

Take Control of ALL Your Storage Resources

iRODS and Quantum Xcellis® Deliver Comprehensive Management

In dynamic environments, where unstructured data is growing rapidly and IT infrastructures are constantly evolving, organizations need to invest in technologies that minimize disruption of business-critical workflows, yet provide enterprise-wide awareness and control over the data and the storage resources that are deployed throughout the environment.

STORAGE SILOS POPPING UP EVERYWHERE

It's common to have multiple storage silos across an organization. While often necessary, it complicates data and storage management, and creates challenges for data visibility and sharing. Silos can be the legitimate result of investments made for specific projects or solutions to specific needs such as deep archive or high-performance analysis. They can also be the consequence of acquisitions and restructuring. Whatever the reason, the number of silos tends to increase over time, and as needs change, investment decisions often dictate that hardware not yet fully depreciated must be repurposed to fulfill other needs somewhere in the infrastructure.

In addition to a single organization having multiple silos, it's common in areas such as scientific research and media & entertainment for multiple independent entities to work together on projects. In such cases, the security of each organization must be maintained while allowing appropriate sharing and collaboration.

Even in the most well-managed and thoughtful organization, the existence of multiple storage silos may be minimized, but rarely eliminated. It just isn't possible to optimize a single type or configuration of storage for every workload and workflow requirement. With petabytes or exabytes of data, simply buying more high-performance flash or disk and keeping everything together isn't financially feasible. Tiering is the answer – highly active data belongs on high-performance storage, cold data belongs on the lowest cost tier. If cold data needs to be referenced or repurposed, it must be easy to locate and return to the high-performance tier so work can get started as quickly as possible.

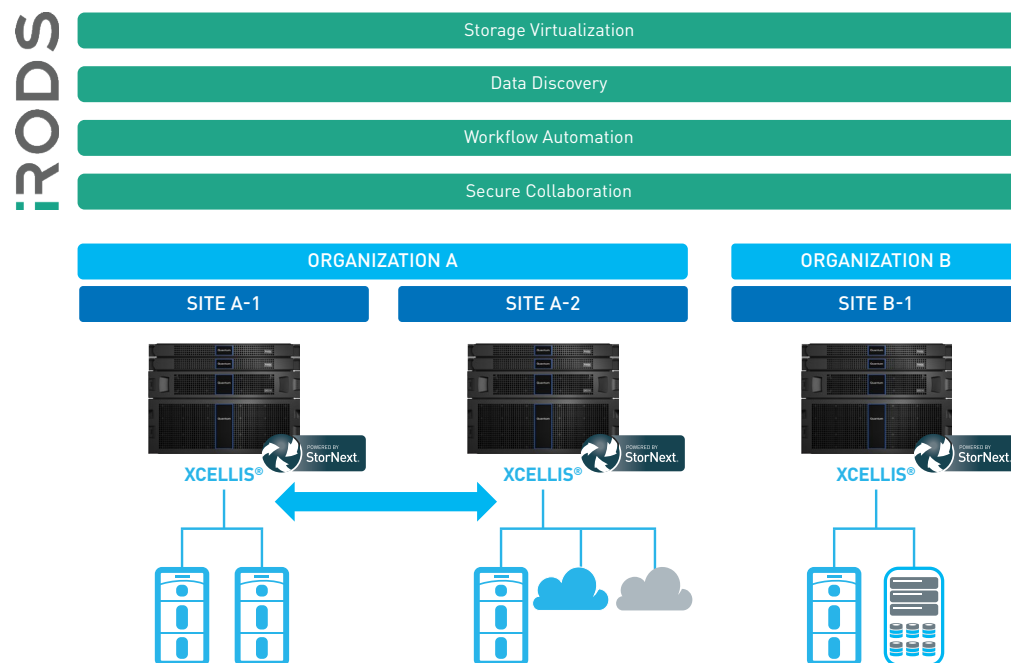
Today's organizations need highly customizable and tunable storage to efficiently support critical workflows, but with the ability to facilitate and even automate data discovery, placement, movement, and sharing based on workflow needs and budget realities.

iRODS

XCELLIS PLUS iRODS SOLUTION BENEFITS

- **High performance** for unstructured data workflows
- **Flexible configuration** to fit current and future needs
- **Open-ended scalability** for both primary and secondary tiers
- **Optimize** for both performance and cost as needed
- **Simple** data and resource management
- **Federated data and storage reporting** across the organization
- **Automated data movement** within and between data silos, organizations and the cloud
- **Custom metadata** to add value and visibility to data

Figure 1. Quantum Xcellis high-performance workflow storage under an iRODS umbrella



Quantum Xcellis with integrated tiering is tuned for end-to-end high-performance unstructured data workflows.

The Pillars of iRODS Value are Virtualization, Discovery, Automation, Collaboration across sites and silos.

QUANTUM XCELLIS AND iRODS: AN IDEAL COMBINATION

Quantum Xcellis is storage for unstructured data workflows

Xcellis was designed specifically around the needs of high-capacity, high-performance unstructured data workflows. To provide control over exploding data volumes, Xcellis includes an integrated tiering engine that leverages customer-defined policies to control when data moves from active storage to cold storage, and protects data in real time. A single namespace file system or NAS presentation makes it easy to quickly find data, understand where it resides, and call it back to the high-performance tier with a simple click of the mouse.

The Xcellis tiering engine is also extremely valuable when it is necessary to add a new type of cold storage (e.g. public cloud, tape or object storage). Simply define or update the policies to include this new storage destination, and the rest is automated.

The Pillars of iRODS Value: Virtualization, Discovery, Automation, Collaboration

iRODS (Integrated Rule-Oriented Data System) is open source data management software used by research organizations and government agencies worldwide. Released as a production-level distribution aimed at deployment in mission critical environments, iRODS virtualizes data storage resources so users can take control of their data, regardless of where and on what device the data is stored.

The four pillars of iRODS value are particularly powerful because these capabilities can span across multiple data silos in a single organization and even across otherwise independent institutions. As a result, it is possible to implement an enterprise-wide data management strategy that can overlay multiple departmental workflows and enable secure collaboration and data sharing across organizational boundaries.

While iRODS has comprehensive capabilities for data management and movement, as open source software it requires a level of IT sophistication to configure its broad functionality to fit an organization's specific needs. By leveraging simple Xcellis policies for tiering and data protection, the iRODS value can be highly optimized by focusing it on enterprise wide metadata, discovery, automation and collaboration.

The result is not the elimination of data and storage silos, but the creation of a highly customizable storage platform that can be tuned for specific workflow needs and built to cost-effectively scale, and delivers an umbrella of features that make data across silos more visible, more useful, and more easily shared within and between organizations.

ABOUT QUANTUM

Quantum is a leading expert in scale-out tiered storage, archive, and data protection, providing solutions for capturing, sharing, and preserving digital assets over the entire data lifecycle. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. Quantum's end-to-end, tiered storage foundation enables customers to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at www.quantum.com/customerstories.