Pre-integrated, open platform for high performance analytics
Cray’s Urika-XA™ extreme analytics platform is engineered for superior performance and cost efficiency on mission-critical analytics use cases. Pre-integrated with the industry-leading Hadoop® and Spark™ frameworks, yet versatile enough to serve analytics workloads of the future, the Urika-XA platform provides a turnkey analytics environment that enables organizations to extract valuable business insights.

Consolidation of Analytics Workloads

Analytics pipelines built to solve business problems involve multiple stages of processing. To accommodate a variety of processing techniques in a pipeline, convention would dictate building out separate clusters, greatly increasing the footprint of the analytics environment and necessitating data movement between stages.

The flexible Urika-XA platform serves a wide range of analytics tools, with varying computing demands, in a single environment. From the type of processing — data preparation, data mining and machine learning, among others — to their demands on the system — high throughput or low latency — the Urika-XA platform supports workloads across the spectrum, minimizing the footprint of the analytics environment.
Emerging Analytics Technologies
As it evolves from the classic MapReduce framework, the analytics market needs lower-latency processing options, such as interactive SQL, stream processing and in-memory computing. Traditional data analytics infrastructure is primarily set up for batch processing and is not designed for performance on these newer technologies.

Optimized for compute-heavy, memory-centric analytics, the Urika-XA platform incorporates innovative use of memory-storage hierarchies, including SSDs for Hadoop and Spark acceleration, and fast interconnect, thus delivering excellent performance on emerging latency-sensitive applications.

Best of Appliances and Openness
Selecting analytics infrastructure generally comes down to a choice between the build-it-yourself and the rigid appliance models. Organizations that build their own systems divert their energies unnecessarily into a complex and time-consuming exercise. On the other hand, the ever-changing big data and analytics landscape means other organizations face the prospect of being locked into an immutable appliance.

Organizations that choose the Urika-XA platform get the best of both worlds. This turnkey analytics engine accelerates time to value, is available with the widely used Hadoop and Spark software preinstalled, and is tuned for optimal analytics performance. It is an open platform, so users can modify their systems to support future analytics workloads while still benefiting from a single point of support.

Enterprise-Ready Systems Management
The complex systems used in data analytics generate a significant systems management burden, and finding skilled administrators can be challenging. In addition, conventional big data and scale-out architectures are often misaligned with datacenter standards and threaten to create a management headache for administrators.

The Urika-XA platform simplifies systems management by providing a unified administrative tool for managing and monitoring hardware, software and storage components. Interoperability with the datacenter is enhanced by the ability to scale compute and storage components independently, as needed, and by the system’s POSIX compliance, which means it can support non-HDFS uses as well.

The Urika-XA Extreme Analytics Platform

- Reduces total cost of ownership and footprint
  - Single-platform consolidation of a wide range of analytic workloads, with support for both batch and latency-sensitive analytics

- Designed for performance
  - Optimized for compute-and memory-intensive emerging workloads, with acceleration through SSDs, fast interconnect and Cray Adaptive Runtime for Hadoop

- Provides a pre-integrated, open platform
  - Ready to run big data analytics out of the box while supporting modification for future analytics applications

- Ensures high manageability and interoperability
  - Single pane of glass for systems management; standards-based software stack, storage system and datacenter options