

RSS est une technologie originaire de chez Netscape utilisée pour publier fréquemment des mises à jour (ex blogs, information récentes, nouvelles, etc.). Mais RSS n'est pas seulement pour les nouvelles, n'importe quelle entité qui peut être modulée en un objet discret peut être envoyé via RSS. Un document RSS aussi appelé 'feed','web feed' ou 'channel', contient soit un résumé du contenu du site web associé soit le texte entier.la possibilité de choix et de sélection des informations conserver strictement à l'utilisateur lui-même ainsi que la portabilité, la rapidité et la rentabilité, bâtissent la puissance et robustesse de RSS.

RSS permet aux lecteurs de s'inscrire et recevoir les nouvelles ou informations, les grands titres et petit résumé des sites web, weblogs et newsletters. Afin de pouvoir faire ceci les utilisateurs RSS doivent télécharger et installer un logiciel appelée 'news reader' ou 'aggregator'.L'utilisateur peut s'inscrire a une 'feed' avec deux méthodes, soit en insérant le lien de la 'feed', ou soit en cliquant sur l'icône RSS dans un navigateur qui lui-même lance le processus d'inscription. Le logiciel lui scrute régulièrement les 'feeds' auxquelles l'utilisateur est inscrit pour télécharger tout contenu nouveau et mise à jour dont il trouve.

Les initiaux RSS sont utilisés pour faire allusion a :

- Rich Site Summary (RSS 0.91)
- RDF Site Summary (RSS 1.0 and RSS 0.90)
- Really Simple Syndication (RSS 2.0) (most commonly used)

RSS History

The RSS formats were preceded by several attempts at syndication that did not achieve widespread popularity.

RDF Site Summary, the first version of RSS, was created by Guha at Netscape in March 1999 for use on the My.Netscape.Com portal. This version became known as RSS 0.9.In July 1999, Dan Libby of Netscape produced a new version, RSS 0.91, that simplified the format by removing RDF elements and incorporating elements from Dave Winer's scripting News syndication format. Libby also renamed RSS to Rich Site Summary and outlined further development of the format in a "futures document".

Netscape dropped RSS support from My.Netscape.Com in April 2001.

Two entities emerged to fill the void: The RSS-DEV Working Group and Winer, who's UserLand Software, had published some of the first publishing tools outside of Netscape that could read and write RSS.

Winer published a modified version of the RSS 0.91 specification on the User Land web site, and claimed copyright to the document. A few months later, User Land filed a U.S. trademark registration for RSS, but failed to respond to a USPTO trademark examiner's request and the request was rejected in December 2001.

The RSS-DEV Working Group produced RSS 1.0 in December 2000. This new version, which reclaimed the name RDF Site Summary from RSS 0.9, reintroduced support for RDF and added XML namespaces support, adopting elements from standard metadata vocabularies.

In December 2000, Winer released RSS 0.92 a minor set of changes aside from the introduction of the enclosure element, which permitted audio files to be carried in RSS.

In September 2002, Winer released a major new version of the format, RSS 2.0 that redubbed its initials Really Simple Syndication. RSS 2.0 removed the *type* attribute added in the RSS 0.94 draft and added support for namespaces.

Because neither Winer nor the RSS-DEV Working Group had Netscape's involvement, they could not make an official claim on the RSS name or format. This has fueled ongoing controversy in the syndication development community as to which entity was the proper publisher of RSS.

In June 2003 resulting from that contentious debate, the creation of a rival syndication format Atom took place. The desire was to get a clean start free of the issues surrounding RSS; it has been adopted as an IETF standard.

In July 2003, Winer and UserLand Software assigned the copyright of the RSS 2.0 specification to Harvard's Berkman Center for the Internet & Society.

In December 2005, the Microsoft Internet Explorer team and Outlook team announced that they were adopting the feed icon first used in the Mozilla Firefox browser. This effectively made the orange square with white radio waves the industry standard for RSS and Atom feeds, replacing the large variety of icons and text that had been used previously to identify syndication data.

Which one do I use?

RSS versions and recommendations

Version	Owner	Pros	Status	Recommendation
0.90	Netscape		Obsoleted by 1.0	Don't use
0.91	UserLand	Drop dead simple	Officially obsoleted by 2.0, but still quite popular	Use for basic syndication. Easy migration path to 2.0 if you need more flexibility
0.92, 0.93, 0.94	UserLand	Allows richer metadata than 0.91	Obsoleted by 2.0	Use 2.0 instead
1.0	RSS-DEV Working Group	RDF-based, extensibility via modules, not controlled by a single vendor	Stable core, active module development	Use for RDF-based applications or if you need advanced RDF-specific modules
2.0	UserLand	Extensibility via modules, easy migration path from 0.9x branch	Stable core, active module development	Use for general-purpose, metadata-rich syndication

Problem solved by RSS:

Most people are interested in many websites whose content changes on an unpredictable schedule. Examples of such websites are news sites, community and religious organization information pages, product information pages, medical websites, and weblogs. Repeatedly checking each website to see if there is any new content can be very tedious.

Email notification of changes was an early solution to this problem. Unfortunately, when you receive email notifications from multiple websites they are usually disorganized and can get overwhelming, and are often mistaken for spam.

RSS is a better way to be notified of new and changed content. Notifications of changes to multiple websites are handled easily, and the results are presented to you well organized and distinct from email.

In other words, RSS solves a problem for people who regularly use the web. It allows you to easily stay informed by retrieving the latest content from the sites you are interested in. You save time by not needing to visit each site individually. You ensure your privacy, by not needing to join each site's email newsletter and by that reducing the amount of junk in your inbox. On the other hand, RSS solves numerous problems webmasters commonly face, such as increasing traffic, and gathering and distributing news by also creating a user fidelity relationship with the segmented content.

RSS-based newsfeeds advantages:

1) **RSS is timely**. Subscribers get updates and breaking news as soon as they are published and not on the date the newsletter is due. RSS allows us to plug into selected sources of information, like independent reporters, researchers and industry analysts and when they disseminate or report some new information, it allows us to be the first to get it, without having to subscribe to any newsletter, or having to disclose our email address to a new, unknown company.

2) **RSS is cost-effective**. Cost of delivery and distribution is reduced dramatically. No more paying a mailing list distribution provider, nor having to format and layout news and articles for a different media than the website.

3) **RSS is standards-compliant**. (If wanted) Maximum compatibility is preserved allowing email subscribers with text, HTML, AOL or MIME Multipart preferences to all receive well formed news updates perfectly compatible with your email client.

4) **RSS is email independent**. Email client not required. RSS news and feeds can be easily read online, aggregated into a web page journal/portal or managed to create new online content.

5) **RSS can be fully integrated in your email**. Yes, no one forbids the final user from using new services and tools which do allow perfect integration and receipt of RSS feeds inside your email Inbox (e.g., NewsGator, BlogStreet Info Aggregator).

6) **RSS facilitates organization of content**. Relevant messages can be easily archived, sorted and organized according to topic, in a fully automated way, something impossible with previously non-standard newsletters.

7) **The subscriber is in full control**. Subscription and removal from a news feed is totally under the control of the user, unlike now where users may receive many newsletters that make it very hard or unintuitive to unsubscribe.

8) **RSS is private**. RSS subscribers never have to provide an email address to their selected information provider. Publishers cannot as a consequence easily resell those emails to unscrupulous marketers and email spammers. RSS is hardly spammable as you always know the source of each news item received, and there is no easy way yet to easily hack into the system.

9) **RSS is fully reusable**. RSS is a structured, re-usable content protocol that allows the content to be reused for many other purposes: feeding of other news channels and Web pages, integration into dynamic libraries and learning objects.

10) **RSS is searchable**. RSS can be fully indexed and searched just as Google does with the HTML content on the Internet.

11) **RSS is secure**. RSS cannot yet carry viruses or Trojans like a newsletter or email attachment can.

12) **RSS is modifiable**. Even after it has been sent out. Nobody forbids your capability to modify a current posting, or revise an error, and therefore RSS subscribers indeed receive that posted update. RSS posts can be also removed or expired, and while some would argue that this is not completely feasible, there is certainly a wide open opportunity to explore further in this direction.

13) **RSS adds value**. When RSS provides an easy to use complement to your site, it clearly becomes a free value-added service.

RSS-based newsfeeds disadvantages and possible limitations:

1) **RSS tools may be Trojans for malicious software**. Pre-assembled aggregators and newsreaders that contain spyware and other malicious code.

2) **E-marketing through RSS**. RSS marketing may soon be the new trendy buzzword in e-marketing circles. If you come to think of it, there is no embedded mechanism inside RSS that prevents me from posting plain marketing and promotional news items and having them sent out via RSS to anyone subscribing to my feed. While this is not a problem per se, it may be possible that much of our present day pure news feeds will soon be enriched with advertising and other non-related items. The good news is that if and when that happens, unsubscribing from any newsfeed will just be one click away from you.

3) **Limited formatting options**. You can have images, yes, but you certainly can't choose where they are going to be positioned on the page. Forget also about having Verdana 12 point in bold in one section, versus Times New Roman in another one.

4) **RSS cannot be easily measured, tracked and accounted for**. For now, there are no simple or automated ways to account for how many RSS subscribers you have to your own feeds, unless you set up private access and you control it through a registration or subscription mechanism.

5) **RSS requires us to adopt yet one more tool**. Currently, accessing RSS-based news feeds requires a separate software tool. This may prevent novice and non-technical users from easily adopting RSS as a format that they can fully leverage to stay updated on their favorite sites.

6) **RSS restrains editorial abilities**. Publishers are limited in the ways they can organize and prioritize the coverage of their news content through this new medium. Their ability to showcase, summarize, introduce or open up a newsletter is mostly unusable when distributing news and info via RSS.

7) **RSS offers no "reply" button**. As of now, RSS offers no way of replying or communicating directly to your information source. It is likely that this limitation will soon be overcome by complementary features, plug-ins and services filling in this critical gap.

8) **RSS is a bandwidth hog**. Some criticize the fact that RSS readers and news aggregators have to visit a news address frequently to check for updates and new posts. The critics argue that this utilizes an enormous amount of bandwidth uselessly as supposedly newsreaders and aggregators would attempt to pool info from those sites several times a day.

9) **RSS comes in many flavors**. Recently RSS has seen a number of different versions of its specification appear, and therefore it should come as no surprise to see listings indicating support for RSS 0.9, 1.x, 2.x. There is indeed a set of different possible implementations of RSS with differing qualities and capabilities. Suffice it to say for now that most news readers and aggregators read all of these different formats, making the issue not critical for end users. It is rather on the part of both content publishers and subscribers to activate and engage themselves in understanding which of possible standards may best benefit their specific needs and requirements.

Information that RSS propose:

RSS provides very basic information to do its notification. It is made up of a list of items presented in order from newest to oldest. Each item usually consists of a simple title describing the item along with a more complete description and a link to a web page with the actual information being described. Sometimes this description is the full information you want to read (such as the content of a weblog post) and sometimes it is just a summary.

For example, the RSS information for headlines on a local news website could contain the following information:

Item 1:	
Title:	Sidewalk contract awarded
Description:	The city awarded the sidewalk contract to Smith Associates. This hotly contested deal is worth $1.2 million.
Link:	http://www.gardencitynews.com/contractawards/sidewalk.htm
Item 2:	
Title:	Governor to visit
Description:	The governor is scheduled to visit the city on July 1st. This is the first visit since the election two years ago. The mayor is planning a big reception.
Link:	http://www.gardencitynews.com/news/2004/06/gov-visit.htm

The RSS information is placed into a single file on a website in a manner similar to normal web pages. However, the information is coded in the XML computer language for use by a program (the RSS aggregator) and not by a person like a normal web page.

RSS aggregator programs:

RSS aggregators automatically verify a succession of RSS feeds for new items on a constant basis, making it is possible to keep trail of changes to several websites without needing to boringly read and re-read each of the websites yourself. They detect the additions and present them all together to you in a compact and practical manner. If the title and description of an article are of interest, the link can be used to rapidly read the related web page.

Here is a screen shot of an RSS aggregator in action. On the left is a list of the RSS feeds being monitored, along with an indication of the number of unread items in each feed in parenthesis. On the right are the details of the most recent items in a selected RSS feed (in this case, the New York Times).



Many RSS aggregators are available, some are integrated into email programs, some are accessed through a browser, and some run as a standalone application on your laptop or personal computer.

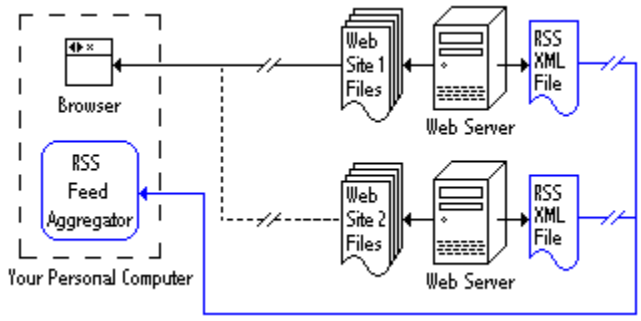
How the RSS feed file is produced?

The special XML-format file that makes up an RSS feed is usually created in one of a variety of ways.

Most large news websites and most weblogs are maintained using special "content management" programs. Authors add their stories and postings to the website by interacting with those programs and then use the program's "publish" facility to create the HTML files that make up the website. Those programs often also can update the RSS feed XML file at the same time, adding an item referring to the new story or post, and removing less recent items. Blog creation tools like Blogger, LiveJournal, Movable Type, and Radio automatically create feeds.

Websites that are produced in a more custom manner, such as with Macromedia Dreamweaver or a simple text editor, usually do not automatically create RSS feeds. Authors of such websites either maintain the XML files by hand, just as they do the website itself, or use a tool such as Software Garden, Inc.'s ListGarden program to maintain it. There are also services that periodically read requested websites themselves and try to automatically determine changes, or that let you create RSS feed XML files that are hosted by that service provider.

Here is a diagram showing how the websites, the RSS feed XML files and your personal computer are connected:



The diagram shows a web browser being used to read first Web Site 1 over the Internet and then Web Site 2. It also shows the RSS feed XML files for both websites being monitored simultaneously by an RSS Feed Aggregator.

Other uses, which have promising future:
In addition to notifying you about news headlines and changes to websites, RSS can be used for many other purposes. There does not even have to be a web page associated with the items listed -- sometimes all the information you need may be in the titles and descriptions themselves.
Some commonly mentioned uses are:

- Notification of the arrival of new products in a store
- Listing and notifying you of newsletter issues, including email newsletters
- Weather and other alerts of changing conditions
- Notification of additions of new items to a database, or new members to a group

One RSS aggregator is all that you need to read all of the RSS feeds, be they headlines, alerts, changes, or other notifications. RSS is shaping up to be a very popular and useful means for communicating.

RSS Syntax

RSS defines an XML grammar (a set of HTML-like tags) for sharing news. Each RSS text file contains both static information about your site, plus dynamic information about your new stories, all surrounded by matching start and end tags.
Each story is defined by an <item> tag, which contains a headline TITLE, URL, and DESCRIPTION. Example:

```
...
<item>
  <title>RSS Resources</title>
  <link>http://www.webreference.com/authoring/languages/xml/rss/</link>
  <description>Defined in XML, the Rich Site Summary (RSS) format has
  quietly become a dominant format for distributing headlines on the Web.
  Our list of links gives you the tools, tips and tutorials you need to get
  started using RSS. 0323</description>
</item>
...
```

Examples

RSS 1.0

The following is an example of an RSS 1.0 file.

```
<?xml version="1.0"?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns="http://purl.org/rss/1.0/"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
>
  <channel rdf:about="http://www.xml.com/cs/xml/query/q/19">
    <title>XML.com</title>
    <link>http://www.xml.com/</link>
    <description>XML.com features a rich mix of information and services for
the XML community.</description>
    <language>en-us</language>
    <items>
      <rdf:Seq>
        <rdf:li
rdf:resource="http://www.xml.com/pub/a/2002/12/04/normalizing.html"/>
        <rdf:li rdf:resource="http://www.xml.com/pub/a/2002/12/04/som.html"/>
        <rdf:li rdf:resource="http://www.xml.com/pub/a/2002/12/04/svg.html"/>
      </rdf:Seq>
    </items>
  </channel>
  <item rdf:about="http://www.xml.com/pub/a/2002/12/04/normalizing.html">
    <title>Normalizing XML, Part 2</title>
    <link>http://www.xml.com/pub/a/2002/12/04/normalizing.html</link>
    <description>In this second and final look at applying relational
normalization techniques to W3C XML Schema data modeling, Will Provost
discusses when not to normalize, the scope of uniqueness and the fourth and
fifth normal forms.</description>
    <dc:creator>Will Provost</dc:creator>
    <dc:date>2002-12-04</dc:date>
  </item>
  <item rdf:about="http://www.xml.com/pub/a/2002/12/04/som.html">
    <title>The .NET Schema Object Model</title>
    <link>http://www.xml.com/pub/a/2002/12/04/som.html</link>
    <description>Priya Lakshminarayanan describes in detail the use of the
.NET Schema Object Model for programmatic manipulation of W3C XML
Schemas.</description>
    <dc:creator>Priya Lakshminarayanan</dc:creator>
    <dc:date>2002-12-04</dc:date>
  </item>
  <item rdf:about="http://www.xml.com/pub/a/2002/12/04/svg.html">
    <title>SVG's Past and Promising Future</title>
    <link>http://www.xml.com/pub/a/2002/12/04/svg.html</link>
    <description>In this month's SVG column, Antoine Quint looks back at
SVG's journey through 2002 and looks forward to 2003.</description>
    <dc:creator>Antoine Quint</dc:creator>
    <dc:date>2002-12-04</dc:date>
  </item>
</rdf:RDF>
```

RSS 2.0

The following is an example of an RSS 2.0 file.

```
<rss version="2.0">
  <channel>
    <title>Liftoff News</title>
    <link>http://liftoff.msfc.nasa.gov/</link>
    <description>Liftoff to Space Exploration.</description>
    <language>en-us</language>
    <pubDate>Tue, 10 Jun 2003 04:00:00 GMT</pubDate>
    <lastBuildDate>Tue, 10 Jun 2003 09:41:01 GMT</lastBuildDate>
    <docs>http://blogs.law.harvard.edu/tech/rss</docs>
    <generator>Weblog Editor 2.0</generator>
    <managingEditor>editor@example.com</managingEditor>
    <webMaster>webmaster@example.com</webMaster>

    <item>
      <title>Star City</title>
      <link>http://liftoff.msfc.nasa.gov/news/2003/news-starcity.asp</link>
      <description>How do Americans get ready to work with Russians aboard
the
        International Space Station? They take a crash course in culture,
language
        and protocol at Russia's Star City.</description>
      <pubDate>Tue, 03 Jun 2003 09:39:21 GMT</pubDate>
      <guid>http://liftoff.msfc.nasa.gov/2003/06/03.html#item573</guid>
    </item>

    <item>
      <title>Space Exploration</title>
      <link>http://liftoff.msfc.nasa.gov/</link>
      <description>Sky watchers in Europe, Asia, and parts of Alaska and
Canada
        will experience a partial eclipse of the Sun on Saturday, May
31st.</description>
      <pubDate>Fri, 30 May 2003 11:06:42 GMT</pubDate>
      <guid>http://liftoff.msfc.nasa.gov/2003/05/30.html#item572</guid>
    </item>

    <item>
      <title>The Engine That Does More</title>
      <link>http://liftoff.msfc.nasa.gov/news/2003/news-VASIMR.asp</link>
      <description>Before man travels to Mars, NASA hopes to design new
engines
        that will let us fly through the Solar System more quickly.  The
proposed
        VASIMR engine would do that.</description>
      <pubDate>Tue, 27 May 2003 08:37:32 GMT</pubDate>
      <guid>http://liftoff.msfc.nasa.gov/2003/05/27.html#item571</guid>
    </item>

    <item>
      <title>Astronauts' Dirty Laundry</title>
      <link>http://liftoff.msfc.nasa.gov/news/2003/news-laundry.asp</link>
      <description>Compared to earlier spacecraft, the International Space
```

```
        Station has many luxuries, but laundry facilities are not one of
them.
        Instead, astronauts have other options.</description>
      <pubDate>Tue, 20 May 2003 08:56:02 GMT</pubDate>
      <guid>http://liftoff.msfc.nasa.gov/2003/05/20.html#item570</guid>
    </item>
  </channel>
</rss>
```

Conclusion: The Future of RSS

Les sites perso ont mis RSS sous les projecteurs mais il est improbable qu'ils soient la force qui va soutenir RSS en tant que moyen de communication. La plus grande opportunité pour RSS n'est pas dans les usages personnels mais au niveau d'un moyen de communication aux niveaux entreprises et sociétés.

Même maintenant, les entreprises qui avaient rejettes l'idée de RSS au début ont commencées à réaliser le pouvoir et les bénéficient des multiples passibilités de RSS. L'ultime capacité des utilisateurs de sélectionner et choisir le contenu qu'ils souhaitent recevoir sera la force qui maintiendra les publicités à un minimum et la qualité consistante du contenu au maximum.

RSS, en tant qu'outil qui permet aux internautes de leur faire gagner du temps et aux administrateurs de site web de leur permettre de réaménager et réinsérer du contenu existant et nouveau, a mon avis, va continuer de fleurir. Une compagnie utilisant efficacement RSS peut attirer de nouveaux visiteurs au site, augmenter leur rang au près des moteurs de recherche et donc générer plus de publicité et d'intérêt face aux produits offerts. La flexibilité de RSS en tant qu'outil de communication et l'expansion du champ d'action de son entête va permettre à RSS de fleurir comme un outil important de marketing en ligne. Chaque jour les entreprises adoptent de nouvelles utilisations de RSS et les utilisateurs s'habituent de plus en plus aux contenus cibles que eu mêmes ont choisis de recevoir.

Alors que les entreprises adoptent RSS et les consommateurs expérimentent les 'feeds', la popularité de RSS va certainement augmenter. en fin de compte les consommateurs sont le moteur de cette technologie .la commodité et l'augmentation de la popularité va définir un modèle d'expectation des utilisateurs. Les entreprises utilisant RSS comme moyen de communication sont capable de créer des contenus à thèmes commun, des recherches par mots clés, bâtir une confiance, réputation et des communications sans cesse avec des clients potentiels.

En fin de compte RSS va devenir un standard, comme les adresses électroniques et les sites web qui sont maintenant une obligation pour chaque entreprise, RSS va se joindre à leurs rangs.