

Reform(aliz)ing Copyright for the Internet Age
Claremont Hotel, Berkeley – April 18-19, 2013

Technology of Registries

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A FRAMEWORK FOR METADATA

The Indecs Project

- Dates from 2000
- Interoperability of Data in E-Commerce Systems
- Funded by European Commission
- Partners and affiliates from Europe, Asia and US



Indecs Model of Commerce

People make stuff

People use stuff

People make deals about stuff

Machine Mediated Commerce

- Need to identify and describe in standard ways:
 - The stuff
 - The people
 - The deals

INDECS PRINCIPLES

Principle of Unique Identification

Every entity should be uniquely identified within an identified namespace.

Unique Identification

- Disambiguation



John Williams
Guitarist
Public Domain



John Williams
Composer
Courtesy: TashTish

Disambiguation



The screenshot shows a Wikipedia page titled "John Williams (disambiguation)". The page has a navigation bar with "Article" and "Talk" tabs. The main content area starts with the title "John Williams (disambiguation)" followed by the text "From Wikipedia, the free encyclopedia". Below this, a paragraph states: "John Williams (born 1932) is an American music composer who specializes in motion picture scores. John Williams, Johnnie Williams, or Johnny Williams may also refer to:". This is followed by a section header "Artists and entertainers" and a bulleted list of links to other articles: "John Williams (actor) (1903–1983), British stage, film, and television actor", "John Williams (guitarist) (born 1941), Australian-born classical guitarist", "John Williams (composer)", "John Williams (radio personality) (born 1959), Chicago radio personality", "John A. Williams (born 1925), American novelist", and "John B. Williams (born 1977), English DJ".

Article [Talk](#) [Read](#)

John Williams (disambiguation)

From Wikipedia, the free encyclopedia

John Williams (born 1932) is an American music composer who specializes in motion picture scores. **John Williams**, **Johnnie Williams**, or **Johnny Williams** may also refer to:

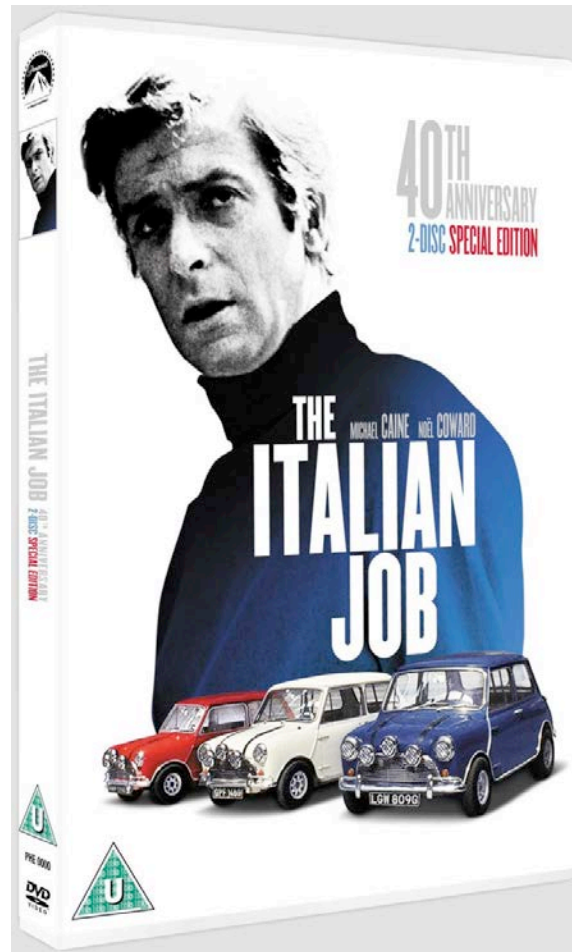
Artists and entertainers

- [John Williams \(actor\)](#) (1903–1983), British stage, film, and television actor
- [John Williams \(guitarist\)](#) (born 1941), Australian-born classical guitarist
- [John Williams \(composer\)](#)
- [John Williams \(radio personality\)](#) (born 1959), Chicago radio personality
- [John A. Williams](#) (born 1925), American novelist
- [John B. Williams](#) (born 1977), English DJ

Principle of Functional Granularity

It should be possible to
identify an entity
whenever it needs to be
distinguished.

Functional Granularity



Mini Coopers

One identifier
or three?

Depends on the function

- Buying an engine part?
- Matching the paint for a respray?
- Defending a speeding ticket?



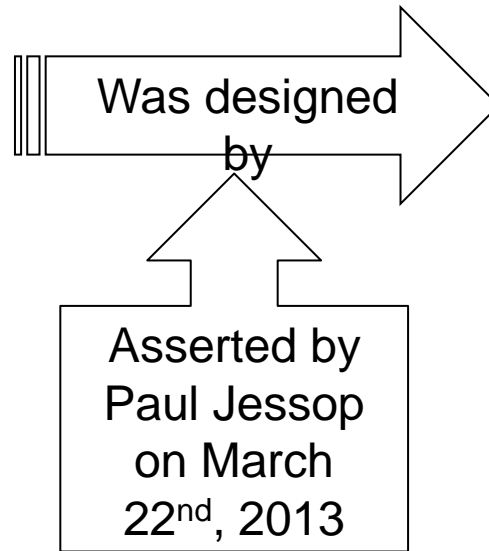
Principle of Designated Authority

The author of an item of metadata should be securely identified.

Architects



St Paul's Cathedral



J S Bach

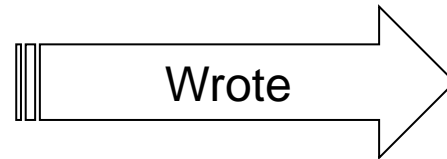
Principle of Appropriate Access

Everyone requires access to the metadata on which they depend, and privacy and confidentiality for their own metadata from those who are not dependent on it.

Crediting Creators



John Williams



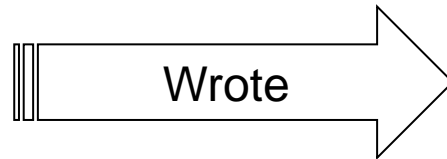
**Jurassic Park
Main Theme**

**I want to credit the
composer in my
webcast. Who wrote
this?**

Not Necessarily Free or Available



John Williams



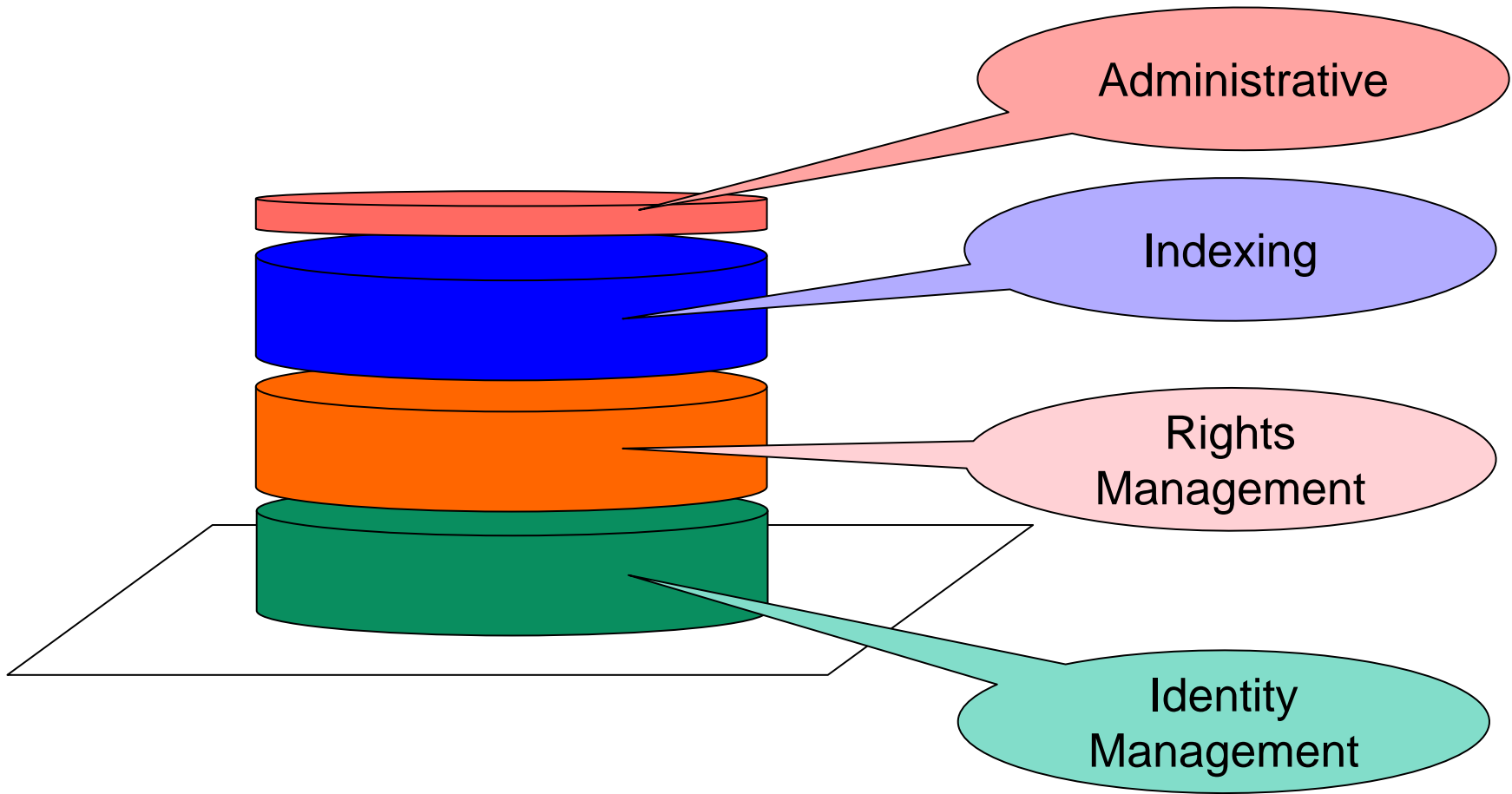
Wrote

**Jurassic Park
Main Theme**

**What deal did the
composer have with
the film producers?**

TYPES OF METADATA

Types of Metadata



Identity Management

- Unique identifying codes
- Enough descriptive metadata to disambiguate
 - Minimum Metadata
 - Reference Metadata

Example – Sound Recording

- International Standard Recording Code
 - AU-XYZ-13-12345
- Track title
- Version title
- Featured Artist
- Recording Date
- Duration

Requirements – Identity Management

- Fundamental: Shared between bilateral users
- In practice: Shared within mesh of users
- Optimally: Public registry

Rights Management

- The information you need to make sure the right people get paid or recognized
- e.g.
 - Ownership of particular right in territory
 - Copyright expiration date
 - Backing musician identity

Indexing Metadata

- Everything else
- For resource discovery
 - “Find me”
 - “Try this”
- For rendering enhancement
 - “Did you know?”
 - “FYI”

REGISTRY REQUIREMENTS

Identity Registry

- Trusted - ISO?
- International
- Open/RAND
- Accountability
- Resolution service
- Query capability

Simple Rights Registry

- Single right
- Territorial
- Identify:
 - Rightsholders
 - Typically for distribution

Complex Rights Registry

- Multiple rights
- Multiple uses
- Multiple territory

- Licence creation
- Licence request processing
- Usage reporting

Codification of Uses

- Overlap with Rights Expression Languages
- See:
 - Copyright Clearance Center/Getty/others
 - Linked Content Coalition - Rights Reference Model
 - Use Description Taxonomy (UDT)

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