

GNU PGP

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1. Download the source and install it with `./configure`, make and make install
Generate a key: `gpg --gen-key`
Export the key for publishing: `gpg --export -a -o root.key`
Submit it to a key server i.e. <http://keyserver.veridis.com/en/>
To revoke a key: `gpg --import revokekey`
`gpg --keyserver www.keyserver.net --send-keys Remco`
2. The second exercise was to make trusted certificates
 - Generate a key: `ssh-keygen -t rsa`
 - Upload the key to the remote ssh server: `scp ~/.ssh/id_rsa.pub remote:`
 - Move the key to the appropriate place: Log into the remote host
`cat /id_rsa.pub >> ~/.ssh/authorized_keys2`
 - Logout and test.
3. To set up using a remote X program, edit the `/etc/ssh/sshd_config` and edit the following lines to these values:
 - `X11Forwarding yes`
 - `X11DisplayOffset 10`
 - `X11UseLocalhost yes`
 - When you log in, you can take over the X server
4. Add the following line to the crontab to securely run a backup script:
`0 5 * * * username /script/backup 1 >/dev/null`
This will run the script under the appropriate user, preferably this is not root, but a user, without login rights, and has only rights, to the appropriate files.
5. Kmail setup
The following packages must be installed to let Kmail send encrypted messages:

- Pth ($i= 1.3.7$), usually packaged as libpth-devel (libpth-dev on Debian)
 - gpg-error ($i= 0.7$), usually packaged as libgpg-error-devel (libgpg-error-dev on Debian)
 - libgcrypt ($i= 1.1.94$), usually packaged as libgcrypt-devel (libgcrypt11-dev in Debian)
 - libassuan ($i= 0.6.6$), usually packaged as libassuan-devel (libassuan-dev in Debian)
 - After this, set the appropriate certificates on in the KMail-config settings.
6. Encrypted filesystems One way to encrypt a filesystem, is to run a daemon, which encrypts data, using a private key. This has two disadvantages:
- Random loss of data can occur, when a user loses his/her private key.
 - Integrity checks are much more difficult.