API Initiative for Rental Equipment Company

ORGANIZATION

Our client is North America's premier rental equipment provider, offering a diverse and comprehensive product portfolio. Their inventory includes general construction equipment, industrial tools, pumps, power generation systems, climate control and HVAC solutions, shoring and scaffolding systems, as well as remediation and restoration equipment. This extensive product mix enables them to support a wide range of industries and projects, from construction and industrial applications to emergency response and environmental restoration.
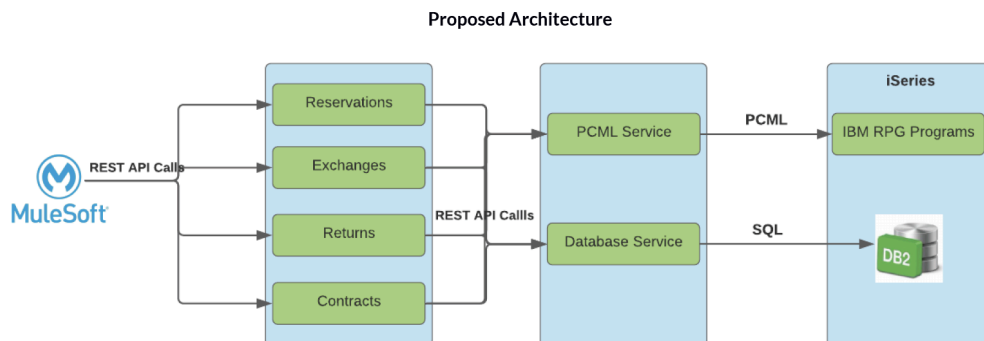
CHALLENGE

Our client relies on the IBM iSeries platform as the backbone for hosting mission-critical business applications and databases. Key processes, such as reservations, exchanges, returns, and contract management, are powered by core business logic developed in RPG programs, with Db2 serving as the primary database supporting these applications.

In their pursuit of digital transformation, the client identified the need for a modern API management solution to enhance integration capabilities and improve overall system flexibility. This initiative required a well-architected, high-performance solution capable of seamlessly interfacing with their legacy iSeries platform, which remains the foundation of their core business operations.

To achieve these goals, the client engaged XTIVIA as a strategic partner, leveraging our technical expertise to design and implement a comprehensive API management solution. Through this collaboration, XTIVIA developed an optimized, future-ready architecture to support the client's digital transformation objectives and enable more agile, efficient business processes.

TECHNICAL SOLUTION

XTIVIA partnered with the client to design an advanced API management solution, aiming to deliver top-tier services by enabling seamless connectivity with both partners and customers. As part of this engagement, XTIVIA conducted an in-depth review and analysis of existing system artifacts, gathered key insights into the client's current architecture, and proposed the following solution:

Proposed Architecture

- **PCML Service Layer Implementation:** Establish a Program Call Markup Language (PCML) service layer to mediate between front-end API services and back-end iSeries business

processes. This layer will ensure that complex business logic on the iSeries platform is easily accessible and effectively utilized by modern applications.

- **Data Service Layer Implementation:** Create a dedicated data service layer to interface between the front-end API services and the iSeries Db2 databases. This layer will streamline data access, improving both performance and scalability while maintaining robust data security and integrity.

Through these enhancements, XTIVIA's solution equips the client with a flexible, future-ready architecture that supports streamlined, efficient service delivery across digital channels.

BUSINESS RESULT

XTIVIA's proposed architecture and implementation empowered our client to accelerate their digital transformation journey while maximizing the value of their existing business applications. By leveraging this solution, the client can now expose back-end business logic through standardized REST protocols, enabling seamless connectivity for both internal teams and external partners. This approach not only simplifies integration with modern applications but also enhances scalability, security, and ease of access to core functionalities, allowing the client to expand digital services and improve user experiences across all touchpoints.

KEYWORDS
Java, Mulesoft, API, Db2, RPG

SOFTWARE
Java, Mulesoft, API, Db2, RPG

HARDWARE
iSeries, Db2

ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia and India. www.XTIVIA.com