

PanMove Advanced

High-Performance Data Movement Software for PanFS On-prem, Cloud, and S3

One constant in computing is the tremendous rate at which data continues to explode. For high-performance computing (HPC), this unstructured data growth is compounded by the increasing convergence of traditional HPC with artificial intelligence and machine learning (AI/ML) workloads. The result is volumes of data that require integrated, easy-to-use data management and mobility solutions at scale.

Data movement in and between the data center, cloud, and S3-interface object storage is core to an efficient and flexible data mobility strategy. Equally important is data mobility that is performant, secure, and ensures data reliability and integrity.

Panasas® provides PanMove™ Advanced, a comprehensive and easy-to-use data movement solution for HPC and AI/ML environments. Combined with the included PanView™ Analytics, users can discover, search, and analyze their data files to mobilize them where and when it is needed.

PanMove™ Advanced and PanView Analytics are the result of a collaboration between Panasas and Atempo, a leading provider of data protection and data management software.

PanMove Advanced is easy to configure and simple to use, with drag and drop functionality. It provides on-demand copy, move, and synchronization between PanFS®-based ActiveStor® data storage appliances, AWS, Microsoft Azure and Google Cloud, and S3-interface object storage.

State-of-the-art HPC and AI/ML solutions require storage solutions that are the highest in reliability, scalability, and performance, and they must also be simple to manage. Whether it's pushing the boundaries in life sciences, manufacturing, energy, financial services, media and entertainment, or academic and government research, Panasas delivers the PanFS parallel file system with the PanFS software suite that includes PanMove Advanced for high-performance data movement.

PanMove Advanced Benefits

- Seamlessly and cost-effectively moves data within a storage realm between ActiveStor appliances
- Powerful and easy-to-use web user interface
- Securely moves data between ActiveStor appliances and the cloud for storage or use by cloud-based apps
- Moves data between ActiveStor appliances and S3 object storages
- Storage remains 100% operational during data movement, resulting in zero production downtime
- Data reliability and integrity with automatic object integrity and file access checks
- Adjust data transfer speed performance by simply adding or removing data movement engines

ActiveStor Storage Nodes

Analyze data on ActiveStor storage nodes using PanView Analytics and then use PanMove Advanced for on-demand copy, move and sync of the data between ActiveStor Ultra, ActiveStor Flash, ActiveStor Ultra XL, and ActiveStor Classic storage nodes.

Cloud and S3-Interface Object Storage

PanMove Advanced provides on-demand data movement between ActiveStor storage appliances and Amazon Simple Storage Service (S3), Microsoft Azure Blob Block Cloud, and Google Cloud Storage. Data can be stored on cloud storage or used by cloud-based applications.

PanMove Advanced also provides on-demand data movement between ActiveStor storage appliances and S3-interface object storage.

PanMove Advanced Components

PanMove Advanced is a client/server data movement application that includes a server and several agents (data movers), as shown in Figure 1.

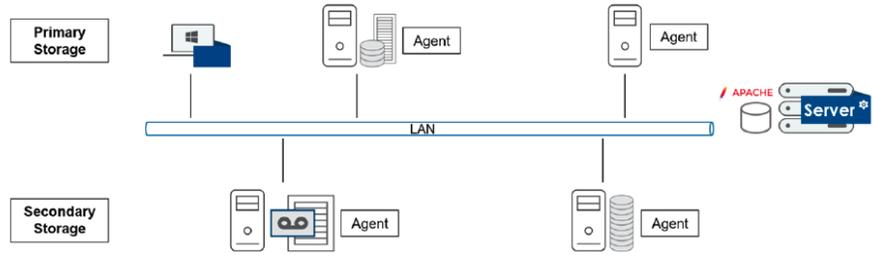


Figure 1. PanMove Advanced Schematics Components Overview.

Central Administration

PanMove Advanced comes with a console to manage settings for the entire system, including enabling license keys and creating users and groups. Levels of permissions granted to each user or user group can also be defined.

Web Interface

PanMove Advanced also comes with an easy-to-use Web user interface. As shown in Figure 2, with two panes, data files can be copied, moved, or synchronized using simple drag-and-drop functionality between source and target in either personal or shared project repositories.

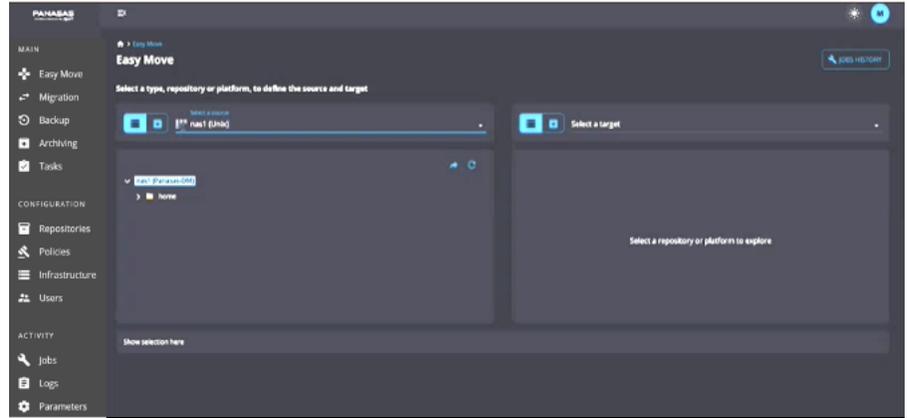


Figure 2. PanMove Advanced Easy Move Web Interface.

Secure Data Movement

PanMove Advanced guarantees fast and secure data movement, including optional Secure Socket Layer (SSL) encryption. This provides security and integrity of data and associated ACLs during data movement.

separates the detection of objects from the actual data movement and starts moving data early on. Using a powerful parallel processing and multi-task environment adapted to all file sizes, data movers copy or move data with optimized performance. Data movers can run on bare-metal servers or virtual machines as long as they have access to both the primary and secondary storage. Additional data mover instances can be added for increased performance.

Timely, High-Quality Service and Support

Unlike open-source solutions and even commercial alternatives from broad portfolio vendors, Panasas offers timely, world-class support.

High Performance Data Movers

Unlike many other data movement solutions, PanMove Advanced

More Information

For more information about PanMove Advanced, contact your local Panasas representative or visit panasas.com/products/panmove.

About Panasas



Panasas builds a portfolio of data solutions that deliver exceptional performance, unlimited scalability, and unparalleled reliability – all at the best total cost of ownership and lowest administrative overhead. The Panasas data engine accelerates AI and high performance applications in manufacturing, life sciences, energy, media, financial services, and government. The company's flagship PanFS® data engine and ActiveStor® storage solutions uniquely combine extreme performance, scalability, and security with the reliability and simplicity of a self-managed, self-healing architecture. The Panasas data engine solves the world's most challenging problems: curing diseases, designing the next jetliner, creating mind-blowing visual effects, and using AI to predict new possibilities.

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