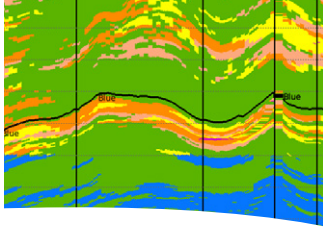
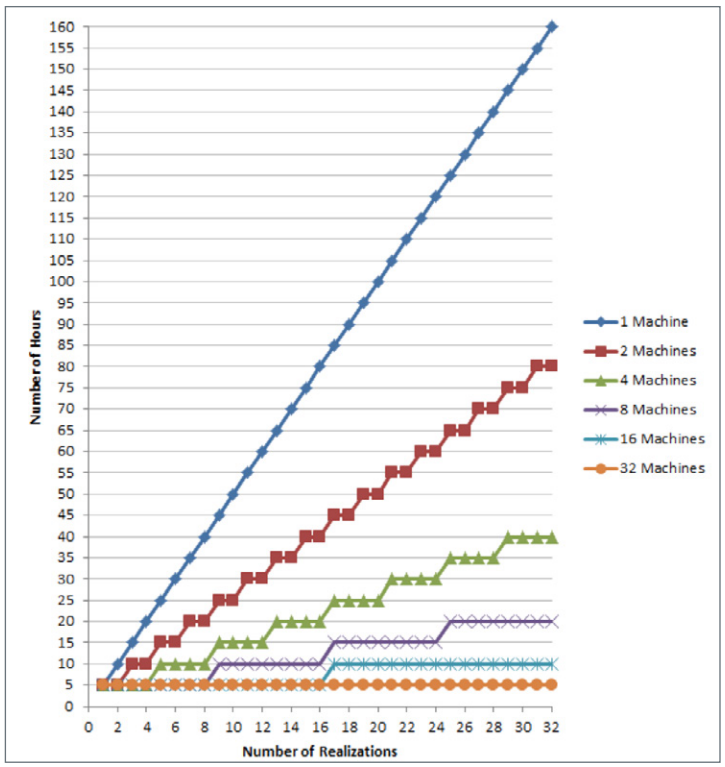
Jason

Multi-Realization



Reduce compute time in **StatMod** and **RockMod**

Jason® offers a **Multi-Realization** batch accelerator option to speed up your **StatMod**® and **RockMod**® reservoir characterization projects. **StatMod** and **RockMod** generate multiple highly detailed reservoir models by tightly integrating multiple data with different scales, and provide a quantified measure of uncertainty. By default, **StatMod** and **RockMod** are multi-core enabled to use multiple or all available cores within one machine (up to a maximum of 128 cores). The **Multi-Realization** utility allows the user to simultaneously generate multiple realizations on multiple machines to dramatically reduce the execution time of **StatMod** and **RockMod** batch runs (one realization per machine). Fast realization generation results in more time for the user to review the intermediate results, then fine-tune and iterate inversion parameters to ensure quality and reliability in the final realizations. The additional time also allows the user to analyze the multiple realizations through ranking to assess the uncertainties and select the relevant realizations for follow-on reservoir modeling and simulation.

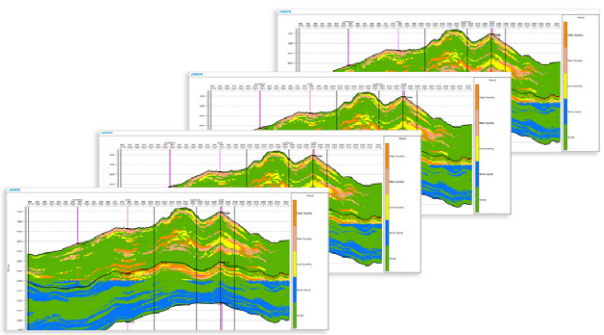


Processing time speed ups:

(1) Where Multi-Realization isn't used, one realization takes 5 hours to execute on a machine. The processing time needed to generate 32 realizations is 160 hours.
(2) The processing time to generate 32 realizations can be reduced to as little as 5 hours with the use of a Multi-Realization license of 32, assuming all the machines have the same hardware specifications.

Key features and benefits

- Supports multiple machines on a network to linearly speed up the generation of multiple realizations
- Allows the same user to run several **StatMod** and/or **RockMod** batch jobs simultaneously up to the total number of licensed realizations
- Supports IBM® Platform™ LSF® for job scheduling on Linux environment
- Generates more realizations than the number of available machines per batch job by automating a pool of machines on a network
- Automatically generates QCs over multiple realizations from the same **Multi-Realization** run
- Supports machines with either Windows® or Linux™ operating systems or a mix of Windows and Linux machines



CGG GeoSoftware

Multi-Realization

Licensing options

Multi-Realization licenses for **StatMod** and **RockMod** are available for up to 2, 4, 8, 16, 32, 64 and 128 simultaneous realizations that require up to the same number of machines respectively.

Operating system requirements

On Linux™ x64, the following operating systems are supported:

- SUSE™ Linux™ Enterprise Server 11 or later, with latest updates
- Red Hat® Linux™ Enterprise Server (CentOS) 4, 5 or 6, with latest updates

On Windows®, only 64-bit versions of the following are supported:

- Windows® 7 (professional, enterprise and ultimate), with latest service packs installed
- Windows® 8.1 (professional and enterprise), with latest service packs installed

Interoperability

- **Jason® Workbench**
- **EarthModel® FT**
- Easy transfer of model properties to **Petrel®** corner point grids through **EarthModel FT**

Recommended minimum hardware

Processor:

8+, 16+ and 32+ cores for working with small-, mid- and large-sized datasets respectively

Hard drives:

SATA-II hard drive with enough disk space for your data

Disk space for software installation:

10 GB of free disk space recommended for installation since the installer un-compresses files and generates temporary files. The installed software will occupy about 4 GB of disk space.

Memory:

16+, 64+ and 128+ GB for small-, mid- and large-sized datasets respectively

Graphics card:

512 MB NVIDIA® OpenGL 3.0 capable video card with at least 48 shader cores. No requirement for computer cluster.

Monitors:

Dual monitors are recommended. On Linux™, configure the X-server to use NVIDIA's TwinView™ architecture. Xinerama is not supported because it causes performance issues in the viewers.

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