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List of file signatures

This is a list of file signatures, data used to identify or verify the content of a file. Such signatures are also known as magic numbers or Magic Bytes.

Many file formats are not intended to be read as text. If such a file is accidentally viewed as a text file, its contents will be unintelligible. However, sometimes the file signature can be recognizable when interpreted as text. The column **ISO 8859-1** shows how the file signature appears when interpreted as text in the common ISO 8859-1 encoding, with unprintable characters represented as the control code abbreviation or symbol, or codepage 1252 character where available, or a box otherwise. In some cases the space character is shown as ^s_p for clarity.

Hex signature	ISO 8859-1	Offset	Extension	Description
23 21	#!	0		Script or data to be passed to the program following the <u>shebang</u> (#!)[1]
D4 C3 B2 A1 (<u>little-endian</u>)	ÔÃ² ;	0	pcap	Libpcap File Format[2]
A1 B2 C3 D4 (<u>big-endian</u>)	; ²ÃÔ			
4D 3C B2 A1 (<u>little-endian</u>)	M<² ;	0	pcap	Libpcap File Format (nanosecond-resolution)[2]
A1 B2 3C 4D (<u>big-endian</u>)	; ²<M			
0A 0D 0D 0A	L_F C_R C_R L_F	0	pcapng	PCAP Next Generation Dump File Format[3]
ED AB EE DB	í«îÛ	0	rpm	RedHat Package Manager (RPM) package[4]
53 51 4C 69 74 65 20 66 6F 72 6D 61 74 20 33 00	SQLite format 3 N _{U_L}	0	sqllitedb sqlite db	SQLite Database[5]
53 50 30 31	SP01	0	bin	Amazon Kindle Update Package[6]
49 57 41 44	IWAD	0	wad	internal WAD (main resource file of <u>Doom</u>)[7]
00	N _{U_L}	0	PIC PIF SEA YTR	IBM Storyboard bitmap file Windows <u>Program Information File</u> Mac <u>Stuffit Self-Extracting Archive</u> IRIS <u>OCR</u> data file
00 00	N _{U_L} N _{U_L}	11	PDB	PalmPilot Database/Document File
BE BA FE CA	¾ºpÊ	0	DBA	<u>Palm Desktop Calendar Archive</u>
00 01 42 44	N _{U_L} S _{O_H} BD	0	DBA	Palm Desktop To Do Archive
00 01 44 54	N _{U_L} S _{O_H} DT	0	TDA	Palm Desktop Calendar Archive
54 44 46 24	TDF\$	0	TDF\$	Telegram Desktop File

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Hex signature	ISO 8859-1	Offset	Extension	Description
80 2A 5F D7	€*_x	0	cin	<u>Kodak Cineon image</u>
52 4E 43 01 52 4E 43 02	RNC ^{s_{OH}} RNC ^{s_{TX}}	0		Compressed file using <u>Rob Northern Compression</u> (http://segaretro.org/Rob_Northern_compression) (version 1 and 2) algorithm
4E 55 52 55 49 4D 47 4E 55 52 55 50 41 4C	NURUIMG NURUPAL	0	nui nup	nuru (https://github.com/domsson/nuru) ASCII/ANSI image and palette files
53 44 50 58 (<u>big-endian</u> format)	SDPX	0	dpx	<u>SMPTE DPX image</u>
58 50 44 53 (<u>little-endian</u> format)	XPDS			
76 2F 31 01	v/1 ^{s_{OH}}	0	exr	<u>OpenEXR image</u>
42 50 47 FB	BPGû	0	bpg	Better Portable Graphics format ^[13]
FF D8 FF DB	ÿøÿÛ	0	jpg jpeg	JPEG raw or in the JFIF or Exif file format ^[14]
FF D8 FF E0 00 10 4A 46 49 46 00 01	ÿøÿà ^{N_{UL} D_L E_L} JFIF ^{N_{UL} s_{OH}}			
FF D8 FF EE	ÿøÿî			
FF D8 FF E1 ?? ?? 45 78 69 66 00 00	ÿøÿá??Exif ^{N_{UL} N_{UL}}			
FF D8 FF E0	ÿøÿà	0	jpg	JPEG raw or in the JFIF or Exif file format ^[14]
00 00 00 0C 6A 50 20 20 0D 0A 87 0A	^{N_{UL} N_{UL} N_{UL} F_F} JP ^{S_P S_P C_R L_F ‡^{L_F}}	0	jp2 j2k jpf jpm jpg2 j2c jpc jpx mj2	JPEG 2000 format ^[15]
FF 4F FF 51	ÿ0ÿQ			
71 6f 69 66	qoif	0		QOI - The “Quite OK Image Format” ^[16]
46 4F 52 4D ?? ?? ?? ?? 49 4C 42 4D	FORM????ILBM	0 any	ilbm lbm ibm iff	<u>IFF Interleaved Bitmap Image</u>
46 4F 52 4D ?? ?? ?? ?? 38 53 56 58	FORM????8SVX	0 any	8svx 8sv svx snd iff	<u>IFF 8-Bit Sampled Voice</u>

Hex signature	ISO 8859-1	Offset	Extension	Description
46 4F 52 4D ?? ?? ?? ?? 41 43 42 4D	FORM????ACBM	0 any	acbm iff	<u>Amiga Contiguous Bitmap</u>
46 4F 52 4D ?? ?? ?? ?? 41 4E 42 4D	FORM????ANBM	0 any	anbm iff	<u>IFF Animated Bitmap</u>
46 4F 52 4D ?? ?? ?? ?? 41 4E 49 4D	FORM????ANIM	0 any	anim iff	<u>IFF CEL Animation</u>
46 4F 52 4D ?? ?? ?? ?? 46 41 58 58	FORM????FAXX	0 any	faxx fax iff	<u>IFF Facsimile Image</u>
46 4F 52 4D ?? ?? ?? ?? 46 54 58 54	FORM????FTXT	0 any	ftxt iff	<u>IFF Formatted Text</u>
46 4F 52 4D ?? ?? ?? ?? 53 4D 55 53	FORM????SMUS	0 any	smus smu mus iff	<u>IFF Simple Musical Score</u>
46 4F 52 4D ?? ?? ?? ?? 43 4D 55 53	FORM????CMUS	0 any	cmus mus iff	<u>IFF Musical Score</u>
46 4F 52 4D ?? ?? ?? ?? 59 55 56 4E	FORM????YUVN	0 any	yuvn yuv iff	<u>IFF YUV Image</u>
46 4F 52 4D ?? ?? ?? ?? 46 41 4E 54	FORM????FANT	0 any	iff	<u>Amiga Fantavision Movie</u>
46 4F 52 4D ?? ?? ?? ?? 41 49 46 46	FORM????AIFF	0 any	aiff aif aifc snd iff	<u>Audio Interchange File Format</u>
4C 5A 49 50	LZIP	0	lz	<u>lzip compressed file</u> ^[17]
30 37 30 37 30 37	070707	0	cpio	<u>cpio archive file</u> ^[18]
4D 5A	MZ	0	exe scr sys dll fon cpl iec ime rs tsp mz	DOS MZ executable and its descendants (including <u>NE</u> and <u>PE</u>)
5A 4D	ZM	0	exe	<u>DOS ZM executable and its descendants (rare)</u>

Hex signature	ISO 8859-1	Offset	Extension	Description
50 4B 03 04 50 4B 05 06 (empty archive) 50 4B 07 08 (spanned archive)	$PK^{E_{TX} E_{OT}}$ $PK^{E_{NQ} A_{CK}}$ $PK^{B_{EL} B_{S}}$	0	zip aar apk docx epub ipa jar kmz maff msix odp ods odt pk3 pk4 pptx usdz vsdx xlsx xpi	zip file format and formats based on it, such as EPUB, <u>JAR</u> , <u>ODF</u> , <u>OOXML</u>
52 61 72 21 1A 07 00	Rar! $s_{UB}^{B_{EL} N_{UL}}$	0	rar	<u>Roshal ARchive compressed archive v1.50 onwards</u> ^[19]
52 61 72 21 1A 07 01 00	Rar! $s_{UB}^{B_{EL} s_{OH} N_{UL}}$	0	rar	<u>Roshal ARchive compressed archive v5.00 onwards</u> ^[20]
7F 45 4C 46	v_{EL} ELF	0		<u>Executable and Linkable Format</u>
89 50 4E 47 0D 0A 1A 0A	⌘PNG $c_R^{L_F s_{UB}^{L_F}}$	0	png	Image encoded in the <u>Portable Network Graphics format</u> ^[21]
C9	É	0	com	<u>CP/M 3 and higher with overlays</u> ^[22]
CA FE BA BE	Êp $o_{\frac{3}{4}}$	0	class	<u>Java class file, Mach-O Fat Binary</u>
EF BB BF	ï»¿	0	txt <i>others</i>	<u>UTF-8 byte order mark, commonly seen in text files.</u> ^{[23][24][25]}
FF FE	ÿþ	0	txt <i>others</i>	<u>UTF-16LE byte order mark, commonly seen in text files.</u> ^{[23][24][25]}
FE FF	þÿ	0	txt <i>others</i>	<u>UTF-16BE byte order mark, commonly seen in text files.</u> ^{[23][24][25]}
FF FE 00 00	ÿþ $N_{UL}^{N_{UL}}$	0	txt <i>others</i>	<u>UTF-32LE byte order mark for text</u> ^{[23][25]}

Hex signature	ISO 8859-1	Offset	Extension	Description
00 00 FE FF	$\text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{p}\ddot{\text{y}}$	0	txt <i>others</i>	UTF-32BE byte order mark for text ^{[23][25]}
2B 2F 76 38 2B 2F 76 39 2B 2F 76 2B 2B 2F 76 2F	+/v8 +/v9 +/v+ +/v/	0		UTF-7 byte order mark for text ^{[26][25]}
0E FE FF	$\text{s}_\text{s} \text{p}\ddot{\text{y}}$	0	txt <i>others</i>	SCSU byte order mark for text ^{[26][25]}
DD 73 66 73	Ýsfs	0		UTF-EBCDIC byte order mark for text ^{[26][25]}
FE ED FA CE	þíúÎ	0 0x1000		Mach-O binary (32-bit)
FE ED FA CF	þíúÏ	0 0x1000		Mach-O binary (64-bit)
FE ED FE ED	þíþí	0		JKS JavakeyStore (http://hg.openjdk.java.net/jdk10/jdk10/jdk/file/777356696811/src/java.base/share/classes/sun/security/provider/JavaKeyStore.java)
CE FA ED FE	Îúíp	0		Mach-O binary (reverse byte ordering scheme, 32-bit) ^[27]
CF FA ED FE	Ïúíp	0		Mach-O binary (reverse byte ordering scheme, 64-bit) ^[27]
25 21 50 53	%!PS	0	ps	PostScript document
25 21 50 53 2D 41 64 6F 62 65 2D 33 2E 30 20 45 50 53 46 2D 33 2E 30	%!PS-Adobe-3.0 ESPF-3.0	0	eps epsf	Encapsulated PostScript file version 3.0 ^[28]
25 21 50 53 2D 41 64 6F 62 65 2D 33 2E 31 20 45 50 53 46 2D 33 2E 30	%!PS-Adobe-3.1 ESPF-3.0	0	eps epsf	Encapsulated PostScript file version 3.1 ^[28]
49 54 53 46 03 00 00 00 60 00 00 00	ITSF $\text{E}_{\text{TX}} \text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{N}_{\text{UL}} \text{N}_{\text{UL}}$	0	chm	MS Windows HtmlHelp Data
3F 5F	?_	0	hlp	Windows 3.x/95/98 Help file
25 50 44 46 2D	%PDF-	0	pdf	PDF document ^[29]

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30 26 B2 75 8E 66 CF 11 A6 D9 00 AA 00 62 CE 6C	0&²uŽfİ ^ᵀ !Û ^ᵀ ā ^ᵀ bÎł	0	asf wma wmv	<u>Advanced Systems Format</u> ^[30]
24 53 44 49 30 30 30 31	\$SDI0001	0		<u>System Deployment Image</u> , a disk image format used by <u>Microsoft</u>
4F 67 67 53	OggS	0	ogg oga ogv	Ogg, an open source media container format
38 42 50 53	8BPS	0	psd	Photoshop Document file, <u>Adobe Photoshop's</u> native file format
52 49 46 46 ?? ?? ?? ?? 57 41 56 45	RIFF????WAVE	0	wav	<u>Waveform Audio File Format</u> ^[31]
52 49 46 46 ?? ?? ?? ?? 41 56 49 20	RIFF????AVI ^s	0	avi	<u>Audio Video Interleave</u> video format ^[32]
FF FB FF F3 FF F2	ÿû ÿó ÿò	0	mp3	MPEG-1 Layer 3 file without an ID3 tag or with an ID3v1 tag (which is appended at the end of the file)
49 44 33	ID3	0	mp3	<u>MP3</u> file with an ID3v2 container
42 4D	BM	0	bmp dib	BMP file, a bitmap format used mostly in the <u>Windows</u> world
43 44 30 30 31	CD001	0x8001 0x8801 0x9001	iso	<u>ISO9660</u> CD/DVD image file ^[33]
43 44 30 30 31	CD001	0x5EAC9	cdi	CD-i CD image file
6D 61 69 6E 2E 62 73	main.bs	0	mgw	Nintendo <u>Game & Watch</u> image file
4E 45 53	NES	0	nes	Nintendo <u>Entertainment System</u> image file
A0 32 41 A0 A0 A0	2A	0x165A4	d64	Commodore 64 1541 disk image (D64 format)
47 53 52 2D 31 35 34 31	GCR-1541	0	g64	Commodore 64 1541 disk image (G64 format)

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A0 33 44 A0 A0	3D	0x61819	d81	Commodore 64 1581 disk image (D81 format)
43 36 34 20 74 61 70 65 20 69 6D 61 67 65 20 66 69 6C 65	C64 tape image file	0	t64	Commodore 64 tape image
43 36 34 20 43 41 52 54 52 49 44 47 45 20 20 20	C64 CARTRIDGE	0	crt	Commodore 64 cartridge image
53 49 4D 50 4C 45 20 20 3D 20 54	SIMPLE $s_p s_p$ = $s_p s_p s_p s_p s_p s_p$ $s_p s_p s_p s_p s_p s_p$ $s_p s_p s_p s_p s_p$ T	0	fits	Flexible Image Transport System (FITS) ^[34]
66 4C 61 43	fLaC	0	flac	Free Lossless Audio Codec ^[35]
4D 54 68 64	MThd	0	mid midi	MIDI sound file ^[36]
D0 CF 11 E0 A1 B1 1A E1	ð Ì ¨ ª ª ± ª ª á	0	doc xls ppt msi msg	Compound File Binary Format, a container format defined by Microsoft COM. It can contain the equivalent of files and directories. It is used by Windows Installer and for documents in older versions of Microsoft Office. ^[37] It can be used by other programs as well that rely on the COM and OLE API's.
64 65 78 0A 30 33 35 00	dex l_r 035 N_{UL}	0	dex	Dalvik Executable
4B 44 4D	KDM	0	vmdk	VMDK files ^[38] ^[39]
43 72 32 34	Cr24	0	crx	Google Chrome extension ^[40] or packaged app ^[41]
41 47 44 33	AGD3	0	fh8	FreeHand 8 document ^[42] ^[43] ^[44]
05 07 00 00 42 4F 42 4F 05 07 00 00 00 00 00 00 00 00 00 00 00 01	$E_{NO} B_E N_{UL} N_{UL}$ BOB0 $E_{NO} B_E N_{UL} N_{UL} N_{UL} N_{UL} N_{UL} N_{UL}$ $N_{UL} N_{UL} N_{UL} N_{UL} N_{UL} S_{OH}$	0	cwk	AppleWorks 5 document

Hex signature	ISO 8859-1	Offset	Extension	Description
06 07 E1 00 42 4F 42 4F 06 07 E1 00 00 00 00 00 00 00 00 00 00 01	$A_{C_K} B_{E_L} \acute{a}_{N_{U_L}} BOBO$ $A_{C_K} B_{E_L} \acute{a}_{N_{U_L} N_{U_L} N_{U_L} N_{U_L} N_{U_L} N_{U_L}}$ $N_{U_L} N_{U_L} N_{U_L} N_{U_L} N_{U_L} N_{U_L} S_{O_H}$	0	cwk	AppleWorks 6 document
45 52 02 00 00 00	$ER^{S_{T_X} N_{U_L} N_{U_L} N_{U_L}}$	0	toast	Roxio Toast disc image file
8B 45 52 02 00 00 00	$\lt ER^{S_{T_X} N_{U_L} N_{U_L} N_{U_L}}$			
6B 6F 6C 79	koly	end-512	dmg	Apple Disk Image file
78 61 72 21	xar!	0	xar	eXtensible ARchive format ^[45]
50 4D 4F 43 43 4D 4F 43	PMOCCMOC	0	dat	Windows Files And Settings Transfer Repository ^[46] See also USMT 3.0 (Win XP) ^[47] and USMT 4.0 (Win 7) ^[48] User Guides
4E 45 53 1A	$NES^{S_{U_B}}$	0	nes	Nintendo Entertainment System ROM file ^[49]
75 73 74 61 72 00 30 30 75 73 74 61 72 20 20 00	$ustar^{N_{U_L}} 00$ $ustar^{S_P S_P N_{U_L}}$	257	tar	tar archive ^[50]
4F 41 52 ??	OAR?	0	oar	OAR file archive format, where ?? is the format version.
74 6F 78 33	tox3	0	tox	Open source portable voxel file ^[51]
4D 4C 56 49	MLVI	0	MLV	Magic Lantern Video file ^[52]
44 43 4D 01 50 41 33 30 50 41 33 30	$DCM^{S_{O_H}} PA30$ PA30	0		Windows Update Binary Delta Compression file ^[53]
37 7A BC AF 27 1C	$7z^{\frac{1}{4}} \text{ }^{\text{'}} F_S$	0	7z	7-Zip File Format
1F 8B	$U_S \lt$	0	gz tar.gz	GZIP compressed file ^[54]
FD 37 7A 58 5A 00	$\acute{y}7zXZ^{N_{U_L}}$	0	xz tar.xz	XZ compression utility using LZMA2 compression

Hex signature	ISO 8859-1	Offset	Extension	Description
04 22 4D 18	$E_{OT} "M^c_N$	0	lz4	LZ4 Frame Format ^[55] Remark: LZ4 block format does not offer any magic bytes. ^[56]
4D 53 43 46	MSCF	0	cab	Microsoft Cabinet file
53 5A 44 44 88 F0 27 33	SZDD^ð'3	0	??_	Microsoft compressed file in Quantum format, used prior to Windows XP. File can be decompressed using Extract.exe or Expand.exe distributed with earlier versions of Windows. After compression, the last character of the original filename extension is replaced with an underscore, e.g. 'Setup.exe' becomes 'Setup.ex_'.
46 4C 49 46	FLIF	0	flif	Free Lossless Image Format
1A 45 DF A3	$s_{u_p}E\&\&$	0	mkv mka mks mk3d webm	Matroska media container, including WebM
4D 49 4C 20	MIL s_p	0	stg	"SEAN : Session Analysis" Training file. Also used in compatible software "Rpw : Rowperfect for Windows" and "RP3W : ROWPERFECT3 for Windows".
41 54 26 54 46 4F 52 4D ?? ?? ?? ?? 44 4A 56	AT&TFORM????DJV	0	djvu djv	DjVu document The following byte is either 55 (U) for single-page or 4D (M) for multi-page documents.
30 82	0,	0	der	DER encoded X.509 certificate

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2D 2D 2D 2D 2D 42 45 47 49 4E 20 43 45 52 54 49 46 49 43 41 54 45 2D 2D 2D 2D 2D	-----BEGIN CERTIFICATE-----	0	crt pem	PEM encoded X.509 <u>certificate</u>		
2D 2D 2D 2D 2D 42 45 47 49 4E 20 43 45 52 54 49 46 49 43 41 54 45 20 52 45 51 55 45 53 54 2D 2D 2D 2D 2D	-----BEGIN CERTIFICATE REQUEST-----	0	csr pem	PEM encoded X.509 Certificate Signing <u>Request</u>		
2D 2D 2D 2D 2D 42 45 47 49 4E 20 50 52 49 56 41 54 45 20 4B 45 59 2D 2D 2D 2D 2D	-----BEGIN PRIVATE KEY-----	0	key pem	PEM encoded X.509 PKCS#8 private key		
2D 2D 2D 2D 2D 42 45 47 49 4E 20 44 53 41 20 50 52 49 56 41 54 45 20 4B 45 59 2D 2D 2D 2D 2D	-----BEGIN DSA PRIVATE KEY-----	0	key pem	PEM encoded X.509 PKCS#1 <u>DSA</u> private key		
2D 2D 2D 2D 2D 42 45 47 49 4E 20 52 45 41 20 50 52 49 56 41 54 45 20 4B 45 59 2D 2D 2D 2D 2D	-----BEGIN RSA PRIVATE KEY-----	0	key pem	PEM encoded X.509 PKCS#1 <u>RSA</u> private key		
50 75 54 54 59 2D 55 73 65 72 2D 4B 65 79 2D 46 69 6C 65 2D 32 3A	PuTTY-User-Key- File-2:	0	ppk	PuTTY private key <u>file</u> version 2		
50 75 54 54 59 2D 55 73 65 72 2D 4B 65 79 2D 46 69 6C 65 2D 33 3A	PuTTY-User-Key- File-3:	0	ppk	PuTTY private key <u>file</u> version 3		
2D 2D 2D 2D 2D 42 45 47 49 4E 20 4F 50 45 4E 53 53 48 20 50 52 49 56 41 54 45 20 4B 45 59 2D 2D 2D 2D 2D						
0						OpenSSH private key file
2D 2D 2D 2D 2D 42 45 47 49 4E 20 53 53 48 32 20 4B 45 59 2D 2D 2D 2D 2D						
0	pub	OpenSSH public key file				

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44 49 43 4D	DICM	128	dcm	DICOM Medical File Format
77 4F 46 46	wOFF	0	woff	WOFF File Format 1.0 (https://www.w3.org/TR/2012/REC-WOFF-20121213/)
77 4F 46 32	wOF2	0	woff2	WOFF File Format 2.0 (https://www.w3.org/TR/WOFF2/)
3C 3F 78 6D 6C 20	<?xml ^{s_p}	0 after BOM	xml	eXtensible Markup Language ^{[24][57]}
3C 00 3F 00 78 00 6D 00 6C 00 20	< ^{N_{UL}} ? ^{N_{UL}} x ^{N_{UL}} m ^{N_{UL}} l ^{N_{UL}} ^{s_p} ^{N_{UL}}			
00 3C 00 3F 00 78 00 6D 00 6C 00 20	^{N_{UL}} < ^{N_{UL}} ? ^{N_{UL}} x ^{N_{UL}} m ^{N_{UL}} l ^{N_{UL}} ^{s_p} ^{N_{UL}}			
3C 00 00 00 3F 00 00 00 78 00 00 00 6D 00 00 00 6C 00 00 00 20 00 00 00	< ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} ? ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} x ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} m ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} l ^{N_{UL}} ^{s_p} ^{N_{UL}} ^{N_{UL}} ^{N_{UL}}			
00 00 00 3C 00 00 00 3F 00 00 00 78 00 00 00 6D 00 00 00 6C 00 00 00 20	^{N_{UL}} ^{N_{UL}} ^{N_{UL}} < ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} ? ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} x ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} m ^{N_{UL}} ^{N_{UL}} ^{N_{UL}} l ^{N_{UL}} ^{s_p} ^{N_{UL}} ^{N_{UL}} ^{N_{UL}}			
4C 6F A7 94 93 40	Lo\$""@			
00 61 73 6D	^{N_{UL}} asm	0	wasm	WebAssembly binary format ^[58]
CF 84 01	ï ^{s_{OH}}	0	lep	Lepton compressed JPEG image ^[59]
43 57 53	CWS	0	swf	Adobe Flash .swf
46 57 53	FWS			
21 3C 61 72 63 68 3E 0A	!<arch> ^{L_P}	0	deb	linux deb file
52 49 46 46 ?? ?? ?? ?? 57 45 42 50	RIFF????WEBP	0	webp	Google WebP image file, where ?? ?? ?? ?? is the file size. More information on WebP File Header (https://developers.google.com/speed/webp/docs/riff_container#webp_file_header)

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27 05 19 56	' $\text{E}_{\text{N}} \text{Q}$ E_{M} V	0		U-Boot / ulmage. Das U-Boot Universal Boot Loader. ^[60]
7B 5C 72 74 66 31	{\rtf1	0	rtf	Rich Text Format
54 41 50 45	TAPE	0		<u>Microsoft Tape Format</u>
47	G	0 0xBC 0x178 ... (every 188th byte)	ts tsv tsa mpg mpeg	MPEG Transport Stream (MPEG-2 Part 1) ^[61]
00 00 01 BA	$\text{N}_{\text{U}_L} \text{N}_{\text{U}_L} \text{S}_{\text{O}_H} \text{Q}$	0	m2p vob mpg mpeg	MPEG Program Stream (MPEG-1 Part 1 (essentially identical) and MPEG-2 Part 1)
00 00 01 B3	$\text{N}_{\text{U}_L} \text{N}_{\text{U}_L} \text{S}_{\text{O}_H} \text{3}$	0	mpg mpeg	MPEG-1 video and MPEG-2 video (MPEG-1 Part 2 and MPEG-2 Part 2)
66 74 79 70 69 73 6F 6D	ftypisom	4	mp4	ISO Base Media file (MPEG-4)
78 01	$\text{x}^{\text{S}_{\text{O}_H}}$	0	zlib	No Compression (no preset dictionary)
78 5E	$\text{x}^{\wedge}$			Best speed (no preset dictionary)
78 9C	$\text{x}\text{æ}$			Default Compression (no preset dictionary)
78 DA	$\text{x}\acute{\text{U}}$			Best Compression (no preset dictionary)
78 20	$\text{x}^{\text{S}_{\text{P}}}$			No Compression (with preset dictionary)
78 7D	$\text{x}\}$			Best speed (with preset dictionary)
78 BB	$\text{x}\gg$			Default Compression (with preset dictionary)
78 F9	$\text{x}\grave{\text{u}}$			Best Compression (with preset dictionary)
62 76 78 32	bvx2	0	lzfse	LZFSE - Lempel-Ziv style data compression algorithm using

Hex signature	ISO 8859-1	Offset	Extension	Description
				Finite State Entropy coding. OSS by Apple. ^[62]
4F 52 43	ORC	0	orc	Apache ORC (Optimized Row Columnar) file format
4F 62 6A 01	Obj ^{s₀H}	0	avro	Apache Avro binary file format
53 45 51 36	SEQ6	0	rc	RCFile columnar file format
65 87 78 56	eþxV	0	p25 obt	PhotoCap Object Templates
55 55 AA AA	UU ^{a a}	0	pcv	PhotoCap Vector
78 56 34	xV4	0	pbt pdt pea peb pet pgt pict pjt pkt pmt	PhotoCap Template
50 41 52 31	PAR1	0		Apache Parquet columnar file format
45 4D 58 32	EMX2	0	ez2	Emulator Emaxsynth samples
45 4D 55 33	EMU3	0	ez3 iso	Emulator III synth samples
1B 4C 75 61	^{E_SC} Lua	0	luac	Lua bytecode ^[63]
62 6F 6F 6B 00 00 00 00 6D 61 72 6B 00 00 00 00	book ^{N_UL N_UL N_UL N_UL} mark ^{N_UL N_UL N_UL N_UL}	0	alias	macOS file Alias ^[64] (Symbolic link)
5B 5A 6F 6E 65 54 72 61 6E 73 66 65 72 5D	[ZoneTransfer]	0	Identifier	Microsoft Zone Identifier for URL Security Zones (http://technet.microsoft.com/en-us/windows/ms537183(v=vs.60)) ^[65]
52 65 63 65 69 76 65 64 3A	Received:	0	eml	Email Message var5
20 02 01 62 A0 1E AB 07 02 00 00 00	^{s_P s_T s_X s₀H} b _L ^{r_S} « ^{r_E} ^{s_T s_X s₀H} ^{N_UL N_UL N_UL N_UL}	0	tde	Tableau Datasource

Hex signature	ISO 8859-1	Offset	Extension	Description
37 48 03 02 00 00 00 00 58 35 30 39 4B 45 59	7H ^{E_F} _X ^{S_F} _X ^{N_U} _L ^{N_U} _L ^{N_U} _L ^{N_U} _L X509KEY	0	kdb	KDB file
85 ?? ?? 03	...? ^{E_T} _X	0	pgp	PGP file ^[66]
28 B5 2F FD	(μ/ý	0	zst	<u>Zstandard</u> compress ^{[67][68]}
52 53 56 4B 44 41 54 41	RSVKDATA	0	rs	QuickZip rs compressed archive ^{[69][70]}
3A 29 0A	:) ^{L_F}	0	sml	<u>Smile</u> file
4A 6F 79 21	Joy!	0		<u>Preferred</u> <u>Executable Format</u>
31 0A 30 30	1 ^{L_F} 00	0	srt	<u>SubRip</u> File
34 12 AA 55	4 ^{D_C} ₂ äU	0	vpk	VPK file, used to store game data for some <u>Source Engine</u> games
2A 2A 41 43 45 2A 2A	**ACE**	0	ace	<u>ACE</u> (compressed file format)
60 EA	`ê	0	arj	<u>ARJ</u>
49 53 63 28	ISc(	0	cab	<u>InstallShield</u> CAB Archive File
4B 57 41 4A	KWAJ	0	??_	Windows 3.1x Compressed File
53 5A 44 44	SZDD	0	??_	Windows 9x Compressed File
5A 4F 4F	Z00	0	zoo	<u>Zoo</u> (file format)
50 31 0A	P1 ^{L_F}	0	pbm	<u>Portable bitmap</u> ASCII
50 34 0A	P4 ^{L_F}	0	pbm	<u>Portable bitmap</u> binary
50 32 0A	P2 ^{L_F}	0	pgm	<u>Portable Gray Map</u> ASCII
50 35 0A	P5 ^{L_F}	0	pgm	<u>Portable Gray Map</u> binary
50 33 0A	P3 ^{L_F}	0	ppm	<u>Portable Pixmap</u> ASCII
50 36 0A	P6 ^{L_F}	0	ppm	<u>Portable Pixmap</u> binary
D7 CD C6 9A	×ÍÆš	0	wmf	<u>Windows Metafile</u>
67 69 6D 70 20 78 63 66	gimp xcf	0	xcf	<u>XCF</u> (file format)

Hex signature	ISO 8859-1	Offset	Extension	Description
2F 2A 20 58 50 4D 20 2A 2F	/* XPM */	0	xpm	<u>X PixMap</u>
41 46 46	AFF	0	aff	Advanced Forensics Format
45 56 46 32	EVF2	0	Ex01	EnCase EWF version 2 format
45 56 46	EVF	0	e01	<u>EnCase EWF version 1 format</u>
51 46 49	QFI	0	qcow	<u>qcow file format</u>
52 49 46 46 ?? ?? ?? ?? 41 43 4F 4E	RIFF????ACON	0	ani	<u>Animated cursor</u>
52 49 46 46 ?? ?? ?? ?? 43 44 44 41	RIFF????CDDA	0	cda	<u>.cda file</u>
52 49 46 46 ?? ?? ?? ?? 51 4C 43 4D	RIFF????QLCM	0	qcp	<u>Qualcomm PureVoice file format</u>
52 49 46 58 ?? ?? ?? ?? 46 47 44 4D (big-endian)	RIFX????FGDM	0	dcr	<u>Adobe Shockwave</u> ^[71] ^{[72][73]}
58 46 49 52 ?? ?? ?? ?? 4D 44 47 46 (little-endian)	XFIR????MDGF			
52 49 46 58 ?? ?? ?? ?? 4D 56 39 33 (big-endian)	RIFX????MV93	0	dir dxr drx	<u>Macromedia Director file format</u> ^{[74][72][73]}
58 46 49 52 ?? ?? ?? ?? 33 39 56 4D (little-endian)	XFIR????39VM			
46 4C 56	FLV	0	flv	<u>Flash Video file</u>
3C 3C 3C 20 4F 72 61 63 6C 65 20 56 4D 20 56 69 72 74 75 61 6C 42 6F 78 20 44 69 73 6B 20 49 6D 61 67 65 20 3E 3E 3E	<<< Oracle VM VirtualBox Disk Image >>>	0	vdi	<u>VirtualBox Virtual Hard Disk file format</u>
63 6F 6E 6E 65 63 74 69 78	connectix	0	vhd	<u>Windows Virtual PC Virtual Hard Disk file format</u>

Hex signature	ISO 8859-1	Offset	Extension	Description
76 68 64 78 66 69 6C 65	vhdxfi	0	vhdx	Windows Virtual PC Windows 8 Virtual Hard Disk file format
49 73 5A 21	IsZ!	0	isz	Compressed ISO image
44 41 41	DAA	0	daa	Direct Access Archive PowerISO
4C 66 4C 65	LfLe	0	evt	Windows Event Viewer file format
45 6C 66 46 69 6C 65	ElfFile	0	evtx	Windows Event Viewer XML file format
73 64 62 66	sdbf	8	sdb	Windows customized database
50 4D 43 43	PMCC	0	grp	Windows 3.x Program Manager Program Group file format
4B 43 4D 53	KCMS	0	icm	ICC profile
72 65 67 66	regf	0	dat hiv	Windows Registry file
21 42 44 4E	!BDN	0	pst	Microsoft Outlook Personal Storage Table file
44 52 41 43 4F	DRACO	0	drc	3D model compressed with Google Draco ^[75]
47 52 49 42	GRIB	0	grib grib2	Gridded data (commonly weather observations or forecasts) in the WMO GRIB or GRIB2 format ^[76]
42 4C 45 4E 44 45 52	BLENDER	0	blend	Blender File Format ^[77]
00 00 00 0C 4A 58 4C 20 0D 0A 87 0A	$N_{UL} N_{UL} N_{UL} F_F JXL S_P C_R L_F \ddagger L_F$	0	jxl	Image encoded in the JPEG XL format ^[78]
FF 0A	$\ddot{y} L_F$			
00 01 00 00 00	$N_{UL} S_O N_{UL} N_{UL} N_{UL}$	0	ttf tfe dfont	TrueType font
4F 54 54 4F	OTTO	0	otf	OpenType font ^[79]
23 25 4D 6F 64 75 6C 65	#%Module	0		Modulefile for Environment Modules ^[80]

Hex signature	ISO 8859-1	Offset	Extension	Description
4D 53 57 49 4D 00 00 00 D0 00 00 00 00	MSWIM ^{N_{U_L} N_{U_L} N_{U_L} D^{N_{U_L} N_{U_L} N_{U_L}}}	0	wim swm esd	<u>Windows Imaging Format</u> file
21 2D 31 53 4C 4F 42 1F	! -1SLOB ^{U_s}	0	slob	Slob (sorted list of blobs) is a read- only, compressed data store with dictionary-like interface ^[81]
AC ED	¬í	0		Serialized Java Data ^[82]
43 72 65 61 74 69 76 65 20 56 6F 69 63 65 20 46 69 6C 65 1A 1A 00	Creative Voice File	voc	0	<u>Creative Voice</u> file
2E 73 6E 64	.snd	au snd	0	<u>Au audio file format</u>
DB 0A CE 00		0		OpenGL Iris Performer .PFB (Performer Fast Binary) ^[83]
48 5a 4c 52 00 00 00 18	HZLR	0	.hazlrules	Noodlesoft Hazel ^[84]
46 4C 68 64	FLhd	0	flp	FL Studio Project File
31 30 4C 46	10LF	0	flm	FL Studio Mobile Project File
52 4b 4d 43 32 31 30	RKMC210	0		Vormetric Encryption DPM Version 2.1 Header ^[85]

See also

- List of file formats
- Magic number (programming)
- Substitute character (for the 1Ah (^Z) "end-of-file" marker used in many signatures)

References

1. "execve(2): execute program - Linux man page" (<https://linux.die.net/man/2/execve>). *linux.die.net*. Retrieved 2022-07-12.
2. "Libpcap File Format" (https://wiki.wireshark.org/Development/LibpcapFileFormat#Global_Header). Retrieved 2018-06-19.
3. "PCAP Next Generation Dump File Format" (<https://www.winpcap.org/ntar/draft/PCAP-DumpFileFormat.html#sectionshb>). Retrieved 2018-06-19.
4. "A. Format of the RPM file" (<ftp://ftp.tuwien.ac.at/.vhost/www.openpkg.org/doc/book/maximum-rpm.html/node26.html>). Retrieved 2017-02-15.

5. "Database File Format" (<https://www.sqlite.org/fileformat.html>). Retrieved 2018-11-16.
6. "GitHub - NiLuJe/KindleTool: Tool for creating/extracting Kindle updates and more" (<https://github.com/NiLuJe/KindleTool>). *GitHub*. Retrieved 2017-02-15.
7. "IWAD" (<https://zdoom.org/wiki/IWAD>). Retrieved 2022-07-05.
8. Icons (<http://msdn.microsoft.com/en-us/library/ms997538.aspx>) (at MSDN)
9. GRAPHICS INTERCHANGE FORMAT(sm) Version 89a (<http://www.w3.org/Graphics/GIF/spec-gif89a.txt>)
10. "TIFF, Revision 6.0" (<https://www.loc.gov/preservation/digital/formats/fdd/fdd000022.shtml>). *Sustainability of Digital Formats: Planning for Library of Congress Collections*. The Library of Congress. 2022-04-06. Retrieved 2022-07-12.
11. Computer Knowledge. "File Extension .CR2 Details" (<http://filext.com/file-extension/CR2>). *filext.com*.
12. "Inside the Canon RAW format version 2, understanding .CR2 file format and files produced by Canon EOS Digital Camera" (http://lclevy.free.fr/cr2/#key_info). *free.fr*.
13. Bellard, Fabrice (2015). "BPG Image format" (<http://bellard.org/bpg/>).
14. "Overview of JPEG 1" (<https://jpeg.org/jpeg/>).
15. "Overview of JPEG 2000" (<https://jpeg.org/jpeg2000/>).
16. "qoi-specification" (<https://qoiformat.org/qoi-specification.pdf>) (PDF).
17. "Lzip Compressed Format and the 'application/lzip' Media Type" (<https://datatracker.ietf.org/doc/draft-diaz-lzip/>). *Ietf Datatracker*. section 2.
18. "Format of cpio archives" (<https://www.mksssoftware.com/docs/man4/cpio.4.asp>). Retrieved 2022-07-05.
19. *TechNote.txt: RAR version 4.00 - Technical information* (Technical report). 2010-12-01. "The marker block is actually considered as a fixed byte sequence: 0x52 0x61 0x72 0x21 0x1a 0x07 0x00"
20. "RAR 5.0 archive format" (<https://www.rarlab.com/technote.htm>). Retrieved 2013-05-01.
21. *PNG (Portable Network Graphics) Specification Version 1.0* (<https://datatracker.ietf.org/doc/html/rfc2083>). IETF. doi:10.17487/RFC2083 (<https://doi.org/10.17487%2FRFC2083>). RFC 2083 (<https://datatracker.ietf.org/doc/html/rfc2083>).
22. Elliott, John C.; Lopushinsky, Jim (2002) [1998-04-11]. "CP/M 3.0 COM file header" (<http://www.seasip.info/Cpm/rsxrec.html>). *Seasip.info*. Archived (<https://web.archive.org/web/20160830194033/http://www.seasip.info/Cpm/rsxrec.html>) from the original on 2016-08-30. Retrieved 2016-08-29.
23. "Faq - Utf-8, Utf-16, Utf-32 & Bom" (https://unicode.org/faq/utf_bom.html#BOM).
24. "How to : Load XML from File with Encoding Detection" (<https://odieweblog.wordpress.com/2016/04/10/how-to-load-xml-from-file-with-encoding-detection>). 10 April 2016.
25. "SDL Documentation" (<https://docs.sdl.com/791187/581899/sdl-contenta-5-7/representations-of-boms-by-encoding>).
26. —Honerman, Tom (January 2, 2021). "Clarify guidance for use of a BOM as a UTF-8 encoding signature" (<https://unicode.org/L2/L2021/21038-bom-guidance.pdf>) (PDF).
27. "Mac Developer Library" (<https://developer.apple.com/library/mac/#documentation/DeveloperTools/Conceptual/MachORuntime/Reference/reference.html>). *apple.com*.

28. "Encapsulated PostScript (EPS) File Format, Version 3.x" (<https://www.loc.gov/preservation/digital/formats/fdd/fdd000246.shtml>). *Library of Congress*. 10 May 2022. Retrieved 2022-07-05.
29. "File command PDF Magic format" (<https://github.com/file/file/blob/master/magic/Magdir/pdf>). *GitHub*. Retrieved 2018-11-06.
30. "ASF (Advanced Systems Format)" (<http://www.digitalpreservation.gov/formats/fdd/fdd000067.shtml>). 6 April 2007.
31. "WAVE Audio File Format" (<https://www.loc.gov/preservation/digital/formats/fdd/fdd000001.shtml>). *Sustainability of Digital Formats: Planning for Library of Congress Collections*. The Library of Congress. 2022-04-19. Retrieved 2022-07-12.
32. "AVI (Audio Video Interleaved) File Format" (<https://www.loc.gov/preservation/digital/formats/fdd/fdd000059.shtml>). *Sustainability of Digital Formats: Planning for Library of Congress Collections*. The Library of Congress. 2016-03-09. Retrieved 2022-07-12.
33. Gary C. Kessler (21 October 2012). "File Signatures Table" (http://www.garykessler.net/library/file_sigs.html). Retrieved 28 December 2012.
34. "Flexible Image Transport System (FITS), Version 3.0 - File type signifiers" (<https://www.loc.gov/preservation/digital/formats/fdd/fdd000317.shtml#sign>). *Library of Congress*. 2012-09-26. Retrieved 16 June 2021.
35. Josh Coalson. "FLAC — format" (<https://xiph.org/flac/format.html#stream>). Retrieved 16 June 2021. "fLaC", the FLAC stream marker in ASCII, meaning byte 0 of the stream is 0x66, followed by 0x4C 0x61 0x43"
36. "File Signature Database: mid File Signatures" (<https://filesignatures.net/index.php?search=mid&mode=EXT>). *filesignatures.net*.
37. "Developing a tool to recognise MS Office file types (.doc, .xls, .mdb, .ppt)" (https://web.archive.org/web/20140809205308/http://social.msdn.microsoft.com/Forums/en-US/343d09e3-5fdf-4b4a-9fa6-8ccb37a35930/developing-a-tool-to-recognise-ms-office-file-types-doc-xls-mdb-ppt-?forum=os_binaryfile). *social.msdn.microsoft.com*. Archived from the original (http://social.msdn.microsoft.com/Forums/en-US/343d09e3-5fdf-4b4a-9fa6-8ccb37a35930/developing-a-tool-to-recognise-ms-office-file-types-doc-xls-mdb-ppt-?forum=os_binaryfile) on 2014-08-09. Retrieved 2014-07-28.
38. "What Files Make Up a Virtual Machine?" (https://www.vmware.com/support/ws55/doc/ws_learning_files_in_a_vm.html). *VMware*.
39. "VMware Virtual Disks Virtual Disk Format 1.1" (<http://www.vmware.com/app/vm/dk/?src=vmdk>). *VMware*.
40. "CRX Package Format" (<https://developer.chrome.com/extensions/crx.html>). *chrome.com*.
41. "CRX Package Format" (<https://developer.chrome.com/apps/crx.html>). *chrome.com*.
42. "[Pythonmac-SIG] Discovering file type" (<https://mail.python.org/pipermail/pythonmac-sig/2005-February/013028.html>). *python.org*.
43. Tim Fisher. "FH8 File - What It Is & How To Open One" (<http://pcsupport.about.com/od/fileextensions/f/fh8file.htm>). *About.com Tech*.
44. Kehl, Ken. "Re: What is the suffix for Freehand files?" (<https://groups.google.com/g/macromedia.freehand/c/g6bGwP-YYks/m/4m2Xfk--7Vkj>). *Google Groups*.
45. "xar - xarformat.wiki" (<https://code.google.com/p/xar/wiki/xarformat>). *code.google.com*.

46. "Easily Restore Your Computer With File and Settings Transfer Wizard XP (Part 1)" (<https://www.howtogeek.com/79820/easily-restore-your-computer-with-file-and-settings-transfer-wizard-xp-part-1/>). *howtogeek.com*.
47. "User State Migration Tool 3.0" (<https://technet.microsoft.com/en-us/library/cc722032%28v=ws.10%29.aspx>). *microsoft.com*. Microsoft.
48. "User State Migration Tool 4.0 User's Guide" (<https://technet.microsoft.com/en-us/library/dd560801.aspx>). *microsoft.com*. Microsoft.
49. "NESRomTool::NES ROM Quickstart" (<http://sadistech.com/nesromtool/romdoc.html>). *sadistech.com*.
50. "GNU tar 1.28: Basic Tar Format" (https://www.gnu.org/software/tar/manual/html_node/Standard.html). *gnu.org*.
51. "UVOX Universal Voxel Translator - Man Page" (<https://web.archive.org/web/20160508202038/http://tox.land/uvox/man.html>). *tox.land*. Archived from the original (<http://tox.land/uvox/man.html>) on 2016-05-08. Retrieved 2015-06-29.
52. "RAW Format v2.0 - Google Sheets" (<https://docs.google.com/spreadsheets/ccc?key=0AgQ2MOKAZTFHdHJraTVTOEpmNElwTVIKd0dHVi1ULUE#gid=0>). *google.com*.
53. "Using Binary Delta Compression (BDC) Technology to Update Windows Operating Systems" (<http://www.microsoft.com/en-us/download/details.aspx?id=1562>). Microsoft. 10 June 2005. Retrieved 15 March 2015.
54. Deutsch, L. Peter (May 1996). "Member header and trailer" (<https://datatracker.ietf.org/doc/html/rfc1952#page-6>). *GZIP file format specification version 4.3* (<https://datatracker.ietf.org/doc/html/rfc1952>). p. 6. doi:10.17487/RFC1952 (<https://doi.org/10.17487%2FRFC1952>). RFC 1952 (<https://datatracker.ietf.org/doc/html/rfc1952>). Retrieved 2018-10-29.
55. Collet, Yann (19 November 2021). "LZ4 Frame format" (https://github.com/lz4/lz4/blob/dev/doc/lz4_Frame_format.md). *github.com*.
56. Collet, Yann (19 November 2021). "LZ4 Block Format" (https://github.com/lz4/lz4/blob/dev/doc/lz4_Block_format.md). *github.com*.
57. "Extensible Markup Language (XML) 1.0 (Fifth Edition)" (<https://w3.org/TR/xml>).
58. "WebAssembly/design" (<https://github.com/WebAssembly/design/blob/master/BinaryEncoding.md#high-level-structure>). *GitHub*. Retrieved 2016-11-01.
59. "Lepton image compression: saving 22% losslessly from images at 15MB/s" (<https://blogs.dropbox.com/tech/2016/07/lepton-image-compression-saving-22-losslessly-from-images-at-15mbs/>). *Dropbox*.
60. "How to Extract an ulmage" (https://web.archive.org/web/20170225051131/http://buffalo.nas-central.org/wiki/How_to_Extract_an_ulmage). Archived from the original (http://buffalo.nas-central.org/wiki/How_to_Extract_an_ulmage) on 2017-02-25. Retrieved 2017-02-24.
61. "An introduction to MPEG-TS" (<https://tsduck.io/download/docs/mpeg-ts-introduction.pdf>) (PDF).
62. "lzfse/lzfse" (<https://github.com/lzfse/lzfse>). *GitHub*. Retrieved 2018-10-16.
63. Laurie, Dirk (2013). "Lua 5.2 Bytecode and Virtual Machine" (<http://files.catwell.info/misc/mirror/lua-5.2-bytecode-vm-dirk-laurie/lua52vm.html>).
64. "Mac OS X - ForensicsWiki" (https://www.forensicswiki.org/wiki/Mac_OS_X#Burn_Folder). *www.forensicswiki.org*. Retrieved 2018-09-22.
65. "libyal/libfsntfs" ([https://github.com/libyal/libfsntfs/blob/master/documentation/New%20Technologies%20File%20System%20\(NTFS\).asciidoc](https://github.com/libyal/libfsntfs/blob/master/documentation/New%20Technologies%20File%20System%20(NTFS).asciidoc)). *GitHub*. Retrieved 2018-09-22.

66. "gnupg - Is it a coincidence that the first 4 bytes of a PGP/GPG file are ellipsis, smile, female sign and a heart? - Information Security Stack Exchange)" (<https://security.stackexchange.com/a/144555/12109>). *security.stackexchange.com*. Retrieved 2020-06-05.
67. Collet, Yann; Kucherawy, Murray (October 2018). "Zstandard Frames" (<https://datatracker.ietf.org/doc/html/rfc8478#section-3.1.1>). *Zstandard Compression and the application/zstd Media Type* (<https://datatracker.ietf.org/doc/html/rfc8478>). sec. 3.1.1. doi:10.17487/RFC8478 (<https://doi.org/10.17487%2FRFC8478>). RFC 8478 (<https://datatracker.ietf.org/doc/html/rfc8478>). Retrieved 2018-10-29.
68. "Magic numbering scheme (zstd project issue tracker)" (<https://github.com/facebook/zstd/issues/768>). *GitHub*. Retrieved 2018-10-29.
69. "RS File Extension" (<https://filext.com/file-extension/RS>). *filext.com*. Retrieved 2020-09-18.
70. "Quickzip.org (WebArchive)" (<https://web.archive.org/web/20050403233040/http://www.quickzip.org/help/>). Archived from the original (<http://www.quickzip.org/help/>) on 2005-04-03. Retrieved 2020-09-18.
71. "DCR format - reverseShockwave" (<https://sites.google.com/site/reverseshockwave/home/dcr-format>).
72. "Shockwave (Director)" ([https://web.archive.org/web/20200211184445/http://fileformats.archiveteam.org/wiki/Shockwave_\(Director\)](https://web.archive.org/web/20200211184445/http://fileformats.archiveteam.org/wiki/Shockwave_(Director))). *fileformats.archiveteam.org*. Archived from the original ([http://fileformats.archiveteam.org/wiki/Shockwave_\(Director\)](http://fileformats.archiveteam.org/wiki/Shockwave_(Director))) on 11 February 2020. Retrieved 15 January 2022.
73. "Projector EXE to Shockwave DCR" (<https://docs.google.com/presentation/d/1pc-f2b4uB0qTFsvQ9XayQt3NYd6ARCIPSS8ikOLTzbU/htmlpresent>).
74. "Dir format - reverseShockwave" (<https://sites.google.com/site/reverseshockwave/home/dir-format>).
75. "Draco Bitstream Specification" (<https://google.github.io/draco/spec/>). *google.github.io*. Archived (<https://web.archive.org/web/20210118162812/http://google.github.io/draco/spec/>) from the original on 2021-01-18. Retrieved 2021-01-18.
76. "A GUIDE TO THE CODE FORM FM 92-IX Ext. GRIB" (<https://web.archive.org/web/20210502163758/https://www.wmo.int/pages/prog/www/WDM/Guides/Guide-binary-2.html>). Archived from the original (<https://www.wmo.int/pages/prog/www/WDM/Guides/Guide-binary-2.html>) on 2021-05-02. Retrieved 2021-05-02.
77. "The mystery of the blend" (https://web.archive.org/web/20150418144220/http://www.atmind.nl/blender/mystery_ot_blend.html). 2015-04-18. Archived from the original (https://www.atmind.nl/blender/mystery_ot_blend.html) on 2015-04-18. Retrieved 2021-05-07.
78. "GitHub - JPEG/JPEG XL Reference Software" (<https://github.com/libjxl/libjxl/blob/c98f133f3f5e456caaa2ba00bc920e923b713abc/lib/jxl/decode.cc#L107-L138>). *github.com*. Retrieved 2021-08-11.
79. "The OpenType Font File" (<https://docs.microsoft.com/en-us/typography/opentype/spec/otff>). *docs.microsoft.com*. Retrieved 2022-02-07.
80. "Environment Modules Documentation: modulefile" (<https://modules.readthedocs.io/en/latest/modulefile.html>). Retrieved 2021-08-19.
81. *GitHub - itkach/slob: Data store for Aard 2* (<https://github.com/itkach/slob>)
82. "[Best] 111+ Fancy Text Generator-*Stylish, Cool & Crazy Text* 🎨 Free Online" (<http://web.archive.org/web/20220609163801/https://fancytexteditor.com/>). Archived from the original (<https://fancytexteditor.com/>) on 2022-06-09. Retrieved 2022-07-13.

83. "J3k0/OpenPFB" (<https://github.com/j3k0/OpenPFB/blob/40d3bb13f672f50beca921aea581684d218fd989/OpenPfb.h#L370>). *GitHub*. 25 June 2022.
84. "Noodlesoft – Noodlesoft – Simply Useful Software" (<https://www.noodlesoft.com/>). *www.noodlesoft.com*. Retrieved 2022-07-24.
85. IBM. "Thales Vormetric Data Security Platform" ([https://www.ibm.com/support/pages/system/files/inline-files/\\$FILE/VDS_6.2.0_VAE_Install_API_Guide.pdf](https://www.ibm.com/support/pages/system/files/inline-files/$FILE/VDS_6.2.0_VAE_Install_API_Guide.pdf)) (PDF). *IBM*.

External links

- Gary Kessler's list of file signatures (http://www.garykessler.net/library/file_sigs.html)
 - Online File Signature Database for Forensic Practitioners, a private compilation free to Law Enforcement (<http://www.filesig.co.uk/ofsd.html>)
 - Man page for compress, uncompress, and zcat on SCO Open Server (<https://web.archive.org/web/20100502014229/http://docsrv.sco.com:507/en/man/html.C/compress.C.html>)
 - Public Database of File Signatures (<https://www.filesignatures.net/>)
 - Complete list of magic numbers with sample files (<http://asecuritysite.com/forensics/magic>)
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This page was last edited on 19 October 2022, at 15:47 (UTC).

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