

Panzura White Paper

Unlock the Power of your data with Vizion.ai, the Multi-Cloud Data Management Platform

Too Many Clouds, Too Much Data?

Unstructured data is exploding. The average enterprise is doubling its data volume every 2 years, and 80% of the new content is unstructured¹. These data sets are coming from everywhere as part of the overall enterprise trend to digital transformation. Example file types include database backups, virtual machine backups, machine data such as server logs, medical images, security cameras, geophysical images, and user generated content like internal training videos, document scans, screen recordings and traditional office documents.

To solve this, most companies are looking to leverage the cloud to increase corporate agility, reduce cost and drive higher corporate productivity. In fact, 82% of corporations are planning to use multiple clouds, with an average of 4.8 clouds used per enterprise². IDC estimates that by 2021 \$530 Billion will be spent on cloud technologies globally with 90% of that spending being multi-cloud³.

Yet along with this multi-cloud future comes a dark side. Data sprawl. Data is becoming spread rapidly across the enterprise and across organizations – from DevOps to HR to IoT to SaaS Applications like Office 365 and Dropbox. Data islands are forming—data that gets segmented by users and applications, living in separate silos on separate infrastructure and separate sites. Creating governance and compliance headaches and making the unified search for data across the enterprise practically impossible.

How valuable is your cloud efforts if it impacts business performance and competitiveness because your decision makers can't quickly find and mobilize trusted data crucial to big data analytics, security, compliance and other key functions? When can we get to a "single source of truth" for your data that lets business and technology leaders confidently analyze and control key data across all your clouds?

¹ IDC, Veritas, EETimes

² Rightscale 2018 State of the Cloud Report

³ IDC 2017 Futurescape Report



Breaking Through Cloud Storage Barriers

Meet Vizion.ai, a new multi-cloud data management platform service from Panzura.

This enterprise “power tool” helps unlock the power of your data by making it easier to find and share across previously siloed public and private clouds.

Vizion.ai drives smarter strategy and operations by enabling:

- Unified, Instant Indexing and Search. Conduct global search and retrieval across multiple clouds (Google Cloud, Microsoft Azure, AWS, IBM and others), and on-premise data centers through one secure portal.
- Powerful Multi-Cloud Analytics Engine. A “gold copy” of your metadata, powering fast, reliable enterprise-wide analysis and policy-driven control for your unstructured data.
- Smarter Data Management and Control. Integrated indexing, improved orchestration and advanced machine learning analytics help enterprises discover patterns more quickly. The result? Improved collaboration, analysis, control and compliance — and better choices to manage cost, agility, governance and security
- A multi-cloud API for integrating search and analytics into enterprise applications and workflows

Make Sense of Your Data

Your business decision makers cannot succeed without accurate information. First rate data analysis depends on accurate data search. There are 2,312,000,000 files in an average PB of enterprise storage⁴. And According to IDC, the average company spends \$2.5 million a year on data search⁵. An inability to instantly locate, search, index, access and mobilize the most current and accurate data greatly hinders executive insight and action.

The Vizion.ai platform speeds time to insight with intelligent web-scale architecture and centralized meta-data index and search. Upcoming releases will further boost business productivity, value and bottom-line impact with “deep content” search and user-defined policies creating alerts for vital information.

Accounting for Data Movement

In a world where G.D.P.R. regulations drive your data policies, and the threat of cyberattacks imperil your intellectual property, data control and auditing capabilities are now mission critical in every organization.

Example: A traveling executive visits multiple company offices, accessing different data in the cloud. Suddenly, an urgent demand for a high-stakes discovery: Provide a record of all files that he touched over the past week.

Unfortunately, for many organizations, that’s difficult or impossible. One common reason: enterprise policies are complicated or stymied by Microsoft One Drive, Google Drive and other popular but siloed cloud storage apps.

Vizion.ai is a powerful, automated tool for compliance and security. Your team can search metadata for a specific user, file type, share, date ranges, when modified or accessed, etc. across multi-clouds and Panzura filers, speeding discovery. This ability to audit user behavior patterns helps identify and alert unusual activity before a rogue employee causes serious reputational and financial damage.

⁴ Veritas, Data Genomics Index, 2016

⁵ IDC, the High Cost of Not Finding Information Whitepaper



Faster Data Movement and Velocity

Velocity may be the single most underappreciated aspect of cloud data management.

Quickly locating trusted enterprise data is often only half the challenge. Making that data quickly, safely and easily available to another location, across the office or the world, is the other.

In a “sun never sets” scenario, your global DevOps teams burst workloads in and out of clouds and between countries. When you control your data, you can clone and shift it on the fly between data centers or geographies. Now when the software team in California ends their day, the terabytes of working set files are already replicated to the Bangalore office in the morning. This enables for a continuous global DevOps cycle with a single truth of the data that is always cloud-protected, versioned, snapshotted and always up-to-date.

Old Ways

- Buy expensive network bandwidth
- Push huge data-streams to users
- FTP, Aspera, Dropbox
- Slow, expensive, inefficient to move data
- No guarantee data is newest
- Errors, lack of agility

New Way with Vizion.ai

- Single service point for authorized users anywhere
- Instant sync of data between locations
- “Low viscosity”, “just-in-time” data access
- Greater mobility without new infrastructure
- Multi-hour wait for data eliminated

Build the New Possible

The fast-moving shift to multi-cloud has brought new challenges and opportunities to VPs of IT and storage administrators, cloud architects, developers and other technologists and leaders. Vizion.ai is an open API platform that enables a new world of multi-cloud data applications – from IoT to security monitoring to log analysis machine learning.

Vizion.ai provides plug-ins for both Panzura and third-party data applications, and services. Use the API and leverage your existing investments and create new capabilities.

1. Integrates with Panzura Freedom NAS for search and audit, but not required
2. Elastic Search API and native access API bring Vizion.ai’s metadata indexing power to NetApp, Dell/EMC, Isilon, Hitachi, as well as generic Windows and Linux servers



Vizion.ai API in Action: Smart Cities China

Smart Cities China is an ambitious initiative to add real-time analytics and centralized intelligence to connected sensors along with millions of CCTV cameras in the country's fast growing urban infrastructure.

Smart Cities' main challenge is analysis of the MP4 video clips, which it believes will help improve security — assuming the data isn't locked in silos.

Utilizing Vizion.ai:

1. Smart Cities is able to achieve sub-1-second search & recovery across millions of hours of video
2. Applies metadata index & search such as GPS, time, camera ID, clip location
3. The process is all-API driven machine data workflows. A third-party has created an application interface to move the metadata to Vizion.ai to tap its fast indexing and search. Vizion.ai's open API enables the customer to apply custom tags that help categorize their video content

Vizion.ai is helping Smart Cities to unlock the power of this vast trove of unstructured data.

Simplify Data Backup and Recovery

The age-old challenge of implementing safe, affordable backup and recovery gains new complexity — and consequence — in today's multi-cloud world. Over the last 10 years, backup file sizes have increased in size by 2,586%. From 2016-2017 backup storage grew by an astounding 98% in one year⁶. New solutions from new vendors put a modern interface on an old process but don't break-through to a new way of doing business. A new paradigm is needed.

With Vizion.ai integrated with the Panzura Freedom NAS, all data is protected at all times, with unlimited copy-on-write snapshots that provide instantaneous global search, recovery and point-in-time roll-back of previous versions or deleted files in seconds. No separate backup processes are required to protect data sitting on Freedom NAS as all of the data is de-duplicated, compressed, and encrypted onto durable, scalable, low-cost object-storage. Need to retrieve an overwritten file from last week? No problem. Need to restore a database dump from 2 months ago to clone for DevOps? Vizion.ai enables you to do this in seconds. Need to move a VMware backup set from your Las Vegas datacenter to your Ashburn data center? Vizion.ai offers one-click control.

Deflate Your Data Storage Costs

The high cost of local datacenter storage is driving many enterprises to cloud storage. To achieve the best cloud storage economics, an enterprise must first understand how much data it holds and then understand how much of this data could be moved to the cloud without impacting local performance. Fortunately, Vizion.ai is here to help.

With your Panzura account comes the free Vizion.ai Index and Search plugin for third party storage. This enables an enterprise to scan their existing SMB and NFS file stores and aggregate metadata statistics into a single platform. The result is a file analytics tool that provides an intuitive, graphical report that includes total files, total storage indexed, and hot, warm and cold access patterns across this tier of storage. This tool identifies how many terabytes of data could be moved off of local storage and into the cloud.

⁶ Veritas, Data Genomics Index Report, 2017



For enterprises already using cloud storage, there is a second problem: cost optimization. Few storage admins track cloud upload and download profiles. The result: paying high bandwidth bills or storage costs for data that could be placed on a lower cost tier. Vizion.ai uses advanced machine learning algorithms that help enterprises manage and optimize their cloud storage costs between tiers such as standard to S3 IA or Google Nearline.

ROI Success Story

A financial services company using the Panzura Freedom NAS for storing backups, contact center call recordings, and other unstructured data reduced monthly AWS cloud storage spending by nearly 60%, from \$60,000 to \$25,000/month. By using machine learning contained in Vizion.ai, Panzura performed linear regression analysis based on historical usage that showed by moving to S3 Infrequent Accessed from S3 Standard the lower-cost of storage would offset the higher cost in access fees with thousands per month in savings.

Vizion.ai SaaS Platform - Webscale Platform for a Webscale Problem

The technical foundation of Vizion.ai rests upon Panzura's new Multi-Cloud Data Engine. The MCDE is a Kubernetes-orchestrated platform consisting of an application layer that contains:

- Secure multi-tenancy
- Open API
- Metadata ingestion engine
- Metadata indexing engine
- Metadata search engine
- Data movement engine
- Scale-out distributed flash cache tier with global deduplication and tiering to object storage
- Analytics plug-in modules
 - » NFS/SMB Storage environment collection and analytics
 - » File audit search and analytics
 - » Freedom NAS plug-in

Presenting a GUI into the MCDE is the Vizion.ai Management portal that includes

- Multi-tenant enterprise portal with single sign-on federation, enabling end-user search and recovery
- Usage and metrics presentation
- Enterprise billing
- 3rd Party Plug-in architecture for new data collectors
- Global search and file recovery
- Presentation and reporting layer for analytics engines

Vizion.ai is a container-based application orchestrated by Kubernetes and thus can be deployed in-cloud as well as in a private data center.

Your Path to Unlocking Multi-Cloud Data

Your organization's future depends upon its ability to quickly search, analyze and control data in a multi-cloud world. Vizion.ai unlocks your multi-cloud data – by helping you make faster and better business decisions, improve operational efficiencies, and improve data compliance and security.

Get started by going to <https://www.vizion.ai> and registering for your free account. Download the NFS/SMB indexing VM and start indexing your existing filers and file share environment. The free account includes unlimited metadata storage during the Vizion.ai Beta.

About Panzura

Panzura is the leader in multi-cloud data management, a \$68B market opportunity. Its portfolio includes Panzura Freedom NAS and Vizion.ai. Freedom NAS provides software-defined, multi-cloud file services to enterprises in over 5,500 sites globally across 33 countries. The Vizion.ai SaaS platform enables enterprises to meet the most demanding requirements for data search, analytics, and governance in a multi-cloud world. Panzura's cloud partners include AWS, Google, IBM and Microsoft and has over 400 resellers worldwide. Organizations like Sony, Avis, American College of Radiology, LiveNation, Prosper Marketplace and Chevron use Panzura to unlock the power of multi-cloud data.

Please visit www.panzura.com for further information.



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