

# Sparkle user guide

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January 8, 2020

## 1 Required packages

### 1.1 On Grace

Grace is the computing cluster of the ADA group<sup>1</sup> at LIACS, Leiden University. Since not all packages required by Sparkle are installed on the system, some have to be installed local to the user.

Specifically, `epstopdf` is required for Sparkle's reporting component to work (e.g. `generate_report`, `generate_report_for_configuration`), it can be installed in your user directory as follows:

1. Download `epstopdf`  
`wget http://mirrors.ctan.org/support/epstopdf.zip`
2. Unzip the package  
`unzip epstopdf.zip`
3. Rename `epstopdf.pl` (inside the directory you just unzipped)  
`mv epstopdf.pl epstopdf`
4. Add this line to your `.bashrc` (open with e.g. `vim ~/.bashrc`)  
`export PATH="/<directory>/epstopdf:$PATH"`  
(replace "`<directory>`" with the path to the `epstopdf` directory)

### 1.2 Yahsp example

1. Install gmp on Grace  
`wget https://gmplib.org/download/gmp/gmp-6.1.2.tar.xz`  
`tar -xf gmp-6.1.2.tar.xz`  
Inside the `gmp-6.1.2` directory:  
`./configure`  
`make`  
`make check`

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<sup>1</sup><http://ada.liacs.nl/>

2. Navigate to the `seq-ag1-yahsp3` directory
3. Add the below after `-fpermissive` on line 24 of `cpt-yahsp/CMakeLists.txt`:  
`-I /home/blomkvander/lib/gmp-6.1.2/ -L /home/blomkvander/lib/gmp-6.1.2/.libs/`  
(replace `/home/blomkvander/lib/` with the path where you installed gmp)
4. Compile yahsp with:  
`./build`
5. In `yahsp/esequi.sh` the line `#!/bin/bash` was added to the start of the file to allow Grace nodes to find the 'time' utility.