# 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.
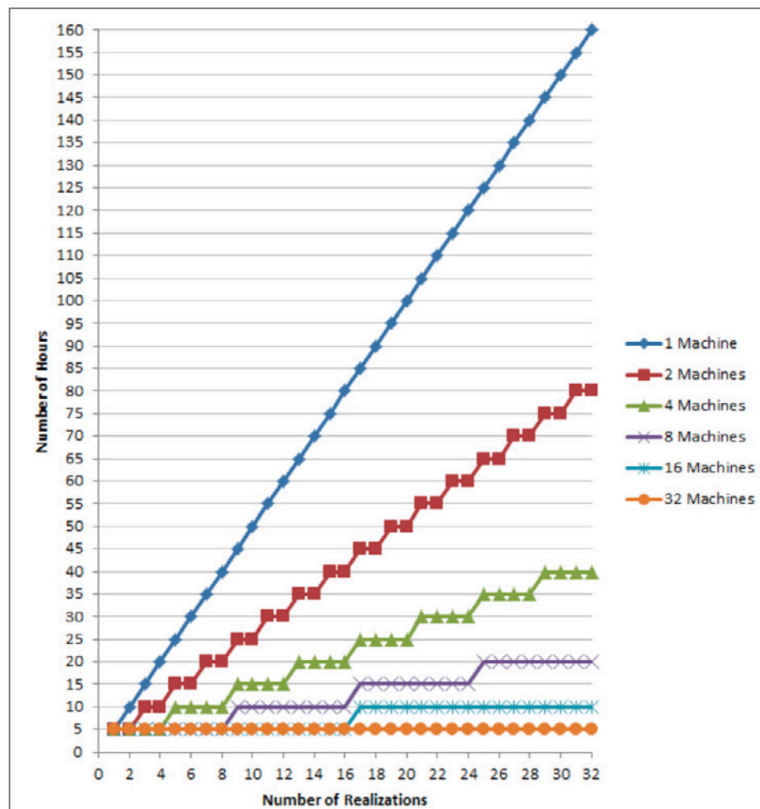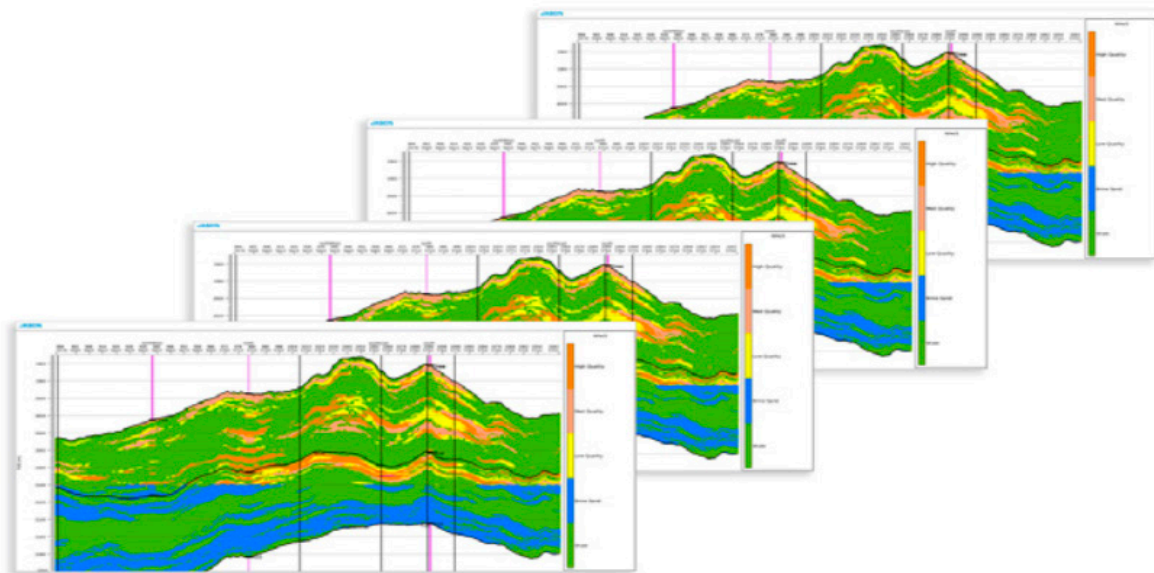

Processing time speed ups:

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.*

GeoSoftware™

www.GeoSoftware.com

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