Arcitecta Unlocks AI at Scale with Unified, AI-Ready Data Infrastructure that Supports All Forms of Data and AI Models

The Mediaflux platform delivers a data fabric for the AI Era, delivering better training and inference data quality and faster time to AI insights with no vendor lock-in or format constraints

BOULDER, Colo. and MELBOURNE, Australia — August 12, 2025 — Arcitecta, a creative and innovative data management software company, today announced significant enhancements to its Mediaflux® data management platform, delivering an AI-ready data fabric that supports all forms of data and AI models and provides a built-in vector database within its high-performance XODB® database. The innovative enhancements enable Mediaflux to power AI workflows by making multiple types of data AI-ready through unified metadata and vector embeddings. With the new vector support, users can leverage their entire data environment for AI training, significantly boosting model quality to accelerate advanced solutions in areas from cancer research to genomic analysis and scientific discovery.

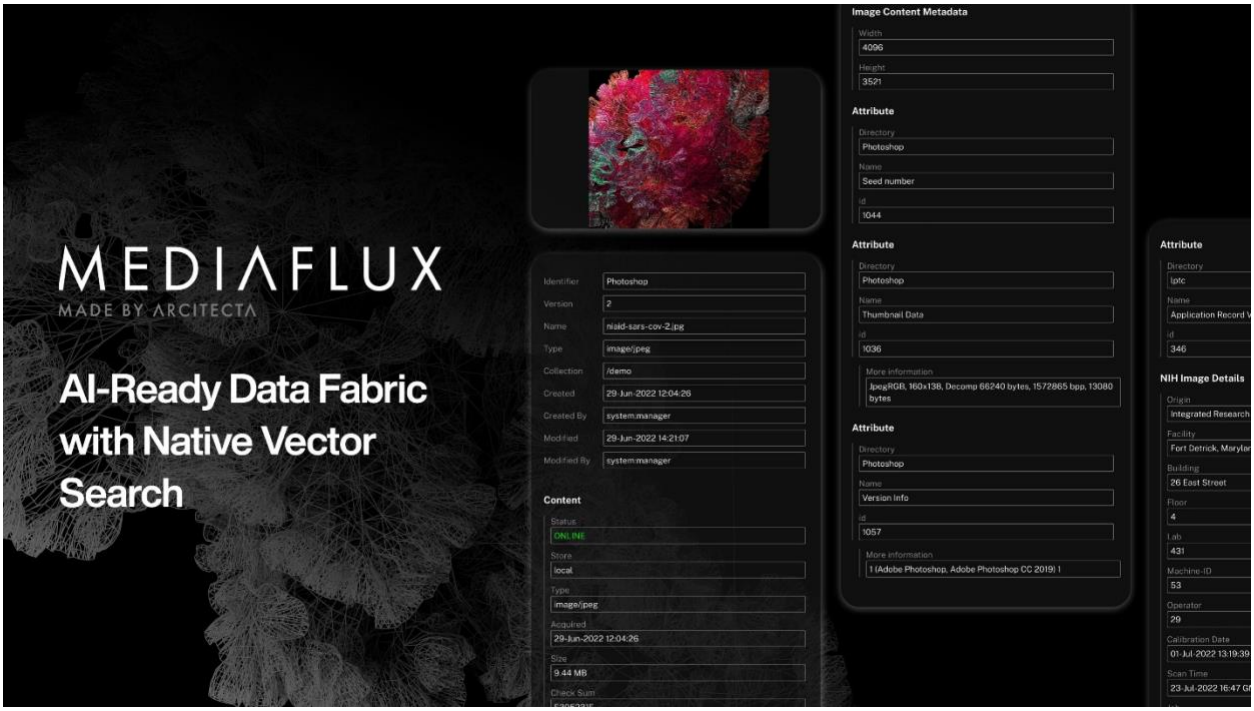
The enhancements arrive at a pivotal moment, as the rapid rise of AI and machine learning is driving significant adoption of vector databases, with Gartner predicting that 70% of enterprises will adopt them by 2026. Mediaflux directly addresses the market's need for unified platforms to combat data sprawl, heterogeneity, compliance challenges and the demand for model reproducibility, all of which require robust metadata and vector-driven platforms.

"As organizations increasingly rely on AI and machine learning, the challenge of making vast, diverse datasets accessible and usable for AI training has become paramount," said Jason Lohrey, CEO of Arcitecta. "With an enhanced version of Mediaflux that powers AI, we are delivering a revolutionary data fabric that integrates any data asset into an AI-ready resource pool, allowing our customers to achieve better models faster and with unparalleled operational efficiency. This integrated approach bypasses the need for fragmented software development tools and separate vector stores, setting a new standard for AI data management. The result will be outcomes such as transformative advancements in cancer research, accelerated drug discovery and preservation of the world's most important cultural archives."

Mediaflux powers AI with a flexible, model-agnostic data fabric that works with any data and AI model at scale, eliminating vendor lock-in and data format constraints. It accelerates time to AI insights with built-in pipelines to automate ingest, tagging and transformation, rich metadata and support for vector embeddings for increased context and accuracy. Additionally, a schema-less metadata model delivers the flexibility needed across diverse data sources, to adhere to regulatory compliant standards with on-premises options in addition to the cloud.

Unlike traditional solutions that bolt on external vector databases, Mediaflux delivers full metadata and vector search in a single, high-performance system that simplifies data infrastructure and reduces complexity. By optimizing data and leveraging vector embeddings, Mediaflux ensures that any unstructured or structured data becomes searchable and usable for AI, eliminating the need for a

separate vector store. The solution's core features include a metadata catalog, vector embeddings, similarity search, retrieval-augmented generation (RAG)-ready data and single-pane orchestration.



Additional Mediaflux capabilities include multi-protocol support (NFS, SMB, S3) and multi-site, edge and real-time capabilities in addition to the new AI functionality. The platform achieves more than 95% bandwidth utilization on transfers with Mediaflux Livewire and its Point in Time security feature is recognized as a TOP 5 Cybersecure 10 PB+ NAS solution by DCIG.

"AI is only as good as the data it trains on. Common sense. There's a problem when that is data distributed across silos locally and geographically dispersed in formats that AI can't reach or easily use," said Marc Staimer, founder, Dragon Slayer. "Making that data available and AI-ready is frequently quite difficult. Traditional approaches require piecing together multiple systems, which creates complexity and bottlenecks. Platforms such as Mediaflux, with its XODB database, can manage different data types while providing built-in vector search and metadata management in a single system. This unified approach helps organizations make use of all their data for AI training, which leads to better models, faster results, and significant cost savings by eliminating multiple access points to your siloed systems."

Mediaflux delivers compelling advantages for enterprises managing massive volumes of data:

- **Faster Time to AI:** Mediaflux manages any type of data – text, images, time series and more – and provides ready-to-use data pipelines, eliminating manual preparation and accelerating AI initiatives.
- **Better Models:** Users can leverage richer training datasets through better inputs, leading to improved accuracy and quality of AI models, while also having the flexibility to deploy new models in the future without the need to modify their data.
- **Cost and Operational Efficiency:** Mediaflux offers a centralized platform that simplifies tooling and governance, providing a single system versus a patchwork of disparate tools.

- **Native Vector Search Engine:** It enables fast similarity queries at scale across trillions of records in milliseconds, significantly outperforming legacy tools that might take hours.
- **Unified Data Fabric:** Mediaflux delivers full metadata and vector indexing in a single system, combining metadata, vector, file and object data across multiple locations.
- **End-to-End RAG Pipeline Support:** The solution facilitates semantic queries, similarity search and retrieval-augmented generation pipelines directly within its environment.

The Mediaflux AI-enhanced platform is ideal for enterprises across multiple industries, including life sciences, research, media and entertainment, and government and defense domains, that work with massive volumes of data and require scalable, high-performance infrastructure. It is particularly beneficial for departments such as research and development, data science, genomics, medical imaging and machine learning operations within vertical industries such as healthcare, research/academia, finance and government.

The enhanced platform is driving next-generation AI workflows for leading organizations today:

- **Cancer Research**: Scientists can now query massive genomic datasets and medical imaging files to detect anomalies faster using semantic and similarity search.
- **Government and Defense**: Teams manage time-series and geospatial data in real time, supporting edge deployments in secure, disconnected environments.
- **Media & Entertainment**: Archives become searchable by meaning, not just metadata, unlocking new creative workflows and revenue streams.

XODB: A Powerful, Flexible Multi-Model Database
Mediaflux XODB is a flexible multi-model database with built-in capabilities for vector embeddings and plugin support for new models managed within Mediaflux. XODB provides users with a competitive advantage and is a foundational pillar of Mediaflux. With the new advancements, Mediaflux can now fuel seamless searchability and near-instant insights, providing a pathway for rich AI-feature expansion in the future. The platform comprehensively supports object, time-series, geospatial and vector data, maximizes storage, enriches metadata, and curates data collections for ease of searching. Interwoven with Mediaflux, XODB manages metadata in real time, instantly directing users toward their data, regardless of scale or location.

Availability and Pricing
The new Mediaflux AI-ready capabilities are available as an integrated part of the existing Mediaflux platform. It is licensed by user count, eliminating capacity-based fees and offering a pricing edge compared to patchworked tools.

Resources
- More on Mediaflux for AI
- Blog: Unlocking AI at Scale: Why Mediaflux is Your Data Fabric for the AI Era
- Solution Brief: Mediaflux: AI-Ready Data Fabric with Native Vector Search
- More on Mediaflux, a Data Management Platform
- More on Mediaflux XODB, a powerful, flexible multi-model database
- More on Mediaflux Livewire for data transfers at the speed of light

About Arcitecta

Arcitecta has been building the industry's best data management platforms since the dawn of the data age. Today, Arcitecta is transforming data management and backup with Mediaflux, a rich end-to-end data fabric that simplifies data-intensive workflows in petabyte-scale environments to improve business and research outcomes. Mediaflux unifies data management processes into a single platform, simplifying the administration of massive data sets and allowing world leaders to solve some of the most challenging problems on the planet. For more, visit www.arcitecta.com.

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