



Podcast Delivery Specification

Spotify AB

IMPORTANT LEGAL NOTICE – PLEASE READ BEFORE PROCEEDING

This information and all other documentation (in printed or electronic form) in connection here- with (the “Documentation”) are provided for reference purposes only. While efforts were made to verify the completeness and accuracy of the Documentation, it is provided “as is” without any warranty whatsoever and to the maximum extent permitted, Spotify disclaims all warranties, including without limitation the implied warranties of merchantability, non-infringement and fitness for a particular purpose, with respect to the Documentation. Spotify shall not be responsible for any damages, including without limitation, direct, indirect, consequential or incidental damages, arising out of the use of, or otherwise related to, the Documentation. Notwithstanding anything to the contrary, nothing contained in the Documentation is intended to, nor shall have the effect of, creating any warranties or representations from Spotify (or its suppliers or licensors). The Documentation is strictly confidential and shall not be disclosed to any unauthorized person nor to any third party. The Documentation shall be used only for the intended business purpose for which it was disclosed. Spotify shall remain the owner of any and all rights concerning the Documentation, including but not limited to intellectual and industrial property rights, trade secret rights, usage rights and the right to register trademarks or other intellectual property rights, and no transfer of any ownership, license, usage or other rights in relation to the Documentation or any information, documents and materials derived therefrom is granted unless established under a separate written agreement. By accessing the Documentation, you confirm that you have read and agreed to the foregoing legal notice on behalf of yourself and the organization you are representing.

1 Introduction	3
2 Shows, Episodes and Chapters	3
3 Supply Chain and Payout	3
4 Data Formats	4
4.1 Audio	4
4.2 Images	4
4.3 Metadata	4
5 Data Elements	5
5.1 RSS	5
5.2 RSS/CHANNEL	6
5.3 RSS/CHANNEL/TITLE	6
5.4 RSS/CHANNEL/LINK	7
5.5 RSS/CHANNEL/DESCRIPTION	7
5.6 RSS/CHANNEL/LANGUAGE	8
5.7 RSS/CHANNEL/ITUNES:AUTHOR	8
5.8 RSS/CHANNEL/ITUNES:IMAGE	9
5.9 RSS/CHANNEL/ITUNES:EXPLICIT	9
5.10 RSS/CHANNEL/ITUNES:CATEGORY	10
5.11 RSS/CHANNEL/ITUNES:COMPLETE	10
5.12 RSS/CHANNEL/ITUNES:TYPE	11
5.13 RSS/CHANNEL/SPOTIFY:LIMIT	11
5.14 RSS/CHANNEL/SPOTIFY:COUNTRYOFORIGIN	11
5.15 RSS/CHANNEL/ITEM	13
5.16 RSS/CHANNEL/ITEM/GUID	13
5.17 RSS/CHANNEL/ITEM/ENCLOSURE	14
5.18 RSS/CHANNEL/ITEM/PUBDATE	15
5.19 RSS/CHANNEL/ITEM/TITLE	15
5.20 RSS/CHANNEL/ITEM/MEDIA:TITLE	16
5.21 RSS/CHANNEL/ITEM/DESCRIPTION	16
5.22 RSS/CHANNEL/ITEM/MEDIA:DESCRIPTION	17
5.23 RSS/CHANNEL/ITEM/MEDIA:CONTENT	18
5.24 RSS/CHANNEL/ITEM/MEDIA:RESTRICTION	19
5.25 RSS/CHANNEL/ITEM/ITUNES:DURATION	20
5.26 RSS/CHANNEL/ITEM/ITUNES:ORDER	20
5.27 RSS/CHANNEL/ITEM/ITUNES:EXPLICIT	21
5.28 RSS/CHANNEL/ITEM/ITUNES:IMAGE	21

5.29 RSS/CHANNEL/ITEM/DCTERMS:VALID	22
5.30 RSS/CHANNEL/ITEM/PSC:CHAPTERS	23
5.31 RSS/CHANNEL/ITEM/PSC:CHAPTER	24
5.32 RSS/CHANNEL/ITEM/ITUNES:KEYWORDS	25
Appendix	26
A - Simple Example	26
B - Document Change Log	27

1 Introduction

This document details how podcasts need to be structured and formatted for successful deployment in the Spotify services. It describes file format and encoding requirements, and mandatory and optional metadata elements.

The targeted audience are trusted Spotify partners looking to understand how to set up their services to work with Spotify. The reader is recommended to have a basic technical understanding of Really Simple Syndication (RSS)/Media RSS (MRSS), Extensible Markup Language (XML) and some data modeling skills.

2 Shows, Episodes and Chapters

Spotify models podcasts as shows, episodes and chapters. A show is equivalent to the main top-level podcast itself, episodes are separate installments of serialized podcasts, and chapters further segment episodes into main divisions, typically signaling an event or a transition in the episode. In this document the concepts show and podcast have the same meaning; they both refer to what RSS in turn defines as a channel.

3 Supply Chain and Payout

Spotify uses HTTP to download entire podcasts, including all image, audio and metadata files, for all episodes directly from the same Internet source as being used for the online presence i.e. there is no need to set up a separate delivery or change the formats to allow a podcast to be added to Spotify.

Once a podcast is subscribed to, Spotify will check the feed URL for any metadata change several times per hour. If Spotify recognizes a change between what is available at the source and what is available in the Spotify catalog a new download will be made, fully replacing the earlier download with the changed information. This also applies for takedowns where removing the podcast is a signal for Spotify to unpublish parts, or the full podcast depending on what was removed in the metadata. Worth noting that only changing the image or audio binaries will not change the files at Spotify; Unless these files change name and/or path in the metadata, no new download will be made by Spotify.

In the normal case the podcast payout is handled by Spotify who ensures the audio and images are optimized for streaming performance on all podcast capable clients on different network bandwidths.

Allow for at least an hour for any change at the source to make its way through to the clients.

4 Data Formats

4.1 Audio

Currently only ISO/IEC 11172-3 MPEG-1 Part 3 (MP3) audio files with bitrates between 96 and 320 Kbps are supported. A maximum length of 200 MB (roughly 83 minutes @ 320 Kbps) is recommended.

4.2 Images

Podcast images need to have a fully squared (1:1) aspect ratio. Preferably they should always be delivered in the highest resolution available to allow for all Spotify screen sizes.

Accepted formats in order of preference are: TIFF, PNG or JPEG.

4.3 Metadata

The expected podcast metadata input is a case sensitive XML 1.0 formatted text file encoded in UTF-8. A limited set of RSS 2.0, Apple iTunes, Dublin Core Metadata, and MRSS 1.5 elements are supported as detailed by the following section.

HTML ampersand characters shall always be escaped (e.g. never use: *News & Politics*, instead use: *News & Politics*). Other HTML tags embedded in elements like e.g. <bold> are not allowed and will be cleaned from the metadata by Spotify before publication.

As a general rule, with the exception of podcast and episode descriptions, the consumer facing elements should not exceed 20 characters to ensure a good fit in all Spotify clients. For any element exceeding the display size the text will be truncated at the point of the maximum length possible to display for the specific device

5 Data Elements

5.1 RSS

Root element specifying schemata used.		1..1
ATTRIBUTE:	RANGE:	#
xmlns:media	http://www.itunes.com/dtds/podcast-1.0.dtd Uses common vocabulary from Apple iTunes's namespace.	0..1
xmlns:itunes	http://www.itunes.com/dtds/podcast-1.0.dtd Uses common vocabulary from Apple iTunes's namespace.	1..1
xmlns:dcterms	https://purl.org/dc/terms The Dublin Core metadata terms are a set of vocabulary terms which can be used to describe resources for the purposes of discovery/availability.	0..1
xmlns:spotify	http://www.spotify.com/ns/rss Uses specific data elements from Spotify's namespace to limit the number of maximum concurrent episodes to have published at any given time.	0..1
xmlns:psc	https://podlove.org/simple-chapters/ Adds support for episodic chaptering using Podlove's Simple Chapters approach.	0..1
version	2.0 Uses RSS version 2 to allow support for namespaces.	1..1

EXAMPLE:

```
<rss xmlns:media="https://search.yahoo.com/mrss/"
xmlns:itunes="https://www.itunes.com/dtds/podcast-1.0.dtd"
xmlns:dcterms="https://purl.org/dc/terms/"
xmlns:spotify="https://www.spotify.com/ns/rss"
xmlns:psc="https://podlove.org/simple-chapters/"
version="2.0">
...
</rss>
```

5.2 RSS/CHANNEL

Indicates a show i.e. the podcast itself. It contains the metadata for the show and encapsulates all the show episodes as items. Defining multiple podcasts in the same RSS is not supported.		1..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    ...
  </channel>
  ...
</rss>

```

5.3 RSS/CHANNEL/TITLE

The name by which the podcast is known		1..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <title>
      Stream Big
    </title>
    ...
  </channel>
</rss>

```

5.4 RSS/CHANNEL/LINK

The web address of the podcast RSS page expressed as a RFC 1738 Uniform Resource Locator.		1..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <link>
      https://example.com/sbig
    </link>
    ...
  </channel>
</rss>

```

5.5 RSS/CHANNEL/DESCRIPTION

Phrase or short description of the podcast intending to give the consumer a quick understanding of what the podcast is about.		1..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <description>
      Already in the early 1920s, ...
    </description>
    ...
  </channel>
</rss>

```


5.6 RSS/CHANNEL/LANGUAGE

Indicates the primary show language using RSS 2.0 or W3C RFC 1766 language codes.		0..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <language>
      en
    </language>
    ...
  </channel>
</rss>

```

5.7 RSS/CHANNEL/ITUNES:AUTHOR

The full name of the show main originator, group or person.		1..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <itunes:author>
      Example Ltd
    </itunes:author>
    ...
  </channel>
</rss>

```

5.8 RSS/CHANNEL/ITUNES:IMAGE

Indicates the podcast artwork. This image will be used as a fallback for any podcast episode not defining its own artwork.		1..1
ATTRIBUTE:	RANGE:	#
href	RFC 1738 Uniform Resource Locator Address where image file is located.	1..1

EXAMPLE:

```

<rss>
  <channel>
    <itunes:image href="https://example.com/sbig-logo.jpg"/>
    ...
  </channel>
</rss>

```

5.9 RSS/CHANNEL/ITUNES:EXPLICIT

Indicates if the podcast contains explicit material in any of its episodes. Allowed values are yes or clean. Clean indicates the podcast in its entirety is suitable to minors with or without edited material. Yes indicates that parental guidance is recommended to parts of the content.		0..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <itunes:explicit>
      clean
      <!-- yes -->
    </itunes:explicit>
    ...
  </channel>
</rss>

```

5.10 RSS/CHANNEL/ITUNES:CATEGORY

Used to group the podcast into specific sets. May be nested with subcategories like: 1. Arts → 1.1 Design, 1.2 Fashion & Beauty, 1.3, Food 1.4 Literature etc. While not mandatory for the podcast ingest the categorization is needed for Spotify to perform recommendations.

0..*

ATTRIBUTE:	RANGE:	#
text	String Apple iTunes Podcast Connect Category	1..1

EXAMPLE:

```

<rss>
  <channel>
    <itunes:category text="Arts">
      <itunes:category text="Design" />
      <itunes:category text="Fashion & Beauty" />
      <itunes:category text="Food" />
    </itunes:category>
    ...
  </channel>
</rss>

```

5.11 RSS/CHANNEL/ITUNES:COMPLETE

YES | NO A yes indicates a podcast that has ended and no further episodes will be published.

0..1

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <itunes:complete>
      yes
      <!-- no -->
    </itunes:complete>
    ...
  </channel>
</rss>

```

5.12 RSS/CHANNEL/ITUNES:TYPE

(show/channel level): “episodic” for non-chronological episodes that will behave as they have for years and download the latest episode, or “serial” for chronological episodes that should be consumed oldest to newest.		0..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <itunes:type>
      episodic
    </itunes:type>
    ...
  </channel>
</rss>

```

5.13 RSS/CHANNEL/SPOTIFY:LIMIT

If specified at most this number of episodes appear in the client, using the most recent episodes.		0..*
ATTRIBUTE:	RANGE:	#
recentCount	Integer Number of concurrent episodes (items) to display starting from the latest release. E.g. a podcast with 10 episodes and the limit 3 will display episodes 10, 9 and 8 but not 1 through 7	1..1

EXAMPLE:

```

<rss>
  <channel>
    <spotify:limit recentCount="1" />
    ...
  </channel>
</rss>

```

5.14 RSS/CHANNEL/SPOTIFY:COUNTRYOFORIGIN

Defines the intended market/territory where the podcast is relevant to the consumer.		0..1
--	--	------

This is defined as a space separated list of ISO 3166 country codes ranked in order of priority from most relevant to least relevant. Podcasts with a narrow list of countries will have a higher potential reaching their it's target audiences compared to podcasts with wide definitions. Podcasts omitting this element entirely will be defined as 'global' and not having a target market/territory.

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```
<rss>
  <channel>
    <!-- Sets the podcast to be most relevant in Norway, but also having
some value in Denmark and Sweden. -->
    <spotify:countryOfOrigin>
      se
    </spotify:countryOfOrigin>
  </channel>
</rss>
```

5.15 RSS/CHANNEL/ITEM

An item is equivalent to a podcast episode. Each of the separate installments into which a show is divided. A podcast need at least one episode to be public.		1..*
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <item>
      ...
    </item>
    ...
  </channel>
</rss>

```

5.16 RSS/CHANNEL/ITEM/GUID

Unique provider identifier for the podcast which is stable over time.		1..1
ATTRIBUTE:	RANGE:	#
isPermaLink	Boolean true indicates that the GUID is a full URL that can be used to permanently locate the podcast episode. false indicates that the GUID is not a link but only to be used as a unique identifier.	1..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <guid isPermaLink="false">
        e99f7614-d82f-42bc-9b23-1f251592f472
      </guid>
    </item>
    ...
  </channel>
</rss>

```

5.17 RSS/CHANNEL/ITEM/ENCLOSURE

This is the default RSS definition of the episode content file. This is an extension to <enclosure> tag and is used mostly for video files.		0..1
ATTRIBUTE:	RANGE:	#
url	RFC 1738 Uniform Resource Locator Specifies the location of the episode audio file.	1..1
type	IETF RFC 6838 MIME Type Specifies the format of the audio file. Only audio/mpeg is supported.	1..1
length	Numeric The length of the audio file in bytes.	1..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <enclosure
url="https://dts.podtrac.com/redirect.mp3/files.serialpodcast.org/sites/default/files/podc
ast/1422481890/serials01-e09.mp3" type="audio/mpeg" length="21830720"/>
      </item>
    ...
  </channel>
</rss>

```

5.18 RSS/CHANNEL/ITEM/PUBDATE

Indicates the age of the episode when the episode was first published in any outlet (also outside of Spotify) using an IETF RFC 2822 format. This value is used to order episodes when no other explicit order is specified. 1..1

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <pubDate>
        Thu, 20 Nov 2014 10:30:00 +0000
        <!-- OR Thu, 20 Nov 2014 10:30:00 GMT -->
      </pubDate>
    </item>
    ...
  </channel>
</rss>

```

5.19 RSS/CHANNEL/ITEM/TITLE

The title of the specific podcast episode. Alternatively the analog <media:title> element may be used instead but never both at the same time. One of the alternatives must always be specified. 0..1

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <title>
        Episode 9: Napster
      </title>
    </item>
    ...
  </channel>
</rss>

```


5.20 RSS/CHANNEL/ITEM/MEDIA:TITLE

The title of the specific podcast episode. Alternatively the analog <title> element may be used instead but never both at the same time. One of the alternatives must always be specified.		0..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <media:title>
        Episode 9: Spotify
      </media:title>
    </item>
    ...
  </channel>
</rss>

```

5.21 RSS/CHANNEL/ITEM/DESCRIPTION

Phrase or short example of the episode to give the consumer a quick understanding of its content. Alternatively the analog <media:description> element may be used instead but never both at the same time. One of the alternatives must always be specified.		0..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <description>
        Napster was the name given to two music-focused
        online services. It was originally founded as a pioneering peer-to-peer (P2P) file
        sharing Internet service that emphasized sharing audio files, typically music, encoded
        in MP3 format.
      </description>
    </item>
    ...
  </channel>
</rss>

```

5.22 RSS/CHANNEL/ITEM/MEDIA:DESCRIPTION

Phrase or short example of the episode to give the consumer a quick understanding of its content. Alternatively the analog <description> element may be used instead but never both at the same time. One of the alternatives must always be specified.	0..1
---	------

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <media:description>
        Napster was the name given to two music-focused
        online services. It was originally founded as a pioneering peer-to-peer (P2P) file
        sharing Internet service that emphasized sharing audio files, typically music, encoded
        in MP3 format.
      </media:description>
    </item>
    ...
  </channel>
</rss>

```

5.23 RSS/CHANNEL/ITEM/MEDIA:CONTENT

Specifies the location to download the episode content from and what content type that is used to create the content. Alternatively the default RSS element <enclosure> may be used but never both at the same time. At least one of the alternatives must always be defined.		0..1
ATTRIBUTE:	RANGE:	#
type	IETF RFC 6838 MIME Type Specifying the format of the content file. This is audio/mpeg for podcast audio episodes.	1..1
url	IETF RFC 1738 Uniform Resource Locator Online location of the content file	1..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <media:content type="audio/mpeg"
        url="https://example.com/sbig02e09.mp4" />
    </item>
    ...
  </channel>
</rss>

```

5.24 RSS/CHANNEL/ITEM/MEDIA:RESTRICTION

<p>Restricts availability of the specific episode using a whitelist of space separated ISO 3166 country codes. The podcast will be published in the countries specified. If the restriction element is fully absent the content is considered available in all regions. Spotify currently only supports relationship="allow" and type="country".</p>		0..1
ATTRIBUTE:	RANGE:	#
type	<p>country</p> <p>Indicates restrictions to be placed based on ISO 3166 country codes. This is the only restriction type supported.</p>	1..1
relationship	<p>allow</p> <p>Indicates the type of relationship that the restriction represents. This is the only relationship supported.</p>	1..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <!-- Episode allowed only in the USA and Sweden.-->
      <media:restriction type="country" relationship="allow">
        us se
      </media:restriction>
    </item>
    ...
  </channel>
</rss>

```

5.25 RSS/CHANNEL/ITEM/ITUNES:DURATION

The value provided for this tag can be formatted as HH:MM:SS, H:MM:SS, MM:SS, or M:SS, where H = hours, M = minutes, S = seconds. If a single number is provided as a value (no colons are used), the value is assumed to be in seconds. If one colon is present, the number to the left is assumed to be minutes, and the number to the right is assumed to be seconds. If more than two colons are present, the numbers farthest to the right are ignored.

0..1

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <itunes:duration>
        2700
      </itunes:duration>
    </item>
    ...
  </channel>
</rss>

```

5.26 RSS/CHANNEL/ITEM/ITUNES:ORDER

Indicates the order in which the episode shall be played. If omitted the <pubDate> field will be used to generate order with the oldest episode starting as the first list entry.

0..1

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <itunes:order>
        9
      </itunes:order>
    </item>
    ...
  </channel>
</rss>

```

5.27 RSS/CHANNEL/ITEM/ITUNES:EXPLICIT

Indicates if the podcast episode contains explicit material. Allowed values are yes, no or clean yes indicates that the episode contains content not suitable to minors. no means the episode is suitable to minors and have not been edited from its original. clean means the episode has been edited to become suitable to minors.

0..1

ATTRIBUTE:	RANGE:	#
------------	--------	---

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <itunes:explicit>
        clean
        <!-- OR yes OR no -->
      </itunes:explicit>
    </item>
    ...
  </channel>
</rss>

```

5.28 RSS/CHANNEL/ITEM/ITUNES:IMAGE

Indicates the episode artwork. Should be a 1:1 dimensioned image in high resolution representing the particular episode. When omitted on the item level the the channel level will be used instead.

0..1

ATTRIBUTE:	RANGE:	#
href	RFC 1738 Uniform Resource Locator Location of the image resource	1..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <itunes:image
        href="https://example.com/sbig/screenshots/s02e09.png" />
    </item>
    ...
  </channel>
</rss>

```

5.29 RSS/CHANNEL/ITEM/DCTERMS:VALID

Specifies a time window during which the content is playable. See example for time formatting. If absent, it is playable until it is removed from the feed.		0..1
ATTRIBUTE:	RANGE:	#
start	ISO 8601 date and time Specifies the start time of when the content shall be visible and playable in the Spotify clients	1..1
end	ISO 8601 date and time Specifies the end time of when the content shall stop being visible and playable in the Spotify clients	1..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <dcterms:valid/>
        start=2015-06-22T09:00+01:00;
        end=2015-07-02T09:00+01:00;
      </dcterms:valid>
    </item>
    ...
  </channel>
</rss>

```

5.30 RSS/CHANNEL/ITEM/PSC:CHAPTERS

Creates a list of chapters for this episode. If present there must be at least one chapter defined in the list.		0..1
ATTRIBUTE:	RANGE:	#
version	1.1 Specifies the Podlove version. Only version 1.1 is supported by Spotify	0..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <psc:chapters/>
      <!-- Minimum one <psc:chapter> element here -->
      ...
    </psc:chapters>
  </item>
  ...
</channel>
</rss>

```


5.31 RSS/CHANNEL/ITEM/PSC:CHAPTER

Specifies a point in the audio file of particular interest to the consumer. The point in time is described with a title and optionally associates a URL and/or an image.		
ATTRIBUTE:	RANGE:	#
start	IETF RFC 2326 A Normal Play Time (NMP) timestamp - a single point in time relative to the beginning of the episode audio file.	1..*
title	String The name of the episode segment.	1..1
href	RFC 1738 Uniform Resource Locator Web address of associated page referred to in the segment.	0..1
image	RFC 1738 Uniform Resource Locator Web address of associated image referred to in the segment. This needs to be in a 1:1 aspect ratio	0..1

EXAMPLE:

```

<rss>
  <channel>
    <item>
      <psc:chapters/>
        <psc:chapter start="0" title="Opening credits" />
        <psc:chapter start="0:35" title="Today's CNN headlines"
href="https://edition.cnn.com/"
image="https://cdn.cnn.com/cnn/.e/img/3.0/global/misc/cnn-logo.png"/>
        <psc:chapter start="8:36" title="End credits" />
      </psc:chapters>
    </item>
    ...
  </channel>
</rss>

```

5.32 RSS/CHANNEL/ITEM/ITUNES:KEYWORDS

Indicates the episode keywords. Keywords used for searching purposes. Plain text, no HTML, words must be separated by comma (,).		0..1
ATTRIBUTE:	RANGE:	#

EXAMPLE:

```
<rss>
  <channel>
    <item>
      <itunes:keywords>keyword,separated</itunes:keywords>
    </item>
    ...
  </channel>
</rss>
```

Appendix

A - Simple Example

```
<?xml version="1.0" encoding="UTF-8"?>
  <rss xmlns:itunes="http://www.itunes.com/dtds/podcast-1.0.dtd">
    <channel>
      <title>Serial</title>
      <link>https://serialpodcast.org</link>
      <description>Serial is a new podcast from the creators of This American Life,
hosted by Sarah Koenig. Serial unfolds one story - a true story - over the course of a whole
season. The show follows the plot and characters wherever they lead, through many surprising
twists and turns. Sarah won't know what happens at the end of the story until she gets there, not
long before you get there with her. Each week she'll bring you the latest chapter, so it's
important to listen in, starting with Episode 1. New episodes are released on Thursday
mornings. Serial, like This American Life, is a production of WBEZ Chicago.
      </description>
      <language>en</language>
      <itunes:author>This American Life</itunes:author>
      <itunes:category text="News & Politics" />
      <itunes:type>episodic</itunes:type>
      <itunes:image
href="https://serialpodcast.org/sites/all/modules/custom/serial/img/serial-itunes-logo.png" />
      <item>
        <guid>1234</guid>
        <title>Episode 09: To Be Suspected</title>
        <description>New information is coming in about what maybe did not happen on
January 13, 1999. And while the memory of that day is foggy at best, he does remember what
happened next: being questioned, being arrested and, a little more than a year later, being
sentenced to life in prison.</description>
        <pubDate>Thu, 20 Nov 2014 10:30:00 +0000</pubDate>
        <itunes:order>9</itunes:order>
        <itunes:duration>2700</itunes:duration>
        <enclosure
url="https://dts.podtrac.com/redirect.mp3/files.serialpodcast.org/sites/default/files/podcast/14224
81890/serial-s01-e09.mp3" type="audio/mpeg" />
      </item>
    </channel>
  </rss>
```

B - Document Change Log

This appendix provides details about previous document revisions and important changes made to the specification. Typically minor revisions are to be considered functionally equivalent and backwards compatible whereas major revisions introduce new or remove deprecated functionality.

Version	Change
1.6	Added itunes:type tag
1.5	Added keywords and updated the namespace address
1.4	Added guid to Simple example Small clarifications to text
1.3	Rewording of Introduction, Shows and Episodes and Distribution chapters to include more details and making it more fluent to read. Stepped version to 1.3 Clarified that metadata changes are needed to re-trigger binary downloads. Changed to recommended binary length of 200MB instead of mandated. Changed podcast episode images to also be 1:1 aspect ratio. Clarified the use of HTML in metadata (not allowed). Changed the episode image cardinality from 1..1 to 0..1 to make it optional. Removed incorrect statements of what elements are consumer facing. Explained the importance of <itunes:category> to make recommendations. Changed type attribute of <media:content> element to be mandatory. Clarified the white-listing of countries in the <media:restriction> element. Added new <spotify:countryOfOrigin> element. Added Podlove chaptering support. Added <media:title> and <media:description> elements as alternatives to respective <title> and <description> elements. Added <media:content> and <enclosure> elements as alternatives to each other.
1.2	Trimmed element examples
1.1	Added <itunes:complete> Changed the description of the use of HTML ampersands
1.0	First full revision

