Do We Need Application Profiles? Reflections and Suggestions from Work in DCMI and ISO/IEC

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• Why this paper...
• Metadata AP, MAP, AP
• MAP in the DCMI context (DCAP)
  • EDU community
  • Accessibility community
• MAP in the ISO context
• RDF & Application profiles
• A bit of discussion
Why this paper?

range of application profile types

- a given standard (e.g., Dublin Core)
  - application profile which focuses the standard on a particular domain
  - very specific
  - application profile which narrows the focus of the standard to a specific problem
  - more general
Why this paper?

ISO/IEC WORK (ITLET)

“Why do you want an application profile? They are not necessary...”

VES CLASS

Education AP (Australia, 1999)

CVL AP (Spain, 2000)

“Do we really need Yet Another Application Profile? (YAAP)”
In computer science, an application profile consists of a set of metadata elements, policies, and guidelines defined for a particular application.\[1\] The elements may come from one or more element sets, thus allowing a given application to meet its functional requirements by using metadata from several element sets - including locally defined sets. For example, a given application might choose a subset of the Dublin Core that meets its needs, or may include elements from the Dublin Core, another element set, and several locally defined elements, all combined in a single schema. An application profile is not complete without documentation that defines the policies and best practices appropriate to the application.
A **DCAP** includes guidance for metadata creators and clear specifications for metadata developers. By articulating what is intended and can be expected from data, application profiles promote the sharing and linking of data within and between communities. The resulting metadata will integrate with a semantic web of linked data [LINKED]. To achieve this it is recommended that application profiles be developed by a team with specialized knowledge of the resources that need to be described, the metadata to be used in the description of those resources, as well as an understanding of the Semantic Web and the linked data environment.
DCMI Community

“global interoperability & local specificity”

- 1999: Education AP
- 2000: Heery & Patel
- Metadata for “information discovery”
- DCAM & Singapure Framework (2007)
- DC-Edu metadata & LOM
- DCMI: pioneering agency and the work was breaking new ground
- DC-Accessibility
DCMI: Singapurur Framework

Application Profile

Usage Guidelines

Functional Requirements

Domain Model

Description Set Profile

Data Format

Community Domain Model

RDF Vocabularies

Constraint Language

Compatible Syntaxes

Domain Standards

Foundation Standards

RDFS

RDF

Constraint Language

annotated

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*Do we need Application?*
ISO context

• ISO/IEC N19788 → MLR (Metadata for Learning Resources:
  – Includes several APs
  – today not only resources, as they have been traditionally known, are to be described

• Access4All metadata challenges the idea of an AP as a set of terms to describe a resource.
APs in RDF and LOD world: "web of descriptions"

Gilles Gauthier
Is it possible for an application profile to be a set of delimiters/restrictions?

The orange subgraph constitutes the bounded description of the learning resource represented by node sn.

Gilles Gauthier
Discussion (late 90s)

Do we need Application Profiles?

GENERAL PURPOSE METADATA

DOMAIN ORIENTED METADATA

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Discussion (2007...)

GENERAL PURPOSE METADATA

DOMAIN ORIENTED METADATA (APS)
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Do we need Application Profiles?

Discussion (2012- )

health.schema.org

BIB-SCHEMA.ORG

LRMI

DOMAIN ORIENTED SCHEMA.ORG ?

GENERAL PURPOSE METADATA

schema.org
Discussion

• What is next?
• Accumulated work/experience (Curado & Baptista; LRMI, LOM, MLR, etc.)
• Why APs have a special name?
• value helping people distinguish between the set of terms that can be used to describe a resource and the set of values [traditional]
• what they use will emerge according to what others use [schema.org]
• RDF metadata landscape
Questions for you:

– Do we still need ‘application profiles’?
– Do we still need to use that name? (ex. Manga Profile Set)
– Might we want to advise people just to ‘use metadata’ and even share it, or develop it collaboratively?
– Might we want to be more specific and recognise the various kinds of metadata profiles?
– What level of standardisation or at least community endorsement does an AP need?
"Interoperability is not the goal of a focused application profile"
Thank you / Obrigada

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