

## **Table of Contents**

- 1. Introduction
  - 1. History
  - 2. Code Names
- 2. Do you want to support SimpleRSS?
- 3. What's new in version 0.4
- 4. SimpleRSS Guides
  - 1. Languages in SimpleRSS
  - 2. How I Use SimpleRSS
  - 3. The BDN guide to RSS
- 5. Credits
- 6. The fine print
  - 1. The LGPL
  - 2. Creative Commons Attribution License

## (1) Introduction

Welcome to SimpleRSS, the premier free feed component for all developers. SimpleRSS is used to import, export and work with RSS, Atom, RDF, and iTunes feeds in a method that is simple for anyone to use. SimpleRSS is also 100% free for use in open source <u>AND</u> commercial applications.

## (1.1) History

SimpleRSS was started as a component for use in a aggregator application I was writing in 2003. Originally it made use of TSimpleXML (from JEDI – Joint Endevour of Delphi Innovators). Version 0.1 was released with SourceForge in 2003 to the public. With version 0.2 TSimpleXML was replaced with TXMLDocument. The 3 main reasons for this were:

- 1) Availablity to use more advanced XML features, not supported in TSimpleXML
- 2) To provide SimpleRSS to more developers, by removing TSimpleXML and it's licensing requirements.
- 3) To make it even simpler to use (no need to install the Jedi VCL first).

## (1.2) Code Names

SimpleRSS Version 0.3 Code Named Echo. No idea why any more SimpleRSS Version 0.3.x Code Named Knowledge. I got the chance to ask Robert Scroble from Microsoft, what in one word descriped RSS and his answer was knowledge. SimpleRSS Version 0.4 Code Named BlueHippo. I have a plush blue hippo that sits on my desk

and provides much needed laughter every so often.

SimpleRSS can be found at http://simplerss.sourceforge.net. SimpleRSS is written in Borland Delphi.

# (2) Do you want to support SimpleRSS?

If you find use of SimpleRSS and would like to support SimpleRSS please look at participating in one of the following:

- There are positions open for people to join the SimpleRSS team. So if you have any skills (developer, writer, web designer etc...) why not check out the jobs page and see if you can jump in and help.
- We are always looking for new tutorials, guides or applications that show or explain features or abilities with SimpleRSS.
- Give us suggestions for new features or ideas you would like implemented.
- Spread the word about SimpleRSS by placing the button/logo in your applications or on your website or just by telling people.
- We are accepting donations via the SourceForge project page.

# (3) Whats new in version 0.4?

Please see the included changelog.txt for all the details.

# (4) SimpleRSS Guides

These are a collection of guides and tutorials for using SimpleRSS that have been reproduced here in a central location so you can simply find what you need.

## (4.1) Languages in SimpleRSS

by Robert MacLean

(Original can be found at <a href="http://www.sadev.co.za">http://www.sadev.co.za</a> reproduced here with permission)

The RSS documents state give an optional element named language which can specify the language of the RSS feed. The language must be either from the list provided by Netscape (see it http://blogs.law.harvard.edu/tech/stories/storyReader\$15) or a value as defined by the W3C (see that http://www.w3.org/TR/REC-html40/struct/dirlang.html#langcodes)

In SimpleRSS 0.1 it was handled via a string field that you could use to set or get the value. With SimpleRSS 0.2 this changed to a simplier method (especially if you do not what the feed wants) and also a more robust method for handling in code, this was done by having preset values that you can select from.

The format of the name of the value indicates what it will be. ie: lang\_EN is en, lang\_EN\_US is en-us and so on. By default the language is set to lang\_EN.

So what of the W3C options or if you need something special? Or what if you import a feed that is wrong how can you check the language then? To do these sort of things there is an option named langX. When langX is set the value from a feed (or the special value you want to set) is handled by the property of the component named XLang.

ie if you needed to have the language set to en-xx you would set the language property to langX and then put en-xx into the XLang property.

## (4.2) How I use SimpleRSS

By Robert MacLean

(Original can be found at <a href="http://www.sadev.co.za">http://www.sadev.co.za</a> reproduced here with permission)

The site www.sadev.co.za includes a few RSS feeds (see the valid RSS button at the bottom). There is one for the blog, downloads, gallery in fact every single section has one.

So how did I code them using the great component SimpleRSS?

Well firstly there was the preparation which included getting my database (which is MySQL) going, once that was done I had to setup the Apache shared object to connect to it and lastly hard coding some things in (like the feed name, and description which I did via the Kylix IDE).

Once that was done it was time to code.

First up was clearing the component for each request (remember Apache shared objects are like ISAPI and everything should be cleared on each request). The issue here is I did not want to clear the whole component, just the items (so I did not waste that nice hard coding). This is easily done with the SimpleRSS.Items.Clear;

Next up I did my DB select and using the normal TCollection method (since the SimpleRSS.Items is just a TCollection) of Add I added my items.

```
sqldtMain.CommandText := 'SELECT strTitle, strID, dtAdded, strAuthor,
txtMessage FROM tblBlog ORDER BY dtAdded DESC';
 sqldtmain.open;
 if not sqldtmain.isempty then
   begin
      sqldtmain.first;
      while not sqldtmain.eof do
          rssitem := rss.items.add;
          rssitem.title := httpdecode(sqldtmain.fieldbyname('strtitle').
asstring);
          rssitem.link :=
'http://www.sadev.co.za/viewblog?id='+sqldtmain.fieldbyname('strid').
asstring;
          rssitem.description := httpdecode(sqldtmain.fieldbyname
('txtmessage').asstring);
          rssitem.author := httpdecode(sqldtmain.fieldbyname('strauthor').
asstring);
          rssitem.guid.ispermalink := true;
          rssitem.guid.include := true;
          rssitem.guid.guid :=
'http://www.sadev.co.za/viewblog?id='+sqldtmain.fieldbyname('strid').
asstring;
          rssitem.pubdate.datetime := sqldtmain.fieldbyname('dtadded').
asfloat;
          rssitem.pubdate.timezone := 'gmt+2';
          sqldtmain.next;
       end; // while not do
   end; // if else
```

The Last thing that has to happen is we need to send the response to the browser. This is the easiest part of all:

Response.Content := RSS.SaveToString;

### (4.3) The BDN Guide To RSS

By Craig Stuntz (Original can be found at <a href="http://bdn.borland.com/article/0,1410,31981,00.html">http://bdn.borland.com/article/0,1410,31981,00.html</a> reproduced here with permission)

#### Introduction

BDN now features RSS (Really Simple Syndication) <u>feeds</u> for BDN News, <u>CodeCentral</u> submissions, and <u>QualityCentral</u> reports. This article explains what RSS is, how to use it, and how you can use it in your own applications. If you're already using an RSS aggregator, start by subscribing to the <u>feeds</u> which intrest you, then skip ahead to <u>the section on using RSS in your own applications</u>. If you've never heard of RSS, read on!

#### **RSS** for Beginners

The purpose of RSS is to make it easy to find recent content which is interesting to you. Usually "content" means web pages, but, as demonstrated by the CodeCentral and QualityCentral feeds, almost anything which can be described with a paragraph or so of text and a URL is fair game. If you visit several different web sites each day looking for new articles, that can be a fairly time-consuming process. RSS feeds allow you to skim multiple sources for items of interest without having to visit multiple sites.

Most people use RSS feeds by running a program called an aggregator, so named because it combines the information from multiple feeds into a list of recently published items. The easiest way to get the feel for what you can do with RSS feeds is to use an aggregator. Here are a few you might want to try, in alphabetical order:

- <u>AmphetaDesk</u> is written in Perl, and acts as a local web server. You connect with your browser.
- BlogLines is an online aggregator. Membership is presently free.
- FeedDemon is a Windows aggregator, written in Delphi.
- If you don't like any of these, a <u>Google search for "rss aggregator"</u> yields many more choices. Or you can <u>write your own</u>.

BlogLines is probably the easiest way to get started as it requires neither a download nor installation, but some people will prefer a Windows client such as FeedDemon. AmphetaDesk's biggest strength is its ease of customization (for those familiar with Perl, anyway).

Once you've picked an aggregator to try, add a feed, such as the <u>feed</u> from <u>my weblog</u> or one of the <u>BDN feeds</u>. When you visit your favorite web sites, look for the little red XML button, like the one on the left-hand side of <u>my weblog</u>. This button means that an RSS feed is available.

The aggregator will download the RSS files from each site you track every hour or so, and combine the feeds for display. You can quickly skim the new items and read the articles which intrest you. This works especially well if you use a browser which supports tabbed browsing, such as <a href="Mozilla Firebird">Mozilla Firebird</a>, as you can open each interesting article in a new tab as you skim through the list and then close the tabs after you've read each article.

That's really all there is to it. RSS lives up to the "Really Simple" part of its name, at least when it comes to reading feeds with a commercial aggregator. It makes keeping track of what's new on the web and elsewhere easier.

#### **OPML**

<u>Outline Processor Markup Language</u> (OPML) is an XML dialect designed to store information in outline or tree-structured form. It's useful in the context of RSS since a number of RSS aggregators use this format to store subscriptions to RSS channels. If your aggregator supports OPML documents you can easily exchange a large number of RSS subscriptions with users of many other aggregators.

You can subscribe to all of the Borland RSS feeds at once using this OPML document.

#### Programming with RSS

RSS is more or less an XML dialect. I say "more or less" because there is no official XSD for it (although some have tried) and because a number of sites produces RSS that follows the rules of neither RSS nor XML. This means that if your application intends to consume RSS generated by persons unknown in the wilds of the internet, you must be prepared to deal with some less-than-compliant documents. Since non-well-formed documents may be summarily rejected by an off-the-shelf DOM, some authors resort to writing their own parsers.

An additional problem for applications consuming RSS feeds is that there are multiple, <u>not-entirely-compatible</u> versions of the RSS specification. A good aggregator needs to be able to handle all of them.

Producing RSS documents, on the other hand, can be done quite readily with components such as TXMLDocument in Delphi. You can use TXMLDocument directly, but I wrote a simple RSS component in less than half an hour using a sample RSS document, Delphi's XML Data Binding Wizard, and Indy, which makes working with RSS documents much easier. I haven't released it to the public, mostly because Robert MacLean offers a <u>free</u> component which also uses TXMLDocument, but adds more bells and whistles.

For details, such as they are, on how to use each tag in the document, read the RSS 2.0 specification. It's a bit vague in places — for example, it gives conflicting advice on how to use the permalink tag — so when publishing RSS it's a good idea to test your feeds with a variety of popular aggregators.

#### Sample RSS Projects in CodeCentral

- From John Moshakis, an <u>ASP.NET application</u> (written in Delphi for .NET) which serves blog entries and includes an RSS feed.
- From Chris Dickerson, a Delphi for .NET <u>RSS aggregator</u>.

#### Open Source RSS Projects on SourceForge

- FeedReader is an open source Windows aggregator.
- As I mentioned above, Robert MacLean's <u>SimpleRSS component</u> is a Delphi component for consuming and producing RSS feeds.

#### Alternative Formats

Two other XML dialects are worth menioning: Atom and RDF.

Atom

Atom is an alternative to RSS which was born out of frustration with ambiguities in the RSS specification. Atom is "pre-release" and much less popular than RSS at this point, but still widely supported (although BlogLines and FeedDemon, mentioned above, both support it), and in general places much more emphasis on having an unambiguous and testable standard.

**RDF** 

<u>RDF</u> is a newly-approved <u>W3C</u> standard which attempts a much broader scope than RSS. It's designed to allow cataloging just about anything, anywhere. As such, it's probably a better fit for non-news feeds such as CodeCentral entries, but the specification is brand new and not widely supported yet. Some early versions of RSS were compatible with RSS, but they are now very different and cannot be treated interchangeably.

# (5) Credits

Extra Special thanks goes to

Borland for creating the best development language ever made!

http://www.borland.com

SourceForge for proving the SimpleRSS a home on the internet

http://www.sourceforge.net

Borlands newsgroups, in particluar the TeamB members and TObject (from

borland.public.delphi.vcl.components.writing.dotnet).

nntp://news.borland.com

The guys behind RSS Validator

Craig Stuntz, for allowing me to reproduce his article and for the great mentions he has given SimpleRSS on his site (<a href="http://delphi.weblogs.com/">http://delphi.weblogs.com/</a>) and in the article.

Bob Swart, for his wonderful article which help with creating the .Net Assembly and Win32 DLL. <a href="http://www.drbob42.com">http://www.drbob42.com</a>

Thomas Zangal for all his code, time and energy spent on SimpleRSS

## (6) The fine print

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