Panzura Data Services

Search, View, Manage and Audit CloudFS Files

Gaining visibility into, and management of, unstructured data and files is key towards getting more value from that data. Panzura Data Services enables all that and more through a SaaS single pane of glass.

Panzura® Data Services provides a robust "single pane of glass" management experience for CloudFS files, as well as added findability across other SMB or NFS storage devices such as NetApp and PowerScale/Isilon. In this way, Data Services gives frontline IT, data management, and IT security teams the visibility and observability they need across an organization's entire file network. Tightly integrated with other components in the Panzura Platform, Data Services also helps identify and alert on suspicious patterns that may indicate a ransomware attack in your environment. For CloudFS files, administrators get highly performant file search, audit, recovery and AI-supported analysis through Data Services seamless ingestion of CloudFS metadata and audit log data.

Why Data Services Matters

According to 2023 research from Asana, U.S. workers lose nearly three hours of productivity per week to duplicated work, including recreating files that cannot be easily found. In earlier research, Asana noted that 58% of management ranked file findability among the top three challenges impacting productivity.

For IT teams, finding and restoring deleted files from backups, ensuring file data is secure and compliant, and monitoring the health of file networks occupies a punishing amount of time. Because unstructured and file data is widely distributed across storage silos, locations, and applications, and the volume of this data is increasing rapidly, there's an urgent need for a better approach.

Panzura Data Services radically improves the findability, management of, and efficient monitoring of unstructured data. Comprising three tiers (Basic, Search, and Audit), its use is a best practice for those seeking more value from files and from Panzura CloudFS—so much so, we've included the Basic tier of Data Services within CloudFS itself at no extra cost.

![Panzura logo]

Data Services Use Cases

Panzura Data Services tiers enable robust, scalable, end-to-end CloudFS system and file management. It provides automation, reporting, and a user experience designed for busy frontline IT, data management, and IT security teams.
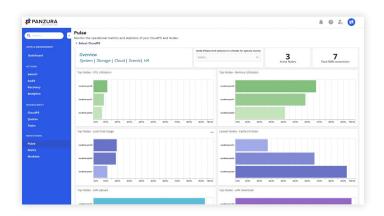
There are four major use cases where Data Services provides value.

Use Case 1

Automating health checks on file system infrastructure and associated cloud connectivity.
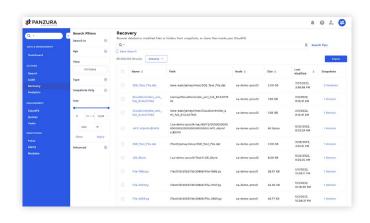
Time to remediation matters. You can't fix what you can't see—and with Data Services, you'll have the visibility needed to quickly identify infrastructure and operational anomalies related to file data. Configurable alerts that can provide proactive warnings are available for every metric captured by the Pulse capability in Data Services, including:

- System metrics, such as CPU utilization and load peaks, memory utilization, bandwidth limits, network traffic, and more
- Storage metrics like local and cloud disk usage, metadata storage utilization, cache statistics, managed capacity usage, LAN and WAN upload and download, and snapshot status
- Cloud metrics, such as cloud upload and download failure rate, site-to-site latency, and snapshot sync per minute

- Events metrics for licenses applied to Panzura nodes, or performance issues such as excessive latency
- Where applicable, High Availability metrics for CloudFS nodes designated as high availability
- Inventories of CloudFS nodes and associated datasets, reflecting where authoritative data is stored, and which CloudFS ring it belongs to
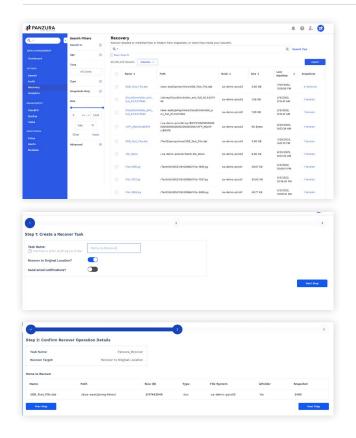
Use Case 2

Improving productivity through powerful file search capabilities.

As discussed above, time wasted searching for files, and associated duplicate file creation, is a non-trivial drag on productivity throughout the organization. Data Services search is designed to find files in near real time, even when querying hundreds of millions of files spread over multiple locations. Although the Data Services Search tier is not included with CloudFS, customers find it is a powerful way to get more value from CloudFS deployments, as well as other Windows file shares such as NetApp and PowerScale/Isilon devices. It includes search, file recovery, soft user quotas and data analytics.
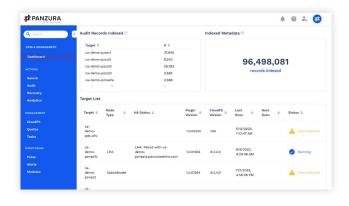
Use Case 3

Rapid, search-based recovery of file snapshots.

By using the same search functionality and filters as the search operation itself, but with the addition of CloudFS snapshots, Data Services uses a unique approach that speeds restoration. CloudFS stores new and changed data in the cloud or object store using non-destructive writes, while existing data blocks remain unchanged. Metadata pointers are then updated in real time to reflect which data blocks comprise a file at any given time. Once captured by snapshots according to an organization's snapshot schedule, files can be restored to their previous state by simply restoring the metadata pointers to that point in time. Metadata is a fraction of the size of the file itself, so restoration is fast, and consumes only a tiny amount of system resources.

Use Case 4

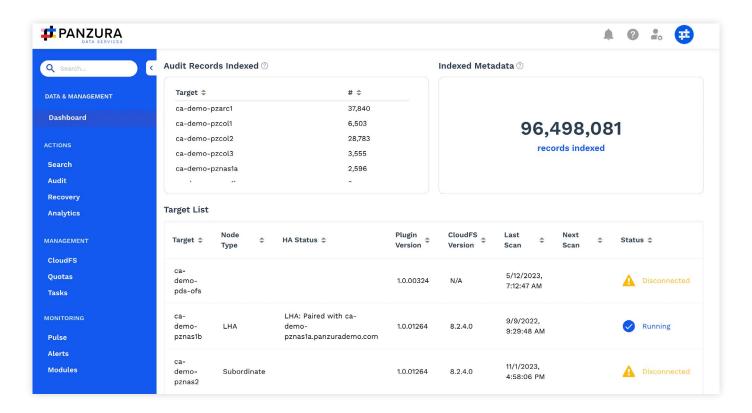### Seamless file management and compliance via Audit insights.

The Audit tier of Data Services turns CloudFS audit logs into meaningful information by searching through audit records—processed syslog events—and returning clear and comprehensive audit trails in near real time. Audit uses the same powerful and burstable search functionality available in the search tier and can return millions of results in under a second. This capability has been used by customers to investigate and remediate mass file deletions (in one case, six million files were deleted in roughly a 24-hour period), avoid regulatory compliance fines by self-reporting (see this technical whitepaper for details), and save time and money on legal holds.

> We had a serious data breach. Panzura's file audit capabilities let us pinpoint the time, the files affected, the action taken and the user responsible. Without it, we would never have known our intellectual property had been taken.
>
> —Data Leadership at a Leading Enterprise

Data Services Capabilities

These major features of Data Services provide the capabilities you need to manage and protect your CloudFS files.

Admin-friendly dashboarding.
The Panzura Data Services dashboard makes it easy for frontline IT admins to manage, monitor, and share updates. It also supports automated alerting.

Powerful, industry-leading audit capabilities.
Data Services turns CloudFS audit logs into meaningful information by searching through audit records—processed syslog events—and returning clear and comprehensive audit trails in near real time. Audit uses the same powerful and burstable search functionality available in the search tier and is capable of returning millions of results in under a second. Audit also offers an analytical overview for insights into data activity, enabling understanding of how data in CloudFS is being used. It shows in dashboard form the most active users, the most frequently accessed files and folders, and can be filtered by date range for the most relevant view. Every metric allows a one-click deep dive into the files or usage that comprise it.

Efficient, metadata-centric global search.
Files and folders can be found using Data Services' powerful search tooling. Panzura Data Services indexing capabilities makes all file and folder metadata instantly retrievable.

Targeted metadata-centric recovery.

Data Services supports CloudFS in lightning-fast recovery by simply restoring the metadata pointers to that point in time. Restoration is fast because metadata is a fraction of the size of the file itself and consumes only a tiny amount of system resources.

SMS and email notification automation.

Data Services provides SMS and / or email notifications automatically to your choice of recipients, for rapid alerting on thresholds and outliers.

Customized alerting and scheduled reporting.

For Pulse Metrics, admins can get timely alerts and reports through SMS, Slack, email, or SMTP servers.

CloudFS inventory management.

Data Services includes inventories of CloudFS deployments, and which nodes belong to which deployments, providing visibility over CloudFS connectivity and its associated node details.

Additional Capabilities

- Audit analytics and user action drill downs
- Hot, warm, and cold data analytics
- Storage distribution by file size and file type insights
- Track multiple tasks while recovering snapshots and exporting Search/Audit records

- Soft Quotas for individual users or user groups
- Customized quota alerting emails
- Save frequently executed searches
- Search available captured file snapshots

- Audit log retention for up to 5 years (default 90 days)
- Scheduled reports for Pulse Alerting
- Adhoc reports for Data and Audit analytics
- Notification and alerting history

Data Services requires Panzura CloudFS 8.0 or higher, and leverages CloudFS and SSO login.

Learn more about Data Services today

See the technical documentation for Panzura Data Services here.

Request a demo of Data Services.

- Visit panzura.com to schedule your demo, OR
- Click here to complete a form for a demo request.