

# Appendix A

## Resources

### *Links*

This list includes most of the URLs referenced in this book. For more online resources and further reading, see our website at <http://bwmo.net/>

#### **Anti-virus & anti-spyware tools**

- AdAware, <http://www.lavasoftusa.com/software/adaware/>
- Clam Antivirus, <http://www.clamav.net/>
- Spychecker, <http://www.spychecker.com/>
- xp-antispy, <http://www.xp-antispy.de/>

#### **Benchmarking tools**

- Bing, <http://www.freenix.fr/freenix/logiciels/bing.html>
- DSL Reports Speed Test, <http://www.dslreports.com/stest>
- The Global Broadband Speed Test, <http://speedtest.net/>
- iperf, <http://dast.nlanr.net/Projects/Iperf/>
- ttcp, <http://ftp.arl.mil/ftp/pub/ttcp/>

## Content filters

- AdZapper, <http://adzapper.sourceforge.net/>
- DansGuard, <http://dansguardian.org/>
- Squidguard, <http://www.squidguard.org/>

## DNS & email

- Amavisd-new, <http://www.ijs.si/software/amavisd/>
- BaSoMail, <http://www.baso.no/>
- BIND, <http://www.isc.org/sw/bind/>
- dnsmasq, <http://thekelleys.org.uk/dnsmasq/>
- DJBDNS, <http://cr.yp.to/djbdns.html>
- Exim, <http://www.exim.org/>
- Free backup software, <http://free-backup.info/>
- Life with qmail, <http://www.lifewithqmail.org/>
- Macallan Mail Server, <http://macallan.club.fr/>
- MailEnable, <http://www.mailenable.com/>
- Pegasus Mail, <http://www.pmail.com/>
- Postfix, <http://www.postfix.org/>
- qmail, <http://www.qmail.org/>
- Sendmail, <http://www.sendmail.org/>

## File exchange tools

- DropLoad, <http://www.dropload.com/>
- FLUFF, <http://www.bristol.ac.uk/fluff/>

## Firewalls

- IPCop, <http://www.ipcop.org/>
- L7-filter, <http://l7-filter.sourceforge.net/>
- Linux iptables HOWTO, <http://www.linuxguruz.com/iptables/howto/>
- m0n0wall, <http://m0n0.ch/wall/>
- Netfilter, <http://www.netfilter.org/>

- Network Address Translation HOWTO :  
*<http://www.netfilter.org/documentation/HOWTO/NAT-HOWTO.html>*
- Packet Filtering HOWTO:  
*<http://www.netfilter.org/documentation/HOWTO/packet-filtering-HOWTO-7.html>*
- PF: The OpenBSD Packet Filter, *<http://www.openbsd.org/faq/pf/>*
- Smoothwall, *<http://www.smoothwall.org/>*
- Shorewall, *<http://shorewall.net/>*
- ZoneAlarm, *<http://www.zonelabs.com/>*

## Flow monitors

- EtherApe, *<http://etherape.sourceforge.net/>*
- Flowc, *<http://netacad.kiev.ua/flowc/>*
- iptraf, *<http://iptraf.seul.org/>*
- MRTG, *<http://oss.oetiker.ch/mrtg/>*
- NeTraMet, *<http://www.auckland.ac.nz/net/NeTraMet/>*
- RRDtool, *<http://oss.oetiker.ch/rrdtool/>*

## Internet authorities

- APNIC, *<http://www.apnic.net/>*
- AfriNIC, *<http://www.afrinic.net/>*
- ARIN, *<http://www.arin.net/>*
- IANA, *<http://www.iana.org/>*
- LACNIC, *<http://lacnic.net/>*
- RIPE, *<http://www.ripe.net/>*

## Log parsers

- adcfw-log, *<http://adcfw-log.sourceforge.net/>*
- ADMLogger, *<http://aaron.marasco.com/linux.html>*
- Analog, *<http://www.analog.cx/>*
- AWStats, *<http://awstats.sourceforge.net/>*
- Calamaris, *<http://cord.de/tools/squid/calamaris/>*
- IPTables log analyzer, *<http://www.gege.org/iptables/>*
- isoqlog, *<http://www.enderunix.org/isoqlog/>*

- Logwatch, <http://www.logwatch.org/>
- Sawmill, <http://www.sawmill.net/>
- Webalizer, <http://www.mrunix.net/webalizer/>

## Mirroring tools

- Curl, <http://curl.haxx.se/>
- HTTrack, <http://www.httrack.com/>
- rsync, <http://rsync.samba.org/>
- wget, <http://www.gnu.org/software/wget/>

## Policy

- Carnegie Mellon Network Bandwidth Usage Guideline: Wired network  
[http://www.cmu.edu/computing/documentation/policies\\_bandwidth/bandwidth.html](http://www.cmu.edu/computing/documentation/policies_bandwidth/bandwidth.html)
- Carnegie Mellon Network Bandwidth Usage Guideline: Wireless network  
[http://www.cmu.edu/computing/documentation/policies\\_wirelessbw/wireless\\_bandwidth.html](http://www.cmu.edu/computing/documentation/policies_wirelessbw/wireless_bandwidth.html)
- Educause collation on Acceptable/Responsible Use Policies,  
[http://www.educause.edu/content.asp?page\\_id=645&PARENT\\_ID=110&bhcp=1](http://www.educause.edu/content.asp?page_id=645&PARENT_ID=110&bhcp=1)
- Examples of Internet Acceptable Use Policies,  
<http://ndsl.lib.state.nd.us/AcceptableUseExp.html>
- Illegal software and film downloads exhaust university computer networks,  
<http://www.hs.fi/english/article/1101978960379>
- INASP Policy Development Workshop,  
<http://www.inasp.info/training/bandwidth/bmo-pdw/>
- JANET Acceptable Use Policy (AUP),  
<http://www.ja.net/services/publications/service-documentation/supportmanual/policies.html>
- Policy and rules on Internet and Email use, from The University of Cape Town,  
<http://www.icts.uct.ac.za/modules.php?name=News&file=print&sid=633>
- The SANS institute policy template page:  
<http://www.sans.org/resources/policies/#template>
- Tech Republic: A framework for e-mail and Internet usage policies for your enterprise, <http://articles.techrepublic.com.com/5102-6299-1033914.html>
- University of KwaZulu-Natal's ELECTRONIC COMMUNICATIONS POLICY,  
<http://www.nu.ac.za/itd/policies/ecomcommunications.pdf>

## Protocol analysers

- tcpdump, <http://www.tcpdump.org/>
- SoftPerfect Network Scanner, <http://www.softperfect.com/>
- WinDump, <http://www.winpcap.org/windump/>
- Wireshark, <http://www.wireshark.org/>

## Protocol tuning

- Lawrence Berkeley National Laboratory's TCP Tuning Guide, <http://dsd.lbl.gov/TCP-tuning/background.html>
- Pittsburgh Supercomputing Center's guide to Enabling High Performance Data Transfers, [http://www.psc.edu/networking/perf\\_tune.html](http://www.psc.edu/networking/perf_tune.html)
- Swedish University Computer Network TCP tuning parameters guide, <http://proj.sunet.se/E2E/tcptune.html>
- TCP Tuning and Network Troubleshooting by Brian Tierney, [http://www.onlamp.com/pub/a/onlamp/2005/11/17/tcp\\_tuning.html](http://www.onlamp.com/pub/a/onlamp/2005/11/17/tcp_tuning.html)
- TXQueueLen Investigation into IP Performance, <http://www.hep.ucl.ac.uk/~ytl/tcpip/linux/txqueuelen/>

## Proxies & caches

- Automatic Proxy Configuration protocol, <http://wp.netscape.com/eng/mozilla/2.0/relnotes/demo/proxy-live.html>
- JANET DNS Cache Service, <http://www.ja.net/services/network-services/resolver/index.html>
- Microsoft ISA Server, <http://www.isaserver.org/>
- National Web Cache Service, [http://www.jisc.ac.uk/index.cfm?name=acn\\_caching](http://www.jisc.ac.uk/index.cfm?name=acn_caching)
- PEPsal, <http://sourceforge.net/projects/pepsal/>
- Squid, <http://squid-cache.org/>
- Squid cache wiki, <http://wiki.squid-cache.org/>
- Squid documentation, <http://www.visolve.com/squid/>
- Squid for Windows, <http://www.acmeconsulting.it/SquidNT/>
- Squid User's Guide, <http://www.deckle.co.za/squid-users-guide/>

## Realtime monitoring tools

- Nagios, <http://nagios.org/>
- Zabbix, <http://www.zabbix.org/>

## Security

- GotRoot, <http://gotroot.com/>
- JANET Security,  
<http://www.ja.net/services/publications/service-documentation/supportmanual/security.html>
- Linux security and admin software,  
[http://www.linux.org/apps/all/Networking/Security/\\_Admin.html](http://www.linux.org/apps/all/Networking/Security/_Admin.html)
- ModSecurity, <http://www.modsecurity.org/>
- ngrep, <http://ngrep.sourceforge.net/>
- nmap, <http://insecure.org/nmap/>
- Snort, <http://snort.org/>

## Spam fighting tools

- denysoft\_greylist, [http://www.openfusion.com.au/labs/dist/denysoft\\_greylist](http://www.openfusion.com.au/labs/dist/denysoft_greylist)
- DomainKeys, <http://antispam.yahoo.com/>
- DSPAM, <http://dspam.nuclearelephant.com/>
- exim-greylist, <http://johannes.sipsolutions.net/Projects/ex>
- Gld Greylists on Postfix, <http://www.gasmi.net/gld.html>
- gps - greylist policy service for Postfix, <http://mimo.gn.apc.org/gps/>
- Greylisting with Exim & MySQL,  
<http://theinternetco.net/projects/exim/greylist>
- Greylisting with Exim & Postgres, <http://raw.no/personal/blog/tech/Debian/>
- Mail relay testing tool, <http://www.abuse.net/relay.html>
- milter-greylist,  
<http://hcpnet.free.fr/milter-greylist/> <http://home.teleport.com/~nb6z/>
- Open Relay Database, <http://www.ordb.org/>
- policyd for Postfix, <http://policyd.sourceforge.net/>
- postgrey, <http://isg.ee.ethz.ch/tools/postgrey/>
- qgreylist, <http://www.jonatkins.com/page/software/>

- Smart Sendmail filters, <http://smfs.sourceforge.net/>
- SpamAssassin, <http://spamassassin.apache.org/>
- Spam Filtering for Mail Exchangers, <http://www.tldp.org/HOWTO/Spam-Filtering-for-MX/>
- SPF: Sender Policy Framework, <http://www.openspf.org/>
- SPF mail filter, <http://www.acme.com/software/spfmliter/>
- SPF support in Postfix, <http://www.linuxrulz.org/nkukard/postfix/>
- SQLgrey, <http://sqlgrey.sourceforge.net/>
- tumgreyspf, <http://www.tummy.com/Community/software/tumgreyspf/>

## Spot check tools

- MyTraceRoute, <http://www.bitwizard.nl/mtr/>
- ntop, <http://www.ntop.org/>

## Traffic shaping tools

- BWM Tools, <http://bwm-tools.pr.linuxrulz.org/>
- WonderShaper, <http://lartc.org/wondershaper/>
- The Linux Advanced Routing and Traffic Control HOWTO, <http://lartc.org/>

## Trending tools

- Argus, <http://www.qosient.com/argus/>
- Cacti, <http://www.cacti.net/>
- SmokePing, <http://oss.oetiker.ch/smokeping/>

## Very low bandwidth

- Das Packet Radio-Portal, <http://www.packetzone.de/>
- Introduction to Packet Radio, <http://www.choisser.com/packet/>
- loband, <http://www.loband.org/>
- TEK, <http://tek.sourceforge.net/>
- www4mail, <http://www.www4mail.org/>

## More information

- AidWorld, <http://www.aidworld.org/>

- Enhancing International World Wide Web Access in Mozambique Through the Use of Mirroring and Caching Proxies, <http://www.isoc.org/inet97/ans97/cloet.htm>
- FreeBSD Handbook, [http://www.freebsd.org/doc/en\\_US.ISO8859-1/books/handbook/](http://www.freebsd.org/doc/en_US.ISO8859-1/books/handbook/)
- Freely available ISO standards, <http://standards.iso.org/ittf/PubliclyAvailableStandards/>
- Guide to IP Layer Network Administration with Linux, <http://linux-ip.net/html/>
- How Computing Services Monitors and Enforces Network Bandwidth Usage [http://www.cmu.edu/computing/documentation/bandwidth\\_howenforced/index.html](http://www.cmu.edu/computing/documentation/bandwidth_howenforced/index.html)
- ICTP, <http://www.ictp.it/>
- ICTP Workshop on Optimization Technologies for Low-Bandwidth Networks, [http://cdsagenda5.ictp.it/full\\_display.php?smr=0&ida=a05228](http://cdsagenda5.ictp.it/full_display.php?smr=0&ida=a05228)
- INASP, <http://www.inasp.info/>
- INASP Network Traffic Monitoring and Analysis Workshop, <http://www.inasp.info/training/bandwidth/bmo-ntmw/>
- Internet2 Joint Techs presentation resource page: "Successful Bandwidth Management at Carnegie Mellon," <http://www.net.cmu.edu/pres/jt0803/>
- JANET Bandwidth Management Review, [http://www.ja.net/services/network-services/bmas/papers/review/BMAS\\_Bandwidth\\_Management\\_Review.htm](http://www.ja.net/services/network-services/bmas/papers/review/BMAS_Bandwidth_Management_Review.htm)
- Linux Advanced Routing and Traffic Control HOWTO, <http://lartc.org/>
- Linux networking wiki, <http://linux-net.osdl.org/>
- MTA comparison, [http://shearer.org/MTA\\_Comparison](http://shearer.org/MTA_Comparison)
- Optimising Internet Bandwidth in Developing Country Higher Education, <http://www.inasp.info/pubs/bandwidth/>
- Planet Malaysia blog on bandwidth management, <http://planetmy.com/blog/?p=148>
- The VSAT Buyer's Guide, IDRC, 2005 <http://ictinafrica.com/vsat/>
- Wessels, Duane. *Squid: The Definitive Guide*. O'Reilly Media (2004). <http://squidbook.org/>
- Wireless Networking in the Developing World, <http://wndw.net/>



## Wikipedia entries

Wikipedia has a wealth of information about Internet protocols. As with any wiki, information should always be verified by checking with other sources. These entries are an excellent starting place for learning more about how the Internet works.

- [http://en.wikipedia.org/wiki/Bandwidth\\_management](http://en.wikipedia.org/wiki/Bandwidth_management)
- [http://en.wikipedia.org/wiki/Colocation\\_centre](http://en.wikipedia.org/wiki/Colocation_centre)
- <http://en.wikipedia.org/wiki/Ethernet>
- [http://en.wikipedia.org/wiki/Internet\\_protocol\\_suite](http://en.wikipedia.org/wiki/Internet_protocol_suite)
- [http://en.wikipedia.org/wiki/Network\\_traffic\\_measurement](http://en.wikipedia.org/wiki/Network_traffic_measurement)
- [http://en.wikipedia.org/wiki/OSI\\_model](http://en.wikipedia.org/wiki/OSI_model)
- [http://en.wikipedia.org/wiki/Synchronous\\_optical\\_networking](http://en.wikipedia.org/wiki/Synchronous_optical_networking)
- <http://en.wikipedia.org/wiki/TCP/IP>
- [http://en.wikipedia.org/wiki/Wide\\_area\\_network](http://en.wikipedia.org/wiki/Wide_area_network)

## Relevant RFCs

While some RFCs are approved by the IETF and become official Internet standards, others are simply proposals or technical background on network engineering challenges. Many of these become de facto standards even without official approval.

The RFCs listed here are mentioned in this book, and are a good starting point for learning more about the various Internet protocols. You can view RFCs online at <http://rfc.net/>.

- RFC1144: *Compressing TCP/IP Headers for Low-Speed Serial Links*
- RFC1323: *TCP Extensions for High Performance*
- RFC1518: *An Architecture for IP Address Allocation with CIDR*
- RFC1918: *Address Allocation for Private Internets*
- RFC1928: *SOCKS Protocol Version 5*
- RFC1977: *PPP BSD Compression Protocol*
- RFC1979: *PPP Deflate Protocol*
- RFC2186: *Internet Cache Protocol (ICP), version 2*

- RFC2821: *Simple Mail Transfer Protocol*
- RFC3135: *Performance Enhancing Proxies Intended to Mitigate Link-Related Degradations*