



# Gained 90% Accuracy with Test Automation using TAAS for Functional and API Testing

## Case Study

### Insight

A leading provider of comprehensive waste management wanted to test each of its products using a custom approach instead of a standardized test automation solution.

Forsys offered Testing as a Service (TaaS) for functional and API testing, identified the weak points, and redefined the client's QA processes and strategies. It formalized the testing process and lowered the testing costs significantly.

**Industry:**  
Environmental Services

**Revenue**  
\$1+ B

**Employees**  
40K+

**Headquarters**  
Texas, US

### Business Challenge

The client's product framework needed to be tested across various platforms with different application servers and databases.

The main challenges for the client were:

- ☑ Lack of skilled and trained resources.
- ☑ Poorly identified and defined requirements.
- ☑ Maintenance and support costs.
- ☑ Executing repetitive test cases daily.
- ☑ Unstable production environment.
- ☑ Coordinating between onsite and offsite teams.

# Transformation Journey











Forsys provided TaaS for functional and API testing to the client. We formed a team of test automation specialists based on the inputs received from the client about the application.

The key highlights of the approach to the solution are:

- Identification of the weak points and redefining of QA processes and strategies.
- Maintenance of quality of inputs and outputs during all phases of product development and release.
- Recommendations for best-practice modeling and answering tool use questions.
- Modifying and developing the system operations model as per feedback.

## Impact

With Forsys' TaaS offering, the client:

- |  |   |
|--|---|
|  <b>Achieved 90% accuracy via automation</b>                       |  <b>Reduced testing cycle time by &gt;40%.</b>                       |
|  <b>Removed &gt;95% functional defects in production.</b>         |  <b>Enhanced test coverage and traceability</b>                     |
|  <b>Gained testing efficiency with zero-dollar investment.</b>   |  <b>Tested during sprints, resulting in reduced time to market</b> |
|  <b>Reduced automation costs by 25-40%</b>                       |  <b>Achieved E2E automation and an optimized regression suite</b>  |
|  <b>Optimized minimum test cases leading to faster execution</b> |  <b>Formalized the testing process</b>                             |

## About the Client

The client is North America's leading provider of integrated environmental solutions. It partners with customers and communities to manage and reduce waste from collection to disposal while recovering valuable resources and creating clean, renewable energy.

Headquartered in Houston, the company serves nearly 20 million municipal, commercial, industrial, and residential customers through a network of 367 collection operations, 355 transfer stations, 273 active landfill disposal sites, 16 waste-to-energy plants, 104 recycling plants, and 111 beneficial-use landfill gas projects.

## Solution Components

### Manual

- Functional Testing
- Performance and Load Testing
- API Testing
- User Interface Testing
- End-to-End Testing
- Integration Testing
- Compatibility Testing
- Smoke Testing
- Regression Testing

### Automation

- API Testing
- Database Validation
- Puppeteer