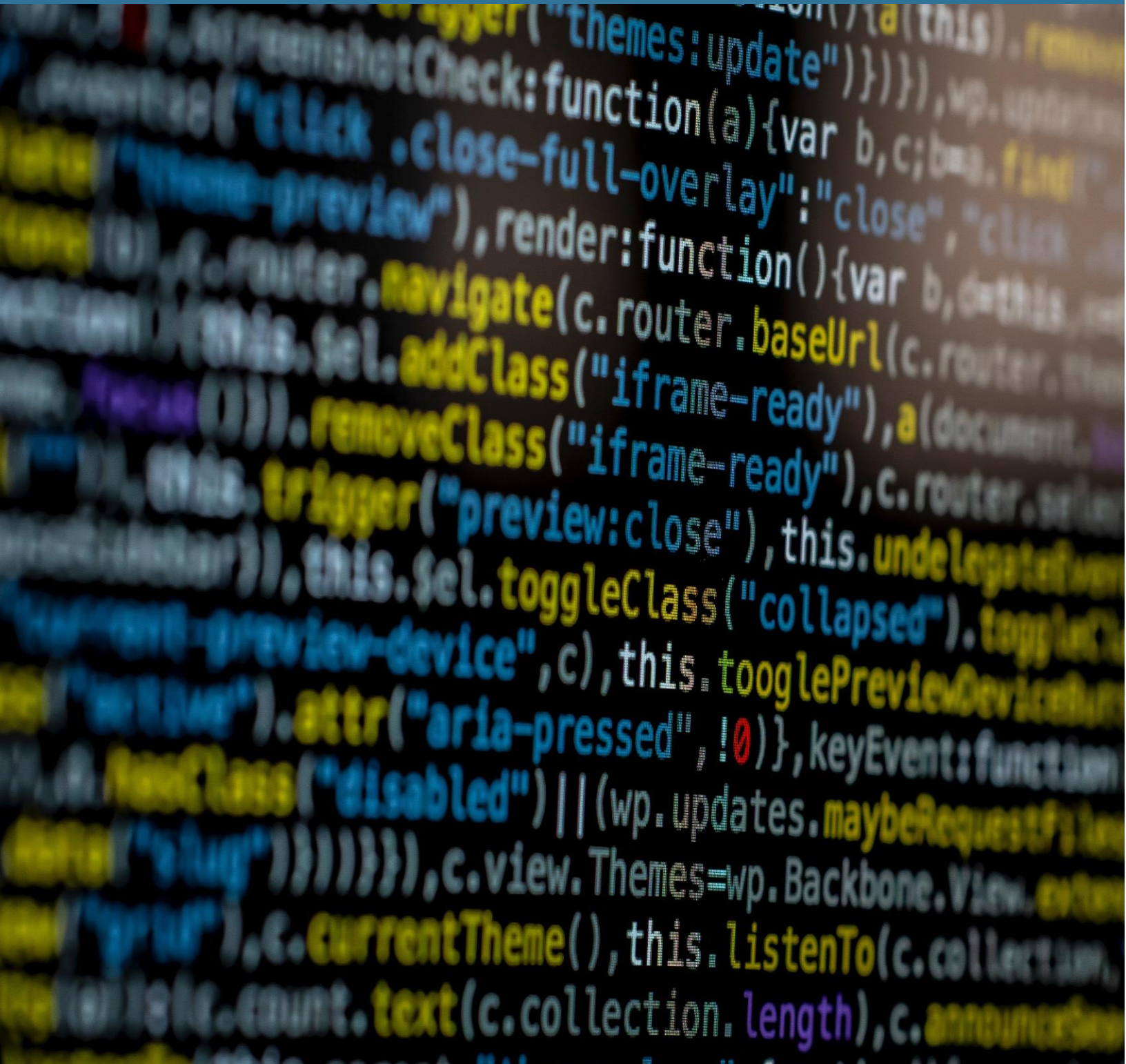


CASE STUDY

CRM IMPLEMENTATION – ORDER FLOW TEST AUTOMATION



THE CLIENT

The client was a leading Smart Home Security provider in Canada. They were looking to streamline and modernize processes across all their business functions which included Sales, Service, Installations, Central Monitoring, Billing, Inventory, and Processing.

THE CASE

To support streamlining and modernization the client aimed to upgrade its legacy CRM systems with a customized implementation of **Microsoft CRM Dynamics365CE**. This was done in conjunction with the delivery of a field mobile application for technicians to support in the provisioning and assurance of their jobs.

The client had challenges delivering their software projects on time due to a lack of sound QA and testing processes. The delivery schedule would need to be made up of many iterative deployments involving multiple teams continuously testing the CRM implementation in multiple environments. The process required large amounts of data seeding to enable various types of testing.

They required a complete Manual and Automation QA framework to be developed from scratch to support in their new CRM implementation initiatives.

THE SOLUTION

Elecsoft was engaged to develop a thorough manual and automated QA framework for the client. Over the course of a year the team reviewed, evaluated, and identified manual test cases and formed a baseline of automated tests.

To ensure an in-depth and thorough validation of system specifications the QA was performed in the following phases:

Unit/Development Testing	Performed by development team in Test Environment
CRM System Integration Testing (SIT)	Performed in QA environment to test newly added functionality within the CRM system
End to End Testing (E2E)	Aimed to test entire functionality with a greater focus on validations on the integrated systems within the single flow.
Business User Acceptance Testing (BUAT)	This testing would have a greater focus on real world processes, operations and functional scenarios designed by the end users.
Operational Readiness Testing (ORT)	This testing shall be conducted by selected end users in a staging environment to ensure the code and configurations being deployed a

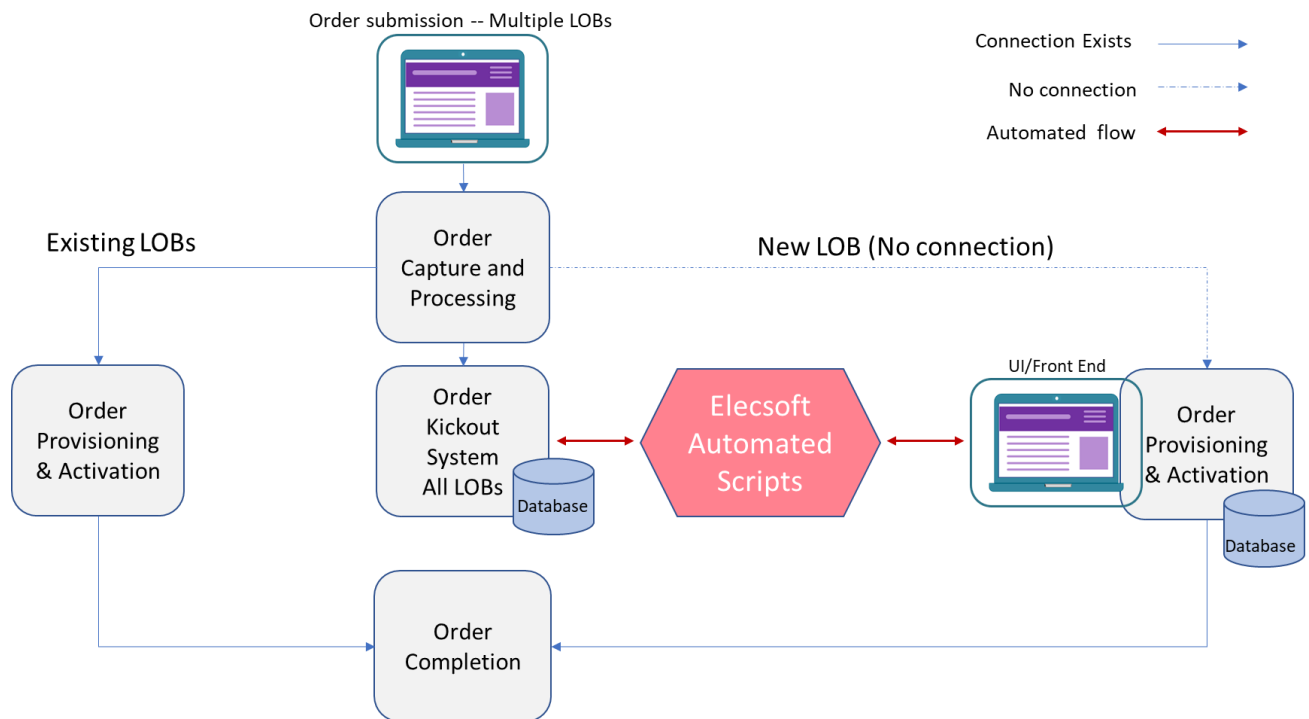
The test cases were developed into automated scripts that completed the entire Sales flow from Lead Generation to Installation Scheduling/Order Submission to the client's System of Record, validating key reference data at each stage. The automated scripts executed Regression tests and produced validated test data for teams in various test environments as well as performing Production Sanity tests.



Value Add:

Elecsoft later added value to the client's Operations team by proposing to leverage the automated data seeding scripts as re-useable code to handle kickouts in their Back Office queue manager and automate their current manual process for handling these types of orders.

KICK OUT AUTOMATION – FLOW CHART



TOOLS USED

SELENIUM	MySQL	JAVA
SOAPUI	JIRA	GitLab

QA DELIVERABLES

Document Overall Test Strategy and Test Plan
Document the test scenarios/cases for all in-scope systems
Co-ordinate and execute CRM Functional and E2E Integration testing for all in-scope systems
Lead daily triage calls for each phase of testing
Provide daily test execution status on progress of each phase of testing
Test Closure Report

THE OUTCOME

The QA strategies employed by **Elecssoft** were able to automate the validation of thousands of rows of product catalogue and CRM configuration data. Testing cycles were reduced from days to hours and the process supported the data seeding requirements for all teams. **Elecssoft's** engagement ensured high quality software releases for the client.

The kick-out automation process which **Elecssoft** implemented as a value-added service, helped reduce errors from manual entry and ensured there were no missed appointments from the order queue. It cut order processing time from **17mins** to **3mins** per order and saved the Client thousands of resource hours per year.

