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Implementation Strategies using XMP

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Adobe Systems Incorporated

*Helping people and businesses communicate better
for more than twenty years*





What is XMP?

- **Technical description**

“Adobe’s Extensible Metadata Platform (XMP) is a labeling technology that allows you to embed data about a file, known as metadata, into the file itself.”

- **Human description**

“The message is in the medium”

- apologies to Marshall McLuhan



Imagine if your files could talk...

- **You would know where they've been**
 - Store contact info and e-commerce links
- **Whether it's appropriate to use them**
 - License usages, copyright notification
- **They could tell you what happened to them**
 - I've been cropped, rasterized, dithered...
- **Who their relatives and friends are**
 - I'm related to or derivative of this licensed file
- **XMP provides a common language for interchange**

"XMP - adding intelligence to media"



How is this achieved?

- **Becoming Swiss**
 - File format independent
 - XMP 'packet' is stored in existing custom data locations for file formats
- **Speaking a common language**
 - Open standards based framework
 - Uses XML & subset of RDF
- **Building upon common vocabularies**
 - Schemas & properties from Dublin Core, IPTC, EXIF
- **Freely available 'language' resources**
 - Open source license SDK available for free
- **Open for discussion & dialog**
 - Creative Suite optimized to speak XMP
 - Partners & products joining in the discussion



How to join in the conversation.

- **Establish your standard**
 - Develop a 'human' readable description of properties and example values
- **Build your schema**
 - Develop a 'technical' description of properties and value ranges
- **Identify desired areas of interoperability**
 - Look for namespace & property re-use
 - Properties descriptions can change in the UI (author <-> creator <-> photographer)
- **Choose implementation vehicle**
 - Custom panel creation
 - SDK development
 - 3rd Party help - Pound Hill software plugins



Example: DISC

- **Digital Imaging Submission Criteria**
 - Normalizing the communication between photographer and magazine publisher
 - Standard inputs in the publishing process reduce rework and improve productivity
- **Human readable document**
- **Identify namespace re-use**
 - Built in schema support in Adobe products

DISC Metadata	PS 5 Metadata	PS 7 Metadata
Photographer's Name	Byline	Author
Photographer's Contact Information	Byline Title	Author's Position
Subject	Title	Title
Photo Credit	Credit	Credit



Schema Support in XMP

- Get the latest spec from adobe.com/xmp
- **Schema support**
 - Dublin Core
 - Basic XMP
 - Rights Management
 - Media Management
 - Job Ticket Management
 - XMP Page Text
 - Adobe PDF
 - Photoshop (IPTC subset)
 - EXIF
- **Aliasing**
- **File format embedding guidelines**



Building a custom panel

- Latest doc at adobe.com/xmp
- Describes the 'layout language'
 - Described in a simple text file
 - UI properties
 - Types of UI widgets to use
 - Specifies namespaces, properties & allowable values for input

```
group(placement: place_row, spacing: gSpace, horizontal: align_fill, reverse: rtl_aware)
{
  static_text(name: '$$$/DublinCore/Coverage=Coverage:', vertical: align_top, font: font_big_right);

  edit_text(horizontal: align_fill, xmp_namespace: xap_ns_dc, xmp_path: 'coverage');

  mru_popup(xmp_namespace: xap_ns_dc, xmp_path: 'coverage', no_check: true, vertical: align_top);
}
```



Distribution, installation, usage

- **Install custom panel**
 - /custom file info panels/..
- **Appearance across Creative Suite apps**
 - Standardized customizable File Info dialog
- **Metadata values are stored within the file**
- **Metadata templates store commonly used values**
- **Photoshop File Browser can apply metadata to multiple files at once**
- **<Demo>**



For the designer, photographer, creative...

- **Keep track of the work you've done**
 - Embed history in PS files
 - Version Cue versioning of assets
- **Get noticed and the credit for your work**
 - Batch apply contact info into your work
- **Take control of how your assets are used**
 - Embed licensing date into the file
- **Adhere to submission standards**
 - Meet requirements for magazine submission



For the manager, design director, industry...

- **Higher quality ingredients, earlier**
 - “Nutrition labels” on files
 - Push preflight earlier upstream - DISC
- **Minimize mistakes**
 - Find file faster, ensure proper file usage, compliance with rights & reuse policies
- **Flexible, open integration platform**
 - Legacy and future extensible, vendor neutral, interoperable
- **Standard bodies implementation vehicle**
 - Create a panel, distribute it, adhere to it



Partners using XMP

- **Pound Hill Software** - <http://www.poundhill.com>
 - MetaLab - free tool for limited panel creation
 - Catalyst - plugins for custom UI & metadata for Adobe tools (and Quark)
 - Added support for AppleScript & PHP
- **iView & Portfolio**
 - Next version to support read & write XMP



Industry Support

- Ancept/Stellent
- Apago
- Artesia
- Context Media
- CoreMedia
- BearingPoint
- Data Technologies International (DTI)
- DeepBridge
- Documentum/EMC
- Extensis
- Getty Images
- **IBM/NICA**
- IfilterShop
- **IxiaSoft**
- Kodak
- MediaBin/Interwoven
- Media Systemen
- **North Plains Systems**
- Pindar Systems
- Pine Tree Systems
- **Pound Hill Software**
- Profium
- **Sansui**
- W3C
- WaveCorp/MediaBank
- **WebWare/Insci**
- Xerox





Standards Update

- **DISC to release first custom panel**
 - Digital Image Submission Criteria for photographers submitting photos to magazines
 - <http://www.disc-info.org/>
- **IPTC**
 - Strong desire in adopting XMP as standard!
- **W3C**
 - Adobe's support of RDF & Semantic Web
- **Creative Commons**
 - Licensing for distributing and sharing content
 - <http://creativecommons.org/technology/xmp-help>
 - Embedding license with XMP in media
- **PDF/A - Archive**
 - Adopting XMP as metadata archive standard



Community Support & Resources

<http://www.adobe.com/xmp>

- **Spec and SDK available via open source license**
- **Resources via XMP Web site**
 - White papers
 - Datasheet
 - Conference presentations
 - Developers Toolkit
 - Online knowledgebase
- **Community**
 - Contributors free to add to the open source
 - Requests, bug-fixes, changes, enhancements



xmp™

Adding Intelligence to Media



XMP Exposed ... in Photoshop

- **Photo organization and tagging**
 - Enhanced file browser metadata features
- **Metadata template application**
 - Copyright info, attribution
- **Preservation across transformations**
 - IPTC & EXIF info preserved from JPG to PSD
- **History stored in metadata**
 - Modification history optionally stored in XMP
- **Custom File Info Panel**
 - Define custom UI and schemas
- **ImageReady sidecar files**
 - Metadata for the Web



XMP in InDesign & InCopy

- **Custom File Info panel**
 - Define custom UI and schemas
- **Metadata template application**
 - Copyright info, attribution
- **Preservation across transformations**
 - INDD metadata preserved to PDF
- **File Info for placed objects**
 - Reveal metadata for placed objects for INCD, PSD, AI, JPG, TIFF files
 - Improved doc & object XMP support through PDF creation
- **XMP for InCopy documents**
 - Attach metadata to stories and reveal in InDesign



Version Cue

- **INTEGRATED** design process management ...



...for small creative workgroups

Powered By
xmp™



Adobe Creative Suite
Photoshop CS, Illustrator CS,
InDesign CS, GoLive CS