



Rust Built Case Study

Vacation rental platform
pulling real-time listings
from multiple data
sources.

How we turned
a great idea,
into an even
better reality.



www.rustbuilt.com





Project Vision & Technical Challenges

The idea here was to build a unified rental platform powered by multiple property management systems. The team had no in-house technical resources, but they knew how it needed to work. The challenge was turning that into a functioning product.

Initial Technical Challenges:

With no in-house technical resources or expertise, the client needed a trusted partner to architect, develop, and deploy a fully custom platform from the ground up.

Business Objectives:

Build the technologic foundation of the company. a unified platform that aggregates professionally managed vacation rental listings from multiple property management systems (PMSs), providing users with a seamless browsing experience.





Solutions Delivered

The solution included a custom web application built on the LAMP stack using CodeIgniter, supported by a robust backend system that aggregated, sanitized, and standardized data feeds from various sources.

An internal dashboard was developed to monitor real-time data streams, while a standalone WordPress blog hosted on AWS Lightsail and securely separated from the main codebase provided a content hub.

The user-facing front end delivered a seamless experience, presenting unified property listings with interactive visualizations powered by Mapbox.



Existing Systems Before Rust Built:

Data was sourced from five major providers—NextPax, OwnerRez, RentalsUnited, Streamline, and Track; each with distinct data structures, naming conventions, and API behaviors.

Pain Points from Existing Stack:

The data was fragmented, inconsistent, and lacked standardization, making it impossible to reconcile property details, amenities, and availability across sources without implementing a centralized data model.



Solutions *(continued)*



Impact on Daily Operations:

Rust Built provided the foundational platform that enabled the company to launch its core product and operate its business.

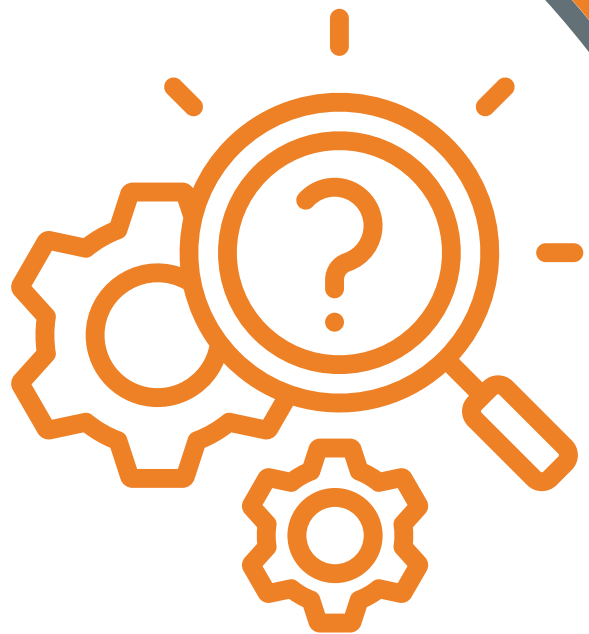
Without it, the venture would not have been possible.



Our Value:

We leveraged our expertise in data aggregation, normalization, and complex system architecture,

we enabled the client to transform fragmented property data into a cohesive and seamless user experience.





Technologies Used

- Backend: PHP (CodeIgniter), cron jobs for scheduled data imports
- Frontend: HTML, CSS, JavaScript
- Database: MySQL (via RDS), DynamoDB, Redisearch
- Infrastructure: AWS (EC2, RDS, S3, Lightsail)
- Mapping: MapBox



Data Integration Approach

Rust Built implemented scheduled imports to retrieve data from each property management system (PMS). Custom mapping logic was developed to translate vendor-specific data, particularly amenities, into standardized formats aligned with Online Travel Agency (OTA) requirements.



Timeline

3 years from initial planning to handoff.



Security & Compliance

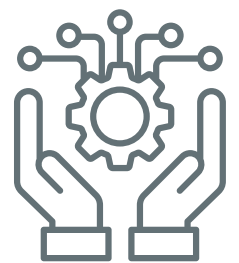
The platform was designed and developed in accordance with PCI compliance standards to ensure secure handling of payment information.





Challenges:

Successfully managed high volumes of inconsistent, timezone-sensitive data from multiple international providers.



Strengths:

- Strong architectural planning for scalable data ingestion
- Custom development across the full stack
- Ability to launch a first-of-its-kind platform from scratch



Key Takeaway:

This client came to us with ambition but no real technical infrastructure. The vision was clear: to aggregate listings from multiple property management systems into a single, streamlined platform. But the build would be more complex than anticipated: messy data, inconsistent formats, and there was no existing tech to base it on.

Rust Built handled the full build, from backend ingestion and mapping logic to frontend design and launch readiness. We built the system to OTA standards, and listings were visualized on an interactive map. Scheduled imports ensured ongoing accuracy.

The new platform became the foundation of the business. Without it, the idea couldn't have gone to market. With what we delivered, they were able to launch with confidence.

