



# Apache XMP Incubator project

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Adding Intelligence to Media

# Metadata ???



+

```
<xmpmeta xmlns:x="adobe:ns:meta/">
  <rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-
    rdf-syntax-ns#"><rdf:Description rdf:about=""
    xmlns:dc="http://purl.org/dc/elements/1.1/">
    <dc:creator>
      <rdf:Seq>
        <rdf:li>Creator</rdf:li>
      </rdf:Seq>
    </dc:creator>
    <dc:description>
      <rdf:Alt>
        <rdf:li xml:lang="x-default">
          Description Line</rdf:li>
        </rdf:Alt>
      </dc:description>
    </rdf:Description>
  </rdf:RDF>
```

=



Adobe created in 2001...



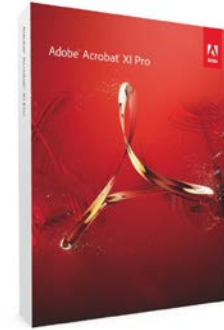


Adding Intelligence to Media



- **Data model**
- **Schemas**
- **Standard serialization**
- **File embedding**
  - **In about 30 file formats**

# XMP in Adobe Products



scene7®



# XMP on mobile devices



Image copyright: Google



# XMP on Cameras



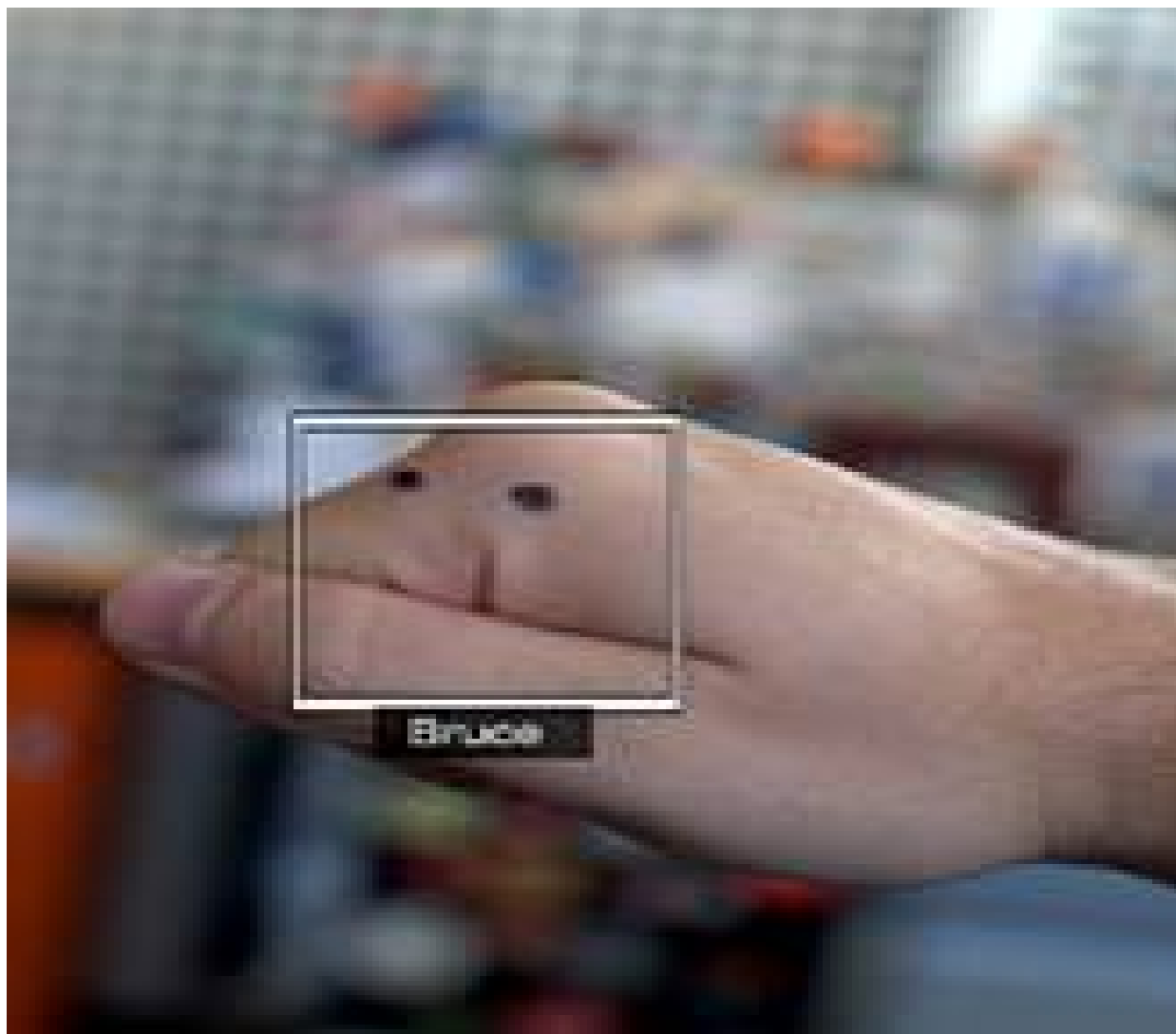
Image copyright: Nikon

# Example software that uses XMP



Image copyright: Google

# One example for what XMP is actually being used



# Some companies using XMP

**Canon**

**NOKIA**



**Google™**



***Nikon***®



Image copyrights: the respective company

# XMP has been adopted by many standards



# XMP specification part 1 is owned by ISO today



**XMP = ISO 16684-1**

# A lot of open source projects around XMP

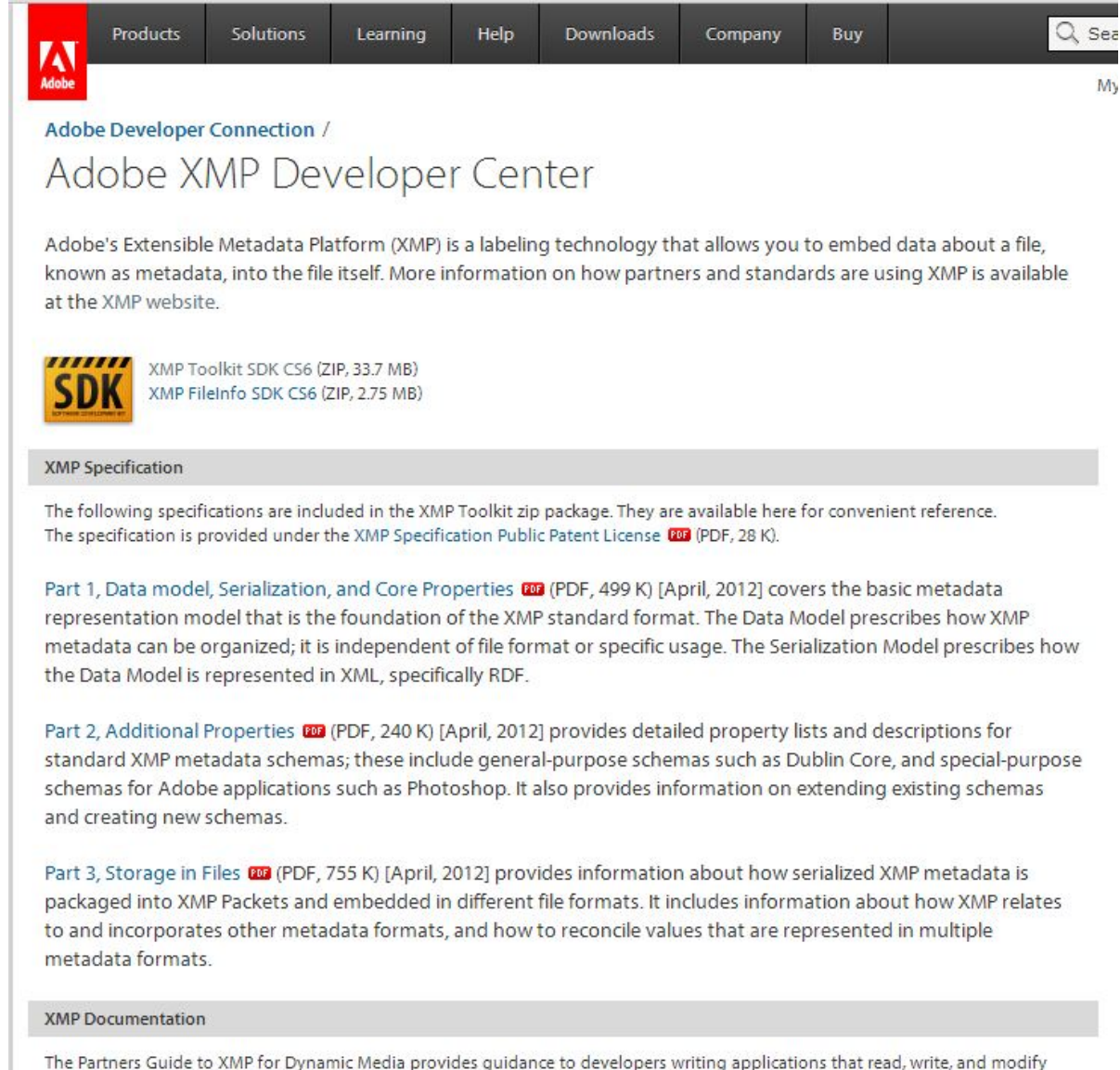


Google code



SOURCE  
forge

# Adobe XMP source public for many years




The screenshot shows the Adobe Developer Connection website. At the top, there is a navigation bar with the Adobe logo on the left and menu items: Products, Solutions, Learning, Help, Downloads, Company, Buy, and a search box labeled 'See'. Below the navigation bar, the page title is 'Adobe Developer Connection / Adobe XMP Developer Center'. The main content area features a paragraph about Adobe's Extensible Metadata Platform (XMP) and a list of SDKs: 'XMP Toolkit SDK CS6 (ZIP, 33.7 MB)' and 'XMP FileInfo SDK CS6 (ZIP, 2.75 MB)'. Below this, there is a section titled 'XMP Specification' which contains three paragraphs describing the specifications included in the XMP Toolkit zip package. The first paragraph mentions the XMP Specification Public Patent License (PDF, 28 K). The second paragraph describes 'Part 1, Data model, Serialization, and Core Properties' (PDF, 499 K) [April, 2012]. The third paragraph describes 'Part 2, Additional Properties' (PDF, 240 K) [April, 2012]. The fourth paragraph describes 'Part 3, Storage in Files' (PDF, 755 K) [April, 2012]. At the bottom, there is a section titled 'XMP Documentation' which mentions 'The Partners Guide to XMP for Dynamic Media'.

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## Adobe Developer Connection / Adobe XMP Developer Center

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. More information on how partners and standards are using XMP is available at the XMP website.

 XMP Toolkit SDK CS6 (ZIP, 33.7 MB)  
XMP FileInfo SDK CS6 (ZIP, 2.75 MB)

### XMP Specification

The following specifications are included in the XMP Toolkit zip package. They are available here for convenient reference. The specification is provided under the [XMP Specification Public Patent License PDF](#) (PDF, 28 K).

[Part 1, Data model, Serialization, and Core Properties PDF](#) (PDF, 499 K) [April, 2012] covers the basic metadata representation model that is the foundation of the XMP standard format. The Data Model prescribes how XMP metadata can be organized; it is independent of file format or specific usage. The Serialization Model prescribes how the Data Model is represented in XML, specifically RDF.

[Part 2, Additional Properties PDF](#) (PDF, 240 K) [April, 2012] provides detailed property lists and descriptions for standard XMP metadata schemas; these include general-purpose schemas such as Dublin Core, and special-purpose schemas for Adobe applications such as Photoshop. It also provides information on extending existing schemas and creating new schemas.


[Part 3, Storage in Files PDF](#) (PDF, 755 K) [April, 2012] provides information about how serialized XMP metadata is packaged into XMP Packets and embedded in different file formats. It includes information about how XMP relates to and incorporates other metadata formats, and how to reconcile values that are represented in multiple metadata formats.

### XMP Documentation

The Partners Guide to XMP for Dynamic Media provides guidance to developers writing applications that read, write, and modify



# Open Source?? ;)





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## XMP SDK

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5 points awarded for **Helpful Answers**

Where else? ;)



# What would Adobe contribute?

~~Specification~~



SDK

XMP Core

XMP Schema

XMP Transform

C++ SDK as well, but later

+ The XMP Geeks that work at Adobe

Interested?

# Thanks for coming!

If you are interested, please contact me:

Jörg Ehrlich

jehrlich@adobe.com

jehrlich@apache.org



- Hamburg is hiring: <http://www.adobe.com/careers.html>