

5.4xx PATCH RELEASE NOTES

TT 5.4 Products

**TrapTester
StressTester
EarthGrid/TMX Mapper
Triangle Plus**

CONTENTS

Release 5.400.....	1
Patch 5.401.....	1
Patch 5.402.....	2
Patch 5.403.....	2
Patch 5.404.....	3
Patch 5.405.....	4
Patch 5.406.....	6
Patch 5.407.....	8
Patch 5.408.....	8
Patch 5.409.....	9
Patch 5.410.....	10
Patch 5.411.....	10
Patch 5.412.....	10
Patch 5.413.....	11

Release 5.400	03/2007	Full distribution of TrapTester 5.4
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PATCH INFORMATION

Patch 5.401	17/04/07	Patch release (Solaris/Linux/Interix)
General Information		
This is a general bug-fix patch.		
Bug Fixes		
<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>
<1405>	CULTURE	lib*/libCUL.so
	Culture file reader did not follow recursive include file references properly.	
<1407>	GRIDTOOL	bin*/gridder
	Grid tool did not respond properly to external 3D survey grid nav creation.	
<1409>	GRIDTOOL	bin*/gridder
	Grid tool's grid preview/editor did not correctly snap to nearest row/column when using the graphics handles to stretch the grid.	
<1412>	VOLUME EDITOR	lib*/libBasemap.so
	Volume Editor would crash on startup if the startup-session referenced a survey that had been deactivated or deleted.	
<1413>	VOLUME EDITOR	lib*/libCDA.so
	Volume Editor would crash when deactivating/deleting a survey if time-slice data was being displayed.	
<1414>	VOLUME EDITOR	lib*/libSurface.so
	Volume Editor would crash when using the "Move Vertices" option for patch editing.	
<1415>	DATABASE	lib/libIDB00.so
	Improved tri-mesh storage.	
<1416>	SEG-Y-LOADER	bin*/seg2bgl
	The SEG-Y loader would crash when attempting to load 2D data with more traces than the number of samples per trace.	
<1417>	VOLUME EDITOR	lib*/libIDB500.so
	When editing 2D horizon data on newly created 2D lines all embedded NULL data (i.e. areas where there was no interpretation) would be written with z=0. This would not be apparent until the horizon data was reloaded into the Volume-Editor.	
<1418>	DB-EXPLORER	lib*/libCDA.so
	When deactivating/deleting a fault segment in the Database-Explorer it would not propagate the change in state to the same segment displayed under a different part of the hierarchy.	
<1419>	VOLUME EDITOR	bin.Interix/vol_ed (Interix-Only)
	Volume Editor would crash with a stack overflow when creating contours for large tri-mesh objects.	

<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>
<1421>	DB-EXPLORER	bin*/dbtree
	If left idle for several minutes the Database Explorer's editor form would fail to respond to changes in the tree selection.	
<1429>	BASE-SYSTEM	lib*/libAPPL.so
	Horizon property modification would fail if the horizon had no horizon volumes assigned (e.g. marker horizons or horizons defined from point-set or tri-mesh data).	
<1431>	BASE-SYSTEM	scripts/upd_faprc scripts/upgradeFAPS
	Improvements to the project update handling on Interix.	
<....>	CXH-HELP	etc/cxh/...
	Improvements and additions to the context-sensitive-help system.	

Patch 5.402	11/05/07	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix/enhancement patch.			
Bug Fixes			
<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>	
<1433>	VOLUME EDITOR:	lib*/libBOGL.so	lib*/libSurface.so
	Point-Set data did not highlight when selected.		
<1445>	VOLUME EDITOR:	lib*/libWell.so	
	Performance overhead in Volume-Editor Well Module related to well curve drawing. With a large number of wells displayed this would result in significant post-motion delays.		

Patch 5.403	18/06/07	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix patch.			
Bug Fixes			
<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>	
<1480>	PATCH SYSTEM:	patches/installPATCH	
	Fixes incompatibility for check-sum value between different Operating Systems. Note - this patch uses a different procedure to the standard patch installer and requires user confirmation to proceed. Note that after installing this patch, pre 5.403 patches cannot be re-installed using the new patch installer; if this is required it will be necessary to obtain the original version of the installPATCH script from the TT5.400 distribution or alternatively, contact support@badleys.co.uk.		

Patch 5.404	18/06/07	Patch release (Solaris/Linux/Interix)		
General Information				
This is a general bug-fix/enhancement patch.				
Enhancements				
ID No.	MODULE:	FILES		
<...>	TRIANGLE:	bin*/triangle	bin*/att_calc	bin*/plotviewer
		lib*/libTXM.so	lib*/libSurface.so	lib*/libTCE.so
		lib*/libTDE.so	lib*/libCDA.so	lib*/libU.so
		lib*/libFaultED.so	lib*/libEarthGrid.so	scripts/upgradeFAPS
		etc/menus/ttmenu.rc		etc/fdb/*
		etc/cxh/*		
		<p>The Triangle 1D fault-seal utility has undergone a major overhaul to enable it to benefit from the User-Defined-Attribute system (Attribute Calculator). In the new system all standard triangle attributes are computed in a single pass and are stored in the project's fdb folder. Triangle attribute displays are now managed in the same way as for faults & horizons in the Volume-Editor. Hence Triangle now benefits from the flexibility of the TrapTester Display Method Editor. The Triangle attribute displays are controlled by a user-selected Display Method. This upgrade includes a set of default Display Methods for each of the standard attributes. With the new system Triangle attributes can be used in the Plot Viewer utility to generate cross-plots. This tool can also be used to export data. Although, in general the use of Triangle is much the same as before there are some significant changes to the interface. The Context sensitive help, accessed via the F1-key has been updated but the on-line html docs have not. Please refer to the Badleys website for the latest documentation.</p>		
<1467>	GEOFRAME-LINKS:	bin.Linux/iesx_dataio	bin.Linux/iesx_seisio	
		bin.Linux/iesx42_seis	bin.Linux/iesx42_wellio	
		bin.Linux/iesx42_data	bin.Linux/iesx43_seis	
		bin.Linux/iesx43_wellio	bin.Linux/iesx43_data	
		etc/iosys/systems.rc		
		<p>This patch introduces support for the GEOFRAME-IESX 4.2 and 4.3 direct import link to TrapTester on Linux. The implementation of this link is identical to the Solaris version. The TT reference manual pages for the Solaris version are fully relevant for the Linux-based links. Please use the TT I/O configuration tool to configure TrapTester for use with IESX-GF4.2/4.3.</p>		
Bug Fixes				
ID No.	MODULE:	FILES		
<1411>	DB-EXPLORER:	lib*/libAPPL.so		
		3D survey grid definition - error in post-definition of time-slice sub-grid.		
<1441>	DB-EXPLORER:	bin*/dbtree		
		Improved node-name display. Some node names were not useful. For instance well horizon picks under a well parent used the same well name.		
<1454>	DATABASE:	lib*/libIDB500.so		
		Creation of Abstract Fault Groups was not enabled in generic API.		

<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>
<1462>	2D-MOVE-LINK:	lib*/libSection.so
	Export to 2D move did not account for the Z-domain. Always exported as time.	
<1466>	LICENSE:	scripts/lmadmin
	Now uses the flexlm hostid utility.	
<1468>	DB-EXPLORER:	lib*/libAPPL.so
	2D line-name form prevented editing of the 2D line name.	
<1472>	VOLUME-EDITOR:	lib*/libSurface.so
	Time-Depth colour coding of point-set horizon raw data did not work.	
<1473>	VOLUME-EDITOR:	bin*/vol_ed
	Session manager popup would close after opening a session - it now remains open.	
<1474>	DB-EXPLORER:	lib*/libAPPL.so
	Grid definition first Z value would suffer from rounding errors during unit conversion.	
<1478>	ATT-CALC:	lib*/libMDB2.so
	The output (expression) units option did not update when a saved macro was loaded.	
<1479>	ATT-CALC:	bin*/att_calc
	The Save button did not sensitize when the output units were changed.	
<1484>	DB-EXPLORER:	lib*/libAPPL.so
	Line object selected in tree could display an Editor for a line in a different survey (if it had the same UID value).	

Patch 5.405	05.11.07	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix/enhancement patch.			
Enhancements			
<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>	
<1517>	CULTURE:	libCUL.so	libBasemap.so
	Added support for per-point colouring for culture "point-set" objects.		
Bug Fixes			
<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>	
<1465>	TRIANGLE:	bin*/triangle	
	Session data not saved correctly. Some of the internal display panes in Triangle were not correctly preserved in the session.		
<1471>	CULTURE:	lib*/libCUL.so	lib*/libBasemap.so
	Image display using the culture system on Windows/Interix would not clamp the image nicely to the specified rectangle - the image would "bleed" to the extremities of the host object.		

ID No.	MODULE:	FILES		
<1484>	DB-EXPLORER:	lib*/libAPPL.so		
	Edit window for LINE objects (2D lines, 3D rows, 3D cols) would not show the correct object data under multiple survey scenarios.			
<1485>	SEISMIC:	lib*/libSection.so		
	Export of data for 2Dmove would fail if no seismic was displayed.			
<1492>	SLICER:	lib*/libGEOS.so	lib*/libGOM.so	
	Inadequate sampling for horizon amplitude extraction.			
<1499>	TRIANGLE:	bin*/triangle		
	In the 5.404 version of Triangle, clicking on the colourbar floating window has no effect, when previously it displayed the colourmap editor. As the colourmap editor has now been replaced with the Display Method Editor, this is now launched upon clicking the colourbar.			
<1502>	TRIANGLE:	bin*/triangle	lib*/libTDE.so	lib*/libTXM.so
		lib*/libMU.so	scripts/upgradeFAPS	
	Pre-5.404 patch Triangle only recalculated the attributes that were required for the current "calculation type". 5.404 Triangle computed "all" attributes, regardless of the Display Method (aka Calculation type). This adversely affected the calculation time. libTXM has been extended to provide attribute dependency information. Triangle now uses this information to determine which attributes require recalculating. This fix also includes the following renamed Triangle-Task Display Method templates: <p style="text-align: center;">Clay Smear Potential (Shell downthrown) Clay Smear Potential (Shell upthrown)</p> These will be copied into working projects as they are upgraded to the 5.405 version.			
<1503>	TRIANGLE:	bin*/triangle		
	Performance issue on Linux when using the interactive cut-off slider.			
<1511>	TRIANGLE:	bin*/triangle		
	"Show Picks" settings not preserved in session data.			
<1513>	TRIANGLE:	bin*/triangle		
	Text in status bar is not given enough room and shows clipped. Widths of elements in status bar are now modifiable, but changes are not stored in session data.			
<1518>	TRIANGLE:	bin*/triangle		
	Triangle's Display Method Editor did not appear to set the task-change procedure for the filters (or the colourmaps) and so when the filter-editor was invoked it was not able to edit/create Triangle-Task filters.			
<1519>	STRESS-EDITOR:	bin*/sf_ed		
	Rationalisation of licensed-dependant options. Stress-field Editor now checks for the PressureTester license at startup and disables the relevant options accordingly.			
<1523>	ATTCALC:	scripts/configfaps		
	Default value for FAP_GCC (the gcc compiler) does not work on 64bit Linux systems. It is now set to "/usr/bin/gcc -m32" to force the creation of 32 bit shared-object files.			

<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>
<1524>	VOLUME-EDITOR:	lib*/libBOGL.so
	Selection highlight on point-objects was not functioning correctly.	
<1525>	PROJ-PARAMS:	bin*/ppar_ed
	Updated label text for "Capillary pressure conversion values".	
<1529>	SEISMIC:	lib*/libBOGL.so etc/shaders/deptext.frag
	The display of seismic data has up until now been achieved using a simple 2D texture display. However this resulted in poor display quality when using a colour bar more complex than a simple two-colour gradient as the colour of each seismic sample in the texture would be taken directly from the colour table. Pixel-level smoothing was applied as a secondary operation on the sampled colours. This fix introduces the use of fragment shaders which run on the graphics processor. The new process not only provides pixel-level sampling of the colours in the colour bar but also provides a 75% reduction in memory required for the display of seismic data. This fix is only currently operational on Linux systems that support fragment shaders on the GPU.	
<1531>	DB-EXPLORER:	bin*/dbtree
	Fixed various issues with Database Explorer memory allocation.	
<1534>	SURFACE:	lib*/libSurface.so
	Polygon style-editor sub-tab for the Surface Module is now enabled for all licensing modes. Prior to this fix this tab would require a FrameWorkBuilder license which disabled it for use in a StressTester license configuration.	
<1535>	GEOSEVER:	libGEOS.so libGOM.so
	GeoServer would occasionally crash when the algorithm for creating patches for "sparse horizon data" was used.	

Patch 5.406	01/04/08	TrapTester Patch release (Solaris/Linux/Interix)
General Information		
This is a general bug-fix/enhancement patch.		
Enhancements		
<i>ID No.</i>	<i>MODULE:</i>	<i>FILES</i>
<1564>	ALL:	scripts/prxadmin scripts/starttt
		scripts/openur1FAPS
		scripts/w32uninstall.csh
		scripts/open2Dmove
		scripts/flextools scripts/ttwinrun.sh scripts/licreq
		bin.Interix/ttwinrun.exe(rename)
		bin.Interix/flex/1m/ttprxsrv.exe(rename)
		lib.Interix/libdl.so.3.5
		scripts/versionFAPS
		etc/misc/ttprxsrv.dat
	Windows Vista support for Interix build. Though pre-5.406 installs will not be on Vista this script/start patch brings the install up-to-date with the new Windows CD release (at 5.406) which is Vista-compatible.	

	The following files are not part of the patch but are included in the full 5.406 distribution.		
		patches/autoPATCH	patches/installPATCH
		user/Interix/StartTT.ses	user/Interix/StartTTwr.xs
		user/Interix/StartTTwr.ws	scripts/w32install.csh
Bug Fixes			
ID No.	MODULE:	FILES	
<1424>	LICENCE	bin.Interix/*	
	Windows License Proxy Server fatal error. The proxy server would occasionally crash and TT would close down.		
<1486>	ASCIO	bin*ascio	
	Import of timeslice fault-segs does not work. Imported segments get erroneously attached to rows of the same id.		
<1538>	VOL-ED	lib*/libeGEOS.so	
	Volume Editor prone to crash during hydrocarbon column height attribute generation.		
<1539>	VOL-ED/ SEISMIC	lib*/libSection.so	lib*/libCDA.so
	Segment move-points, repick, and pick operations were all followed by a 1-degree angular filter. This had the effect of removing valid control points and has now been removed. Filtering can be applied, if required, by the user as a separate process. The fix for this bug has also included better conditioning for the bind-to-section procedure (in CDA) which now specifically handles 2-point Line-Navigation data.		
<1540>	LICENCE	bin.Interix/seg2bgl	bin.Interix/gridder
		bin.Interix/xphoto	
	CRC mismatch errors when trying to start the SEG Y loader, Grid-tool or Xphoto applications.		
<1545>	QDB2	bin*qdb2	
	qdb2(database query tool) now supports conditionals in the "set" command.		
<1551>	VOL-ED/ SEISMIC	lib*/libBOGL.soc	
	Problem updating seismic colour maps between viewers.		
<1557>	VOL-ED/WELL	lib*/libWell.so	
	Volume-Editor would crash when a displayed well curve was edited in the Well-Editor.		
<1559>	PLOTVIEWER	bin*/plotviewer	
	Plotviewer: poor data precision during ascii export.		
<1562>	ATTRIB-EXPORT	bin*attex	
	Using stratigraphic-based filter for fault-attribute export gives no output.		
<1565>	TRIANGLE	bin*/triangle	
	Multiple instances of Triangle do not update to show mutual changes. A warning dialog (with the option to disable) is now shown if a second instance of Triangle is launched.		
<1567>	OW-LINKS	scripts/owconf	
	Load-library resolution issue for libgcc_s.so.1 would prevent OW-LINKS from starting.		
<1568>	LICENCE	bin*/borrow_tool	
	Borrow tool would crash if the licence used was a node-locked or demo licence.		

Patch 5.407	08.05.08	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix patch.			
Bug Fixes			
ID No.	MODULE:	FILES	
<1569>	CULTURE:	lib.* /libCUL.so	
	Culture polyline segment ids ineffective when indexed from zero.		
<1575>	VOL-ED/FAULTED:	lib.* /libFaultED.so	
	FaultED modelling needs better error trapping for empty horizon/fault meshes.		
<1576>	SLICER:	lib.* /libCPG.so	
	EarthGrid: Attribute - Compute failure on some fault planes.		
<1577>	DB-EXPLORER:	lib.* /libCDA.so	
	Deleting selected fault segment in DB Explorer causes segmentation fault.		
<1578>	VOLED/EARTHGRID	lib.* /libEarthGrid.so	
	EarthGrid: query mode of RFSF objects crashes volume editor on Interix.		

Patch 5.408	30.06.08	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix/enhancement patch.			
Bug Fixes & Enhancements			
ID No.	MODULE:	FILES	
<1580>	XPHOTO:	bin.* /xphoto	
	XPhoto does not handle filenames with embedded spaces.		
<1581>	SYSTEM:	scripts/openurIFAPS	
	Browser/application launching fails on Interix for files with embedded spaces.		
<1582>	CDA:	lib.* /libCDA.so	
	Creating a horizon with undefined lithotype results in error.		
<1584>	EARTHGRID:	lib.* /libCPG.so	
	EarthGrid named fault import fails such that throw and other attributes do not compute properly.		
<1585>	CULTURE:	lib.* /libBOGL.so	lib.* /libBasemap.so
	Cannot colour points in point-set data using the PointColour keyword.		
<1586>	FAULT-ED:	lib.* /libFaultED.so	
	Fault-ED would crash when selecting the strain-model sync option when the scenario had no horizon list specified in the pre-model restoration options. This is a regressive bug from 5.407.		

<1587>	WELL	lib.* /libCDA.so		
	Ascii well trajectory import sometimes results in quantized XY values which in turn produces "staircased well-paths". Well curve display in Volume-Editor would look like "spaghetti" in such cases. Advanced filtering now used.			
<1588>	EARTHGRID	lib.* /libCPG.so		
	User-defined attribute selections for FZ-permeability and FZ-thickness did not work properly.			
<1589>	PROJ-PARAMS	bin.* /ppar_ed		
	Unit domain correction for depth-only Fault-Zone-Properties parameters.			
<1590>	GRIDTOOL	lib.* /libGEOS.so		
	Horizon/Fault polygons are used to control the gridding and the xyz points of the polygons themselves are used directly in construction of the gridded surface model. Until now only visible points from the polygon data have been used i.e. those you would normally see if nodes are turned on in the style editor. Some users noticed that for 2D data where the fault plane sampling is sparse, hence the polygon definition could also be sparse, that the grid may not honour the polygon lines as closely as expected. This new code ensures that the polygons are resampled to a default (editable) interval of 250m. The editable quantity is labelled "grid_poly_min_interval" and can be found in the file <project>/id/geos. Setting this number to a large value will reproduce the pre-upgrade behaviour. Setting it smaller than observed sample intervals on the polygons will increase the influence of the polygons on the resulting horizon grid. N.B. This fix is temporary and will be generalized in the next major release.			

Patch 5.409	04.09.08	Patch release (Solaris/Linux/Interix)		
General Information				
This is a general bug-fix/enhancement patch.				
Bug Fixes & Enhancements				
ID No.	MODULE:	FILES		
<1456>	DATABASE:	lib*/libIDB500.so		
	Database strip error for unassigned well fault picks.			
<1591>	TRIANGLE:	lib*/libGEOS.so		
	Manzocchi TMX display corrupted after displaying FZ-perm attribute.			
<1592> <1593>	GEOFRAME-LINKS	bin.Linux/iesx42_seis	bin.Linux/iesx43_seis	
		bin.Solaris8/iesx404_seis	bin.Solaris8/iesx42_seis	
		bin.Solaris8/iesx43_seis	bin.Solaris8/ch404_seis	
		bin.Solaris8/ch42_seis	bin.Solaris8/ch43_seis	
	GeoFrame IESX & Charisma seismic readers updated to support z_scale and z_fact parameters.			
<1597>	EARTHGRID:	lib*/libCPG.so		
	EarthGrid named-fault parser problem resulting in fault being split into multiple parts.			
<1599>	ASCII I/O:	bin*/ascio		
	Unusable dropdown horizon list for horizon data ASCII import.			

Patch 5.410	06.10.08	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix/enhancement patch.			
Bug Fixes & Enhancements			
ID No.	MODULE:	FILES	
<1612>	EARTHGRID:	lib*/libCPG.so	lib*/libGOM.so
Problem with loading of staircase fault geometry. Fault surfaces would contain holes.			

Patch 5.411	04.02.09	Patch release (Linux)	
General Information			
This is a general bug-fix/enhancement patch.			
Bug Fixes & Enhancements			
ID No.	MODULE:	FILES	
<1641>	OPENWORKS-LINKS:	bin.*/ow5000_0_dataio	scripts/owconf
		bin.*/ow5000_0_wellio	etc/menus/ttmenu.rc
		bin.*/ow5000_0_seisio	etc/iosys/systems.rc
This patch introduces the OpenWorks R5000 data links. Once installed it is possible to configure TrapTester to import from and export to OpenWorks R5000.0. These links are built on RH Enterprise 4 and will operate on RH E4 and E5. The minimum OW version is R5000.0.0.3.			

Patch 5.412	11.02.09	Patch release (Solaris/Linux/Interix)	
General Information			
This is a general bug-fix/enhancement patch.			
Bug Fixes & Enhancements			
ID No.	MODULE:	FILES	
<1625>	VOLED/SECTION:	lib.*/libSection.so	
Regression related to bug 1585			
<1637>	VOLED/WELL:	lib.*/libWell.so	
Precision bug for well attribute Volume Editor status text.			
<1614>	VOLUME EDITOR:	lib.*/libBOGL.so	
Horizon raw-data/point-set display causes lag during selection and motion.			

Patch 5.413	12.02.09	Patch release (Solaris/Linux/Interix)		
General Information				
This is a general bug-fix/enhancement patch.				
Bug Fixes & Enhancements				
ID No.	MODULE:	FILES		
<1646>	OPENWORKS-LINKS:	scripts/owconf		
	Fixes omissions in P5.411 patch.			
<1653>	VOLUME EDITOR:	lib.* /libGEOS.so	lib.* /libGOM.so	
	Improvements to isochore horizon surface modelling			