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Takeaway

Getting a good start in any new technology or programming language often depends on finding the best available information. The TechRepublic QuickStart Tools give you the information you need to quickly grasp the fundamentals of developing in a new IDE, using a new programming language, or working with a new development tool.

Really Simple Syndication (RSS) is a Web content syndication format designed to organize, manage, and share data available on the Internet. Each RSS text file contains dynamic information about the Web content and static information about the site using it. Therefore, the RSS format has become a favorite of Web sites, developers, and organizations that manage content in a dynamic way.

Besides explaining the basics, this TechRepublic QuickStart Tool shows you common RSS tasks, exposes the strengths and weaknesses of the format, demonstrates some of the best uses of RSS versions 0.9 and 2.0, and lists a variety of other online and offline resources that can help you build a solid foundation of practical knowledge.

Table of Contents

FUNDAMENTALS	3
A SAMPLE NEWS FEED.....	3
<i>Begin</i>	3
COMMON TASKS	5
TASK.....	5
STEPS.....	5
<i>Add an image to the channel</i>	5
<i>Specify an author (version 2.0)</i>	5
<i>Add a date (version 2.0)</i>	5
<i>Add a short description</i>	5
<i>Create a Java reader</i>	5
STRENGTHS	6
STRENGTH.....	6
<i>Simple and easy to understand</i>	6
<i>Multipurpose</i>	6
<i>Publishing tool</i>	6
<i>Extensible</i>	6
<i>Metadata syndication and aggregation</i>	6
<i>Easily parsed</i>	6
WEAKNESSES	6
WEAKNESS.....	6
<i>Lack of GUI interface</i>	6
<i>Inability to develop high-end applications</i>	6
<i>Version incompatibility</i>	6
<i>Need for an RSS validator</i>	6
<i>Requires an external reader</i>	6
BEST USES	7
CREATING AND MAINTAINING WEB PORTALS.....	7
AS A SOURCE OF DYNAMIC CONTENT.....	7
AGGREGATING LINKS TO RELATED CONTENT.....	7
ONLINE RESOURCES	7
OTHER RESOURCES	7
ADDITIONAL INFORMATION	7
ADDITIONAL RESOURCES	8
<i>Version history</i>	8
<i>Tell us what you think</i>	8

Fundamentals

Really Simple Syndication (RSS) was originally developed by Netscape as a format for building news portals. It was based on the [Extensible Markup Language](#) (XML) and the [Resource Description Framework](#) (RDF). RDF is a structured model mainly used for detailing metadata on the Web.

RSS is a dialect of XML, and therefore, all RSS files must adhere to the XML 1.0 specifications laid down by the World Wide Web Consortium. The file is a structured list encoded so that it can be aggregated by another program. RSS feeds are used to integrate and distribute dynamic information.

A sample news feed

Using RSS, we will create a sample news feed.

Begin

RSS is not a programming language but an XML-based markup language. It is used to mark up news feeds. The markups in our example show you how to mark up a news item called "British Broadcasting Corporation News" in RSS versions 0.9 and 2.0.

Using RSS version 0.9

```
<rss>

<channel>
<title> British Broadcasting Corporation News </title>
<link>http://something.com/</link>
<description>British Broadcasting Corporation News Example </description>

</channel>

<item>
<title> British Broadcasting Corporation News </title>
<link>http://something.com/bbc.html</link>

</item>

</rss>
```

An analysis of the code shows that:

- The code is enclosed within `<rss>` tags.

- The `<channel>` tag specifies information about the news channel.

- The `<link>` tag specifies the URL of a Web site, which contains all the news.

- The `<item>` tag specifies which news items are to be retrieved.

Using RSS version 2

```
<rss xmlns:dc="http://purl.org/dc/elements/1.1/" >

<channel>
<title> British Broadcasting Corporation News </title>
<link>http://something.com/</link>
<description>British Broadcasting Corporation News Example </description>

</channel>

<item>
<title> British Broadcasting Corporation News </title>
<link>http://something.com/bbc.html</link>
<category>Enterprise Software</category>
<pubDate>Tue, 18 May 2004 19:15:00 PDT</pubDate>

</item>

</rss>
```

The major difference in version 2.0 is the availability of optional tags to specify author, category, and publication date. It provides a namespace called dc to specify these parameters, which is declared as `xmlns:dc=http://purl.org/dc/elements/1.1/` in the RSS tag.

Common tasks

Task	Steps
Add an image to the channel	<p>To add an image for the RSS news channel, use the following tags after the <code></channel></code> tag:</p> <pre><image> <title> British Broadcasting Corporation News </title> <url>http://images.something.com/image.gif</url> <link>http://www.something.com/</link> </image></pre> <p>Note: The image should be size 88x31.</p>
Specify an author (version 2.0)	<p>Use the <code>dc:creator</code> tag to specify the author of a news item. For example:</p> <pre><item> <title> British Broadcasting Corporation News </title> <link>http://something.com/bbc.html</link> <dc:creator>My Name</dc:creator> </item></pre>
Add a date (version 2.0)	<p>Use the <code>dc:date</code> tag to specify a date for the item. For example:</p> <pre><item> <title> British Broadcasting Corporation News </title> <link>http://something.com/bbc.html</link> <dc:date>Date</dc:date> </item></pre>
Add a short description	<p>Though the link tag for the news item can be used to direct the user to the URL for the full news, a short description for a news item can also be added as shown below:</p> <pre><item> <title> British Broadcasting Corporation News </title> <link>http://something.com/bbc.html</link> <description>A Short Description</description> </item></pre>
Create a Java reader	<p>Here is a snippet of a Java program that extracts news items and shows the output using the Java DOM API.</p> <pre>NodeList items = doc.getElementsByTagName(item); for(int i=0;i<items.getLength();i++) { Element itemElement = (Element) items.item(i); NodeList titles = itemElement.getElementsByTagName(title); Node title = titles.item(0); NodeList titleValues = title.getChildNodes(); Node titleValue = titleValues.item(0); System.out.println(+titleValue.getNodeValue()+.); }</pre>

Strengths

Strength	Description
Simple and easy to understand	RSS uses common XML. It does not contain complex syntax, looping structures, or other complex programming rules, and is therefore easy to understand and implement.
Multipurpose	RSS technology can be used for various applications and services, such as content aggregation, threaded discussion forums, document cataloging, and syndication.
Publishing tool	The RSS publishing tool can be used to publish dynamic content, such as news feeds and stock tickers, onto Web sites.
Extensible	Users can extend RSS capabilities with XML namespaces to generate dynamic and static content.
Metadata syndication and aggregation	RSS can act like a mini database containing headlines and descriptions of news and other content present on a Web site, making syndication and aggregation easier to implement.
Easily parsed	RSS documents can be easily parsed using free or commercially available parser programs. You can also write your own parsers.

Weaknesses

Weakness	Description
Lack of GUI interface	RSS documents are created without the benefit of a GUI interface.
Inability to develop high-end applications	You cannot develop high-end applications using RSS as you can with programming languages, which limits the functionality.
Version incompatibility	Some documents created using one version of RSS cannot be opened with a different version. For example, an RSS document created using version 0.9 is not supported by version 2.0.
Need for an RSS validator	RSS is a markup language, and therefore does not have a mechanism for checking syntax errors in the code. RSS code validation requires an external tool to check for syntax errors.
Requires an external reader	An RSS reader program is required to browse, access, and read newsfeeds in the RSS format.

Best uses

Creating and maintaining Web portals

RSS is a popular technology for the development of Web sites that require content aggregation and syndication. RSS acts like a mini database to consolidate data into a well-organized form within a single source file.

As a source of dynamic content

RSS is an excellent medium for news exchange across the Internet. Because RSS facilitates searching, reading, and scanning frequently updated headlines from various sources, users can get regular updates and information regarding the latest happenings around the world when they log on to their subscribed sites.

Aggregating links to related content

RSS is often used to aggregate and organize related links together on one Web site.

Online resources

[What is RSS?](#)

An article that defines RSS and its uses.

[RSS 2.0 Specification](#)

An outline of the RSS 2.0 specification from the Harvard Law School.

[Introduction to RSS](#)

A basic tutorial introducing the principles associated with RSS.

[RSS Tutorial](#)

A tutorial that explains the features and benefits RSS, complete with a brief technical overview of the technology involved.

[RSS Module Guidelines](#)

This guide explains namespace-based modularization and its ability to create opportunities for compartmentalized extensibility.

Other resources

[Content Syndication with RSS](#)

By Ben Hammersley, 2003, ISBN: 0-596-00383-8

[Essential Blogging](#)

By Cory Doctorow, Rael Dornfest, J. Scott Johnson, Shelley Powers, Benjamin Trott, Mena G. Trott, 2002, ISBN: 0-596-00388-9

[Perl Cookbook, 2nd Edition](#)

By Tom Christiansen, Nathan Torkington, 2003, ISBN: 0-596-00313-7

[Perl Template Toolkit](#)

By Darren Chamberlain, David Cross, Andy Wardley, 2003, ISBN: 0-596-00476-1
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Additional information

[Meet diverse needs by using RSS to aggregate content](#)

[Deliver RSS content to syndication sites with JSP and JavaScript](#)

[RSS and you](#)

[Parsing the News.com RSS feed with PHP](#)

[Randomize your RSS feeds with ColdFusion](#)

[Creating an online RSS news aggregator with ASP.NET](#)

[Inside the RSS validator](#)

Additional resources

- Sign up for our [Downloads Weekly Update](#), delivered on Monday afternoons.
- Check out all of [TechRepublic's newsletter offerings](#).
- [The Basics of RSS](#) (White paper)
- [Add RSS feeds to your Web site with Perl XML::RSS](#) (Article)
- [TechRepublic Apache QuickStart Guide](#) (Download)

Version history

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