

## Summary of Open Source Software

### Operating Systems

- Physical servers: RHEL / CentOS 7 [https://access.redhat.com/documentation/en-us/red\\_hat\\_enterprise\\_linux/](https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/)
- Hypervisors: KVM [https://en.wikipedia.org/wiki/Kernel-based\\_Virtual\\_Machine](https://en.wikipedia.org/wiki/Kernel-based_Virtual_Machine)
- Virtual Machines: Ubuntu Linux <https://www.ubuntu.com/desktop>

### Databases, data transformation and analysis

- Pentaho Kettle ETL-tool <http://www.pentaho.com/product/data-integration>
- PostgreSQL <https://www.postgresql.org/docs/9.6/static/index.html>
- Relational data modelling <http://software.sqlpower.ca/page/architect>
- Cloudera Hadoop <https://www.cloudera.com/documentation.html>
- R language (for statistical computing) <https://www.r-project.org/>
- Python 3 (for scientific computing and scripting) <https://www.python.org/>
- Unix Shell (for process automation) <https://www.gnu.org/software/bash/manual/>
- Machine learning: Weka <https://www.cs.waikato.ac.nz/ml/weka/>

### Version control, documentation and backups

- Version control: Git <https://git-scm.com/>
- Wiki pages & notes: Markdown <https://en.wikipedia.org/wiki/Markdown>
- Kanban board: Wekan <https://wekan.github.io/>
- Backups: Cron & rsync <https://en.wikipedia.org/wiki/Cron>, <https://en.wikipedia.org/wiki/Rsync>

### Publishing and Office

- Vector graphics: Inkscape <https://inkscape.org/en/>
- Image manipulation: Gimp <https://www.gimp.org/>
- Scientific publishing: LaTeX <https://en.wikipedia.org/wiki/LaTeX>

### Remote Access

- OpenSSH <https://en.wikipedia.org/wiki/OpenSSH>
- X2Go <https://wiki.x2go.org/doku.php>
- Apache Guacamole (to be installed...) <https://guacamole.apache.org/>

### Web-based User Interfaces

- Front-end layout: Twitter Bootstrap <https://getbootstrap.com/>
- Front-end widgets: jQuery and jQuery UI <https://jquery.com/>
- Interactive graphics: D3.js <https://d3js.org/>
- Back-end logic: Python/Flask <http://flask.pocoo.org/>