



Amplify Your MongoDB System with LifeGraph® from BurstIQ

In today's data-driven world, organizations face increasing challenges in managing, securing, and scaling their data ecosystems. **LifeGraph® from BurstIQ offers MongoDB customers a transformative solution to amplify the power of their existing MongoDB instances.** By combining MongoDB's document-oriented data model with LifeGraph's blockchain-powered data management platform, organizations can unlock new levels of trust, governance, and scalability for their data.



What is LifeGraph?

LifeGraph is an advanced data management platform that leverages blockchain, Web3, and knowledge graph technology to create secure, verifiable, and scalable data ecosystems. At its core, LifeGraph structures data into Smart Data Objects (SDOs)—data assets enriched with blockchain-based privacy, security, context, validation, versioning, and ownership. These SDOs, or LifeGraphs, are stored and managed using MongoDB as the persistence layer, ensuring seamless integration with your existing MongoDB infrastructure.

Key Features of LifeGraph for MongoDB Customers:

- ✦ Enhanced Data Governance & Consent Management
- ✦ Blockchain-Backed Trust & Security
- ✦ Flexible & Scalable Data Modeling
- ✦ Knowledge Graphs for Advanced Insights
- ✦ Seamless Integration with MongoDB Atlas
- ✦ Developer-Friendly APIs & Tools



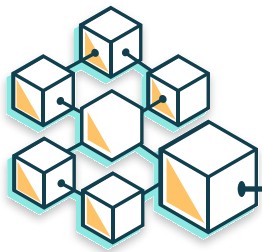
Enhanced Data Governance & Consent Management

LifeGraph introduces cryptographic ownership and consent management to MongoDB environments. **With LifeGraph, organizations can:**

- Assign cryptographic ownership to individual Smart Data Objects, ensuring only authorized entities can access or modify data.
- Create dynamic Consent Contracts to manage data sharing, including fully de-identified or tokenized data for privacy compliance.
- Automate governance policies, such as HIPAA, GDPR, and CCPA compliance, through smart contracts that enforce data retention, deletion, and access rules.

Blockchain-Backed Trust & Security

LifeGraph integrates blockchain technology to validate and secure data at every stage of its lifecycle. **Each Smart Data Object includes:**



- Metadata:** Contextual information that provides clarity about the data.
- Trust Attributes:** Mechanisms that ensure data security, integrity, and a comprehensive audit trail of changes and verification.
- Ownership:** Clear identification of who owns the data.
- Use Permissions:** Guidelines that specify how the data can be utilized.
- Edge Relationships:** Connections and interactions that define how data points relate to one another.

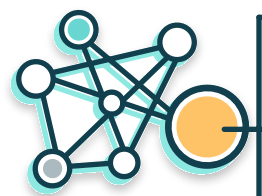
Flexible & Scalable Data Modeling

LifeGraph's data model is intentionally agnostic, **allowing MongoDB customers to:**

- Build or extend their own data models to meet specific use cases.
- Integrate using industry standards like FHIR or HL7 for healthcare data, or create custom models for unique requirements.
- Seamlessly integrate new data types or vendors without disrupting existing systems.

Knowledge Graphs for Advanced Insights

LifeGraph overlays graph models on MongoDB, **enabling organizations to:**



- Visualize complex relationships between data points, such as patient-provider interactions or supply chain networks.
- Ask open-ended, complex questions for AI and machine learning systems to process quickly and efficiently.
- Embed metadata and verification layers directly into Smart Data Objects, enhancing the depth and context of data relationships.

Seamless Integration with MongoDB Atlas

LifeGraph is designed to leverage MongoDB Atlas for serverless scalability and advanced indexing capabilities. **By integrating with Atlas, LifeGraph ensures:**

- Horizontal and vertical scaling to handle high data volumes and query loads.
- Support for advanced indexing, including text-based and fuzzy indexing, to optimize performance.
- A roadmap for AI-driven recommendations on indexing and data optimization.

Developer-Friendly APIs and Tools

LifeGraph provides a robust set of APIs and developer tools to simplify integration and customization.



REST APIs for transactional and bulk data operations.

Support for flat files, JSON, XML, EDI, and other formats for seamless data ingestion.

Extensive developer documentation, tutorials, Swagger API reference, and an AI-powered companion, "Blast," to assist developers with queries and best practices.

Benefits for MongoDB Customers

By combining these capabilities, MongoDB customers can unlock the full potential of their data while ensuring security, privacy, and compliance at every step.

- ✦ **Trust & Transparency:**
Blockchain-backed validation ensures data integrity, builds trust across ecosystems, and codifies data sharing through smart contracts and consent contracts, enabling seamless and secure collaboration.
- ✦ **Autonomous Governance:**
Automate complex data policies, compliance requirements, and consent management, reducing manual overhead while ensuring adherence to privacy regulations.
- ✦ **Scalability & Performance:**
Handle large volumes of data efficiently without impacting performance or requiring redeployment, ensuring seamless operations even as data demands grow.
- ✦ **AI-Ready Data:**
Deliver high-quality, validated data for AI and machine learning systems, enabling ethical, trustworthy AI applications. Data tokenization ensures privacy while maintaining usability for advanced analytics.
- ✦ **Privacy & Security:**
Enable data tokenization to protect sensitive information, ensuring privacy while allowing controlled access. Create data clean rooms seamlessly for secure, collaborative data analysis without exposing raw data.
- ✦ **Flexibility & Adaptability:**
Extend data models and integrate new data sources effortlessly, without disrupting existing systems. This adaptability supports evolving business needs and fosters innovation.

Use Cases in Action



Healthcare:

LifeGraph powers Medicaid ecosystems, breaking data silos and enabling secure data sharing between providers, patients, and agencies while maintaining compliance with strict regulations.



Education:

Maryville University employs LifeGraph to break down silos and achieve a 360-person view of each student in their system. They also use LifeGraphs of curriculum to develop personalized learning AI companions to assist students with coursework.



Research Networks:

Texas A&M Health uses LifeGraph to manage collaborative research data, ensuring patient consent and seamless data sharing across departments without compromising IP.



Workforce Optimization:

LifeGraph helps organizations map employee skills and certifications, creating pathways for career development and workforce planning.



Contingent Workforce:

Litehouse employs LifeGraph to create an “Uber for Nurses” application linking credentialed nurses to available shifts at local hospitals, easing staffing issues and increasing nurse satisfaction.

LifeGraph is more than just a data management platform—

it's a strategic partner for MongoDB customers looking to elevate their data platforms into data ecosystems. By integrating LifeGraph into your MongoDB environment, you can transform your data into a trusted, scalable, and AI-ready asset.

Next Steps

Join the growing community of MongoDB customers who are amplifying their data capabilities with LifeGraph. Whether you're building a healthcare data ecosystem, optimizing workforce data, or creating AI-driven insights, **LifeGraph provides the tools and trust you need to succeed.**

LET'S BUILD THE FUTURE OF DATA TOGETHER.

Contact us today to learn more about amplifying your MongoDB environment with LifeGraph.