | 4,224 | a6768bff9c6d5c9cbc37ce55bf432109f321fab9 |
| GIF | giphy (2).gif | <https://giphy.com/gifs/bicycle-besta-howtomob-O7YL1FFrCxXi0> | 4,862 | d0012d8bf6f633972049e917ede588880d416b95 |
| GIF | giphy.gif | <https://giphy.com/gifs/internet-pizza-computer-ZH5o2lacOA8Te> | 274 | 799521e3a568a270b6259fa7c1565d7adec96c18 |
| GIF | How+do+i+computer+i+decided+to+try+my+hands\_81418e\_4707807.gif | <https://funnyjunk.com/channel/ponytime/How+do+I+computer/rwwsGej/> | 766 | fd2911bff16a8522b7f07a0eca1aeb08292b1b4f |
| GIF | undefined - Imgur.gif | <https://imgur.com/gallery/NVoF3Zi> | 611 | 2c3f083d36904cc56f8c46cffb64108943d8d45a |
| JPEG | file\_example\_JPG\_500kB.jpg | <https://file-examples-com.github.io/uploads/2017/10/file_example_JPG_500kB.jpg> | 543 | 25472d494500707b4510868df469352dc7cd1845 |
| JPEG | IMG\_2375.JPG | Created by khedley | 4,264 | 967cac602f8e01eaf614bee93b8b0c850f22936d |
| JPEG | IMG\_3385\_cropped.jpg | Created by khedley | 138 | 5fb543b4c8037b48c48fadf8a39f408046c6f7ee |
| JPEG | IMG\_3973.JPG | Created by khedley | 3,519 | e5f6d316d896db29eabb073db8022eb2edc7d2fe |
| JPEG | IMG\_3977.JPG | Created by khedley | 1,725 | df58316a3b334379b88dbc41b1313a952810bd45 |
| JPEG | istockphoto-1304263738-170667a.jpg | <https://unsplash.com/s/photos/jpg> | 203 | 1febe282f23e1a15ac100358eb2b700212eee44b |
| JPEG | photo-1533450718592-29d45635f0a9.jfif | <https://unsplash.com/s/photos/jpg> | 450 | f096a046c3692ab714c28b267f94f4efe9a7c22b |
| MOV | 720.mov | <https://www.appsloveworld.com/sample-mov-file-download/> | 5,512 | ac16247bc6746661d19eb5832b5b3eed397d97a0 |
| MOV | Cloud Formation Video.mov | <https://www.appsloveworld.com/sample-mov-file-download/> | 13,066 | a5c0fbd44b6352161e5b6f2aa26f00d5888a3951 |
| MOV | file\_example\_MOV\_480\_700kB.mov | <https://file-examples.com/index.php/sample-video-files/sample-mov-files-download/> | 694 | 682963a12b9b0742651e486a5f697fa949f9daf2 |
| MOV | sample\_960x400\_ocean\_with\_audio.mov | <https://filesamples.com/formats/mov> | 17,111 | faa748ae6d2a31e21e4d65a0bd17e425affed954 |
| MOV | sample-mov-file.mov | <https://www.learningcontainer.com/mp4-sample-video-files-download/> | 14,123 | 126fc405911d33832f88d5dd2fc3942e9a71e896 |
| MP3 | file\_example\_MP3\_700KB.mp3 | <https://file-examples.com/index.php/sample-audio-files/sample-mp3-download/> | 747 | dae94d2ae419b398c977f27f4190680715ae10c3 |
| MP3 | Kalimba.mp3 | <https://www.learningcontainer.com/sample-audio-file/> | 8,218 | ba795c011958b7c8c628abba468bd762beda403e |
| MP3 | sample3.mp3 | <https://filesamples.com/formats/mp3> | 1,654 | 787cc2c7ef51d56d9118d723229d8fdafdbefad5 |
| MP3 | sample4.mp3 | <https://filesamples.com/formats/mp3> | 3,821 | e3f539fd64c27bcb8f6fc68486761b6b1d16549a |
| MP3 | Symphony No.6 (1st movement).mp3 | <https://filesamples.com/formats/mp3> | 11,378 | 9663ba6ca1d35c2ac59e94d51775ce775e518dac |
| MP4 | file\_example\_MP4\_1920\_18MG.mp4 | <https://file-examples.com/index.php/sample-video-files/sample-mp4-files/> | 17,422 | a8ddbbcacc224b427f5b7ca14bdf41b692291730 |
| MP4 | giphy360p (1).mp4 | <https://giphy.com/explore/download> | 198 | 7a65df084f0400e89fac78f247a76fc4b45d851c |
| MP4 | giphy360p.mp4 | <https://giphy.com/explore/download> | 185 | c578124221db590a00bb507202e2dbdb765dccc2 |
| MP4 | sample\_1280x720\_surfing\_with\_audio.mp4 | <https://filesamples.com/formats/mp4> | 70,072 | 406ecad499e84370fa8bfd3db88aa548eeddc3e1 |
| MP4 | sample\_960x540.mp4 | <https://filesamples.com/formats/mp4> | 1,290 | 1ae8b2fcce5b37d8a0d6afe21a0ed9757cf78cbc |
| MP4 | sample-mp4-file.mp4 | <https://www.learningcontainer.com/mp4-sample-video-files-download/> | 10,300 | bfe8feaec39f112dfcc53bbc98a1c17309e0f941 |
| PDF | file-example\_PDF\_1MB.pdf | <https://file-examples.com/index.php/sample-documents-download/sample-pdf-download/> | 1,018 | cec8ad914b1e9db83626b98e8d98512616975fdf |
| PDF | file-sample\_150kB.pdf | <https://file-examples.com/index.php/sample-documents-download/sample-pdf-download/> | 140 | 6703901978dcb3dbf2d9915e1d3e066cfe712b0a |
| PDF | pdf.pdf | <http://www.pdf995.com/samples/pdf.pdf> | 424 | c1f95108a34228535a9262085e784d7c3e27fc68 |
| PDF | PinePhone\_Data\_Locations\_Cheatsheet\_khedley.pdf | Created by khedley | 204 | 074e4fec07c65977f9e0281bae45377ebe800bd3 |
| PDF | PinePhone\_Poster\_khedley.pdf | Created by khedley | 1,152 | a403c9c57dff103b1893d27f1efe05bcaf9fbd9b |
| PDF | sample.pdf | <http://www.africau.edu/images/default/sample.pdf> | 3 | bfd009f500c057195ffde66fae64f92fa5f59b72 |
| PNG | 2cd43b\_16d40260a2274e6fb87d101c321eac17\_mv2.png | <https://www.freepngs.com/dragon-png-images> | 787 | 32b7bf753e866e0d7b41419af529ab3c1ebe3aa3 |
| PNG | 2cd43b\_daa95a985dde42a3af5a63b597f45ac9\_mv2.png | <https://www.freepngs.com/dragon-png-images> | 101 | 045d49e8c7f4184ef19a69122f58aaa431f44e6a |
| PNG | pngwing.com (1).png | <https://www.pngwing.com/en/free-png-zwfuf> | 2,955 | cc5bf259f661d72b5ca78b9e6f58efb3eeafee28 |
| PNG | pngwing.com.png | <https://www.pngwing.com/en/free-png-byvsx> | 548 | 8317e78a842bc9fdbbf3c83e66326693a489fe3d |
| PNG | transparent-maple-leaf-5f8ec1dd91fa41.5756612016031912615979.png | <https://www.subpng.com/png-daqbfi/> | 3,048 | db0e388e61bf72e5742fedb5389e6ecf90f07372 |
| PNG | transparent-owl-icon-autumn-icon-60b5ed32573f44.5876030416225354743574.png | <https://www.subpng.com/png-iqhvv2/> | 794 | 29b523ab7c3dd585430e13f383293bcb84d7749d |
| PPT | file\_example\_PPT\_1MB.ppt | <https://file-examples.com/index.php/sample-documents-download/sample-ppt-file/> | 1,005 | 3d30846c0c62832fd05d1c424fb650cf4da6ae23 |
| PPT | file\_example\_PPT\_250kB.ppt | <https://file-examples.com/index.php/sample-documents-download/sample-ppt-file/> | 243 | cb8ea4114148bc57e7317b3d0aa72ebe53dbe386 |
| PPT | PinePhone Forensics.ppt | Created by khedley | 5,446 | 74485b034c11b8c57d7c3a372e97a34adf02aa44 |
| PPTX | 160930-artificial-intelligence-template-16x9.pptx | <https://www.free-power-point-templates.com/free-machine-learning-powerpoint-template/> | 1,224 | 4203a60c4b88f7aad96720be8d5171e2afacf10e |
| PPTX | pptx1.pptx | <https://www.appsloveworld.com/sample-pptx-file/> | 1,618 | c666363ec2d45b7a1c911427f7690c1bb6313c2a |
| PPTX | pptx2.pptx | <https://www.appsloveworld.com/sample-pptx-file/> | 5,885 | c3f3e076c62eee7bf82ed32325faa0d5f79f1596 |
| TIFF | CCITT\_1.TIF | <https://www.fileformat.info/format/tiff/sample/> | 18 | a21eef750984d91aaddba931361bbebe44a23568 |
| TIFF | file\_example\_TIFF\_10MB.tiff | <https://file-examples.com/index.php/sample-images-download/sample-tiff-download/> | 9,914 | 837ae56fd74b69427b7b9511f1065616ffbc3b9e |
| TIFF | FLAG\_T24.TIF | <https://www.fileformat.info/format/tiff/sample/> | 46 | 4c06fdc1b38c4283835b8f89687390042f84a92b |
| TIFF | Sample-Tiff-File-download-for-Testing.tiff | <https://www.learningcontainer.com/sample-tiff-file-for-testing/> | 79 | 3c560462efd9f4182b0da5c3192258384390424c |
| TIFF | Tiff-Image-File-Download.tiff | <https://www.learningcontainer.com/sample-tiff-file-for-testing/> | 17,155 | dd85696006a32f8f7fa25755f8cef99c8150196f |
| WAV | BabyElephantWalk60.wav | <https://www2.cs.uic.edu/~i101/SoundFiles/> | 2,585 | b816c31a23ae448bb0890f5221f256a90d0e9745 |
| WAV | bird\_caw2.wav | <https://www.wavsource.com/animals/animals.htm> | 46 | 49f1e127edbcef4adf8ad89a297a8adca5735b63 |
| WAV | crickets.wav | <https://www.wavsource.com/animals/animals.htm> | 222 | fb7ece704403a47692b6c2625324d2b11764ed6d |
| WAV | Fanfare60.wav | <https://www2.cs.uic.edu/~i101/SoundFiles/> | 2,585 | 762d3a658519190f4b5f1374964f959d419cf875 |
| WAV | file\_example\_WAV\_5MG.wav | <https://file-examples.com/index.php/sample-audio-files/sample-wav-download/> | 5,105 | 40955508715da2d5bd78546fc8ed9edcca07100e |
| WAV | taunt.wav | <https://www2.cs.uic.edu/~i101/SoundFiles/> | 90 | 2988a818ebd6a373ca37ecd0a0bf9123880c5758 |
| WMV | 1280.wmv | <https://www.appsloveworld.com/sample-wmv-video-file-free-download/> | 13,846 | 814a49657d5e01a0f171634ddebc664c98a8a6ec |
| WMV | file\_example\_WMV\_480\_1\_2MB.wmv | <https://file-examples.com/index.php/sample-video-files/sample-wmv-files-download/> | 1,149 | 1c4d2e7cce26714dcda87cc52fbca695b377b389 |
| WMV | sample\_3840x2160.wmv | <https://filesamples.com/formats/wmv> | 32,726 | 6ee26e2c8d98aa6d3e62dc323ec48e03ba392a2b |
| WMV | sample-wmv-file.wmv | <https://www.learningcontainer.com/sample-wmv-video-file-download/> | 5,833 | a59d51d161b52196aebde4f9c1585c206a9b08a3 |
| WMV | Video2.WMV | <https://www.lehman.edu/faculty/hoffmann/itc/techteach/video/Video_samples.html> | 85 | 66d457ecfcb8ee65c9f841f77ae737ab91aaa11c |
| XLS | file\_example\_XLS\_10.xls | <https://file-examples.com/index.php/sample-documents-download/sample-xls-download/> | 9 | e0cdb9c8a7da39f9787729345fd9bd617d02d539 |
| XLS | file\_example\_XLS\_5000.xls | <https://file-examples.com/index.php/sample-documents-download/sample-xls-download/> | 657 | 3a0d4a8ecb77244d1580b15cb9f0766c8317b073 |
| XLS | USB\_artifacts.xls | Created by khedley | 28 | 39a4a8f0a789578d55951d3fc3e00a5ec86d6b16 |
| XLSX | file\_example\_XLSX\_1000.xlsx | <https://file-examples.com/index.php/sample-documents-download/sample-xls-download/> | 42 | 0dce77a811e9f631913c88e1b04391a868fcc93d |
| XLSX | file\_example\_XLSX\_50.xlsx | <https://file-examples.com/index.php/sample-documents-download/sample-xls-download/> | 8 | c94997094ad00f9f38017fd94a1d44a1241003b6 |
| XLSX | sample3.xlsx | <https://filesamples.com/formats/xlsx> | 13 | 4c82c22ee2a7478fc0d0ddea5d3c9565ff269520 |
| ZIP | DOCX-XLSX-PPTX.zip | Created from DOCX-XLSX-PPTX folder containing files above | 45,381 | 3bc958d3d36c67342d4a209def63d69a3b9c55ca |
| ZIP | MOV.zip | Created from MOV folder containing files above | 47,973 | d45075b85ebb217305ab6bac10e7f6e9a1edceb9 |
| ZIP | MP3.zip | Created from MP3 folder containing files above | 25,633 | 7a144bc05232c3e693669e1ef6121ac3b94d3128 |
| ZIP | PDF.zip | Created from PDF folder containing files above | 2,646 | a1aa6a40d9161d0dc9fc546c8b239689055cb464 |
| ZIP | PNG.zip | Created from PNG folder containing files above | 8,002 | 0a342d01ac70cb9cae28252805bceed415f949f9 |

1. https://www.khyrenz.com/resources [↑](#endnote-ref-1)
2. https://www.exterro.com/ftk-imager [↑](#endnote-ref-2)