



CASE STUDY

ACCELERATED QA APPROACH FOR AN AI-BASED THREAT-DETECTION PLATFORM PROVIDER

Increased test coverage by 70% and reduced test execution time by 60%

Client Background

The client is a deep learning innovator specialized in safeguarding enterprises from cyber threats with its real-time network threat protection platform. The AI-based platform comprised of network threat appliances and deep learning cloud for generating threat prediction messages and performing threat detection, respectively. The client's QA team was unable to achieve full test coverage due to limited time and complex test cases like Graph validations, UI navigations & Reports validation with backend data. There was a need to execute 300+ test cases and 100+ regression test cases on multiple browsers in a limited timeframe. Due to the client's aggressive product roadmap and accelerated time-to-market, manual testing was not adequate.

Xoriant Solution | Key Contributions

Xoriant was the client's technology partner for product engineering and UX enablement. With our technical prowess and excellence in delivery, the client was optimistic with Xoriant's QA approach within the specified aggressive timelines.

Our key contributions for the client included:

- Developed an open source technology-based framework using Selenium 3, Python 3.7 to execute all automated test cases.
- Integrated Database for DB and API Level validations, Graph validations and Report validation with backend data using Python.
- Categorized test cases based on available functionalities that run individual or with the suite.



KEY BENEFITS

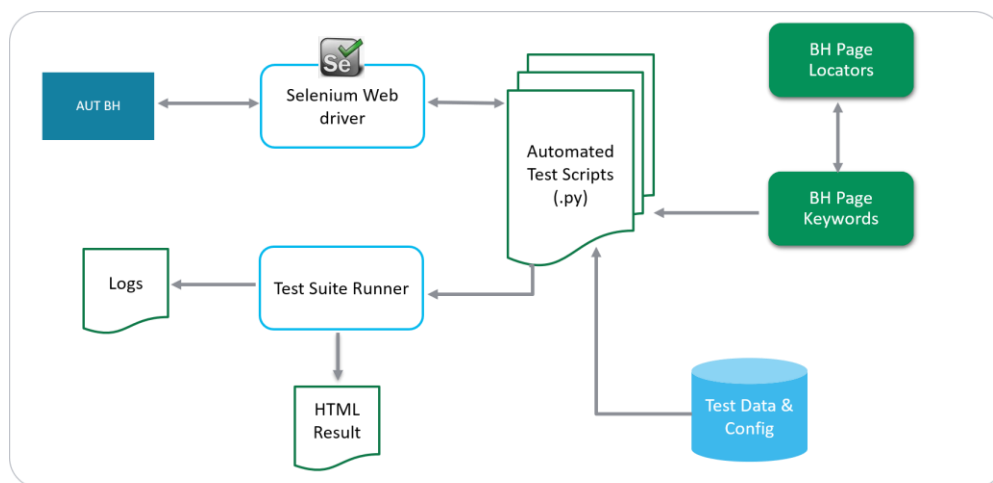
- Established a single package for Sanity and Regression tests.
- Increased test coverage by 70% with reduced test execution time by 60%.
- Improved test quality by 60% with reusable keywords and functions.
- Achieved holistic test result including report overview information, test environment, results summaries and test outcomes.
- Saved significant time following stringent product deadlines.
- Helped the client create, manipulate, and protect required test database, allowing re-use of data.

- Generated comprehensive test report once suite is executed and results for each test executions are further available for analysis.
- Defined test scope based on functional acceptance criteria approved by the client to achieve better test coverage.
- Implemented continuous integration to cover all integration and regression tests in every new build automatically.
- Used automation to ensure client's control over plan, task definition, scheduled testing activities, testing budget and estimate efforts easily.
- Executed browser compatibility tests easily using open source Python framework with small configuration changes that reduced execution time.

Client Testimonial

“Xoriant team has consistently ensured excellence in delivery – product engineering, UI-UX enhancement and quality assurance. They have been very accommodating when we were on strict schedules to achieve speedy time-to-market.”

High Level Architecture



*AUT – Application Under Test

Technology Stack

Selenium | Python | HTML



Xoriant is a product engineering, software development and technology services company, serving technology startups as well as mid-size to large corporations. We offer a flexible blend of onsite, offsite and offshore services from our eight global delivery centers with over 3600 software professionals. Xoriant has deep client relationships spanning over 30 years with various clients ranging from startups to Fortune 100 companies.