



TrapTester 5.2 release notes

[get a .pdf of this newsletter](#)

The Distribution of TrapTester 5.2 started on March 22nd. All media should arrive before April 2nd. If you have not seen the new release either contact us or your systems administrator.

There are many changes in the new release that will improve the usability of the software and this newsletter updates you on the most significant changes that will affect the way you work.

- many new features and functionality, but the look and feel are the same as TrapTester 5.1.
- straightforward project upgrade.

The new features and workflow tools, and are outlined here. Remember also that there is a wealth of new information in the online help system and workflow advisor, aimed at introducing you to the functional changes and getting you "up and running" as quickly as possible.

Most of the information presented in this newsletter is contained in the documentation accompanying the release. We recognise that you may not get to see the important information in the release notes automatically!

If you have any further questions at any time, please do [get in touch](#).

New Features in TrapTester 5.2

In addition to ongoing enhancements and improvements to the overall architecture, visualization, geometry engine and direct links to 3rd party systems TrapTester 5.2 brings the first official release of several new modules. The following paragraphs describe, briefly, the main new features and enhancements that differentiate TrapTester 5.2 from TrapTester 5.1

Triangle

The popular 1D fault seal analysis tool (still available for Windows as "Triangle") has been re-written and greatly improved to be part of the TrapTester software suite. Triangle uses the TrapTester well database and existing TrapTester well import links with OpenWorks and GeoFrame to source property curves. The main use of Triangle will be as a quick look standalone fault seal program or for the investigation of sensitivity issues arising from 3D fault seal analysis in TrapTester.

CurveMapper

This provides a route for generating property maps on faults surfaces without the requirement to model detailed isochores. CurveMapper uses a combination of the mapped horizons and the property curves directly observed from wells to produce upthrown and downthrown fault property maps. These maps incorporate the vertical and lateral variation in Vshale (or other attribute) formerly seen in isochored intervals with the difference that the spatial variation can be observed at the resolution of the well curve. CurveMapper speeds up the fault seal analysis process considerably.

FaultED

TrapTester now contains an integrated system for modelling the 3D strains associated with observed fault displacements. FaultED is a boundary element model based on elastic dislocation theory and is, in part, the result of an

Additional Fault Surface Attributes

TrapTester 5.2 Introduces a further 18 fault surface attributes. Some of these are re-workings of existing attributes using the new CurveMapper feature. The list of additional attributes is shown below.

- Fluid bouyancy pressure: F-wall
- Fluid bouyancy pressure: H-wall
- CurveMapped Gouge ratio
- CurveMapped V-shale: F-wall
- CurveMapped V-shale: H-wall
- CurveMapped Shale smear factor (Lindsay et al.)
- CurveMapped Shale smear factor (Yielding et al.)
- CurveMapped Clay smear potential (" ")
- Threshold cap pressure (Bretan et al.)
- Hydrocarbon column height (Bretan et al.)
- Hydrocarbon contact depth (Bretan et al.)
- Threshold cap pressure (Sperrevik et al.)
- Hydrocarbon column height (Sperrevik et al.)
- Hydrocarbon contact depth (Sperrevik et al.)
- Fault-zone permeability (Manzocchi et al.)
- Fault-zone permeability (Sperrevik et al.)
- Hydrocarbon column height (Fracture Stability)
- Hydrocarbon contact depth (Fracture Stability)
- Hydrocarbon column height (Slip Stability)
- Hydrocarbon contact depth (Slip Stability)

Project Parameters

Partly to support the computation of the additional attributes and partly due to some rationalisation, the Project Parameters editor has been updated. The controls that were part of the "Additional Parameters" window (introduced in TrapTester 5.107) have now been merged with the controls in the Project Parameters window.

New Isochore and Horizon Modelling Workflow

Isochoring is now controlled strictly by the rules on picks of loaded wells (not all active wells as previously implemented). This makes it easier

industry and government funded research and development project. Given a framework model in TrapTester, FaultED is used to predict the relative density, orientation and failure mode of fracture suites. FaultED is implemented as a new module within the Volume Editor.

Geolmage Loader

There is now a facility for the display of PNG image-based data on 2D or 3D sections. This facility is designed mainly for interpretation/mapping from sand box model images but can be used for any image based data.

SEG Y Loader

As part of ongoing investment into bringing structural analysis tools into the seismic domain there is now a 2D SEG Y data loader available for TrapTester5.2. This will be extended to handle 3D in the near future. The SEG Y-data is converted into our proprietary BGL seismic format and is stored under the project directory.

Direct-Link Configuration

Links to 3rd party systems such as OpenWorks and GeoFrame have traditionally been set up in the TrapTester configuration file (faps.conf). Though this is still the case, there is a new and simple interface to set up user-specific links without editing any files. When TrapTester 5.2 is used for the first time by a user wanting to link to one of the supported third party systems they can use the new configuration wizard.

Seismic Access Definitions

TrapTester 5.2 now gains access to seismic data, regardless of its origin, through "seismic access definitions". These describe the source system (e.g. OpenWorks, the source project and seismic file name, maximum amplitude and other parameters). Rows, Columns, Time-slices and 2D lines can all have different definitions assigned to them.

It is possible to create, modify and delete the definitions at any time. The seismic slicer application also makes use of the new seismic access definitions; the user simply chooses which one to use rather than having to define all the information locally.

to control isochoring by loading only the relevant wells.

When modelling horizons, however, all well-based primary horizon picks will be used as raw-data for the horizon model, regardless of whether you have manually loaded the wells or not. Deactivated wells will not be included.

Data Lists

TrapTester 5.2 now implements data-lists for a number of data entities including faults, horizons and wells. This improves the management of large datasets and enables the user to organise data more effectively. Most TrapTester applications make use of the new data-list interface.

Project Backup

The project backup procedure now permits the user to exclude certain components of the project from the backup or to form the backup only from certain components. The components that can be selected are: framework database (idb), attribute database (fdb), seismic cache and related files (sdb) and the project resources (.faprc). It may be useful, for example, to exclude the seismic data from a backup – or to include only the framework database.

Colourmap Editor

The TrapTester colour-map editor has been improved in a number of ways to make it easier to use and more suitable for screen capture. Display Methods, as used in the Volume-editor to control the attribute display on horizon and fault surfaces, can now use logarithmic-scale colour maps.

Contrast Stretch

Seismic data as displayed on sections in the Volume-Editor can now be processed. (Select section, then use <MB3 popup->Section->Process Seismic>. Currently the only supported process is "Contrast Stretch" – this process redistributes the colours in the colour map so that the most frequently occurring amplitudes are distinguished as much as the least frequently occurring. This has the effect of highlighting detail that may be hidden when much of the amplitudes fall in narrow ranges.

Alterations to the faps.conf file

The old direct link configuration variables, FAP_IOS_NAME, FAP_IOS_PATH and FAP_IOS_VERS are no longer used. They are superseded by FAP_IOS_UID and FAP_IOS_PATH. These can be set in the user's faps.conf file or they can be defined using the "Direct Link Configuration Wizard".

Upgrading 4.x or 5.x projects to version 5.2.

Old TrapTester projects (i.e. 4.x or 5.1) are upgraded automatically when they are opened using TrapTester-5.2. Note that in the TrapTester-5.2 Project Manager, the 4.x projects are labelled with a "V" (vintage) value of 4. When they are upgraded the "V" value is incremented to 5. Note also that TrapTester-5.2 project directory extension is ".TT" – the pre-5.0 TrapTester projects will be re-branded with the new extension as they are upgraded.

As part of the upgrade the user will be asked whether or not to update project resources such as Volume Editor display methods, styles, shortcuts etc. It is recommended that this update is performed.

NOTE: FAPS 3.1 and 4.x projects cannot be upgraded using the Linux distribution.

NOTE: Once a 4.x or 5.x project is upgraded to TrapTester-5.2 the project can NOT be opened using older versions of the TrapTester software. It is recommended that you backup the original project BEFORE converting to TrapTester-5.2

If you are unable to view images in this newsletter, a .pdf is available [from our website](#).

Please send us your [feedback and comments](#).

[To Unsubscribe to this newsletter please click here](#)



Badleys

Tel: +44(0)1790 753472 support@badleys.co.uk
Fax: +44(0)1790 753527 www.badleys.co.uk