

Case Study

Azure Integration Services Solution for Seamless API Migrations



COMPANY OVERVIEW

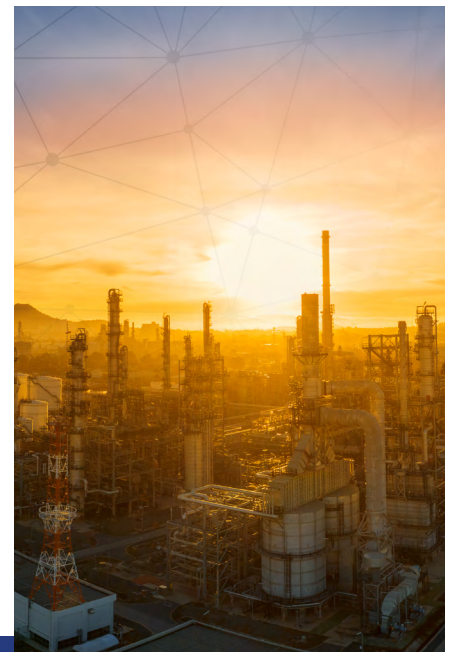
The client is one of the largest crude oil refiners in the USA. The company plays a significant role in the energy industry across downstream, midstream, and retail operations, including refining & marketing, Storage & Transportation, and distribution of refined petroleum, industrial products, and renewable fuels. Their infrastructure includes 2.9 million barrels of crude oil throughput capacity, 40.3 million barrels of terminal storage capacity, and 12 billion standard cubic feet of natural gas processing capacity, making them the nation's largest refining system.



CHALLENGES

As part of their API migration initiative, the client sought to leverage a Dell Boomi Integration platform to automatically integrate data sourced from multiple systems and process work timesheets. However, during the implementation process, the client encountered difficulties integrating interfaces while connecting multiple backend systems with existing systems. This integration complexity caused inefficiencies in fetching, consolidation, and unified view maintenance of data.

Further, due to the lack of proper end-to-end backend automation processes, the client also encountered significant challenges in ensuring sophisticated security for sensitive data. Moreover, inaccurate data integration and storage procedures coupled with application scalability and performance risks resulted in poor response times during peak periods. Additionally, the client also faced difficulties finding system failures due to a lack of precise tracking mechanisms.





SOLUTION

With proven expertise in the development and implementation of intelligent automation solutions, V-Soft deployed a features-rich solution to ensure seamless data integration and maximize application performance.

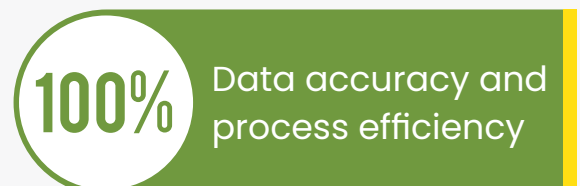
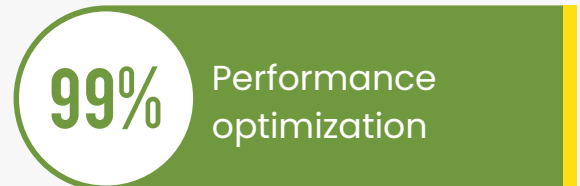
V-Soft's team of seasoned experts with best practices in Azure Integration Services has successfully implemented a results-driven Azure-based cloud solution. Our solution ensured seamless integration of several external and internal systems, ensuring secure connected experiences. Leveraging the full potential of standard logic app workflows hosted within App Service Environment and VNet, V-Soft's highly scalable Azure solution improved the speed of transactional data accessibility for both internal and external users.

To ensure efficient data conversion and data mapping amid objects, V-Soft's experts defined highly accurate and performed Azure Functions in this robust cloud solution. Further, we have implemented powerful logging techniques that assisted our client to track system failures seamlessly. V-Soft has also intelligently addressed the security challenge by leveraging Azure Key Vaults and encrypting sensitive information.



RESULTS

- Automated interfaces run on schedules to ensure no delays in workflows.
- Accelerated transparent and fully augmented operations and service delivery.
- Achieved accurate data flow and transitions compared to the old legacy systems.
- Ensured end-to-end encryption of sensitive information.
- Empowered efficient data transformations between SOAP and other objects.
- Optimized database queries improved the interconnected system's response time.
- Customized workflows required no code changes.
- Workflow runs on schedules without delays ensured workflow optimization.



Technologies Used

- Azure Integration Services
(Standard Logic Apps, Azure Function Apps, Azure Key Vaults, and Azure DevOps)