ARIES™ Modeler Software

Overview

ARIES™ Modeler software extends the widely used ARIES economic and reserves application to evaluate complex fiscal regimes and multi-well drilling programs while also integrating probabilistic economic modeling into your projects. With ARIES Modeler you now have the ability to create, modify, and control fiscal and complex asset models within a single application that retains the familiar ARIES workflows, rollup capabilities and forecasting features.

Features

Integrates unconventional resource play economics
- Included models are designed specifically for shale, CBM and other unconventional resource plays
- Integrates stochastic economics consistent with new reserve reporting guidelines
- Probabilistic calculation of P10, P50 and P90 (1P, 2P and 3P) reserves
- Stochastic aggregation to any hierarchy level

Supports probabilistic multiple reservoir models
- Evaluate deep water and other complex projects
- Automated well scheduler
- Platform cost allocation
- Incorporates geological and development probabilities of success

Model and consolidate fiscal regimes worldwide
- Designed specifically for Production Sharing Contracts (PSC) and Service Contracts
- Fiscal models are managed and stored on secured databases
- Models are maintained as a Landmark service or by customer
- Consolidates results globally

Example of a Shale Gas resource play model.

Multiple reservoirs stochastically summed to project level.

Typical example of a Production Sharing Contract input template.
Novice or expert modeling

By supporting various levels of user expertise, ARIES Modeler software helps satisfy the need for both rapid model customization and consistent and secure deployment of models for use by company personnel.

Company experts can use the fully customizable modeling engine to create the exact calculations they need for their contracts and assets, and can publish these models for non-experts within the company for use in day-to-day evaluations. Intermediate-level and even novice modelers can utilize the included examples of Production Sharing Contracts and multi-well deterministic and stochastic resource play models as starting points for common asset evaluation needs.

Note: ARIES System is required to run ARIES Modeler

Benefits

Meets your diverse fiscal planning needs

ARIES Modeler is routinely used by international project engineers, business analysts and planners, fiscal modelers and negotiators and corporate reserves managers. The software is typically used for:

- Capital project authority for expenditure economic justification;
- Well or asset reserves determination; and
- Corporate reserves and project values.

Extends the value of ARIES software

The Modeler module builds upon the confidence and transparency, the higher productivity and efficiency, and the flexibility and speed of the ARIES system.

A single ARIES project can rollup your assets worldwide.

Provides single tool for all asset types worldwide

Instead of having to manually manage and collate incompatible economic analyses and spreadsheets for different parts of the world or custom evaluation algorithms, ARIES International software provides an integrated roll-up and reporting environment to manage your global business. Using the built-in stochastic support, risk and uncertainty models can be included in a standard ARIES project without need for any external tools or data transfers.

Typical multi-well reservoir template model including risk and uncertainty
Offers more power and control

Since the models are user customizable, dependencies within and between assets, whether deterministic or stochastic, can be more quickly and easily incorporated and analyzed. Similarly, because each country’s fiscal regime is different, and the contracts within these regimes vary and change over time, the end user can efficiently maintain fiscal models internally within the system. With ARIES Modeler software, you have the power to control the details of the fiscal model instead of relying on prescribed algorithms to evaluate the value of your projects and assets.

Adaptable to all calculations

The sophisticated calculations available are not limited to fiscal terms or asset models, but can be applied to many specialized requirements including custom reporting using Excel™, integrated workflows with non-ARIES databases and tables, target solver problems, and more.

Features

Familiar ARIES software environment

ARIES Modeler software retains the familiar and proven ARIES system workflow environment. Users are isolated from the fiscal or asset model details; they simply choose a model and continue as they are accustomed to using the ARIES system to produce their results.

Easy-to-use sample templates

For basic analyses, ARIES Modeler software comes with a selection of PSC, complex calculation, multi-well and stochastic templates to enable quick economic modeling. These can also be used to form the basis for other models by simply inputting additional economic formulas.

Customizable modeling engine

The modeling engine forms the heart of ARIES Modeler software, and is under the control of authorized modelers inside your company.

• During each run, the ARIES cash flow results are processed further through the specialized regime or well level model calculation instructions; then they are consolidated, reported and stored in the database
• The included model function library provides more than 300 pre-defined specific calculations that increase your accuracy and the team’s productivity
• You can have as many models and variations as needed. They are all secured within the database and can be shared across your organization
• The expert modeler decides which, if any, of the fiscal or asset parameters to expose as input data to the other users

Model data and interfaces

Several new interfaces simplify both running and creating models:

• Users can interactively select a model from the database using a pop-up list
• Pertinent parameters are entered or selected on an intelligent form within the data editor
• Modelers can work within the new specialized environment to access models, add/edit instructions, pull model functions from the library, and view explanations and definitions
• Modelers can package a model and export it as an ASCII text or XML file for someone outside the group to modify, then import the results securely back into the database
• Bi-directional links to Excel are provided for specialized input and output needs
• Functions for reading and writing to databases are included to integrate your workflows

Results and presentations

Many output options are available, including:

• Onscreen previews
• Standard and user-defined reports in column or row formats
• Direct output to Excel
• Results can be stored in the database tables for reporting later, as intermediate data for the ARIES reserves management system application, ARIES™ RMS, and for in-house use
• Units and currency conversions within the calculations
## System Requirements

### Hardware
- Intel Pentium 1 GHz processor or greater
- 1 GB RAM or greater
- 1024 by 768 graphics resolution or greater
- 200 MB hard disk space (780 MB additional for running on EDM)
- DVD for optional local workstation installations
- Supports multiple processors

### Operating System(s)
- Windows® XP® Professional SP3
- Windows 7 (32-bit)

### Software
- ARIES System or ARIES Economics
- Adobe® Acrobat® Reader 7+ to view documentation

### Databases
- Microsoft Access® 2003 or 2007 database (Classic Data Model only)
- Microsoft SQL® Server Express database
- Microsoft SQL® Server 2005 or 2008 database
- Oracle® 10g or 11 database

### Related Products
- ARIES System
- ARIES RMS

### For more information:

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