

# Galileo for High Performance Computing

For decades, leading enterprises across every industry sector have been engaged in an arms race, where the weapon-of-choice is insight. Decision-makers are constantly seeking deeper, more granular insights into their internal operations and processes, their customers and competition.

Big data and analytics are essential to any insight-driven organization, but they're only raw materials. Those seeking to mine greater insight rely on high performance computing (HPC) environments to power the conversion of those raw materials into a competitive advantage.

Continual advancements drive organizations to constantly refresh their HPC environments in pursuit of higher throughput and greater compute and disk capacity. So, as limitless as the potential of HPC may be, the job of managing, maintaining and optimizing those environments is getting more challenging. The four most prominent challenges include:

- Maximizing the HPC environment's flexibility
- Scaling the HPC environment rapidly
- Managing the HPC environment efficiently
- Avoiding tool sprawl

## Consolidating performance monitoring

*"IT is compelled to jump from screen to screen in an attempt to draw correlations across different tools, complicating and delaying issue resolution and frustrating users."*

No two HPC environments are identical, so achieving end-to-end view of performance across the entire environment has historically been a challenge.

Many HPC environments are comprised of multiple clusters, and each of those clusters will have its own dedicated performance management solution, collecting high level statistics for CPU, memory, disk and network utilization for that cluster only. IT is compelled to jump from screen to screen in an attempt to draw correlations across different tools, complicating and delaying issue resolution and frustrating users.

Some IT organizations choose to move beyond those cluster and tool-specific performance monitoring solutions and pursue a build-your-own strategy. This approach requires significant time and resources to customizing and maintaining the

performance monitoring dashboards, while also collecting and managing the actual performance data.

However, there is a better approach. Galileo Performance Explorer is a single solution that monitors performance across the entire HPC environment and every cluster, providing IT managers with a holistic view of comprehensive, granular and aggregated performance metrics.

Galileo Performance Explorer technology is vendor-agnostic, with agents monitoring server, storage, systems, database, SAN and cloud environments for a wide range of technologies, including IBM Spectrum Scale. Galileo is cloud-based and maintains all historical data, allowing IT managers to analyze performance trends and issues across their HPC environment for their predictive and preventive value.

**With actionable – and predictive – insights in high-performance environments, available from anywhere, Galileo Performance Explorer represents the cutting edge of infrastructure monitoring. Contact us today to learn more.**