PolySystems, Inc.
Actuarial Software & Consulting Services

PolySystems CloudMaster

PolySystems CloudMaster runs grid jobs using the Microsoft® Azure Batch service. With CloudMaster, PolySystems users just need to add Microsoft® Azure Batch and Storage accounts to their Azure resources, and they can be up and running cloud jobs in minutes. When the job is finished, the results are automatically downloaded to a local machine where they can be used exactly as they are with local or grid runs.

What is Azure Batch?

"Azure Batch is a platform service for running large-scale parallel and high-performance computing (HPC) applications efficiently in the cloud. Azure Batch schedules compute-intensive work to run on a managed collection of virtual machines, and can automatically scale compute resources to meet the needs of your jobs."

-Microsoft®

New reporting requirements are on the horizon, and they are likely to significantly increase runtimes. PolySystems CloudMaster allows for much greater scaling than current, on-premises grids can handle, since all the data and software is stored on the Virtual Machines (VMs) running the jobs.

PolySystems CloudMaster currently supports annuity, health, life, and universal life valuations and asset and liability projections. Following are some high-level highlights of our module.

Highlights of PolySystems CloudMaster Software

- Allows you to upload a PolySystems model to your Azure Storage account, select run-time parameters, and execute the job.
- Eliminates the need for a local grid, as the entire job runs on the Azure cloud.
- Allows you to grant Poly secure access to your Storage account for product support and troubleshooting, eliminating the need to zip and FTP large volumes of data.
- Accesses a pool of VMs that already have all the software required to run PolySystems.
- Takes advantage of the Microsoft® Azure Batch AutoPools feature, allowing you to allocate a grid of servers for each job separately, depending on the size of the job, and then shut them down when the job is complete. The AutoScaling feature that is built into the Microsoft® Azure Batch service shuts down VMs as they complete their tasks, reducing idle time.
- Supports the Microsoft® Azure Batch service's Low Priority Nodes, which are more cost effective at the expense of not always being available. However, they can be used in development and test environments.
- Saves job templates to easily use for future runs.
- As with all PolySystems software, supports command line execution for production job scheduling.
- Supports Asset-Liability Manager and Future State Stochastic runs.

Contact Us

312.332.5670 | support@polysystems.com | www.polysystems.com