

SYSTEM ADMINISTRATION

Webmin 1.0

Marco Fioretti reports on a configuration system with something for everybody, from clusters wizards to home surfers.

Remote admin solution
rivaling Plesk Server
Administrator, NetOp Remote
and Volution at the lower end.

■ **DEVELOPER** Jamie Cameron
■ **WEB** www.webmin.com
■ **PRICE** Free

Webmin is a Unix administration tool suitable both for professional system administrators of company servers and for SOHO desktops. It can be accessed through any web browser, locally or remotely, and provides one common front-end to many configuration and maintenance tasks.

Webmin can be easily extended with custom modules, and offers the same interface on almost every distribution of Unix, BSD and Linux. This means that the administrators of heterogeneous networks can, at least in certain cases, configure different platforms always in the same way, without remembering ten different locations of the same configuration file, or ten different names for the same parameter.

Webmin is written in Perl: internally, it consists of a simple web server calling CGI scripts which display and allow to modify in a more readable way the content of the standard config files. Once it is installed, to manage the local computer simply point the browser to <http://localhost/10000> and log in as root. When this is too risky (i.e.,

Mastering Webmin

The ultimate reference

Webmin users now have a comprehensive resource available, including many tutorials: it is *The Book of Webmin ...or How I Learned to Stop Worrying and Love Unix*, by Joe Cooper, published by No Starch Press: *The Book of Webmin*, December 2002, 304pp. ISBN 1-886411-92-1 www.nostarchpress.com



Figure 1: The system window of *Webmin 1.0*.

across the Internet) the box could be set up to accept *Webmin* connections only if local, and not start it at boot. When needed, both *Webmin* and a web browser could be started on the remote machine, with the output displayed on your PC, through SSH, and without worrying about bandwidth.

As already mentioned, the HTML code generated by *Webmin* is viewable with any browser, including the console ones: the only exception are those modules, like the Telnet client, which require Java or JavaScript.

Webmin can make almost every aspect of system administration easier. It knows about disks, filesystems, users, boot and *cron* processes, as shown in **fig 1**. Networking, Hardware and Clusters have dedicated windows too. Custom commands can be run, and their output logged from *Webmin*. All the standard intranet and Internet services, from mailing lists to MySQL, including CVS, Apache, Jabber, SSH and many more,

can be configured from the "Servers" window. It is not by chance that a *Webmin* control panel is offered by many hosting providers as a free, Open Source alternative to more expensive solutions like *Cpanel* and *Plesk*.

Try this at home!

So far, it may seem that *Webmin* is only useful to network professionals, but this is not the case. First of all, several of the tasks I mentioned should really be familiar also to responsible single users. In the second place, *Webmin* can help a lot also in the everyday use of a stand alone desktop. Personally, I restored my MySQL databases from text dumps in a few seconds, and was able to define and schedule very quickly a regular hard disk backup procedure. Such procedures can go from the simple generation of a tar file from a predefined file list, to mirroring whole directory trees on a CD, with the click

of one button. The "CD Burner" module in the Hardware window supports this and several other use cases, including CD to CD copies.

I also like a lot the Perl and *GnuPG* modules. The former lists installed Perl modules, and can fetch and install new ones from CPAN or local disk. The latter is now helping me to create and manage all the private and public keys my PC must know about. Users with mixed home LANs will also appreciate the interface to *Samba* file sharing. Email administration is another fundamental need shared, obviously at different levels, by both home and network sysadmins. Apart from mailing list setup, *Webmin* makes it possible, out of the box, to manage *fetchmail*, *procmail*, and three different SMTP servers: *sendmail*, *qmail*, and *postfix*.

Test ride summary

To write this review, I installed *Webmin 1.030* on a K6-2 350MHz, with 128MB of RAM, running Red Hat 8.0, using the RPM linked from the home page. The install script recognised the distribution and, in general, worked perfectly: since all *Webmin* needs are Perl and a shell, I have no reason to expect a different behaviour from the tar file, or in any other distribution. In a few seconds I was testing the tool with *Galeon* and *w3m*: both browsers had no problem in rendering *Webmin* pages, and the tool was fast enough, even on that relatively slow machine.

In my opinion, there is only one small glitch in the install procedure of *Webmin* (and of many other applications, from *Emacs* to *gkrellm*): the package contains code for all the supported platforms and languages. Since it does recognise the operating system, and could do the same with the system language, why doesn't it put on disk only the files needed by that combination? This may help whenever old machines with very small disks are used as thin servers.

The documentation on the website is almost always exhaustive, but there is no link in the *Webmin* start page. The single modules, however, do have links to documentation, including hyperlinked man pages, and sometimes also entry forms for Google searches.

New In Webmin 1.0?

Version 1.0 of *Webmin* was released on September 12th, 2002. It includes a lot of bug and security fixes, and

Usermin

Reduced system administration for users

Usermin can be defined as a reduced version of *Webmin*: it offers to all users of a Unix system services like webmail, SSH setup, and file management. It has the same graphical interface and architecture of *Webmin*, and is available from the *Webmin* site under the BSD license. Not surprisingly, it can (and should) be entirely configured from *Webmin*.

several performance improvements. Predictably, it also includes support for new distributions, for example Gentoo, and for the latest releases of other ones, like Red Hat 8.0 and SuSE 8.1. As far as features are concerned, the main new ones are:

- Linux *iptables* support
- Voicemail Server
- Logfile Analysis
- Improved SSL key management
- Some additions to the *Webmin* API
- File manager improvements

The *iptables* module (see **fig 2**) was a much needed addition. While sufficiently flexible and functional, it shares with other *iptables* front-ends the limit described some time ago in *A Comparison of iptables Automation Tools* (<http://online.securityfocus.com/infocus/1410>):

"The idea ... still has not found its implementation, particularly one [for] people who do not understand the technical details of packet filtering ... its

Linux implementation [and] some of the *iptables* internals." People who do have this background, of course, will be able to make custom firewalls quicker. This is obviously not a limit in *Webmin*: packet filtering is inherently not trivial, and the responsibility of delivering a safe starting point, *i.e.* an initial installation that doesn't let *anybody* in, belongs to the distro packagers. Not to whatever takes charge later.

Another major novelty is the Voicemail Server (see **fig 3**), which provides answering machine capabilities to the system by configuring and starting *vgetty*.

Received messages, as shown in the figure, are listed, played back or deleted in a separate window (note that, at least by default, only root can do that). Other options that can be set up in *Webmin* include the automatic forwarding of all recorded calls as WAV email attachments (which practically solves the root access problem), or custom commands to run on each incoming message. Even the greeting message can be unique, or randomly chosen at each call from a given list.

Don't forget that *vgetty*, once started in any way, will cling to the chosen modem and, until explicitly stopped, intercept all the calls. Including those made from the PC to connect to the Internet, as I found, with some embarrassment, in the frenzy of testing. Theoretically, the Voicemail server could be improved to check and issue a warning if the serial

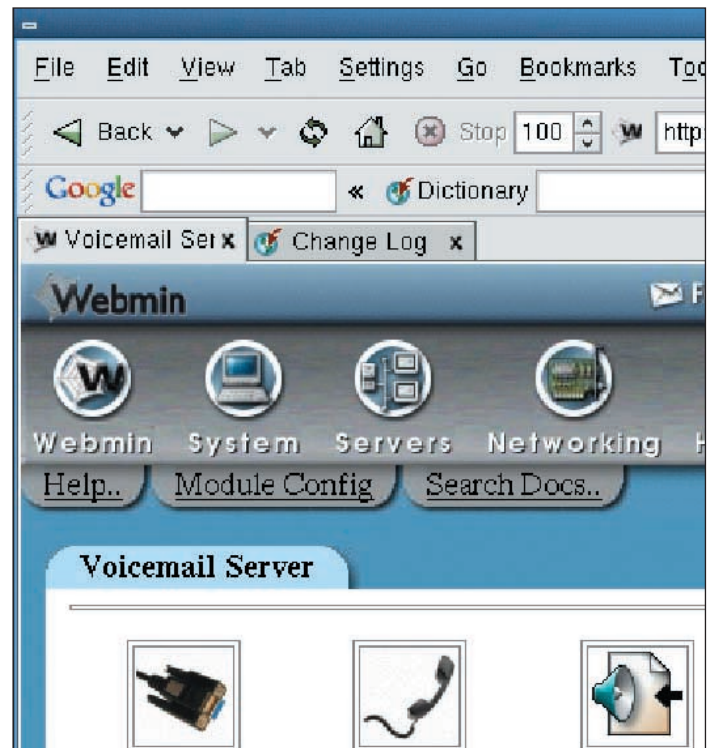


Figure 3: The *Webmin* answering machine.

port is already linked to */dev/modem* or used in *pppd* scripts. However, I have no idea of how complex it would be to make this function really cross platform, and not even if it would be really worth the effort.

Back to Internet services now. From this point of view, as listed above, the main new entries are *Webalizer* and *SSL*. *Webalizer* generates graphic reports from HTTP, FTP and proxy access logs. Its *Webmin* module also supports *Squid* 2.5 directives, and *Squid* delay pools. Several filters can be defined to show or hide daily or hourly usage, as well as sort accesses by Client, Referer, Countries or other criteria.

SSL support in this release has improved: first of all, *Webmin* does not use a built-in key anymore, but generates a unique one at install time. In the second place, some bugs and weaknesses in the key generation mechanism have been fixed in Release 1.03. Please check the mailing list archives and the documentation of the latest version for more updated information.

Since *Webmin* modules are basically CGI programs, custom ones can be easily written: the website has a whole section listing all those contributed by *Webmin* users. So far, most modules have been written in Perl, but nothing prevents the use of other languages. Version 1.0 includes

some additions to the existing API which increase this interoperability.

Last but not least, the File Manager, which resembles the GNOME or Windows ones and requires Java support: the module in *Webmin* 1.0 is finally capable of sorting the file list of any column, by clicking on the heading.

Conclusion

Remote administration over the Internet must be allowed only when the box has been carefully configured and is constantly updated and monitored: desktop PCs connected to the 'Net should simply not allow *Webmin* access from the outside. That said, there is no doubt that *Webmin* does a good job, on any box you want to use it, and in a less intrusive way than *Linuxconf*. **LXF**

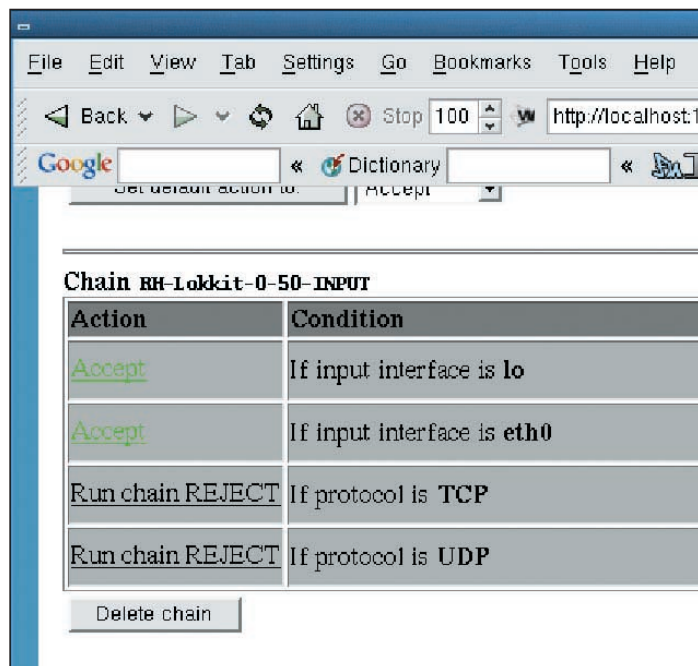


Figure 2: Linux Firewall configuration.

VERDICT

Ease of use	9/10
Features	8/10
Performance	8/10
Value for money	10/10

Webmin is a nice and easily customisable way to give professional care to any Unix box. Try it!

LINUX FORMAT RATING
9/10