

Extensible Metadata Platform

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The Need for Intelligent Media



- **Workflows are becoming more digital**
 - Digital camera capture and upload into the production process
 - Desktop publishing and collaboration
 - Output to print, web, CD, handheld, wireless, eBook, RSS, video ...
- **Proliferation of digital assets**
 - Migration from physical and analog to digital
 - Re-use, re-purposing, re-expression of media assets
- **Efficiency is driving data interchange**
 - Rights and usage mgmt between supplier & consumer
 - Standardization for interchange
- **Metadata is a strategic advantage**
 - If you can't describe it, you can't control it

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
- **Where they are going**
 - What expected next in the workflow
- **XMP provides a common language for interchange**

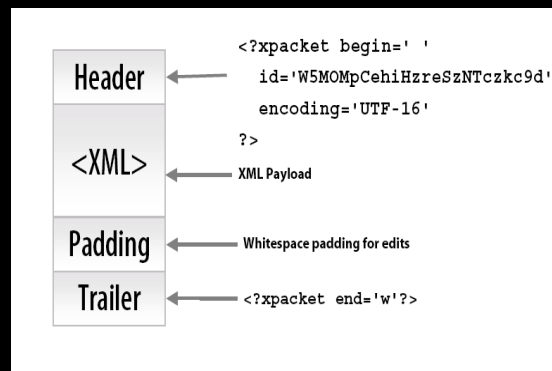
Extensible

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



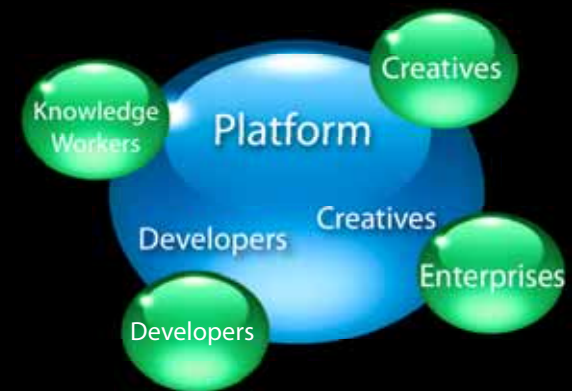
Metadata

- 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)

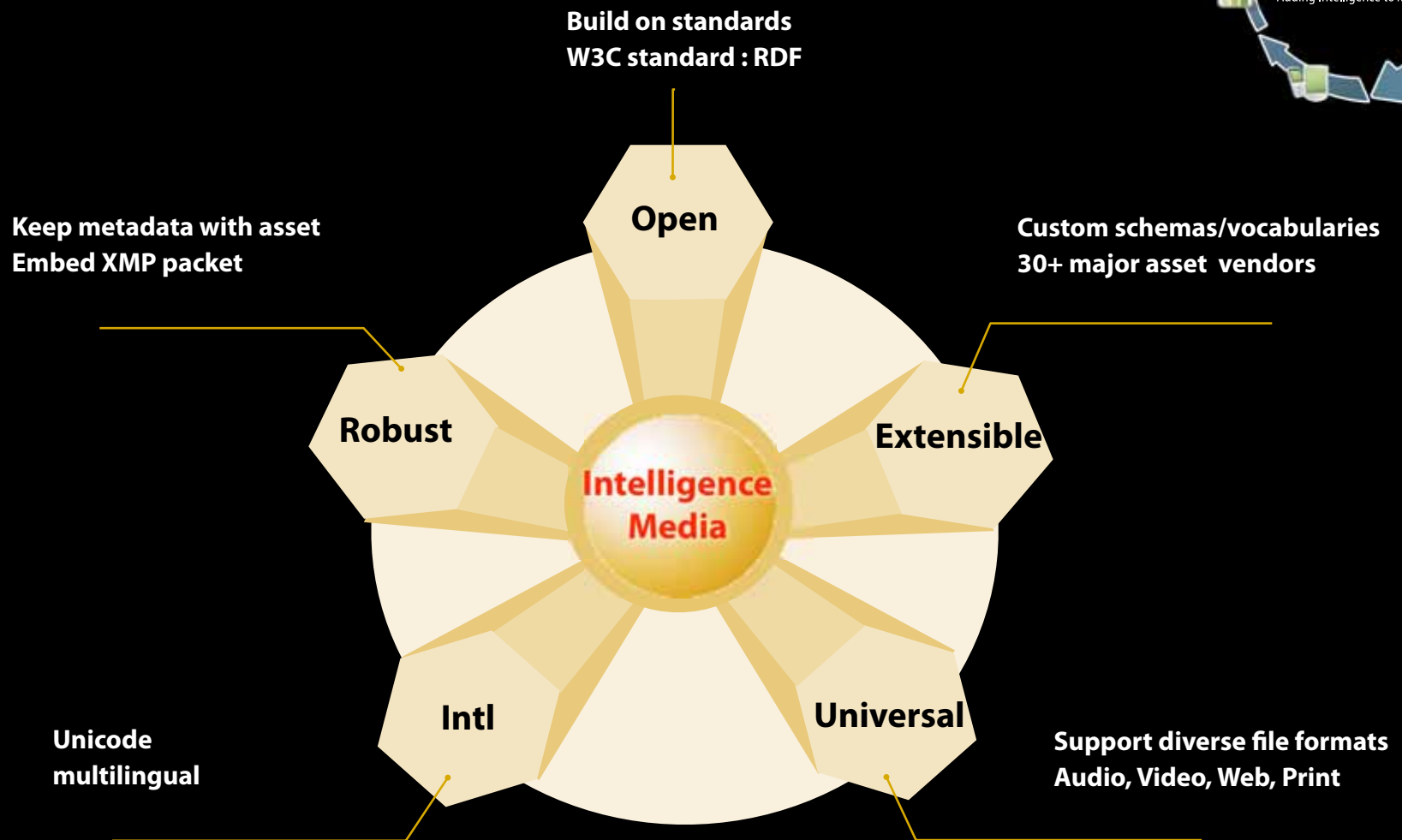


Platform

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



Key Requirements for Intelligence Media



Key Elements of XMP

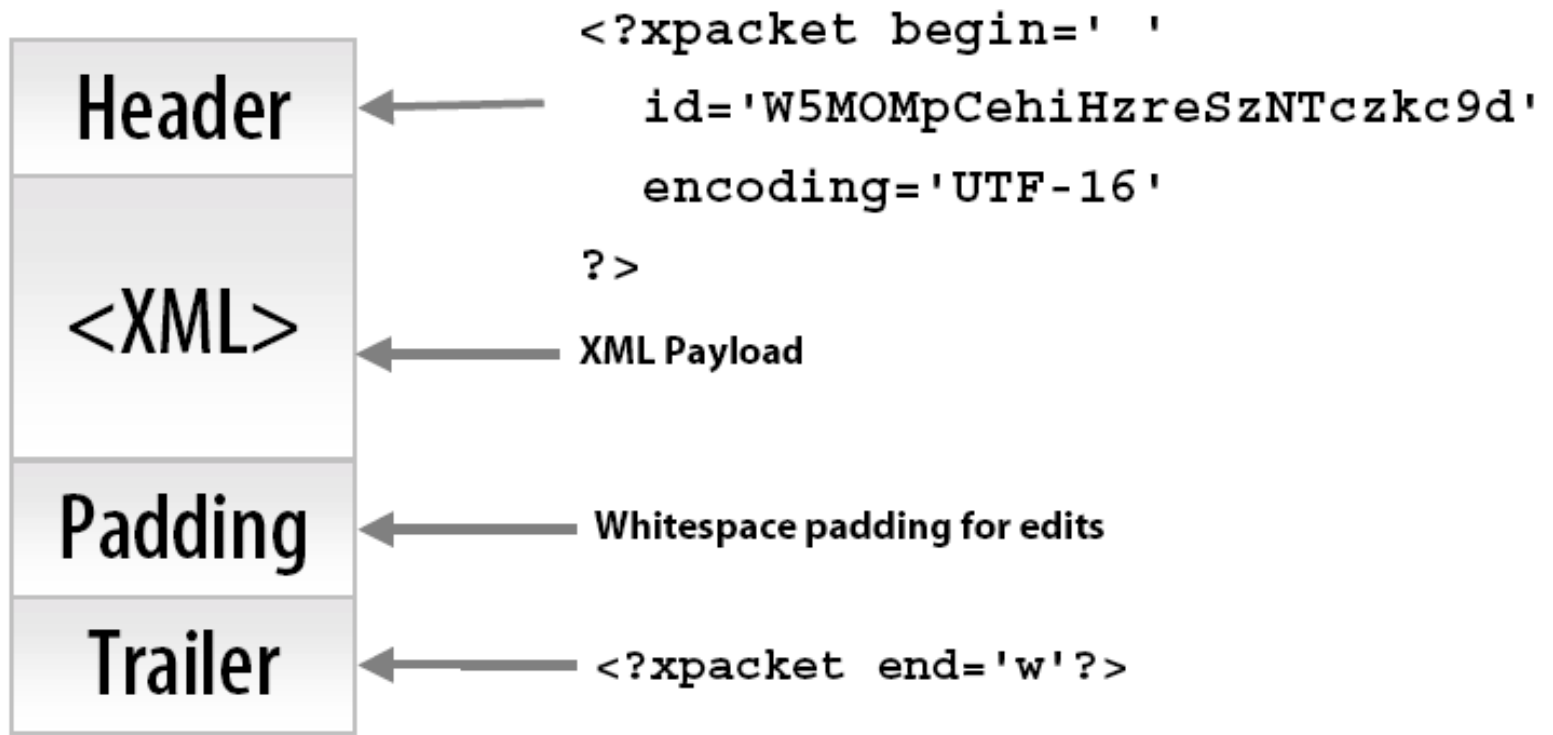


- **Packet**
 - How and where information is stored and accessed
- **Framework**
 - XML structure for storing information
- **Specification**
 - Description of & relationship to other standards
- **Custom Panels**
 - Human interface interaction with metadata
- **Development tool (SDK)**
 - Freely available,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

Key Elements of XMP : Packet



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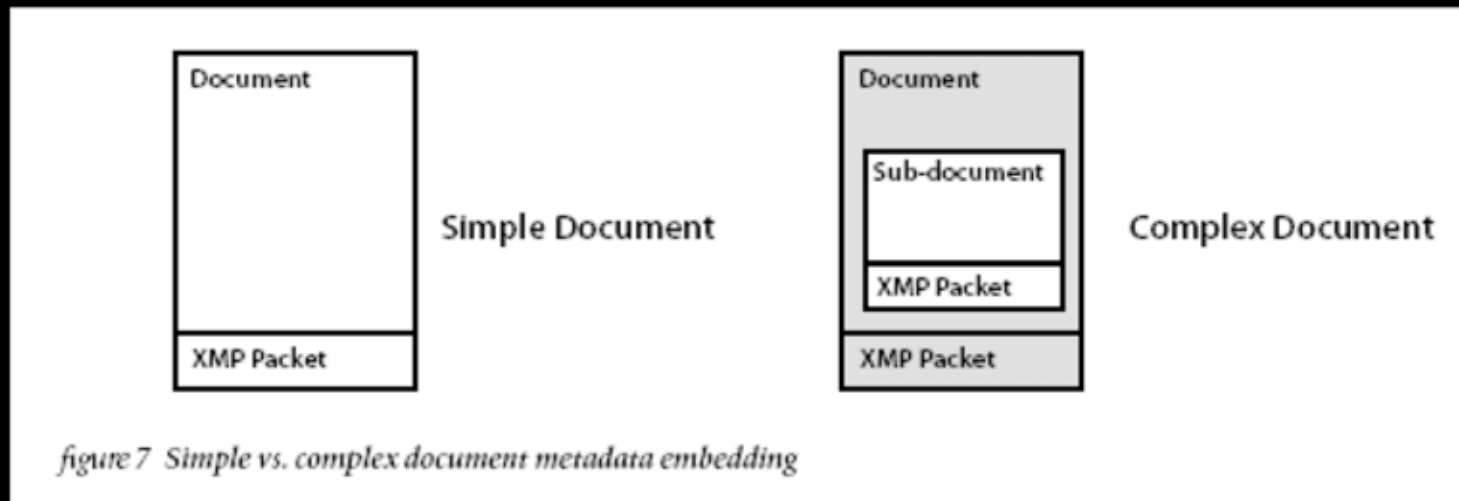
How XMP is used in layout

- **A suite of products working with multiple file formats.**
- **In order to import multiple file formats into an aggregate file, the metadata must be read to tell the application how to handle the request.**
- **Each sub-component has its' own metadata.**



The XMP framework

- **Allows metadata to be combined from 1..* master and sub-components.**
- **Documents are structured – each sub-component has its' own metadata. XMP framework preserves this.**



Key Elements of XMP : Specification



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Schemas supported across Adobe products



- **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 built on XMP



- **IPTC (IPTC Core)** - IPTC standard expressed with XMP framework
- **DNG** - For Camera Raw file interchange
- **DISC** - Standardize photography submission into magazine publication
- **PRISM** - Publishing and syndication for magazines
- **PLUS** - Industry standard vocabulary for image licensing
- **Creative Commons** - Community standard for non-commercial sharing and re-use of content
- **Ad-ID** - Identification of advertising related assets for distribution
- **AdsML** – Advertising Submission Standards
- **PDF/A - Archive**

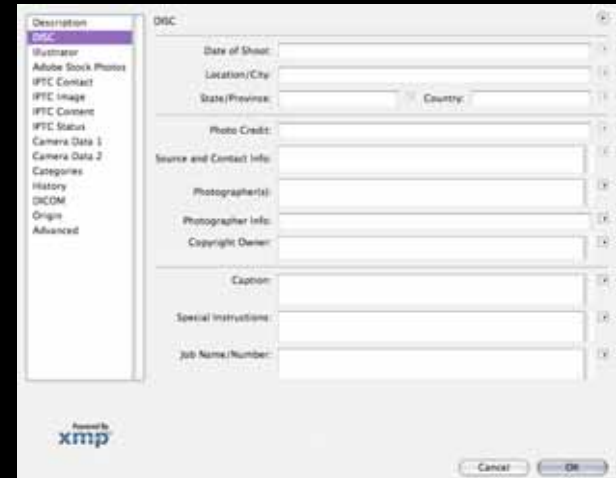
Key Elements of XMP : Custom Panels



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Custom Panels in the CS Products

- **Human interface with metadata**
- **Consistent metadata dialog across CS**
 - Standard view of metadata within workflow
- **Panels defined by text file**
 - Defines the user readable **label** for properties
 - Describes the visual **layout** & interactivity
 - Defines the **storage** of metadata in properties
- **Links data input to data storage structure**
 - Data entered via panel is stored in XMP packet according to panel description
- **Enables standards interoperability & customization**



Bridge CS3 Extensibility with Flash

- **Bridge CS3 included with all CS3 applications and Suites**
- **Bridge CS3 SDK provides:**
 - Create custom Flash UI within Bridge
 - Enhanced scripting of XMP
 - Access to HTTP & FTP
 - <http://www.adobe.com/devnet/bridge/>
- **Version Cue SDK provides:**
 - Asset management integration
 - <http://www.adobe.com/devnet/versioncue/>



Key Elements of XMP : Toolkit (SDK)



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The XMP Toolkit Version 4.1.1



- **The XMP Toolkit Version 4.1.1**

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

- **XMP Core**

- Library for parsing, manipulating, and serializing XMP data.

- **XMP File Handler**

- Library for reading, rewriting, and injecting serialized XMP into popular image, document, and video file formats.

- **File Type Support**

- 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.

- **Available under BSD open source license**

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XMP as a platform for partner solutions

Powered By
XMP™



Metadata in the Rich Content Lifecycle



XMP - Business Drivers



- Faster, efficient throughput of digital assets
 - XMP & Bridge enable faster workflows and asset routing
 - Non-destructive edit for camera raw, JPEGs
- Rights compliance & accountability
 - PLUS - Photographers, stock photo, media consumers
- Increased efficiency & flexibility of system integration
 - Custom namespace & schema support, XML based
- Improved data exchange processes
 - Ability to associate business critical info with media assets
- Standards community engagement
 - Coordination with partners & customers

XMP Info



- **XMP related resources:**
- <http://www.adobe.com/xmp>

- **XMP Toolkit (SDK)**
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Revolutionizing

how the world engages
with ideas and information