ntp is the Network Time Protocol suite.

Installing ntpd

First, make sure ntp/ntpdate are installed. The package is by default installed on Mandrake Linux and Redhat.If you do not have ntp installed you will find packages on your distributions install-cd(s).

On Gentoo Linux, install by typing--- emerge ntp

Configuration files for running ntp as daemon

ntpd manpage

Client Setup

Now, edit the following files:

--- /etc/ntp.conf

The only important thing is that the line contains server some.thing.org.

Example:

---server ntp.uio.nodriftfile /etc/ntp/driftbroadcastdelay 0.008authenticate no---

Make sure you add ntpd as a boot (init) service.

Gentoo Linux: `rc-update add ntpd default`, `/etc/init.d/ntpd start`

(LAN) Server setup

To run a ntp server to sync the clocks on your lan, edit

--- /etc/ntp.conf

Example:

---server fartein.ifi.uio.no preferserver ntp.uio.noserver ntp.eunet.no

fudge 10.0.0.50 stratum 10

driftfile /etc/ntp/driftbroadcastdelay 0.008

authenticate no---

fudge tells the server to pass on the correct time to the given network interface. stratum is the level of time servers, 10 being the lowest. You only need a higher number if you will be acting as a public internet timeserver with fast bandwidth.

It makes sence to add a few servers. Select the best as prefer

Make sure you add ntpd as a boot (init) service.

Gentoo Linux: `rc-update add ntpd default` , `/etc/init.d/ntpd start`

Firewalls

ntp uses port 123, both UDP and TCP. Make sure this port is not blocked by a firewall. If you are using iptables, you can open this port with

--- \$IPTABLES -A INPUT -j ACCEPT -p tcp --dport 123

Known valid and working ntp servers

server adressLocationntp.ipv6.viagenie.qc.caIPV6 ONLYclock.via.netserver fartein.ifi.uio.noNorwayserver ntp.uio.noNorwayserver

Server List

* http://www.eecis.udel.edu/~mills/ntp/servers.html

Setting the clock at boot or using cron

I good idea is _not_ to run the ntpd daemon on clients as it uses about 1,7 MB memory, unless you are a server or have a box with a broken clock. Many boxes clocks do drift along on their own, a check every hour or day is generally a good idea.

rdate

rdate is a simple 3 kB tool for syncing the system clock to a server. It's options are `-p` to print the date on the given server, `-s` to set the system clock according to it (must be done as root) and `-u` to use the UDP protocol. Example:

`rdate -p sntp.lth.se` rdate manual page

clockspeed

clockspeed is a very small tool for setting the clock and is, for clients, a much better alternative than installing the 4+ MB ntp package.

* clockspeed-0.62.tar.gz 28K

cron & ntp

You can simply add ntpdate as a cron job every now and then:

--- echo 'ntpdate -b server.dot.com' > /etc/cron.hourly/time.cron--- chmod a+x /etc/cron.hourly/time.cron

Most distributions come with a cron. dcron and Vixie cron are nice.

Gentoo & ntp-client

You can set the clock using ntp at boot (without starting the daemon) on Gentoo Linux by editing:

--- /etc/conf.d/ntp-client

The file should contain:

---NTPDATE_CMD="ntpdate"NTPDATE_OPTS="-b your.server.here"---

Then add ntp-client to the services started at boot:

--- rc-update add ntp-client default

You can check what services are started at boot with `rc-status`.

Page source:

* t2t:ntp.t2t.tar.bz2

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image:system status display / /status/output.jpg (null)
-->
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