Atom Publishing Protocol - Introspection
draft-snell-atompub-app-introspection-00.txt

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Abstract

This specification defines an introspection format for the Atom
Publishing Protocol.

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1. Introduction

This specification defines an XML format for describing Atom
Publishing Protocol [I-D.ietf-atompub-protocol]Collection resources.

2. Notational Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
"SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this
document are to be interpreted as described in BCP 14, [RFC2119], as
scoped to those conformance targets.

This specification uses XML Namespaces [W3C.REC-xml-names-19990114]
to uniquely identify XML element names.

    "app": "http://www.w3.org/2005/Atom-Introspection"

This specification uses terms from the XML Infoset [W3C.REC-xml-
infoset-20040204]. However, this specification uses a shorthand; the
phrase "Information Item" is omitted when naming Element Information
Items. Therefore, when this specification uses the term "element,"
it is referring to an Element Information Item in Infoset terms.

3. APP Introspection Documents

This specification describes the format for Atom Publishing Protocol
Introspection Documents.

An Introspection Document represents zero or more APP Collections and
Workspaces. A Workspace is a logical collections of related APP
Collections. The root of the Introspection document is the app:
introspection element.

    namespace app = "http://www.w3.org/2005/Atom-Introspection"
    start = appIntrospection

Introspection Documents are specified in terms of the XML Information
Set, serialised as XML 1.0 [W3C.REC-xml-20040204] and identified with
the "application/app-introspection+xml" media type. Introspection
Documents MUST be well-formed XML. This specification does not
define a DTD for Introspection Documents, and hence does not require
them to be valid (in the sense used by XML).

APP Introspection allows for the use of IRI's [RFC3987], xml:base
[W3C.REC-xmlbase-20010627] and xml:lang in the same fashion described
in Section 2 of the Atom Syndication Format specification [I-D.ietf-

   atompub-format].

3.1. Example

   Simple Example

```
<?xml version="1.0" ?>
<app:introspection
  xmlns:app="http://www.w3.org/2005/Atom-Introspection">
 <app:collection
  title="Bookmarks"
  type="entry"
  href="http://example.com/bookmarks" />
 <app:collection
  title="Photos"
  href="http://example.com/photos" />
</app:introspection>
```

   Workspace Example

```
<?xml version="1.0" ?>
<app:introspection
  xmlns:app="http://www.w3.org/2005/Atom-Introspection">
 <app:workspace title="My Weblog">
  <app:collection
   title="Entries"
   type="entry"
   href="http://myblog.example.com/entries" />
  <app:collection
   title="Photos"
   type="image/*"
   href="http://myblog.example.com/photos" />
  <app:collection
   title="Files"
   href="http://myblog.example.com/files" />
 </app:workspace>
</app:introspection>
```

4. Element Definitions

4.1. The 'app:introspection' Element

   The 'app:introspection' Element is the root of APP Introspection
   Documents.

```
   appIntrospection =
     element app:introspection {
       atomCommonAttributes,
       ( appWorkspace*,
       & appCollection*,
       & extensionElement* )
     }
```

This specification assigns no significance to the order of the child
elements of 'app:introspection'.

4.2. The 'app:workspace' Element

The 'app:workspace' Element represents a logical collection of
related APP Collections.

```
   appWorkspace =
     element app:workspace {
       atomCommonAttributes,
       & attribute title (text),
       ( appCollection*,
         & extensionElement )
     }
```

The 'title' attribute specifies a human-readable, language-sensitive
label for the workspace.

This specification assigns no significance to the order of the child
elements of 'app:workspace'.

4.3. The 'app:collection' Element

The 'app:collection' Element represents a collection resource as
specified by the Atom Publishing Protocol.

```
   appCollection =
     element app:collection {
       atomCommonAttributes,
       & attribute title (text),
       & attribute href (IRI),
       & attribute type ( 'entry' | extensionType )?,
       ( extensionElement )
     }
```

```
   extensionType = ( NMTOKEN | mediaType | mediaRange )
```

The 'title' attribute specifies a human-readable, language-sensitive
label for the collection.

The 'href' attribute specifies the IRI of an APP collection resource.

The 'type' attribute MAY be used to specify the types of resources
contained by the collection. A value of 'entry' indicates that the
collection membership consists entirely of Atom Entry Documents. If
the collection element does not contain a 'type' attribute, the
membership of the collection SHOULD be considered to be
unconstrained. If the value specified is a media type or media
range, the membership of the collection SHOULD be considered to be
constrained to resources of the specified type or covered by the
specified range. If the 'type' attribute specifies a value that is
not understood by the an application, the application MUST ignore the
attribute as if the attribute were not present.

[5](#). Security Considerations

TBD

[6](#). IANA Considerations

An Introspection Document can be identified by the following media
type.

MIME media type name:
     application
MIME subtype name:
     app-introspection+xml
Mandatory parameters:
     None
Optional parameters:
     "charset":
         This parameter has identical semantics to the charset
         parameter of the "application/xml" media type as
         specified in [RFC3023].
Encoding considerations:
     Identical to those of "application/xml" as described
     in [RFC3023], section 3.2.
Security considerations:
     As defined in this specification.
     In addition, as this media type uses the "+xml" convention,
     it shares the same security considerations as described in
     [RFC3023], section 10.
Interoperability considerations:
     There are no known interoperability issues.
Published specification:
     This specification.
Applications that use this media type:
     No known applications currently use this media type.

Additional information:

Magic number(s):
    As specified for "application/xml" in [RFC3023], section 3.2.
File extension:
    .appx
Fragment identifiers:
    As specified for "application/xml" in [RFC3023], section 5.
Base URI:
    As specified in [RFC3023], section 6.
Macintosh File Type code:
    TEXT
Person and email address to contact for further information:
    James Snell <jasnell@gmail.com>
Intended usage:
    COMMON
Author/Change controller:
    IESG

7. Acknowledgements

   This draft incorporates ideas discussed by the members of the Atom
   Publishing Format and Protocol working group. This draft also adapts
   some of the language and text from the Atom Syndication Format
   [I-D.ietf-atompub-format] in order to achieve a stylistic similarity
   between the drafts.

8. References

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