

**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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