Energy & Utilities
Case Study

Test Automation Solution for an Energy Analytics Application

Client Overview

Client is an energy analytics solutions provider with an integrated suite of solutions that orchestrate energy systems using data

Business Challenges

- Understand and verify application portfolios, dashboard operations and events (maintenance triggers, anomalies etc.) associated with the system workflows
- Validate static and dynamic data values in real time and for historic records for different dashboard features and scale up for various portfolios
- Automate data validations using custom framework and report critical deviations in data operations
- Adapt to data requirements and data portfolios (increase in energy systems) with a sustainable test plan
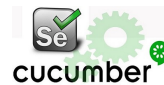
Key Challenges

- Prepared solid test strategy – Smoke and Regress Suite based on understanding of the end to end dashboard operations and data flows to ensure complete test coverage
- Performed Data Validations with seamless querying into Static Value and Dynamic Value databases for various metrics in the dashboard
- Used Automation framework – Selenium with Cucumber to execute tests for over 600 Test Cases
- Implemented Agile Test Methodology for scalable test plan; Provided continuous QA support in a streamlined process –standard defect reporting, test artefacts, optimization of test cases

Business Impact

- Application understanding laid the foundation to a firm test plan . This provided flexibility to execute agile requirements and add test cases for increasing portfolios / functional requirements
- Test cycle improved by a significant 80% by configuring Smoke and Regression Suites and streamlining the test focus
- Effective resistance to manual errors in Data Validations for the intense data driven application

Tools

Se cucumber | Jenkins | Jira