

FILE FORMATS

Windows Media Video (WMV)

File Format Name: Windows Media Video²

File Extension(s): .WMV

Date Introduced: 2004²

Dates in Use: 2004-present²

Variations: Used in conjunction with Windows Media Audio² (subtype of Advanced Systems Format)² and the Sipro ACELP.net audio codec and can be contained within AVI or MKV wrappers as well³

Developers: Microsoft² (the variant VC-1 patent includes sixteen companies³)

Open Source/Proprietary: Versions 8 and below are a proprietary format of Microsoft, Inc.² (note that Windows Media 9, a relative of WMV was accepted by SMPTE in 2003 as the 421M – or VC1 - standard and no longer is proprietary)³

Associated Operating System: Windows OS versions since 1994; MAC OS X²

Associated Application(s): MPlayer and Window Media Player on Mac and PC as well as third-party software that use FFmpeg (used for open-source streaming software for Linux and other platforms); On Mac these files may be played with Flip4Mac, QuickTime player or MPlayer³

Associated Media: (storage) various

Compression: a variation of MPEG-4 Part 2³; SMPTE 421M (VC1) is a compressed video bitstream format and decoding process⁵

Primary Usage: Both AMV and WMV codecs are used to produce ASF files for low bitrate streaming multimedia^{2 3}

Risks:

Condition Assessment:

Conservation Issues: WMV is a proprietary format and thus subject to the whims of patent holder. The .GIF crisis when Unisys threatened to enforce royalties, however unlikely, could be a possible problem in the future. ⁴

Windows Media Video (WAV)

File Format Name: .WAV (“generic name for the set of video codec technologies developed by Microsoft” http://en.wikipedia.org/wiki/Windows_Media_Video) see also ASF (Advanced Systems Format)

File Extension(s): .WAV

Date Introduced: (year) “introduced with Windows 3.1” (1992)

Dates in Use: (years): 1992-present

Variations: .BWV (Broadcast Wave Format); WAVE files are based on IFF files thus similar structure to AIFF files as well ³

Developers: a cooperative effort between Microsoft and IBM ³

Open Source/Proprietary: proprietary

Associated Operating System: Microsoft Windows; Mac-compatible ³

Associated Application(s): Digidesign Pro Tools, Apple

Associated Media: (storage) various

Compression: compressed and uncompressed, but the latter is more common, using the PCM format which uses uncompressed, lossless compression

Primary Usage: high-quality uncompressed files for editing music and audio; not ideal for transmission because file size is much larger than other compressed files

Risks: Can be used with files no larger than 4 gigabytes

Condition Assessment: Testing with current hardware/software combinations

Conservation Issues: Also a proprietary format.

DIGITAL STORAGE DEVICES

Device Name: Zip disk

Date Introduced: (year) 1994 ¹

Dates in Use: (years): 1994-present (still in use but close to extinction)

Dimensions: 3.5"

Variations and/or Identifying Features: removable disk system widely used until the advent of flash media

Common Manufacturers/Brands: Iomega ¹ and, Fuji, Verbatim, Maxell and Epson manufactured cartridges only ³

Associated Hardware: Zip disks are a removable disk system based on Iomega's Bernoulli Box system and targeted to replace 3.5" floppy disks; initially a 100 megabytes of storage and later replaced with a backwards-compatible 250 megabyte model; one less popular variation was the Jaz disk, also a removable disk system with a much higher capacity but based on hard drives as opposed to floppy technology ³

Associated Software: Iomega proprietary software

Associated Media: various

Interface/Connectors: Internal drives used SCSI and IDE and external models used SCSI then USB

Primary Usage: graphic and other files that were too big to store on 1.44 MB (3.5") floppy disks

Risks: allows password protection (related Jaz drives were notoriously unreliable)

Condition Assessment: physical inspection of disks and drives and testing on current hardware/software variations

Conservation Issues: Widely used; parts still widely available

¹ Computer History Museum timeline

² PRONOM Technical Registry/The National Archives

³ Wikipedia

⁴ Barnes, Ian. Preservation of Word Processing Documents.

⁵ SMPTE standards (www.smpte.org/smpte_store/standards/pdf/numindex.pdf)

⁶ Larry Towers, Technical Director, Department of Film & TV, NYU/TSOA