

**RSS 2.0**  
**draft-nottingham-rss2-00**

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Abstract

This specification documents version 2.0 of RSS, an XML-based format for syndicating Web content and metadata.

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## **1. Introduction**

This specification documents version 2.0 of RSS (Really Simple Syndication), an XML-based format for syndicating Web content and metadata.

This specification provides stable documentation for the RSS 2.0 format [\[9\]](#) as described by Dave Winer of UserLand Software, to assist in implementation. As such, RSS documents conformant with this specification should be conformant with that specification, and vice versa.

[[[NOTE: This Internet-Draft is being made available ONLY to allow the community to ascertain whether the specification described herein is true to the original RSS 2.0 specification. Comments should be directed to the RSS2 Support mailing list (RSS2-Support@yahoogroups.com).]]]

### **1.1 Document terminology and 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 [RFC 2119](#) [\[5\]](#).

## **2. Document Structure**

RSS documents MUST be conformant to the XML 1.0 specification [\[1\]](#). There is explicitly no namespace URI [\[2\]](#) associated with the elements described in this document.

## **3. The rss Element**

The root (top-level) element of an RSS document MUST be the rss element. It has one mandatory attribute, version, which indicates the version of RSS which the document conforms to. Documents conformant to this specification MUST have a version attribute of "2.0".

The rss element MUST contain a channel element.

## **4. The channel Element**

The channel element contains metadata about the RSS channel, as well as the items which comprise it.

### **4.1 Required Children**

The following elements MUST be present as children of the channel element;

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#### [4.1.1](#) **title Element**

The title element MUST contain a string, to be used as a name for the channel. Its content SHOULD be the same as that of the human-readable Web page it refers to.

#### [4.1.2](#) **link Element**

The link element MUST contain a URL [[6](#)] which indicates a (human-readable) Web page associated with the channel.

#### [4.1.3](#) **description Element**

The description element MUST contain a string describing the channel.

### [4.2](#) **Optional Children**

The following elements MAY be present as children of the channel element;

#### [4.2.1](#) **language Element**

The language element, if present, MUST contain a language tag, as defined in [RFC3066](#) [[8](#)].

#### [4.2.2](#) **copyright Element**

The copyright element, if present, MUST contain a string, which serves as copyright notice regarding the channel's content.

#### [4.2.3](#) **managingEditor Element**

The managingEditor element, if present, MUST contain an e-mail address, indicating the person or entity responsible for the content (in an editorial sense).

#### [4.2.4](#) **webMaster Element**

The webMaster element, if present, MUST contain an e-mail address, indicating the person or entity responsible for the technical administration of the channel.

#### [4.2.5](#) **pubDate Element**

The pubDate element, if present, MUST contain an [RFC822](#)-formatted [[4](#)] date (subject to the caveats below). It represents the publication date for the channel.

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For example, the New York Times publishes on a daily basis, the publication date flips once every 24 hours. That's when the pubDate of the channel changes.

#### **[4.2.6](#) lastBuildDate Element**

The lastBuildDate element, if present, MUST contain an [RFC822](#)-formatted [4] date (subject to the caveats below). It represents the moment when the content of the channel last changed.

#### **[4.2.7](#) category Element**

The category element, when present, MUST contain a string that identifies a categorization for the channel. It SHOULD use forward slash delimitation to indicate hierarchy.

The category element MAY have a domain attribute, which MUST be a string that identifies a categorization taxonomy.

The category element MAY be repeated to associate multiple categorizations with a channel.

#### **[4.2.8](#) generator Element**

The generator element, if present, MUST contain a string, indicating the program used to generate the document.

#### **[4.2.9](#) docs Element**

The docs element, if present, MUST contain a URL that resolves to documentation for the format of the RSS file, for future reference.

#### **[4.2.10](#) cloud Element**

The cloud element, if present, allows processes to register to be notified of updates to the channel, by using a lightweight publish-subscribe protocol.

For more information, see the rssCloud [10] interface.

#### **[4.2.11](#) ttl Element**

The ttl element, when present, MUST contain an integer number of minutes that indicates how long a channel's representation can be cached.

#### **[4.2.12](#) image Element**





The image element, when present, allows an image such as an illustration or photograph to be associated with the channel. It MUST have the following children: the url element, the title element, and the link element.

The url element MUST contain a URL which can be used to locate the image. It SHOULD be capable of returning an image with one of the following media types; image/gif, image/jpeg, image/png.

The title element MUST be a string describing the image (this element as the same semantic as the HTML alt attribute).

The link element MUST contain a URL which indicates the location of the site associated with the image.

In practice, the title element and link element SHOULD be the same as those associated with the channel itself.

Additionally, the image element MAY have the following children: the width element and the height element.

Both the width element and the height element MUST contain integers which indicate the width and height of the image in pixels, respectively.

The value of the width element MUST NOT be greater than 144; if it is not present, consumers MAY assume it to be 88.

The value of the height element MUST NOT be greater than 400; if it is not present, consumers MAY assume it to be 31.

#### **4.2.13 rating Element**

The rating element, when present, MUST contain the PICS [\[3\]](#) rating for the channel.

#### **4.2.14 textInput Element**

The textInput element describes a text input control that can be used in conjunction with the channel. It MUST contain the following children: the title element, the description element, the name element and the link element. It is included in this specification for backwards-compatibility.

The title element MUST contain a string that can be used as a label for the text input submission widget.

The description element MUST contain a string that explains the text

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input area.

The name element MUST contain a string that associates a name with the input text.

The link element MUST contain a URL to which the text can be submitted.

#### **4.2.15 skipHours Element**

The skipHours element, if present, MUST contain one to 24 hour elements.

The hour element MUST contain an integer between 0 and 23. Its value indicates an hour in which consumers SHOULD NOT attempt to fetch representations of the channel; a value of 0 indicates midnight GMT.

#### **4.2.16 skipDays Element**

The skipDays element, if present, MUST contain one to seven day elements.

The day element MUST contain one of the following strings; "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday" or "Sunday". Its value indicates a day on which consumers SHOULD NOT attempt to fetch representation of the channel.

### **4.3 The item Element**

In addition to the required and optional children described above, the channel element MAY have any number of item elements following them.

item elements embody the payload of the RSS channel. Although all item child elements described here are optional, each item MUST have either a title element or description element as a child.

#### **4.3.1 Optional Children**

##### **4.3.1.1 title Element**

The title element, if present, MUST contain a string, to be used as a name for the item.

##### **4.3.1.2 link Element**

The link element, if present, MUST contain a URL which indicates a (human-readable) Web page associated with the item.



#### [4.3.1.3](#) **description Element**

The description element, if present, MUST contain a string describing the item.

#### [4.3.1.4](#) **author Element**

The author element, if present, MUST contain an e-mail address, indicating the author of the item.

For examples, publications syndicated via RSS might indicate the person who wrote the article that the item describes. For collaborative Weblogs, the author of the item might be different from the managing editor or Webmaster. For a Weblog authored by a single individual, it may be appropriate to omit the author element.

#### [4.3.1.5](#) **category Element**

The category element, if present, MUST contain a string that identifies a categorization for the item. It SHOULD use forward slash delimitation to indicate hierarchy.

The category element MAY have a domain attribute, which MUST be a string that identifies a categorization taxonomy.

The category element MAY be repeated to associate multiple categorizations with an item.

#### [4.3.1.6](#) **comments Element**

The comments element, if present, MUST be a URL, indicating a page for comments relating to the item.

#### [4.3.1.7](#) **enclosure Element**

The enclosure element, if present, describes a media object that is logically attached to the item. It MUST have a url attribute, a length attribute, and a type attribute.

The url attribute indicates the location of the enclosure; it MUST be a http-schemed URL.

The length attribute indicates the size of the enclosure in bytes.

The type attribute indicates the media type of the enclosure.

#### [4.3.1.8](#) **guid Element**



The guid element, if present, MUST contain a string that uniquely identifies the item. Commonly, the guid element is used to determine whether an item is new, and to disambiguate it from other items.

The guid element MAY have a isPermaLink attribute, whose value MUST be either "true" or "false". The isPermaLink attribute indicates whether the guid also serves as a long-lived URL for the item. If the isPermaLink attribute is not present, the default value is "true".

If the value of the isPermaLink attribute is "true", the contents of the guid element MUST contain a URL that points to a Web page described by the item element.

If the value of the isPermaLink attribute is "false", consumers of RSS documents MUST consider the guid string as opaque.

#### **4.3.1.9 pubDate Element**

The pubDate element, if present, MUST be an [RFC822](#)-formatted [4] date (subject to the caveats below) that indicates when the item was published. If pubDate indicates a future date, consumers MAY choose to ignore the item until that date has passed.

#### **4.3.1.10 source Element**

The source element, if present, MUST contain a string that indicates the RSS channel that the item came from. It SHOULD be derived from the channel's title.

The source element MUST have a url attribute, which MUST be a URL indicating an XML source of the channel.

This element is designed to enable the propagation of credit for items, and SHOULD be generated automatically by tools where appropriate.

### **5. Date Formatting**

[RFC822](#)-formatted dates in this specification MAY use two or four digits to indicate a year; it is RECOMMENDED that four digits are used.

### **6. Extending RSS**

Elements and attributes MAY be introduced in the RSS format to extend its functionality. Such extensions MUST use XML Namespaces [2] to distinguish themselves from RSS elements as well as other extensions.



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## **7. IANA Considerations**

To: ietf-types@iana.org

Subject: Registration of MIME media type application/rss+xml

MIME media type name: application

MIME subtype name: rss+xml

Required parameters: none

Optional parameters:

charset

Same as charset parameter of application/xml as specified in [RFC3023](#) [7].

revision

The optional revision parameter indicates the integer version of RSS used; the value is specified by the target RSS version.

namespace

The optional namespace parameter indicates the XML namespace [2] URI of the RSS format, if available.

Encoding considerations:

Same as encoding considerations of application/xml as specified in [RFC3023](#) [7].

## **8. Security Considerations**

Like any Internet format, values in RSS documents should be examined for invalid content, and careful care should be taken if it is to be used as input to further processing (e.g., using a date value as the basis of a calculation).

Furthermore, because HTML is a common payload of RSS files, careful consideration should be given before executing content such as ECMAScript or similar.

Additionally, the security considerations of [RFC3023](#) [7] should be taken into account when generating and processing RSS files.



## References

- [1] Bray, T., Paoli, J., Sperberg-McQueen, C. and E. Maler, "Extensible Markup Language (XML) 1.0 (Second Edition)", W3C REC REC-xml-20001006, October 2000.
- [2] Bray, T., Hollander, D. and A. Layman, "Namespaces in XML", W3C REC REC-xml-names-19990114, January 1999.
- [3] Krauskopf, T., Miller, J., Resnick, P. and W. Treeese, "PICS 1.1 Label Distribution -- Label Syntax and Communication Protocols", W3C REC REC-PICS-labels-961031, October 1996.
- [4] Crocker, D., "Standard for the format of ARPA Internet text messages", STD 11, [RFC 822](#), August 1982.
- [5] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997.
- [6] Berners-Lee, T., Fielding, R. and L. Masinter, "Uniform Resource Identifiers (URI): Generic Syntax", [RFC 2396](#), August 1998.
- [7] Murata, M., St. Laurent, S. and D. Kohn, "XML Media Types", [RFC 3023](#), January 2001.
- [8] Alvestrand, H., "Tags for the Identification of Languages", [BCP 47](#), [RFC 3066](#), January 2001.
- [9] <<http://backend.userland.com/rss>>
- [10] <<http://www.thetwowayweb.com/soapmeetsrss>>

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