

## Linux Tools for Weblogs and RSS

# Diary or Newsticker?

Weblogs are springing up like mushrooms all over the Internet, and more and more websites are starting to offer RSS feeds. This sudden interest is reason enough for us to look at a few Linux-based tools that simplify how you work with both.

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The WWW may just be one Internet service among many, but it is definitely the one that demonstrates the greatest innovation potential. It uses Web chats and streaming on the one hand to extend traditional text and image-based information sources. On the other hand, recent developments clearly show that the latter has more to offer than it would appear at first glance.

The number of weblogs (more commonly known as blogs), Web-based diaries (for private reasons or as business tools to keep the members of a team updated) has rocketed. Along with RSS newsfeeds, which allow webmasters to host dynamic content from other sources on their own sites, or Intranets.

Blogs are an inexhaustible source of tools that can facilitate the work of virtual or real teams, allowing them to distribute information quickly and without red tape, provoke discussions, and update obsolete content, without fighting their way through a jungle of static HTML files. In other words, blogs are a simple way to put content on Web pages.

## Long Live Buzzwords!

At first glance, these online journals may seem banal, but the underlying technolo-

gies are universally applicable. The most important buzzwords in this context are RSS ("Rich Site Syndication"), and XML RPC (XML-based "Remote Procedure Calls"). RSS allows data to be exchanged between websites. XML RPC provides an interface that allows access to multiple weblogs.

This may sound fairly abstract, but a simple example will help. If you embed a so-called RSS feed from a third-party website within your own website, your own site will display the current table of

contents for the third-party site. Many blogs make it really easy to serve up and integrate RSS files. For example, all major weblog systems either use the blogger API or the MetaWeblog API, and this means that you can update your own blog with the right tools.

Of course, you will need your own weblog first. Free services such as <http://www.blogger.com> or <http://www.expressblogs.com/>, which are partly funded by advertizing, provide a good opportunity to get to know the subject. Experts will

### Listing 1: Sample RSS file

```
01 <?xml version="1.0" encoding="ISO-8859-1"?>
02 <rss version="0.92">
03 <channel>
04 <title>stacktrace</title>
05 <link>http://blog.borho.net/</link>
06 <description>just a weblog</description>
07 <language>enu</language>
08 <lastBuildDate>Tue, 30 Dec 2003 23:55:11 GMT</lastBuildDate>
09 <webMaster>martin@borho.net</webMaster>
10 <item>
11 <link>http://blog.borho.net/index.php?item=27</link>
12 <title>Apache Log in Realtime</title>
13 <description>ApacheTop is a neat tool for displaying the Apache access_log in realtime. Excellent, I like it!
14 <description>
15 [via Syndic8Blog]</description>
16 </item>
17 </channel>
18 </rss>
```

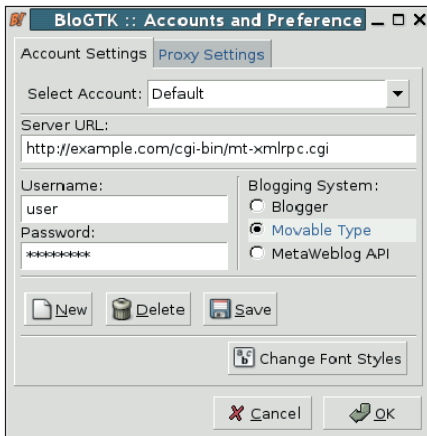


Figure 1: BloGTK prompts for a few settings.

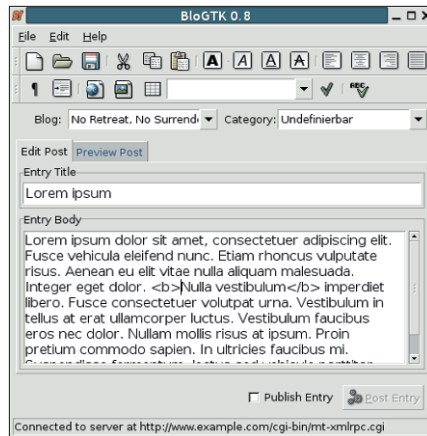


Figure 2: Creating an article with BloGTK.

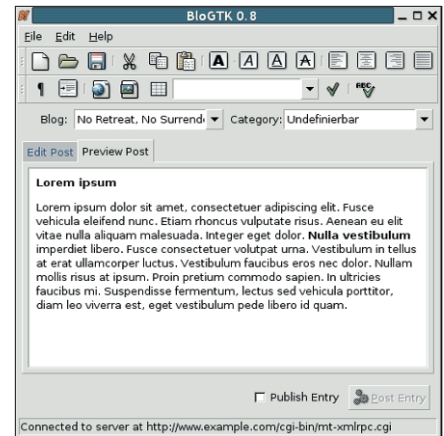


Figure 3: The entry will look like this on the Web.

instead opt for an installation on their own web servers. However, this does assume some familiarity with Linux servers and weblog system configuration. *MovableType* [1], *Nucleus* [2], and *Sunlog* [3] are all fairly widespread. All of these tools use either the MetaWeblog or Blogger API.

The Blogger API is the mother of all blog interfaces and was developed by the US bloghost *Blogger.com*, which helped make blogging popular in the USA. However, Blogger does not provide a great deal of functionality, a failing that *Dave Winer* originally aimed to remove with his MetaWeblog API. This interface can do more, but is not widely supported. Both APIs support the adding of new entries to a blog, as well as editing and deleting. The MetaWeblog API supports easy file uploads, to add images.

Some systems support group blogs and thus allow multiple users to contribute to a weblog. Collaborative blogs of this type typically focus on a specific topic (such as a common project), and – in contrast to other popular online journals – also have the advantage of allowing many people to publish their opinions under a single roof.

No matter whether you are dealing with a group or traditional blog, RSS can

help to collate articles from multiple blogs on a single page. This kind of content aggregation is easy to implement with today’s blog systems, and will easily fill the sidebar of a website with appropriate information from external sources.

### Creating a Newsticker

RSS – an XML-based standard – is available in a number of variants. The most common versions are 0.92 and 2.0, and most tools fortunately support both.

Although the RSS file in Listing 1 may seem cryptic at first glance, a closer look soon reveals what it is all about. The first few lines are occupied by the blog itself: the title (*stacktrace*), the URL (*http://blog.borho.net/*), the description (*just a weblog*), the language (*enu* for English) and of course a contact address (*martin@borho.net*). The lines that follow *<item>* contain the individual items, with a link to an article, a title, and a description in each case (the description can also be an abstract. RSS files like this example are known as RSS feeds, as you can “feed” them to other web pages.

### Blog Tools

Of you can use your web browser to blog, and in fact this is the typical approach. In certain cases it makes more

sense to use bespoke tools – to save a published article on a local machine first, or to compose an entry offline before placing it in the blog.

*BloGTK* [4] is one of only a few weblog clients for Linux. It requires both a **Python** installation on your system and the PyGTK library with Python Glade2 (an independent package with some distributions) to provide graphics support. Red Hat 9.0 users can simply install the *BloGTK* RPM. This also applies to Suse 9.0, although we were unable to deinstall the package later. The important thing to note with Suse is that you need to install *python-numeric* and *python-gnome* along with *python-gtk*.

If you prefer to download the latest *tar-bzip2* compressed archive rather than use the RPM package, you might experience some difficulty when you attempt to unpack the archive. Missing permissions for some of the files in the archive leave you no alternative on some systems but to assume *root* privileges before entering *tar -xjvf blogtk-0.8-5.tar.bz2*. You can then enter *chmod -R a+r BloGTK-0.8-5* to set the missing read permissions. Assuming that the *Makefile* in the new directory is readable, you can then call *make* (in the *BloGTK-0.8-5* directory). This will let you launch the tool by typing *BloGTK &* at the prompt.

### GLOSSARY

**API:** “Application Programmers’ Interface” – documented interfaces that allow programs to access the functionality of external libraries, services, or other programs.

**Python:** One of the most popular scripting languages besides the shell and Perl. Script programs do not need to be compiled. Instead, they are executed directly by an interpreter which parses the source code.

### Table 1: A small selection of interesting blogs

<a href="http://www.antipope.org/charlie/bloxom.cgi">http://www.antipope.org/charlie/bloxom.cgi</a>	Charlie Stross’ weblog. This is how you should do a weblog.
<a href="http://live.linuxchix.org">http://live.linuxchix.org</a>	A Linux community for women.
<a href="http://planet.gnome.org">http://planet.gnome.org</a>	Gnome twenty four hours a day.
<a href="http://blogs.ittoolbox.com/linux/">http://blogs.ittoolbox.com/linux/</a>	ACTO’s UNIX/Linux Blog
<a href="http://www.justenoughlinux.com/">http://www.justenoughlinux.com/</a>	The ironic subtitle of this blog is: “Learning just enough Linux to be dangerous”.
<a href="http://www.kdedevelopers.org/blog/">http://www.kdedevelopers.org/blog/</a>	The KDE developer community blog.

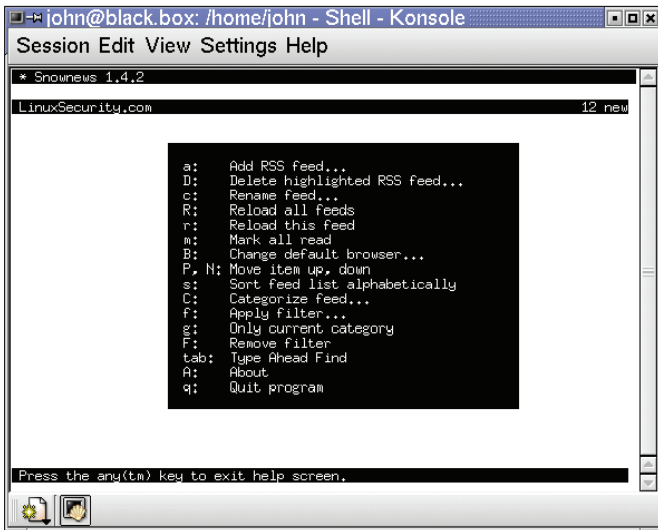


Figure 4: Snownews' help menu provides an overview of its features.

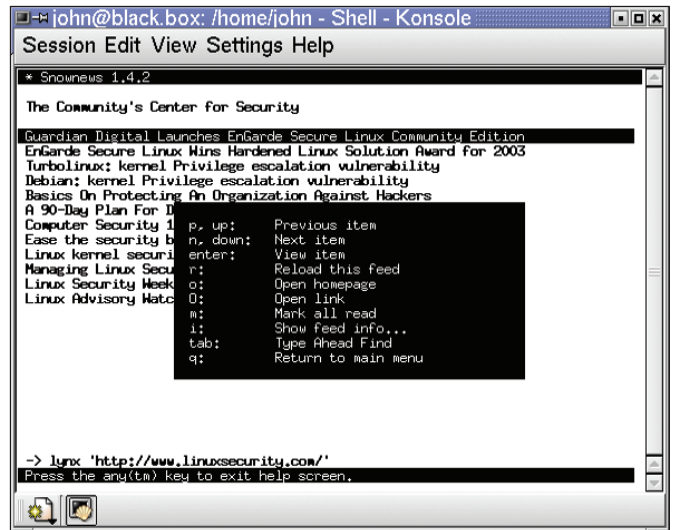


Figure 6: The [H] key provides help in the article view.

Note that you do not need to use *make*. Instead, simply enter the following command in *BloGTK-0.8-5*

```
./src/BloGTK.py &
```

If you installed the *blogtk-0.8.noarch.rpm* archive on Suse 9.0 (not recommended, as previously mentioned), this command is */usr/lib/blogtk/BloGTK.py &*.

When first launched, BloGTK displays the configuration menu (see Figure 1), which you can later access by selecting *Edit / Accounts and Settings ....* There are not a lot of required settings, but you should at least know the URL of your blog and your username/password combination. After giving BloGTK your data, you can then access the weblog. We created a posting (see Figure 2), which is

shown in the *Preview Post* tab (see Figure 3). Selecting *Publish Entry* finally sends the newly created posting to the blog server.

When composing entries, the same rules apply as to any other online publication. A descriptive heading is useful, and occasional paragraphs will improve readability. Quotes should be tagged as such (and linked to the original, if at all possible). Also, one should avoid playing with fonts and font sizes to keep the publication readable.

It is quite simple to post articles with BloGTK, but you will need a web browser to modify the weblog configuration itself. The Python-based GNOME applet, *Gnome Blog* [5] provides similar functionality, although it is tricky to install. In our lab, version 0.7 refused to run on Suse 9.0.

If you use Mozilla, you should take a look at *MozBlog* [6]. This plug-in embeds a blog tool in your browser, allowing you to select *Publish* in the dropdown menu. Unfortunately, the tool could not connect to our blog software, which means that we cannot say much more about it in this article.

### Feeds: An Overview

So called feed readers are another useful group of programs (not only for bloggers). They provide an overview of RSS feeds, and highlight new articles. This makes it just as easy to read newstickers as it is to browse newsgroups. Feed readers display only the content of the RSS files, but as they are linked to your standard browser, you can access any articles that catch your eye directly from within the reader.

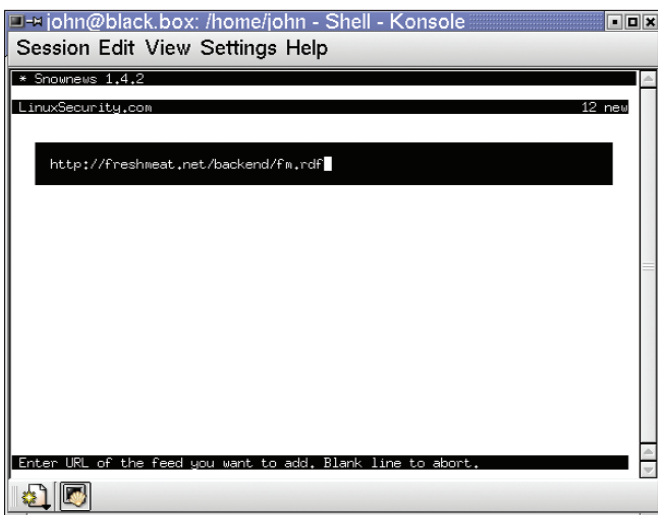


Figure 5: Adding a feed.

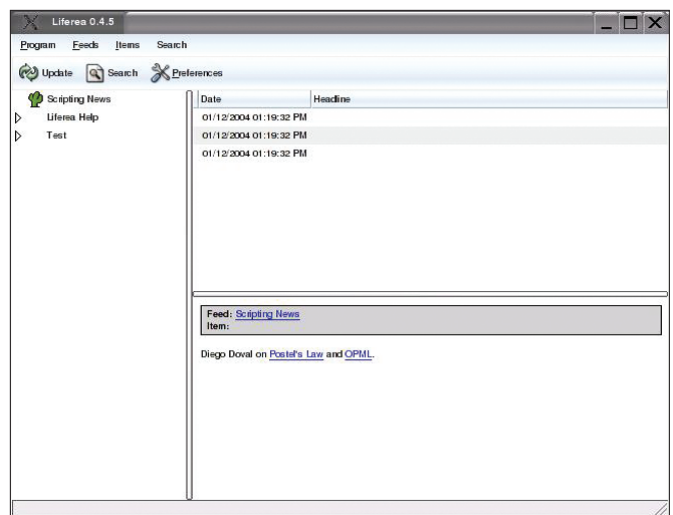


Figure 7: Liferea shows the feed list and the articles at the same time.



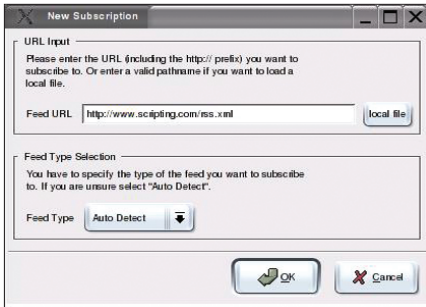


Figure 8: Monitoring a new feed.

Many bloggers use a so-called *blogroll* to list blogs with frequent read access and display any updates to them. *Blogrolling.com* offers this service. You can export the blogroll and parse it with your feed reader to provide a convenient overview of your favorite blogs.

### Snownews is Good News

The first keyboard-controllable command line feed reader, *Snownews* [7], may seem unusual at first glance. But as RSS feeds mainly comprise text, you can typically do without a graphical interface. Snownews' biggest advantage is that it allows you to access your favorite tickers and blogs anywhere.

After downloading the pre-compiled *snownews-1.4.2.i586.tar.bz2* archive from the project homepage, you can simply enter `tar -xjvf` to unpack it, and then launch Snownews:

```
cd snownews-1.4.2/
./snownews
```

To compile the source code archive (*snownews-1.4.2.tar.gz*) yourself, you will first need to unpack the archive, and then enter `make` to compile, and `make install` (as *root*) to install the program. This requires *ncurses* and the *libxml2* libraries, plus `dev(el)` packages.

After launching Snownews, by typing *snownews* at the prompt, you can press the [H] key to display an overview of the tool's options (see Figure 4). Press [A] to

add your first RSS feed (see Figure 5) – for example `http://slashdot.org/slashdot.rdf` for news from SlashDot, (for more tips, see [8]). The important thing to note is that you need to supply the full URL of the feeds. Snownews will not automatically add the `http://` protocol prefix.

You can then use the arrow keys to select a feed from the list, and hit the [Enter] key to enjoy the current entries (see Figure 6). [Q] will go back one level. If you are at the feed list level, pressing [Q] will quit the program. After a sharp learning curve, you will find that Snownews allows you to read articles more quickly than a GUI-based web browser would.

### Where's the GUI?

If you prefer a GUI-based approach, you can try *Liferea* [9] (see Figure 7), a clone of the popular Windows program, *Feedreader* (`http://www.feedreader.com/`). In contrast to Snownews, Liferea provides an attractive graphical interface, requiring both *libxml2* and the GNOME2 libraries with `dev(el)` files to do so.

Listing 2 shows the steps for compiling and installing. The line that sets the `PKG_CONFIG_PATH` variable was necessary for Suse 9.0, as the `configure` script failed to find the `libxml-2.0.pc` file in the `/usr/lib/pkgconfig` directory without a little help. You can omit this step on other systems.

After typing `liferea &` to launch the program, you can select *Feeds / Feed / New Subscription* (see Figure 8) to import new feeds. Although the program crashed each time we tried this under Suse 9.0, after re-launching, we were surprised to find that the selected feed had actually been added to the left-hand column. Selecting a list entry displays abstracts of the entries in the feed in the right-hand panel. You can then click on one of them to display the detailed view in the lower right panel (see Figure 7).

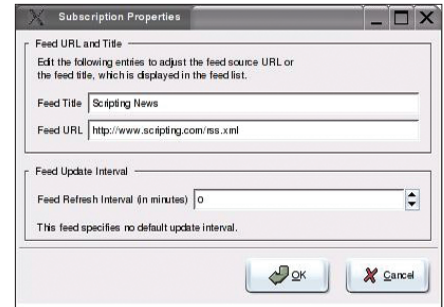


Figure 9: If the title provided by the RSS feed is inappropriate, you can simply rename it.

In contrast to Snownews, Liferea not only handles RSS feeds, but also OPML (“Outline Processor Markup Language”) formatted feeds. This allows the program to access exported blogrolls.

*Program / Settings* allows you to modify Liferea to your own liking. Also, you can select *Feeds / Folder / New Folder* to create folders, and then drag & drop RSS feeds to these folders to your heart's content. You can click the *Update* button at any time to pull the current feeds from the servers. A number in brackets to the right of the feed name indicates that the feed contains new articles. If the name of an entry in the feed list does not tell you enough, you can right-click the entry, and select *Properties* in the dropdown to learn more. The dialog box that appears (see Figure 9) allows you to correct the misleading title. ■

**INFO**

[1] MovableType: <a href="http://www.movabletype.org/">http://www.movabletype.org/</a>
[2] Nucleus: <a href="http://www.nucleuscms.org/">http://www.nucleuscms.org/</a>
[3] Sunlog: <a href="http://www.sunlog.ch/">http://www.sunlog.ch/</a>
[4] BloGTK: <a href="http://blogtk.sourceforge.net/">http://blogtk.sourceforge.net/</a>
[5] Gnome Blog: <a href="http://www.gnome.org/~seth/gnome-blog/">http://www.gnome.org/~seth/gnome-blog/</a>
[6] MozBlog: <a href="http://mozblog.mozdev.org/">http://mozblog.mozdev.org/</a>
[7] Snownews: <a href="http://home.kcore.de/~kiza/software/snownews/">http://home.kcore.de/~kiza/software/snownews/</a>
[8] RSS search: <a href="http://feedster.com/">http://feedster.com/</a>
[9] Liferea: <a href="http://liferea.sourceforge.net/">http://liferea.sourceforge.net/</a>

**Listing 2: Liferea installation from source code**

```
tar -xvzf liferea-0.4.5.tar.gz
cd liferea-0.4.5/
export PKG_CONFIG_PATH=$PKG_CONFIG_PATH:/usr/lib/pkgconfig
./configure
make
su -c "make install"
```

THE AUTHOR

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