

Seismic Handler development

Marcus Walther and Klaus Stammer

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

New Seismic Handler release 2011.2

Overview

The latest version of Seismic Handler is 2011.2. It was released on 14th of April this year.

This version is still based on the Motif toolkit, introduces new features and contains many bug fixes. A detailed overview can be found inside the release notes on the website, they include amongst others:

- * Support for SEED's network and location ID,
- * Updated simulation filters,
- * Broadband magnitude determination,
- * python helper programs.

Installation

The whole installation process was updated: First download the installation archive *SHM-install-20112.sh*. This archive is self-extracting and contains the full Seismic Handler source code. Now simply follow the setup instructions on the website.

Additional required software like LocSAT and FK-analysis is downloaded automatically during the installation process.

Like other software Seismic Handler relies on a customized shell environment. Now also the BASH is supported.

Target platforms

Seismic Handler now targets all Linux operating systems. Active support for other Unix-like systems like Solaris is not available anymore. In our observatory such machines were replaced by Linux and the relevant user-base decreased strongly in the last years.

You'll find detailed installation instructions at www.seismic-handler.org for all major Linux distributions, such as Ubuntu, Debian, RHEL, openSUSE, centOS and Fedora.

A virtual machine based on Ubuntu and LXDE is also available for download.

SeisComP3 binding

The SeisComP3 infrastructure is a major part of seismological work nowadays. After an earthquake is located, relevant picks can be transferred to Seismic Handler.

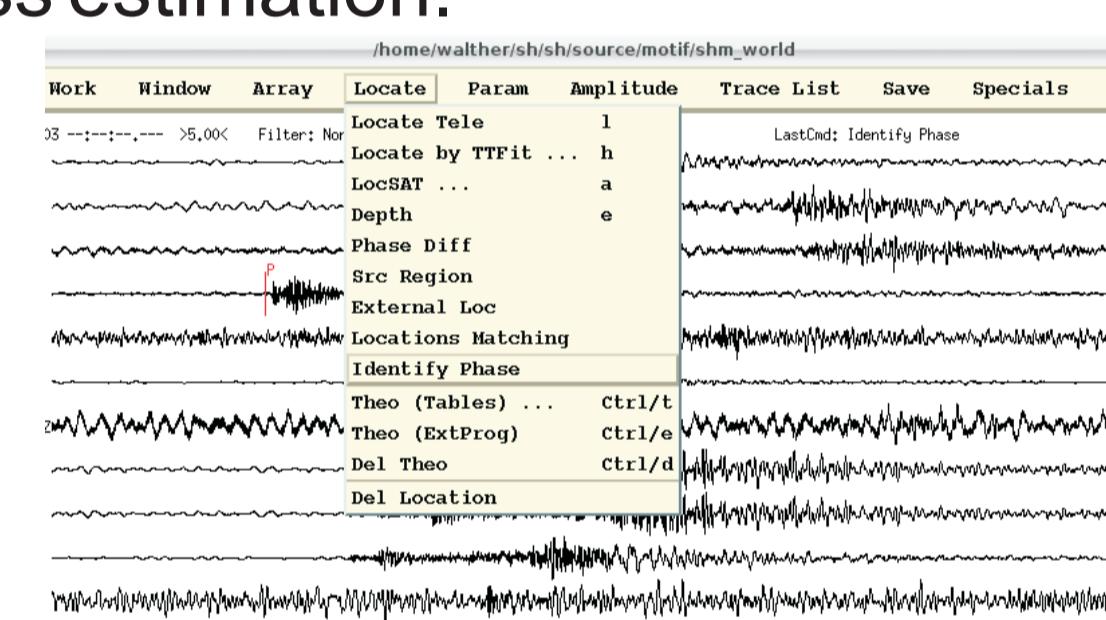
The necessary tool is available in the download section of www.seismic-handler.org. ScXML2Evt converts picks and location information from SeisComP3's Quake-ML like format into the Seismic Handler specific event (EVT) structure.

Using an event list it's possible to auto-load the phases parallel to the mini-seed wave-form data. Furthermore you can use "Recover Evt" from the "Save" menu. Picks will be marked as theoretical onsets for an easy start of the in-depth manual analysis.

NERIES web service

The interactive analysis software SHM is now able to query the web service on seismicportal.eu for event data. This method replaces the former used parsing of the ESMC data contribution website.

To use this feature in your daily work all you need is a reference pick for time information and a slowness estimation.



The query is processed by a small python helper program, so please make sure that at least python version 2.5 is available.

Information & development

Development source code can be accessed on the project's website using:

- <https://www.seismic-handler.org/svn/> subversion repository (recommended)
- syntax highlighted code browser on website
- installation package (until now only SH/SHM)

The wxWidgets based version (SHX) is still in development. An alpha release is expected in July 2011. This version will include Arclink support and additional ObsPy based wave form access.

Please subscribe to our announce mailing list at <http://list.seismic-handler.org/> to stay tuned. Also pay attention to the user's mailing list and it's online archives for questions around Seismic Handler.

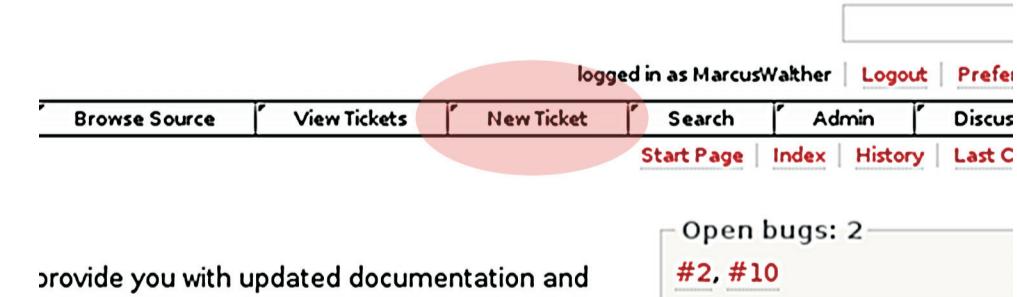
www.seismic-handler.org

Ticket system for suggestions and bug reports

Major parts of the project website are the ticket system and the wiki style documentation. Please submit bug reports and suggestions for improvement of Seismic Handler.

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

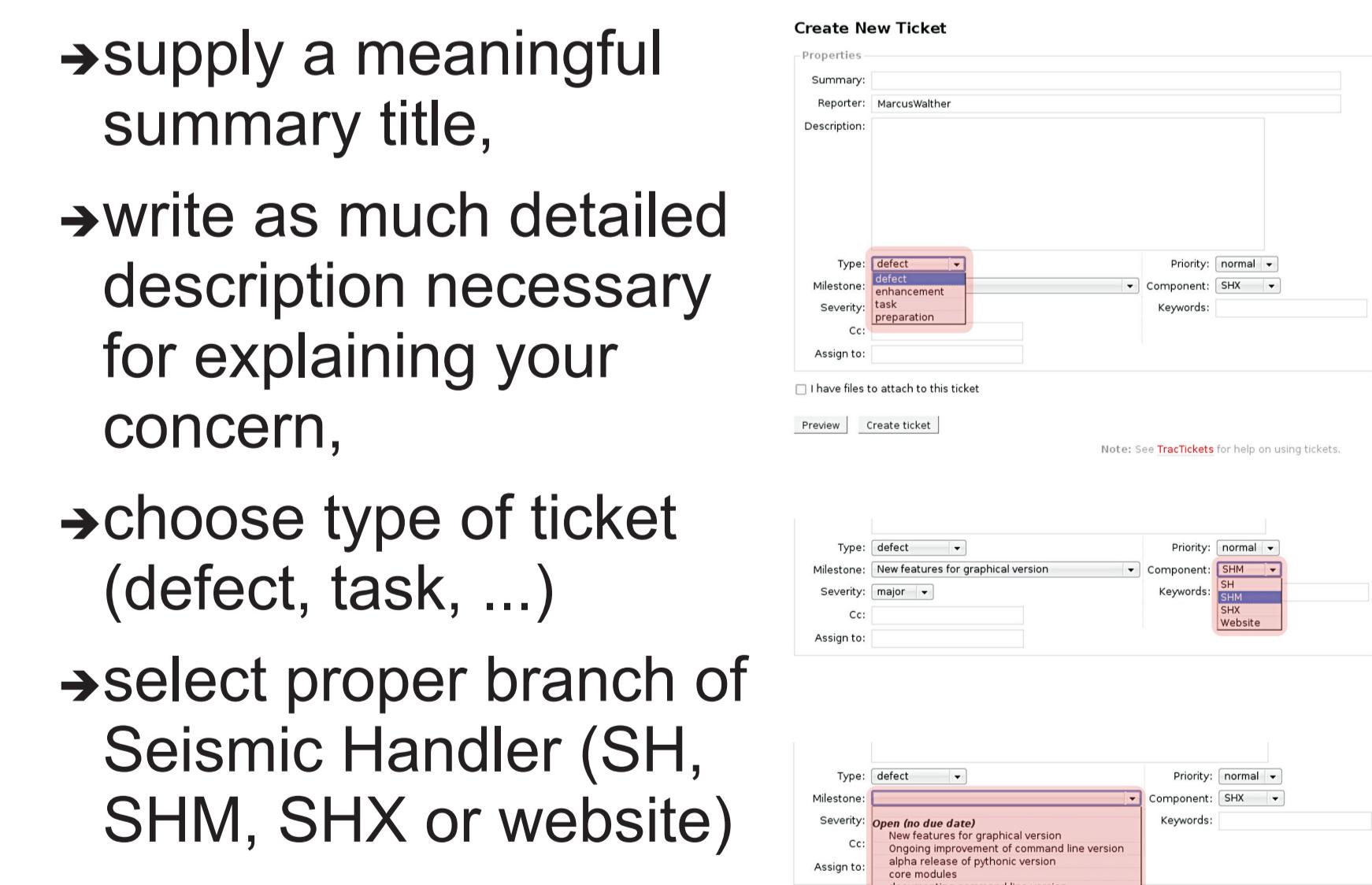
If you have any wishes for enhancement or detailed bug reports, please register at our website. Afterwards you are able to create a new "ticket":



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 may change it),
- please preview your ticket and
- finally submit it.

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

