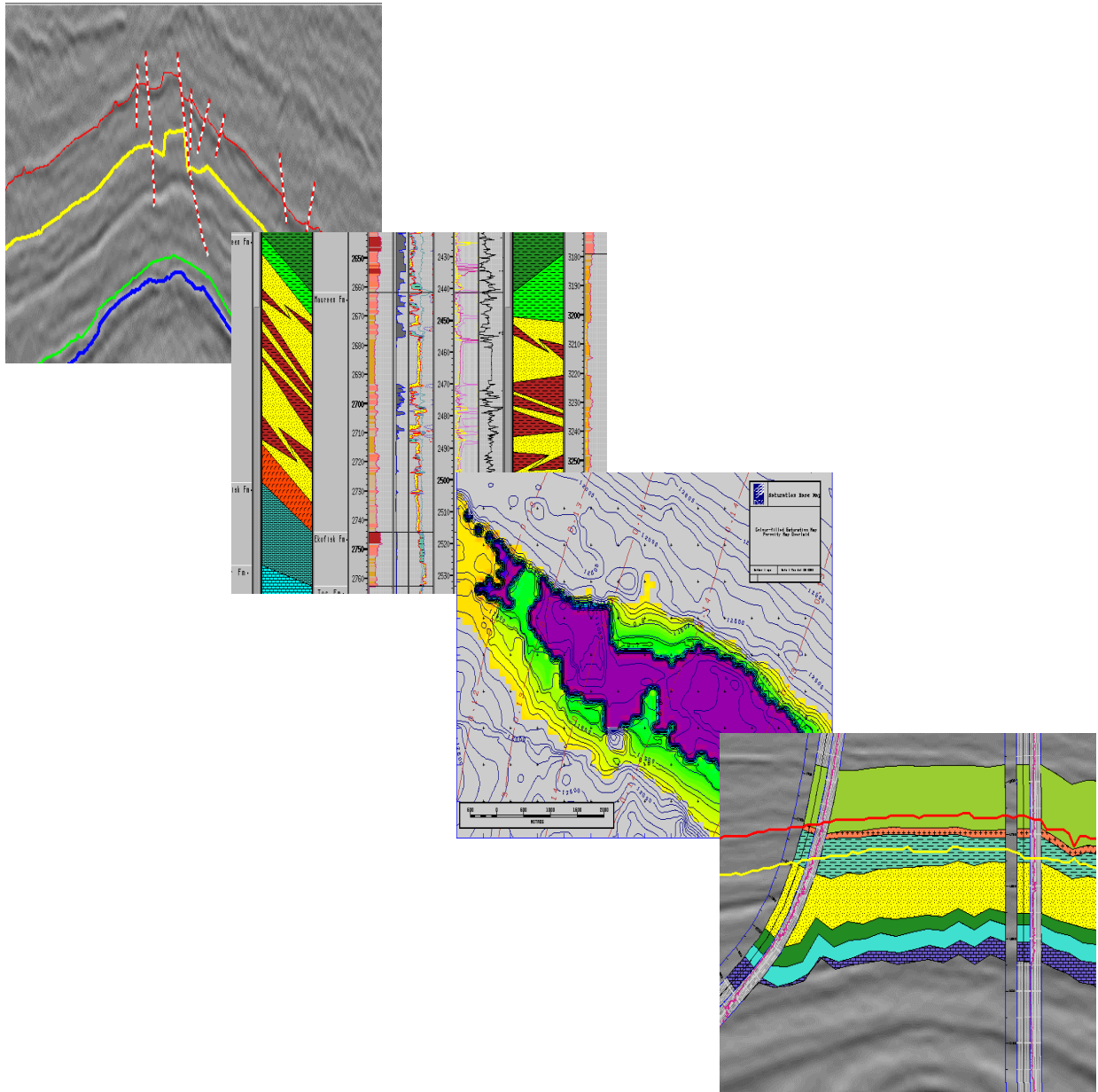




Tigress



**An integrated suite of applications
available on UNIX and PC platforms**

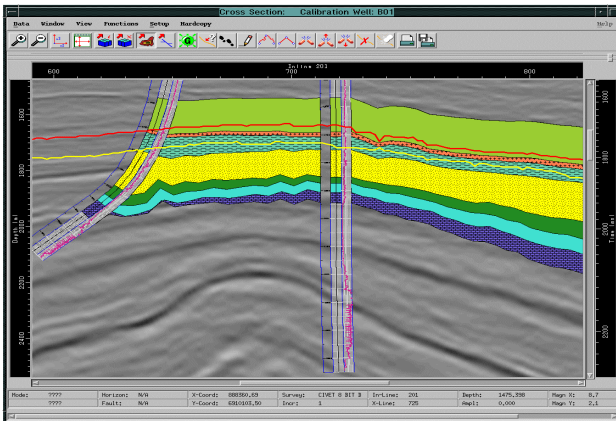
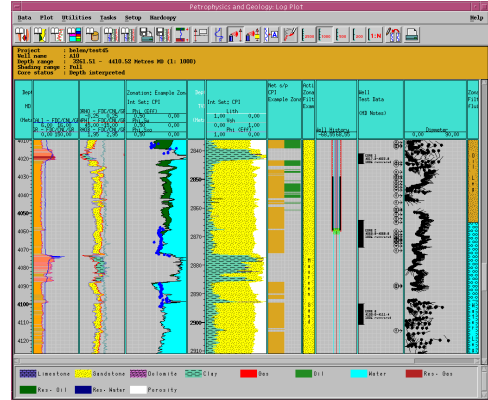


Tigress

Tigress – Application and project database solutions for the Exploration & Production Industry

The Tigress suite of geoscience applications represents the most integrated solution available to the industry. Built around one of the most comprehensive databases available – the Tigress Project Data Store (PDS), the Tigress product has been completely reengineered. With an installation base of over 150 locations in 35 countries, Tigress provides the E & P professional with a proven, integrated, workflow solution.

Backed by dedicated team of skilled support and development staff based in 4 continents we can help you manage the entire E & P data chain. The Tigress solution effectively supports the data stream workflow and greatly reduces the operational drawbacks typically found in non-integrated systems and data management. The Tigress solution is open and vendor neutral to help you protect your investment in software and services.



The ability to make fast and accurate decisions, to bring fields into production quickly and within budget, and to realize their full value before depletion is dependant upon your ability to access and exploit the right data at the right time. PGS Tigress is a leading provider of integrated data management solutions to the industry and our experience, combined with the power of Tigress software, can help you achieve that target.

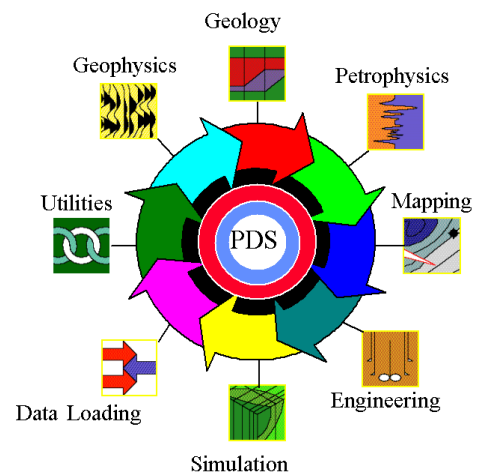
Project Data Store (PDS)

The Project Data Store (PDS) is an Exploration and Production logical data model. Tigress uses the PDS as it's software integration platform and all input data and interpreted results are stored in the PDS. The data model is implemented in the Oracle relational database management system (RDBMS). The combination of a well designed model and the industry's leading RDBMS ensures a high degree of availability, integrity and security of data.

The PDS is a project orientated data store providing real-time data retrieval and storage for a number of concurrent interpreters. Data versioning, access controls and audit trails ensure the continued quality of data stored within a PDS. The Tigress applications are fully integrated with the PDS allowing interpretation using data from all disciplines to accurately model the reservoir.

Links and Utilities

We offer a variety of links and utilities for integration of our data products with third party applications and databases. The seamless exchange of information from the PDS to these third party applications improves the workflow and enhances the productivity of E&P asset teams.

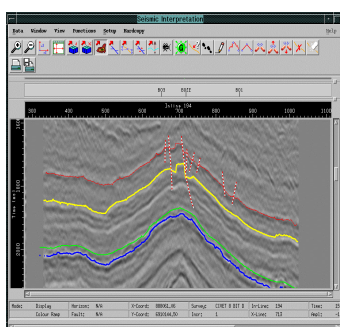
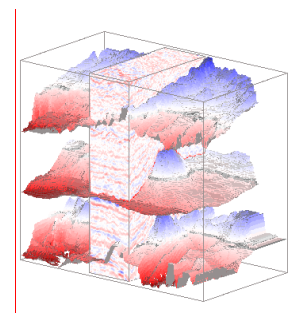




Tigress

Interpretation Tools

We offer a comprehensive array of interpretive software products to assist multi-discipline asset teams to rapidly evaluate field prospectivity, analyze drilling prospects and design development and production programs. The Tigress application suite combined with the PDS delivers a robust project data management and interpretation environment which reduces project cycle time and cost while increasing project integrity and staff productivity.

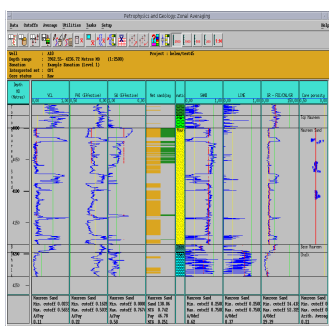
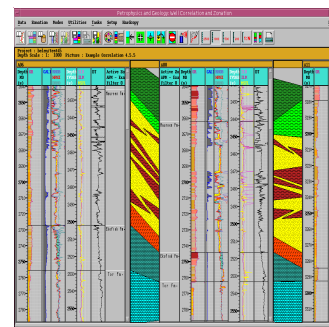


Tigress Geophysics

Tigress Geophysics provides a complete set of easily accessible applications for the interpretation of 2D and 3D seismic data, and the generation of synthetic seismograms to tie in geological models. A full range of visualisation, interpretation, horizon manipulation and attribute extraction functionality is available. These tools, coupled with 3D visualisation and time/depth modelling, provide an integrated approach for the geoscientist. Results of the interpretation are saved to the Project Data Store for use in the other Tigress applications in the Geology and Mapping modules.

Tigress Geology

Tigress Geology allows the geoscientist to model the chrono, litho and fluid stratigraphy of the reservoir, using multi-well zonation, correlation and cross-section interpretation. Tigress Geophysics, Tigress Petrophysics and Tigress Mapping data can be integrated to accurately model the well and inter-well areas. Application hot links with Tigress Petrophysics applications can be used to define finer facies and lithology zonations using core and log data. Zone thicknesses can be generated from the finished zonation and then passed to Tigress Mapping along with zone top and bottom depths for gridding as part of the structural modelling process. Results of the interpretation are saved to the Project Data Store for use in the other Tigress modules.



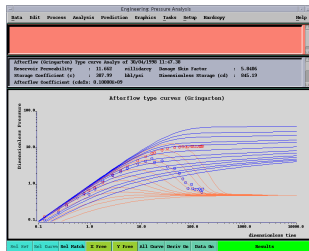
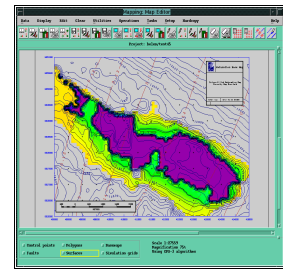
Tigress Petrophysics

Tigress Petrophysics allows the petrophysicist to characterize the reservoir by analysing log and core data. The module provides a comprehensive set of applications for log and core data manipulation and correction, parameter calculation and log analysis for both open- and cased-hole logs. Both input and output data can then be zonally averaged for use in mapping. An automatic audit trail records all processes, so that analyses can be easily rerun using the latest input data or parameters.

Tigress

Tigress Mapping

Tigress Mapping allows the geoscientist to model the structural and lithological properties of the reservoir spatially. Geophysical, geological and petrophysical data can be integrated to construct an accurate reservoir volumetric model. Complex arithmetic or logical operations can be performed on data using standard or user defined equations, the results of which can be used in the volumetric model. Volumetric calculations can be performed on the model with results being reported in a choice of units and on an area by area basis. The static model can be passed to Tigress Simulation as the basis for the fluid flow simulation model.

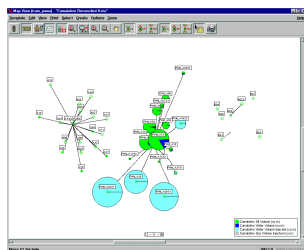
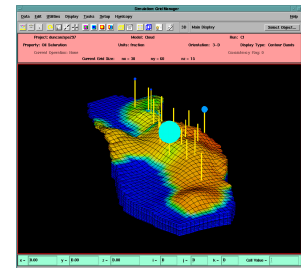


Tigress Engineering

Tigress Engineering enables production engineers to monitor the construction and production history of a well, and reservoir engineers to model reservoir behaviour using pressure test measurements and the results of laboratory fluid experiments. Results from pressure analysis and black oil and compositional fluid analysis are used directly within Tigress Simulation to model fluid flow.

Tigress Simulation

Tigress Simulation provides a wide range of analysis techniques for black oil, compositional, and EOR simulation including thermal modelling, with gas condensate and dual porosity options. Both IMPES and fully implicit time stepping methods are supported for 1D, 2D and 3D models. A unique strength is the use of the integrated project database as the focal point for the compilation and management of the sequence of models required in a simulation study. No keyword files are necessary as all data is stored in the database. The architecture of the Tigress Simulation module facilitates the use of third party simulators such as Eclipse, Chears and SURE.



Tigress Production Data Management and Analysis

Tigress Production Data Management and Analysis is used for the analysis, manipulation and easy visualisation of recent and historical production data. The application, called PUMA, performs all of the typical objectives of reservoir performance analysis and forecasting, including estimation of original hydrocarbons in place, analysis of past and present performance, prediction of future performance under current conditions, estimation of reserves and recovery rates under various conditions and updating of analysis with new data during life of field. PUMA is fully integrated with the PDS and other Tigress applications.

The Tigress suite of applications and the PDS database are available on UNIX and PC platforms.

Backed by an experienced and dedicated helpdesk team, your software support and training requirements are handled quickly and efficiently. A comprehensive selection of training courses and on-site support options tailored to your individual site are available. Installation of the Tigress software and any operating system upgrades can be performed by an experienced Tigress installation engineer upon request.

Integrated by Design



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