

**APP Service Description Format**  
**draft-sayre-atompub-protocol-outline-01.txt**

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Abstract

This memo presents an XML format used to describe Atom Publishing Protocol services. These services typically expose one or more groupings of resources. On a blogging service, for example, each grouping might represent a distinct blog and associated resources.

Editorial Note

To provide feedback on this Internet-Draft, join the atom-protocol mailing list <<http://www.imc.org/atom-protocol/index.html>>.

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## **1. Introduction**

Many Atom Publishing Protocol [[APP](#)] applications require a basic resource layout in order to ease configuration requirements. XML [[W3C.REC-xml-20040204](#)] documents are organized hierarchically, but XML does not differentiate between elements serving as structural divisions and elements serving as structural properties. This specification defines two elements which outline the structure of APP services, and defines minimal user agent conformance rules.

Example APP Service Description Document:

```
<app>
  <service name="My Blog" class="feed"
    href="http://example.com/entries">
    <service name="Photos" class="media feed"
      href="http://example.com/photos"/>
    <service name="Drafts" class="feed"
      href="http://example.com/drafts"/>
  </service>
  <service class="special details" name="Some details...">
    <service name="xyzyzy" href="http://example.org/details"/>
    <service name="thud" href="http://example.net/details"/>
  </service>
</app>
```

## **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 includes a normative RELAX NG Compact schema [[RELAX-NG](#)].

The terms 'URI' and 'IRI' are shorthand for the identifiers specified in [[RFC3986](#)] and [[RFC3987](#)].

## **3. APP Service Description Documents**

APP Service Description Documents MUST be well-formed XML [[W3C.REC-xml-20040204](#)].

The root element of an APP Service Description Document is "<app>". This specification does not define any attributes of the <app> element, but the element MAY have any number of attributes.

Zero or more <service> elements MAY appear as child elements of <app>. Also, <service> elements MAY contain zero or more <service> elements. This specification defines three attributes of the <service> element. <service> elements MUST contain at least one of those attributes.

Service properties that are too large to efficiently include in attribute values MAY appear as child elements of the service element. <app> elements MAY contain any number of elements that are not <service> elements, and <service> elements MAY contain any number of elements that are not <service> elements.

### **3.1 The 'name' Attribute**

The 'name' attribute contains a short string describing the service element. Entities such as "&" and "<" represent their corresponding characters ("&" and "<" respectively), not markup.

### **3.2 The 'href' Attribute**

The 'href' attribute contains an IRI reference interpreted relative to the in-scope base IRI [[RFC3987](#)]. Most protocols require URIs [[RFC3986](#)], so IRIs usually need to be converted to URIs before being dereferenced.

### **3.3 The 'class' Attribute**

The 'class' attribute contains a space-separated list of strings used to classify the service element. This specification defines two values for the 'class' attribute:

- o feed
- o media feed

These values correspond to standard feeds and media feeds, respectively [[APP](#)].

## **4. User Agent Conformance**

Foreign markup is markup not defined by this specification.

Software consuming APP Service Description Documents MUST NOT not halt processing when any foreign markup is encountered. Software MAY ignore the markup and process any content of foreign elements as though the surrounding markup were not present. For example, software may process

```

<app>
  <workspace>
    <service name="My Blog" href="http://example.com/entries">
      <service name="Photos" href="http://example.com/jpgs"/>
        <view title="Archives" seek="...">
          <view title="2005" href="..." />
          ...
        </view>
      </service>
    </workspace>
  </app>

```

as though the `<workspace>` and `<view>` elements were not present.

Software conforming to this specification MAY halt processing when documents that do not conform to the schema below are encountered.

## 5. Relax NG Schema

This schema is normative.

start = app

```

app = element app {
  anyAttribute*,
  (service* & anyElement*)
}

```

```

service = element service {
  (nameAtt | classAtt | hrefAtt), anyAttribute*,
  (service* & anyElement*)
}

```

```

nameAtt = attribute name { text }
hrefAtt = attribute href { text }
classAtt = attribute class { text }

```

```

anyElement = element * { (anyAttribute | text | anyElement)* }
anyAttribute = attribute * { text }

```

## **6. Sample APP Service Description Documents**

Simple APP Service Description Document:

```
<app>
  <service name="Stuff">
    <service class="feed" href="http://example.org"/>
    <service name="media feed" href="http://example.net"/>
  </service>
</app>
```

Valid APP Service Description Document with extensions:

```
<app foo="bar">
  <some-extension>hmm</some-extension>
  <service name="Baz" qux="feed qux" href="http://example.com">
    <service class="garply" name="Xyzy" href="http://example.org"/>
    <service class="foo bar" name="Thud" href="http://example.net"/>
    <some-other-extension>hmm</some-other-extension>
  </service>
</app>
```

## **7. Security Considerations**

TBD.

## **8. IANA Considerations**

An APP Service Description Document can be identified with the following media type:

MIME media type name: application

MIME subtype name: sdf+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: .ao

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: Robert Sayre <rfsayre@boswijck.com>

Intended usage: COMMON

Author/Change controller: IESG

## **9. Normative References**

- [APP] Gregorio, J. and B. de hOra, "The Atom Publishing Protocol", November 2005.
- [RELAX-NG] Clark, J., "RELAX NG Compact Syntax", December 2001.
- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997.
- [RFC3023] Murata, M., St. Laurent, S., and D. Kohn, "XML Media Types", [RFC 3023](#), January 2001.
- [RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66, [RFC 3986](#), January 2005.
- [RFC3987] Duerst, M. and M. Suignard, "Internationalized Resource Identifiers (IRIs)", [RFC 3987](#), January 2005.
- [W3C.REC-xml-20040204] Yergeau, F., Paoli, J., Sperberg-McQueen, C., Bray, T., and E. Maler, "Extensible Markup Language (XML) 1.0 (Third Edition)", W3C REC REC-xml-20040204, February 2004.

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