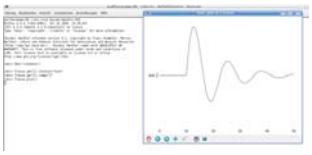
Seismic Handler development

Marcus Walther and Klaus Stammler

Federal Institute for Geosciences and Natural Resources Bundesanstalt für Geowissenschaften und Rohstoffe
Seismological Central Observatory Seismologisches Zentralobservatorium

Seismic Handler and python language combined

The python programming language is now combined to Seismic Handler by compiling a shared library from SH's sources. Newly coded wrappers offer easy access to SH's functions.



In this example a synthetic trace is created, then station and component name are set. Data plotting is done via a high level framework.

The graphical framework allows high quality export to various bitmap and vector formats including PNG, PS, PDF, SVG, EPS.

Of course, existing scripts for Seismic Handler can still be used in the new environment. Also the previous command line interface is still available.

```
! Create, name and filter 10 random traces.
! SAMPLE.SHC

sdef max 10
sdef cnt 0

loop:
      create random 0.01 200 20
      calc i $cnt = $cnt + 1
      set $cnt station [TST]*[cnt]
      if $cnt lti $max goto loop:

fill f BP_2545_3

filter f all

del 1-10

return
```

This "old style" sample script creates 10 random traces. These are filtered and the unfiltered traces are removed.

You can simply start this script from command line.

Documentation

An updated documentation is published at our project website **www.seismic-handler.org**.

This site is an open wiki allowing everyone to contribute to documentation of Seismic Handler and offering the possibility to publish own enhancements rapidly.

Information

Additional to information published on the website, new mailing lists help to incorporate Seismic Handler users.

Three mailing lists are available:

- ➔Announce: regular information on new releases
- ➔Users: support on using SH/SHM/SHX
- ➔Devel: discussion and support regarding SH's development

To subscribe, simply visit **list.seismic-handler.org**, take a list of your choice, fill in and submit the registration form.

All contributions are archived for later demands.

Development

Since 2006 Seismic Handler is explicitly released under the GNU public licence (GPL). The library for usage in python comes with LGPL (lesser GPL).

On our website, full development source code is available. There are three ways of accessing the sources:

- ➔subversion access via **www.seismic-handler.org/svn/**
- ➔syntax highlighted code on website
- ➔pre-packed tarballs

Additionally you can download virtual machines for running Seismic Handler on e.g. Windows OS.

www.seismic-handler.org

Ticket system for suggestions and bug reports

Associated with the launch of the project website, we introduced a new way for submitting bug reports and suggestions for improvement of Seismic Handler.

At **www.seismic-handler.org** you will find a trouble ticket system fitting these concerns.

If you have any wishes for enhancement or detailed bug reports, please register at our website. Afterwards you are able to create a new "ticket":

Further development is strongly dependent on user's demand, so please contribute. On the next panels we show, how to create such tickets.

Steps to create a ticket:

- ➔supply a meaningful summary title,
- ➔write as much detailed description necessary for explaining your concern,
- ➔choose type of ticket (defect, task, ...)
- ➔select proper branch of Seismic Handler (SH, SHM, SHX or website)
- ➔if applicable, pick a milestone

- ➔choose a suitable priority (if we are of another opinion, we'll change it),
- ➔please preview your ticket and
- ➔finally submit it.

The ticket system will track your request and record all changes until the issue has been solved.