



DATA LEAGUE

from Inception to Insights

Facility Management
SaaS Product





Intro

Our consultants collaborated with a prominent Hotel Management client to architect, design, and develop a robust SaaS (Software as a Service) product. The primary objective was to create a multi-tenant flagship facility management solution that seamlessly catered to both front-desk and back-office operations. The project demanded uncompromising high availability, scalability, performance, and security, while ensuring strong data isolation and throughput for individual tenants.



Challenges

Complex Requirements: Balancing the intricate requirements of front-desk and back-office operations, along with the needs of different hotel tenants, posed a significant challenge.

High Performance and Scalability: The product needed to perform exceptionally well, scaling effortlessly to accommodate numerous tenants with varying data loads.

Security and Data Isolation: Ensuring strong data isolation and security was paramount, as the SaaS solution needed to handle sensitive guest and hotel data.

Multi-Tenancy Management: The product needed to efficiently handle multiple tenants while providing each with a unique and seamless experience

Solution

Our consulting team orchestrated a comprehensive solution to address these challenges and build the multi-tenant facility management SaaS product:

- **Collaborative Development:** Our consultants collaborated closely with product owners and business analysts to refine requirements and shape the product's vision.
- **Architecture and Design:** We meticulously designed a robust architecture that incorporated high availability, scalability, performance, and security, while prioritizing strong data isolation and tenant throughput.
- **Dual-Component Build:** The product was developed in two distinct parts – a user-friendly thick client for hotel staff and SaaS services hosted on Azure to ensure seamless data management and access.

Implementation

The development journey encompassed the following crucial steps:



Technology Stack

Selection: We chose a diverse yet integrated technology stack, including WCF, SQL Server (Managed), Azure App Services, Azure Service Bus, Azure Blobs, Azure Tables, Lucene Search, Distributed Tracing, and Azure AD.



Thick Client

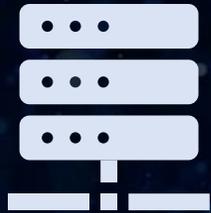
Development: We created a comprehensive thick client to cater to the front-desk and back-office operations, providing a user-friendly interface for hotel staff.



SaaS Services on

Azure: Our experts developed and deployed the SaaS services on Azure, ensuring high availability, scalability, and strong security for multi-tenant operations.

Results



Comprehensive Solution: The multi-tenant facility management SaaS product seamlessly catered to front-desk and back-office operations, accommodating the diverse needs of hotel tenants.



High Performance: The solution's architecture and Azure-based deployment ensured high performance, scalability, and strong data isolation for each tenant.



Data Security: Robust security measures and data isolation mechanisms safeguarded sensitive guest and hotel information.



Through meticulous collaboration, architectural design, and technology implementation, our consultants successfully developed a multi-tenant facility management SaaS product that met the unique requirements of the Hotel Management client. The product's dual-component build, incorporating both a thick client and Azure-hosted SaaS services, ensured efficient front-desk and back-office operations while maintaining high performance, scalability, and security. Our expertise in solution development and Azure technologies played a pivotal role in delivering a robust and innovative solution tailored to the client's needs.

For more insights into how our consulting services can assist your organization with similar SaaS product development challenges, please contact us at info@dataleague.com.au.