RamQuest's Data Lake

RamQuest's Horizon™ title production software includes support for Microsoft's Azure Data Lake. A data lake is a powerful platform for storing and analyzing all your data in one location. It provides scalability, flexibility, ease of use, and extensibility to meet your current and future data management needs, maximizing the value of your data assets. The Data Lake is an efficient central repository for transactional, structured, and unstructured data, laying the foundation for your users to perform a wide variety of data management and analysis tasks, including big data processing, SQL queries, text mining, streaming analytics, and machine learning. We'll enable your Data Lake in our Azure instance or yours, fulfilling RamQuest's Data Promise. Some key features of the Data Lake:

- **Security.** A data lake protects your data assets. Your data is always encrypted, in transit using SSL, and at rest using service or user-managed HSM-backed keys in Azure Key Vault.

- **Schema Independence.** Data Lakes store data without a rigid structure. The Horizon data platform has the ability to evolve independently while continuing to load consistent data into your lake.

- **Performance Optimization.** The Data Lake is designed to handle advanced analytics across varied data files, objects, and types delivered into the lake from multiple sources, without the need to copy or transform data as a prerequisite to analysis.

- **Flexible Retention.** The Data Lake can be configured to hold historical data for a set amount of time to be analyzed and this retention period is independent of the transactional data in the Horizon platform.

What Does This Provide You?

You can securely access your Data Lake using Business Intelligence (BI), programming languages, and advanced analytics tools, enabling you to:

- Process and load data from the Lake into a data warehouse.
- Implement custom reporting applications built for specific needs.
- Integrate custom software or third-party applications requiring Horizon data.
- Copy or backup the data to third-party systems.
- Data access to support building custom APIs and Workflow Automation.

How Do We Do It?

Data from Horizon flows into the data lake from multiple sources using automated jobs configured with these data integration services:

- **Azure Data Factory.** This cloud-based ETL (Extract, Transform, Load) service orchestrates data movement from the Horizon database to Azure Data Lakes.
- **MongoDB Change Streams.** Captures real-time data changes and pushes them to the Data Lake, enabling near real-time analytics.

Whether it's only during business hours or every 30 minutes– you have the flexibility to choose when and how often data flows into your Lake.

To learn more about Horizon's Data Lake, email sales@ramquest.com