



ContextQA

Implementation for Large scale Salesforce application

Date: Sept 03, 2025

Program Report:

1. Executive Summary

The Program engagement between <client> and the ContextQA team was initiated to evaluate ContextQA as an AI-powered, enterprise-ready test automation and intelligence platform for Salesforce applications. The Program successfully validated complex scenarios across low, medium, and high complexity workflows, achieving 100% success across 209 test cases.

Key Outcomes:

- All 209 test cases generated, automated and executed successfully
- ~80% effort savings in test design, execution, and data setup
- 6X faster test execution cycles compared to manual testing
- Proven handling of Salesforce complexity (multi-object updates, conditional logic, session restore, metadata mappings)

2. Context & Objectives

Salesforce testing at <client> involves complex workflows with formula-driven logic, ownership transfers, metadata-driven mappings, and multi-session handling. Regression intensity and the need for reliable test data preparation create high manual overhead. The program aimed to:

- Validate automation across low → medium → high complexity Salesforce scenarios
- Demonstrate ContextQA's ability to handle IF/Else branching, data-driven testing, and multi-session execution
- Show scalability and repeatability across enterprise environments

3. Scope & Use Cases

The Program covered three representative Salesforce scenarios:



- Low Complexity: Account segmentation validation (formula-based fields, profile visibility).
- Medium Complexity: Opportunity ownership reassignment (trigger-based logic across Accounts, Opportunities, and Contacts).
- High Complexity: Automated team member assignment during Lead Conversion (custom metadata-driven mappings, Apex class orchestration).

4. Program Outcomes

The ContextQA platform delivered the following results:

- 209 test cases automated and executed successfully (100% success).
- Validated across low, medium, and high complexity 88 scenarios.
- Demonstrated advanced features: Data-driven testing, IF/Else handling, dynamic verification, session restore, multi-environment execution.
- Toolchain integration with JIRA verified for seamless defect traceability.

5. Value Proposition & Key Benefits

- Accelerated Testing Cycles: 100% automated with reduced regression timelines.
- Improved Accuracy & Reliability: Eliminated manual errors in Salesforce workflows.
- Scalability Across Complex Scenarios: Validated automation across low → high complexity cases.
- Multi-Session & Multi-Environment Handling: Seamless restore and execution.
- Test Data Best Practices: Reusable datasets minimized setup overhead.
- Toolchain Integration: Streamlined traceability with JIRA.

6.



Benefits Analysis: Manual vs ContextQA

Aspect	Manual Testing (Estimated)	ContextQA Automation (Achieved)	Savings/Impact
Test Case Design (88 cases)	176 hrs (2 hrs/case)	35 hrs (AI-assisted)	80% effort saved
Execution Cycle	44 hrs (30 min/case)	6 hrs (average 5 min/case)	6X Faster Execution (86% time saving)
Regression Re-run	44 hrs/run	6 hrs/run	Reduced cycle from 1 week to <1 day
Defect Detection	Prone to oversight in edge conditions	>90% coverage across IF/Else, multi-condition scenarios	Higher accuracy
Test Data Setup	20 hrs	5 hrs	75% reduction

Overall Benefit: 80%+ effort savings, faster release readiness, improved coverage & reliability.

7. Benefit Analysis

Activity	Manual Efforts	ContextQA Savings
Test Case Design	Manual 2 hrs/case	ContextQA reduced by ~80%.
Execution	Manual 30 min/case;	ContextQA less then 3 min/case.
Regression Runs [200 Tests]	Manual 44 hrs	ContextQA 6 hrs.
Accuracy & Coverage	Manual prone to misses in Salesforce logic	ContextQA ensured 100% coverage.
Environment Handling	Manual overhead for sessions/env switching	Automated in ContextQA.

9. Conclusion

The program has successfully implemented **ContextQA** for Salesforce applications and stabilized the automation suite despite frequent Salesforce Lightning platform upgrades. ContextQA has proven to be an **AI-powered, enterprise-ready automation platform** for Salesforce testing.

Its strengths—such as handling complex conditions, managing reusable data, enabling multi-session execution, and integrating seamlessly with toolchains—make it a valuable partner for <Client>'s QA strategy