

ARTIFICIAL INTELLIGENCE FOR HPC & RESEARCH



Unmatched scale, speed and security.

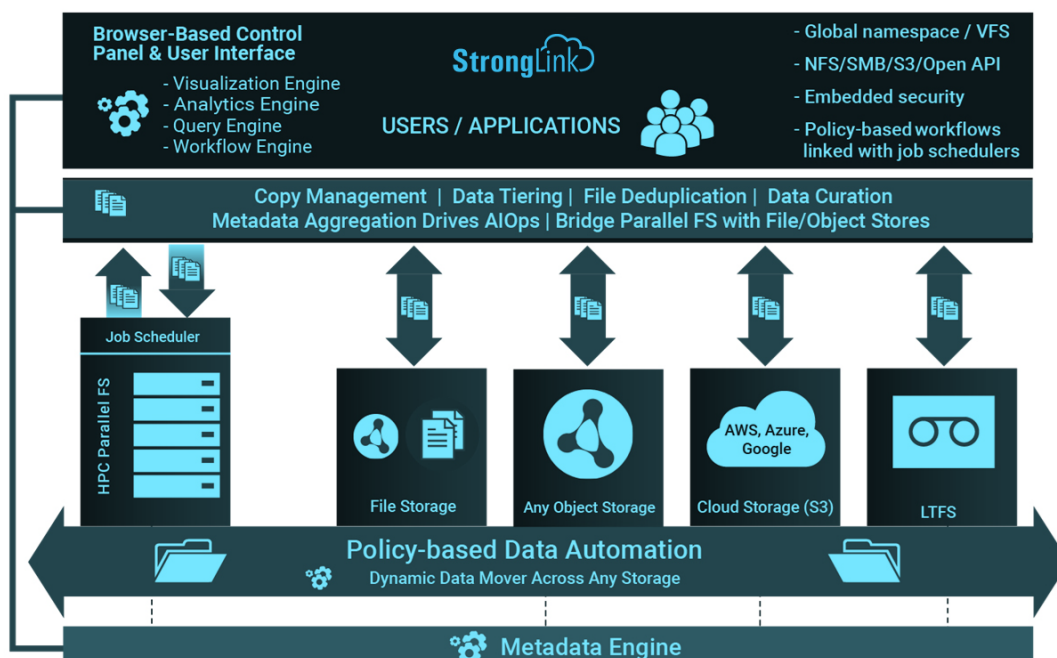
PROBLEM

Massive data sets need effective data management to extract the business value, reduce storage costs, and accelerate tiering between storage. Timely extraction of actionable information mean faster and more effective operations. But today's research and high performance computing (HPC) environments are faced with unique problems: manual processes, lack of data classification, and the complexity of managing research data across diverse storage environments (HPC clusters & instruments, file, object, tape, and cloud storage). These problems are complicated by the stringent heritage and curation requirements of grant-funded projects, publishing, and external data provenance and metadata standards.

IMPACTS

- Data from instruments or parallel file systems are difficult to access, protect, and share
- Limited data insights: critical research data may go undiscovered and underutilized
- Improper metadata classification orphans data and prevents accurate data provenance for study results
- Applying custom taxonomies is labor intensive and often incomplete correlation & collaboration of data is difficult or non-existent

SOLUTION



StrongLink's "Autonomous Engines" work intelligently with Metadata Services, Data Insights and analytics to enhance the automation of metadata management. Metadata is harvested, groomed, aggregated, and analyzed in real-time to facilitate workflows, enhance collaboration, and improve data classification. Data insights are derived from metadata to power workflows and initiate dynamic data movement across all storage tiers and services.

- Global namespace delivers connectivity across various files systems, disparate storage platforms and services for simplified and controlled access, workflow collaboration, and optimization (tiering & archiving) in line with organization's policies
- Intelligent metadata repository of all data is transparently and automatically built from all across all data storage tiers / locations to classify, normalize and aggregate, reducing manual processes
- Advanced metadata tagging based on industry standards and advanced customized taxonomies
- Ensures data provenance and metadata portability to conform to organizational research standards
- Granular security controls protects data access at various levels from authorized users and systems
- Tracking of data access delivers valuable and actionable data insights for optimization and security
- Advanced tracking of data streams ensures data from external instruments and edge systems is protected delivering an additional layer of data integrity across the organization's storage tiers and copies
- Thorough the workflow engine streamlines collaboration between groups and teams and improves organizational efficiency and responsiveness