Admin Core - Administrative Container Metadata

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2. Introduction

Administrative metadata - referred to as 'Admin Core' - is useful to
designate information about the creation and availability of other sets
of metadata. The objective of Admin Core is to provide simple
authentication to verify the integrity and provenance of information
retrieved from networked resources. The Admin Core elements are utilised
to associate date and creator information about metadata. It is
important to recognise that Admin Core is a "container" metadata element
set as opposed to a "content" metadata element set - its purpose is to
describe metadata instances.

The Admin Core, as with other metadata elements sets, is a "core" set.
That is, it is extensible by allowing the addition of new elements that
are specific to a community's needs. This is similar to the model
presented by the Dublin Core Metadata Element Set [2].

Admin Core is not useful by itself. It must be used in association with

at least one other metadata element set. For example, Dublin Core [2], or Privacy [3] metadata. This amalgamation of different metadata sets is supported by a number of metadata encoding systems, such as the Resource Description Framework [1] and the HTML META tag [6]. Examples are given in Section 5.

Admin Core metadata will be used by systems and users to determine the currency of metadata, expired metadata, and how to contact creators of metadata.

3. Description of Admin Core Elements

The following is the reference definition of the Admin Core Metadata Element Set. The evolving reference description can be found at:

        http://metadata.net/admin

In the element descriptions below, each element has a descriptive name intended to convey a common semantic understanding of the element, as well as a formal single-word label intended to make the syntactic specification of elements simpler for encoding schemes. The recommended best practice is to be case-sensitive to avoid complications in case-sensitive environments such as RDF [1].

The element descriptions also indicate the obligations, encoding, and repeatability characteristics for each Admin Core element in accordance with the ISO Standard 11179 [8].

3.1 Personal Creator

    Name: CreatorPersonal

    Definition: The person responsible for creating or modifying the
                metadata pertaining to a resource.

    Obligation: Conditional. Either "Personal Creator" or "Corporate
                Creator" element must appear, or both.

    Datatype: Character String

    Maximum
    Occurrence: Unlimited

    Comment: If possible, the comma (,) is used to separate the
                surname first followed by firstname. For example;
                "Crystal, Mary"

3.2 Corporate Creator

```
Name:        CreatorCorporate

Definition: The name of the organisation by which the metadata
            creator is employed.

Obligation: Conditional. Either "Personal Creator" or "Corporate
            Creator" element must appear or both.

Datatype:   Character String

Maximum
Occurrence: Unlimited

Comment:    The organisation may be a trusted third party for the
            source of the metadata. The organisation is not
            necessarily the entity making the resource available.
```

3.3 Creator Email Address

```
Name:        CreatorEmail

Definition: The email address of the metadata Creator.

Obligation: Mandatory

Datatype:   Character String. Encoded to be consistent with Internet
            Address standard RFC822 [7]

Maximum
Occurrence: Unlimited.

Comment:    None
```

3.4 Creator Contact Information

```
Name:        CreatorContact

Definition: Information on how to contact the creator.

Obligation: Optional

Datatype:   Character String

Maximum
Occurrence: Unlimited

Comment:    The information should be one or more of: a street or
            postal address, a telephone number, a facsimile number,
            and the homepage address of the creator. This provides
            additional evidence for the existence of a trusted third
            party.
```

3.5 **Date Created**

Name: DateCreated

Definition: The date/time the metadata was created by the Personal
            or Corporate Creator.

Obligation: Mandatory

Datatype: Character String. Encoded to Date and Time Format
            ISO 8601 [4]

Maximum
Occurrence: Unlimited

Comment: None

3.6 **Date Modified**

Name: DateModified

Definition: The date/time the metadata was most recently modified
            by the Personal or Corporate Creator.

Obligation: Optional

Datatype: Character String. Encoded to Date and Time Format
            ISO 8601 [4].

Maximum
Occurrence: Unlimited

Comment: None

3.7 **Date Valid From**

Name: DateValidFrom

Definition: The commencing date of the validity of the metadata
            description.

Obligation: Conditional. Single occurrence only is permissible
            otherwise must appear in pairs with "Date Valid To"
            element.

Datatype: Character String. Encoded to Date and Time Format
            ISO 8601 [4].

```
      Maximum
      Occurrence: Unlimited


      Comment:     Non-administrative metadata accessed before this date
                   should be considered to be invalid.
```

3.8 **Date Valid To**

```
      Name:        DateValidTo

      Definition:  The end date of the validity of the metadata
                   description.

      Obligation:  Conditional. Single occurrence only is permissible
                   otherwise must appear in pairs with "Date Valid From"
                   element.

      Datatype:    Character String. Encoded to Date and Time Format
                   ISO 8601 [4].

      Maximum
      Occurrence: Unlimited.

      Comment:     Non-administrative metadata accessed after this date
                   should be considered to be invalid.
```

4. Internationalisation

All the Admin Core elements can be associated with language information
using RFC 1766 [5]. The Admin Core labels are used in the communication
of metadata between systems, with human-readable names being available
in multiple languages for client systems.

5. Admin Core Examples

5.1 HTML META Syntax

Below is an example of the use of the Admin Core metadata elements
with the bibliographic style Dublin Core metadata elements. This example
shows the HTML META syntax [6]. Admin Core elements will be assigned the
namespace of "ADMIN" for the META tag syntax encodings.

```
  <META NAME="DC.Title" LANG="en"
       CONTENT="Admin Core Metadata Element Specification">
  <META NAME="DC.Creator" LANG="en" CONTENT="Crystal, Jacky">
  <META NAME="DC.Date" SCHEME="ISO8601" LANG="en" CONTENT="1998-01-01">
  <META NAME="DC.Identifier" SCHEME="URI" LANG="en"
```

```
        CONTENT="http://metadata.net/ADMIN/elements.html">

    <META NAME="ADMIN.CreatorPersonal" LANG="en" CONTENT="Rubble, Barney">
    <META NAME="ADMIN.CreatorEmail" LANG="en" CONTENT="barn@metadata.net">
    <META NAME="ADMIN.DateCreated" SCHEME="ISO8601" CONTENT="1998-01-15">
```

5.2 **RDF/XML Syntax**

Below is another example of the use of Admin Core metadata elements with
the bibliographic style Dublin Core metadata elements. This example
shows the use of RDF syntax [1]. The RDF XML Namespace for Admin Core
will be defined as: <http://metadata.net/admin/#>

```
  <? xml version="1.0" ?>
  <RDF xmlns      = "http://www.w3.org/TR/WD-rdf-syntax#"
       xmlns:DC   = "http://metadata.net/dc/#"
       xmlns:ADMIN = "http://metadata.net/admin/#" >

    <Description xml:lang="en"
         about = "http://metadata.net/admin/elements.html">
      <DC:Title> Admin Core Metadata Element Specification </DC:Title>
      <DC:Creator> Crystal, Jacky </DC:Creator>
      <DC:Date> 1998-01-01 </DC:Date>

      <ADMIN:CreatorCorporate> Rubble Corp <ADMIN:CreatorCorporate>
      <ADMIN:CreatorEmail> info@rubble.com </ADMIN:CreatorEmail>
      <ADMIN:DateCreated> 1998-01-15 </ADMIN:DateCreated>
      <ADMIN:DateValidFrom> 1998-02-01 </ADMIN:DateValidFrom>
      <ADMIN:DateValidTo > 1999-02-01 </ADMIN:DateValidTo>
    </Description>
  </RDF>
```

6. **Security Considerations**

The Admin Core element set poses no risk to computers and networks.
Human clients who obtain metadata that has been incorrectly
described (by humans) may face minimal risk in determining the
correctness of the metadata. The application of Digital Signature
technology is recommended by systems requiring high levels of
authentication.

7. **Acknowledgements**

8. References

[1] Resource Description Framework (RDF) Model and Syntax
    <http://www.w3.org/TR/WD-rdf-syntax>

[2] RFC 2413, Dublin Core Metadata for Resource Discovery
    <ftp://ftp.isi.edu/in-notes/rfc2413.txt>

[3] Platform for Privacy Preferences Metadata
    <http://www.w3.org/P3P>

[4] Date and Time Formats (based on ISO 8601), W3C Technical Note
    <http://www.w3.org/TR/NOTE-datetime>

[5] RFC 1766, Tags for the Identification of Languages
    <ftp://ftp.isi.edu/in-notes/rfc1766.txt>

[6] A Proposed Convention for Embedding Metadata in HTML
    <http://purl.oclc.org/docs/metadata/dublin_core/approach.html>

[7] RFC822 Standard for the Format of ARPA Internet Text Messages
    <ftp://ftp.isi.edu/in-notes/rfc822.txt>

[8] ISO 11179 Parts 1-6, Specification and Standardization of Data
    Elements <ftp://sdct-sunsrv1.ncsl.nist.gov/x3l8/11179/>

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