

Managing digital records

Definitions and annotated bibliography

Definitions

Note: State Records NSW has produced a *Glossary of recordkeeping terms* as part of the *Government recordkeeping manual* at http://www.records.nsw.gov.au/recordkeeping/glossary_of_recordkeeping_terms_4297.asp. The definitions below are for highly used and more specific terms appearing in these guidelines.

Term	Definition
AIFF	Audio Interchange File Format, an uncompressed audio file format developed by Apple Computer for storing sound data for PCs and electronic audio devices.
AONS	Automated Obsolescence Notification System, a tool which periodically analyses digital repositories and determine whether any digital objects within them are in danger of becoming obsolete.
AVI	Audio-Video Interleave format, a multimedia file format developed by Microsoft and IBM.
BWF	Broadcast Wave Format (BWF), developed by IBM and Microsoft. Based on <u>WAV</u> and proposed as a preferred master format for mono or stereo audio.
CAD	Computer Aided Design, software used to develop engineering and technical design documents.
Checksum	A fixed size datum computed from a block of digital data for the purpose of detecting accidental errors that may have been made during data transmission or storage. The integrity of the data can be checked at a later time by recomputing the checksum and comparing it with the stored one. If the checksums do not match the data has been altered. ¹
Codec	Short hand for (en)coder/decoder or compression/decompression. A codec is the method by which an audio or video bitstream is encoded and decoded.
Compression	A way of encoding a file's data more concisely or efficiently by squeezing or squashing the file. See also lossy compression and lossless compression.
Digibeta	Digital Betacam, a taped based format launched in 1993 by Sony for recording compressed video signal. Digital version of the Betacam videotape format.
Digital records	'Born digital' records such as emails, web pages or database records,

¹ Definition from *Wikipedia*, viewed December 2008, <http://en.wikipedia.org/wiki/Checksum>.

	plus scanned versions of paper records that have been digitised in business processes.
DIRAC	An open, royalty free video compression format, specification and system developed by the BBC.
EDRMS	Electronic document and records management system
FFV1	FF video codec 1, a lossless, intra-frame video format. The encoder/decoder is part of the free, open-source library libavcodec in the project FFmpeg.
File format (audiovisual)	A file format is a way of capturing an encoded data stream as a logical unit and storing it.
File wrapper (audiovisual)	A wrapper is a <u>file format</u> for encapsulating different bitstreams (or files) and metadata into a single file.
FLAC	Free Lossless Audio Codec, a free, open source codec for lossless audio compression and decompression developed by Xiph.org.
GIF	Graphics Interchange Format, a bitmapped image format.
GIS	Geographical Information System, a system to capture, store, analyse, manage and present data that refers to, or is linked to, a location. ²
HTML	Hypertext Markup Language, a predominant markup language for web pages.
InterPARES	International Research on Permanent Authentic Records in Electronic Systems
JFIF	A commonly used standard method of compression for photographic images. Also known as JPEG.
JPEG	A commonly used standard method of compression for photographic images. Also known as JFIF.
JPEG 2000	A still image codec created by the Joint Photographic Experts Group in 2000. JPEG2000 has been increasingly adopted in moving pictures sectors.
Lossless compression	A method of compression using redundancy reduction techniques to find patterns and repetitions in the image data and express these more efficiently.
Lossy compression	A method of compression using some redundancy reduction techniques combined with irrelevancy reduction techniques which aim to remove or alter information that makes little or no difference to the user's perception of the image. In extreme cases lossy compression can compromise the quality of the image. Lossy compressions transform and simplify the image information in a

² Definition from *Wikipedia*, viewed December 2008, <http://en.wikipedia.org/wiki/Geographic_information_system>.

	way that gives much larger reductions in file size than lossless compressions but the information, once disposed of, is irretrievable.
MBWF	Multichannel Broadcast Wave Format (MBWF), developed by IBM and Microsoft. Based on <u>WAV</u> and recommended for use for surround sound or multichannel audio.
Motion JPEG 2000	An object oriented file wrapper developed by the Motion Pictures Experts Group (MPEG). It specifies the use of <u>JPEG 2000</u> for timed sequences of images (motion sequences) possibly combined with audio.
MOV	QuickTime format, a multimedia file format developed by Apple Computer Inc that wraps audio, video, effect or text.
MPEG	A video and audio compression standard produced by the Moving Pictures Experts Group.
MXF	Material Exchange Format, a file format developed by the Society of Motion Picture and Television Engineers (SMPTE) that wraps video, audio and other bitstreams.
ODF	An open, XML based document file format for office applications that create and edit documents containing text, spreadsheets, charts and graphical elements. ³
Open source software	A program in which the source code is available to the general public for use and/or modification from its original design free of charge. ⁴
PDF	Portable Document Format, a proprietary but open standard file format for representing two dimensional documents.
PDF/A-1	Portable Document Format / Archival 1. This standard defines a format for the long-term archiving of electronic documents and is based on the PDF standard.
PNG	Portable Network Graphics, a bit-mapped open source image format that employs lossless data compression.
PRONOM	An online registry of technical information which gives advice regarding file formats, software products and other technical components required to support long term access to digital records.
RAID	Redundant Array of Independent Disks is an umbrella term for computer data storage schemes that combine two or more physical hard disks into a single logical unit by using either special hardware or software.
Recordkeeping metadata	Data that describes the context, content and structure of records and their management through time. ⁵

³ OASIS ODF Adoption Technical Committee, *Open by design: The advantages of the OpenDocument format (ODF)*, an OASIS white paper, December 2006.

⁴ Definition from *Webopedia*, viewed December 2008, <http://www.webopedia.com/TERM/o/open_source.html>.

⁵ AS ISO 15489-2002 *Records management*, Part 1 Clause 3.12.

State archive	A State record that the State Records Authority of New South Wales has control of under the State Records Act 1998. (State Records Act 1998 section 3(1))
State record	Any record, made and kept, or received and kept, by any person in the course of the exercise of official functions in a public office, or for any purpose of a public office, or for the use of a public office. (State Records Act 1998 section 3(1))
Temporary value records	Records with no archival value that are destroyed after approved retention periods.
TIFF	A file format mainly used for storing images, including photographs.
WAV	Waveform Audio File Format, developed by IBM and Microsoft. Currently the international de-facto standard for digital audio.
XENA	XML Electronic Normalising of Archives. This is the National Archives of Australia's software for converting digital records from their original format into preservation formats. XENA, and the plugin architecture being developed for it are available as open source software. The National Archives has also developed open source software for recording the digital preservation process (Digital Preservation Recorder or DPR) and for providing access to digital archives (Quest).
XHTML	EXtensible Hypertext Markup Language, a version of HTML that conforms to the XML syntax and therefore allows automated processing to be performed using standard XML tools.
XML	EXtensible Markup Language, a specification developed by the W3C. XML is a pared-down version of SGML, designed especially for Web documents. It allows designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and between organisations. ⁶

⁶ Definition from *Webopedia*, viewed December 2008, <<http://www.webopedia.com/TERM/X/XML.html>>.

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