IAM

Field development planning and operations software

APPLICATIONS

- Integrated asset optimization
- Field development plan optimization
- Brownfield rejuvenation projects
- Production optimization and reservoir management

BENEFITS

- Improves forecast accuracy
- Unites understanding of subsurface and surface
- Enables multidisciplinary work processes
- Optimizes CAPEX required for field development by enabling full asset understanding
- Optimizes OPEX by evaluation of through-life flow assurance needs
- Maximizes revenues and field production profiles

FEATURES

- Open architecture for dynamic coupling of reservoir simulators with multiphase flow simulators, process simulators, and economic models
- Field planning powered by conditional logic including "what if?" scenarios
- Broad selection of optimization routines, including downstream dynamic matrix optimizers
- Open data framework to support live asset models

IAM* field development planning and operations software provides the most complete and flexible framework for making critical decisions about an asset's development and operation over its life. IAM software enables the coupling of domain models—reservoir, production, process, and economics—into a total system model for asset-level decision making. This solution can be applied during field development, production operations, or daily production optimization.

### Enable critical, asset-level decisions through a total system model

A single production simulation environment integrates all asset details contained in the individual simulation models of the reservoir, wells, surface infrastructure, and process facilities. The simulation environment allows logical connections, constraints, and optimization routines to be implemented so that the value of multiple development options or operating scenarios can be compared and maximized. Together, surface and subsurface teams can collaborate to enhance asset value with a common view of the asset—throughout the life of the field.

Solve your asset-specific challenges

IAM software offers the flexibility to couple any combination of models into a full asset model, while preserving the fidelity of individual detailed models. From reservoir, well, and network production forecasting to solving complex optimizations based on field constraints, IAM software allowing you to solve a range of complex technical challenges.

IAM software enables you to

- achieve more accurate forecasts by accounting for the interactions of subsurface deliverability with surface backpressure constraints
- model compositional blending, mixing, and injection of multiple producing zones and reservoirs to meet product specifications
- optimize the use of artificial lift, EOR, and IOR injection
- plan gas storage operations by predicting deliverability and optimizing compression design
- control cross flow between sands using optimized inlet control valves in complex wells
- debottleneck pipeline network field processing facilities.
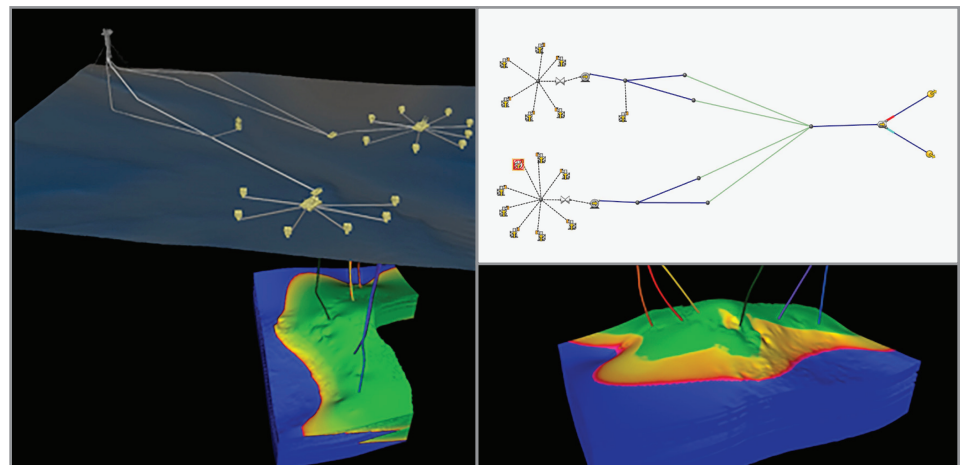
IAM software unites subsurface and surface understanding to enable better decisions for the entire asset.

IAM

Improve results through coupling of best-in-class modeling tools

The open framework of IAM software enables the coupling of a wide number of simulation software applications including:

- Reservoir simulation models
  - ECLIPSE* industry-reference simulator for black-oil, compositional, thermal, and streamline reservoir simulation
  - IMEX reservoir simulator tool from Computer Modeling Group
  - MBAL material balance simulator from Petroleum Experts

- Multiphase flow simulation models
  - PIPESIM* steady-state multiphase flow simulator
  - OLGA* dynamic multiphase flow simulator
  - GAP multiphase oil and gas software from Petroleum Experts

- Process/facilities simulation models
  - HYSYS from AspenTech
  - Petro-Sim from KBC Advanced Technologies
  - UniSim process modeling tool from Honeywell

- Economic and optimization models
  - Merak* Peep for full economics, portfolio, and reserves management

In addition, third-party software integration is supported for Microsoft Excel, as well as other engineering packages for reservoir, well, and surface simulation.
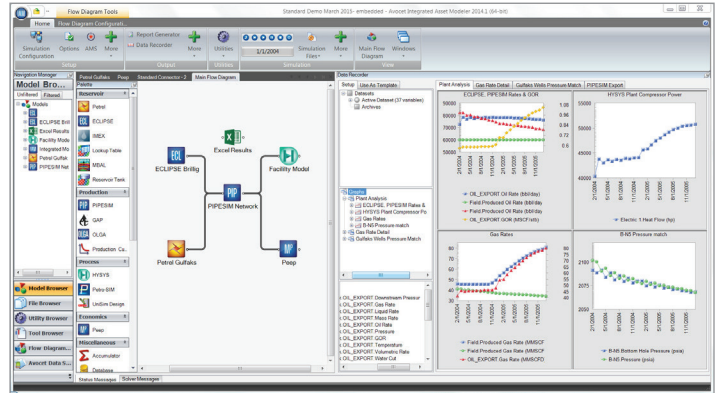
Connect multiple models in the IAM framework for a complete system analysis.

software.slb.com/IAM

Schlumberger