

Ontolog Forum

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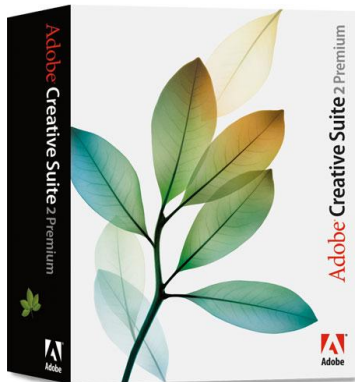


Adding Intelligence to Media

XMP Overview

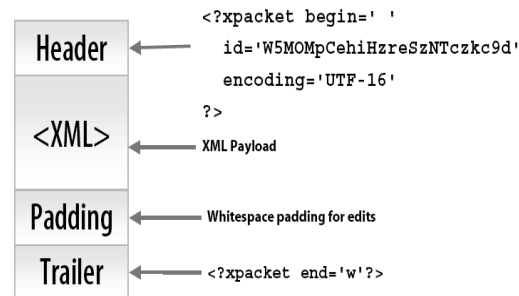
Extensible

- Easily add new metadata properties
- Extend the CS application UI
- Support from 30 + major asset management vendors



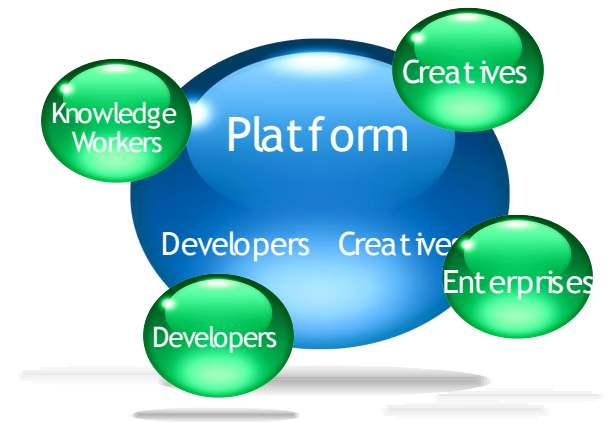
Metadata

- Data about...data
- XML based on the W3C standard for encoding metadata (RDF)
- create "smart assets" by embedding XML metadata in binary files
- File format neutral, e.g., JPEG, TIFF, EPS, PDF, Adobe native
- Metadata schema neutral (customizable)



Platform

- Across all CS products
- Based on industry W3C standards
- Freely available via open source -> partners
- intelligent / automation workflows; improved productivity



Key Elements of XMP

- Framework
 - XML structure for storing information
- Packet
 - How and where information is stored and accessed
- Specification
 - Description of & relationship to other standards
- Development tool (SDK)
 - Freely available, open source licensed tools
- Custom Panels
 - Human interface interaction with metadata
- Platform
 - Standardized access to metadata across Adobe CS

A Closer look at XMP

- **Based on W3C Standards**

- The Adobe Metadata Framework is one of first major, comprehensive implementations of RDF (Resource Description Format).

- **The elements of the Adobe XMP platform are:**

- **RDF Framework or expressing metadata from multiple schemas - XMP Framework**
- **Schemas used to describe properties, contained in namespaces - XMP schemas**
- **Method for embedding XML fragments in binary streams - XMP Packet Technology**
- **Support for third party interface and extensions to XMP - XMP SDK**

What it looks like - PDF Example

```
endobj
33 0 obj<</CreationDate (D:20050622165646-07'00')/Creator (Adobe Acrobat 7.0)/Producer (Adobe Acrobat 7.0)>>endobj
34 0 obj<</Subtype/XML/Length 1267/Type/Metadata>>stream
<?xpacket begin="ï»¿" id="W5M0MpCehiHzreSzNTczkc9d"?>
<x:xmpmeta xmlns:x="adobe:ns:meta/" x:xmptk="3.1-701">
  <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    <rdf:Description rdf:about=""
      xmlns:xap="http://ns.adobe.com/xap/1.0/"
      <xap:ModifyDate>2005-06-22T16:56:46-07:00</xap:ModifyDate>
      <xap:CreateDate>2005-06-22T16:56:46-07:00</xap:CreateDate>
      <xap:MetadataDate>2005-06-22T16:56:46-07:00</xap:MetadataDate>
      <xap:CreatorTool>Adobe Acrobat 7.0</xap:CreatorTool>
    </rdf:Description>
    <rdf:Description rdf:about=""
      xmlns:dc="http://purl.org/dc/elements/1.1/"
      <dc:format>application/pdf</dc:format>
    </rdf:Description>
    <rdf:Description rdf:about=""
      xmlns:xapMM="http://ns.adobe.com/xap/1.0/mm/"
      <xapMM:DocumentID>uuid:e87bd582-8512-441f-aff8-3ad11d672ff6</xapMM:DocumentID>
      <xapMM:InstanceID>uuid:34f18815-b334-4a97-9216-0c5425f208ab</xapMM:InstanceID>
    </rdf:Description>
    <rdf:Description rdf:about=""
      xmlns:pdf="http://ns.adobe.com/pdf/1.3/"
      <pdf:Producer>Adobe Acrobat 7.0 Image Conversion Plug-in</pdf:Producer>
    </rdf:Description>
  </rdf:RDF>
</x:xmpmeta>
<?xpacket end="r"?>
endstream
```

Schemas supported in CS 2

- Dublin Core
- Photoshop (IPTC subset)
- EXIF
- Basic XMP
- Rights Management
- Media Management
- Job Ticket Management
- XMP Page Text
- Adobe PDF
- Camera Raw - metadata edits
- Photoshop History
- Audio & Video
- Stock Photos

Standards Update

- **IPTC (IPTC Core)**
 - IPTC standard expressed with XMP framework
- **DNG - Digital Negative Format**
 - For Camera Raw file interchange
- **DISC - Digital Image Submission Criteria**
 - Photographers submitting photos to magazines
- **DIM2 - Digital Image Management Metadata**
 - Managing images from assignment through production, archive and re-use
- **AdsML - Advertising Submission Standards**
 - Subset of AdsML carried into workflows with XMP
- **PDF/A - Archive**
 - Adopting XMP as metadata archive standard
- **NISO Z39.87**
 - Preservation of digital images

Partners using XMP



The XMP Toolkit (S DK) Version 4.0 Beta

- The XMP Toolkit Version 4.0
 - <http://labs.adobe.com/xmp>
- Contents
 - The **XMP Core**: a component for parsing, manipulating, and serializing XMP data. This component was historically called the "XMP Toolkit" because it was the only component in the toolkit. It will henceforth be called the XMP Core, whereas the XMP Toolkit refers to the entire SDK.
 - The **XMP File Handler**: a component for reading, rewriting, and injecting serialized XMP into popular image, document, and video file formats. The XMP File Manager can be thought of as a "file I/O" component for reading and writing the XMP that is manipulated by the XMP Core.
- Write Support
 - Prerelease 1 of the XMP File Handler will allow developers to easily add and update XMP in the following file formats: JPEG, PSD, TIFF, AVI, WAV, MPEG, MP3, MOV.
 - The File Handler will also allow smarter handling of XMP in the following file formats: INDD, PS, EPS. Future releases will include support for additional file formats.

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