Dell PowerScale, ECS and Kalray ngenea®: a Modern Solution for Data Management

As storage requirements keep growing astronomically, customers are seeking to lengthen the life cycle of their storage systems. Unifying heterogeneous storage tiers is high on the agenda of CTO's and accessible archive storage is more relevant than ever before. Cloud storage also continues to be a big topic for enterprises: businesses need hybrid cloud storage strategies for a variety of reasons, including cloud bursting, disaster recovery and global collaboration.

ngenea® provides holistic active data management bringing Dell PowerScale and Dell ECS into the global namespace, enabling enterprises to store the right data in the right place at the right cost.

ngenea unifies Dell file and object storage systems into a single namespace. As such, customers can deploy object storage to move data sets off high-performance tiers when the data is no longer actively used. Featuring strong search capabilities across storage tiers, ngenea enables users to find data fast, regardless of where it is stored. With ngenea, Dell Technologies customers add data management to their existing PowerScale and ECS storage infrastructures to automate data transfer between the high-performance tiers needed for active workflows and archive storage, without the need for manual data movement being scripted into the workflow.

Supporting both on-premise and public cloud storage, ngenea is certified for all S3 compatible high performance compute and unstructured data storage enterprise solution cloud offerings. Customers can create a single namespace with supported cloud service providers (currently AWS, Azure and Google Cloud Platform) in order to support remote teams.

Combined HPC and data management solution with Dell PowerScale Unstructured Data Storage

Hierarchical storage management (HSM)

ngenea adds HSM functionality to existing infrastructure: unifying file and object storage tiers into one single namespace. As such, customers can deploy high-capacity Dell ECS object storage to move data sets off HPC, Tier-0, higher-performance storage tiers when the data is no longer actively used.
Cloud Bursting
When on-premise infrastructures reach peak capacity, ngenea allows organizations to “burst” extra workloads to public cloud services. This is a convenient and cost-effective method to support workloads with fluctuating demand patterns. Public cloud enables organizations to easily scale to meet workload demands, worldwide. Leveraging the scale and flexibility of public cloud enables customers to reduce additional investment in on-premise infrastructure while preventing interruption to business-critical applications from sudden workload spikes.

ngenea enables organizations to automatically transfer data from on-premise storage, such as PowerScale, into the cloud without manual data movement to quickly serve relevant data to compute instances in the cloud. Intelligent caching minimizes data transfer costs and eliminates limits to the number of cloud compute instances. ngenea provides each cloud compute instance with an easy access protocol, adheres to on-premise access controls lists (ACLs) and security while only retrieving required data to reduce egress costs.

Solution Features

- **Hierarchical Storage Management**
  Transparent tiering between PowerScale, Scratch and ECS.

- **Data Mobility**
  Simplified and efficient data movement with minimal duplication making PowerScale the center of the organization.

- **Data Migration**
  Easily migrate and recall from existing file & object stores as well as legacy storage.

- **Backup, Disaster Recovery**
  Enterprise-scale data protection and business continuity without the need for complex third-party software.

Global Collaboration
Global collaboration requires a single global namespace that allows remote users and applications to instantly access and share data across all storage tiers.

ngenea enables organizations to securely share data between remote teams, across sites. It creates a single namespace with supported (S3) cloud service providers and provides instant data access for distributed applications and remote users. ngenea features real-time availability with instant data access and supports on-premise clouds as well as AWS, Azure and Google Cloud Platform.

About Dell Technologies
Dell Technologies has been a leader in the advanced computing space for over a decade, delivering proven products, solutions and expertise. Dell Technologies has a team of data analytics, high performance computing (HPC) and artificial intelligence (AI) experts dedicated to staying on the cutting edge, testing new technologies and tuning solutions for your applications to help you keep pace with this constantly evolving landscape. Solutions include workstations, servers, networking, storage and services that reduce complexity and enable you to capitalize on the promise of data analytics, HPC and AI. Click here for more.

About Kalray
Kalray (Euronext Growth Paris - ALKAL) is a leading provider of hardware and software technologies for high-performance, data-centric computing markets, from cloud to edge. Kalray provides a full range of products and solutions to enable smarter, more efficient, and energy-wise data-intensive applications and infrastructures. Click here for more.