



A WHITE PAPER

The Ultimate Guide to Testing Salesforce Financial Services Cloud

BROUGHT TO YOU BY:



END-TO-END TEST AUTOMATION
BUILT FOR SALESFORCE®



Introduction

Salesforce Financial Services Cloud (FSC) is a powerful platform designed to meet the unique – and often complicated – needs of the financial services industry. However, testing FSC presents several challenges due to its complexity and industry-specific features.

In this white paper, we examine these challenges and explore how Provar's automated testing solutions address them effectively.



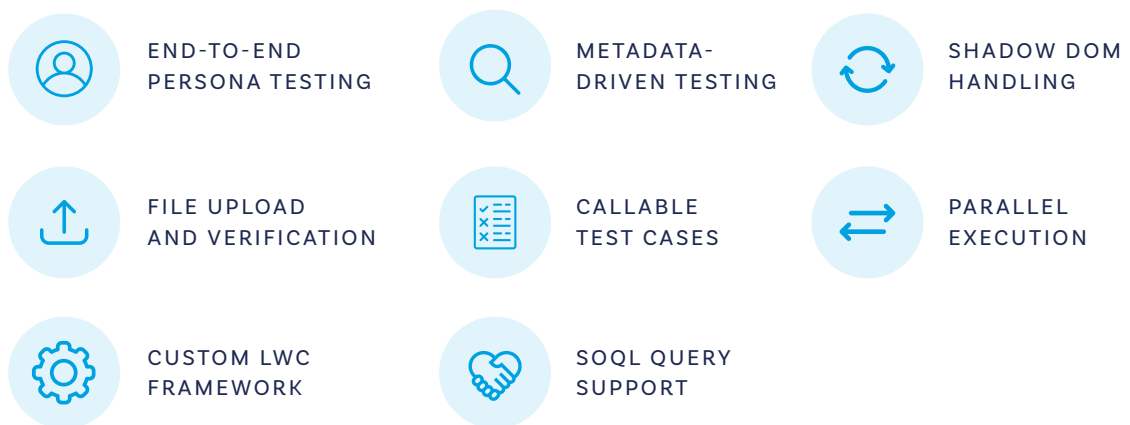
Key Challenges in Testing Financial Services Cloud

1. **Multiple Persona Testing:** FSC requires testing across various user roles and personas, each with unique permissions and views. Personas can include financial advisors, relationship managers, compliance officers, and clients – each needing specific functionality and data access testing.
2. **Complex Data Models:** Financial services involve intricate data relationships and hierarchies that require comprehensive testing. This can include testing complex household structures, account hierarchies, and financial product relationships.
3. **Compliance and Security:** Stringent regulatory requirements demand thorough testing of security features and compliance-related functionalities. Data encryption, audit trails, and role-based access controls all must be tested to ensure compliance with regulations like GDPR, CCPA, as well as industry-specific standards.
4. **Integration Complexity:** FSC often integrates with multiple external systems, requiring robust end-to-end testing. This includes testing integrations with core banking systems, wealth management platforms, and third-party data providers.



5. **Custom Components:** Many FSC implementations involve custom Lightning Web Components (LWC) that require specialized testing approaches. These components often represent industry-specific functionalities that are crucial to the business but challenging to test.
6. **Shadow DOM Handling:** External applications and custom components often utilize Shadow DOM, presenting challenges for traditional testing tools. This requires specialized techniques to interact with encapsulated elements.
7. **Frequent Updates:** Regular Salesforce releases can break existing functionalities and automated tests, necessitating robust testing strategies that can adapt quickly to changes.

How Provar Overcomes Testing Challenges



1. **End-to-End Persona Testing:** Provar enables testing of multiple personas end-to-end in Financial Services Cloud, ensuring comprehensive coverage across different user roles. With Provar, testers can simulate various user profiles, testing not only functionality but also appropriate data access and permissions.
2. **Callable Test Cases:** Provar supports modular test design through callable test cases, improving test maintainability and reusability. This feature allows testers to create reusable components for common financial processes, reducing redundancies in test scripts.
3. **File Upload and Verification:** Provar handles complex file upload interactions and provides robust file verification capabilities, crucial for document-heavy financial processes. With Provar, file formats commonly used in financial services, including PDFs, spreadsheets, and images, are supported.
4. **SOQL Query Support:** Provar's SOQL query support allows for efficient data

validation and manipulation, essential for testing complex data models. With Provar, testers can directly query the Salesforce database to verify data integrity and relationships – crucial for ensuring accurate financial records.

5. **Custom LWC Framework:** Provar offers a custom framework for testing Lightning Web Components, addressing the challenges of custom development in FSC. This framework provides specific methods and utilities tailored for LWC testing, ensuring comprehensive coverage of custom functionalities.
6. **Shadow DOM Handling:** Provar effectively identifies and interacts with shadow root elements, overcoming challenges posed by Shadow DOM in external applications. This capability ensures that even the most complex UI elements can be reliably tested.
7. **Metadata-Driven Testing:** Provar's approach allows for identifying metadata changes after deployment, crucial for maintaining test integrity during Salesforce updates. This feature helps in quickly adapting tests to new fields, objects, or relationships introduced in FSC updates.
8. **Parallel Execution:** Provar supports parallel test execution, significantly reducing overall test execution time. This is particularly beneficial for FSC testing, where comprehensive test suites can be time-consuming.
9. **CI/CD Integration:** Provar offers direct integration with CI platforms, facilitating continuous testing and deployment. This integration ensures that FSC changes can be thoroughly tested as part of the development pipeline, catching issues early in the development cycle.
10. **Data-Driven Testing:** Provar supports using CSV for data input, enabling efficient testing of multiple scenarios. This is particularly useful for testing various financial scenarios and edge cases without the need for extensive test script modifications.

Advanced Features for FSC Testing



AUTOMATED ROLLBACK

Provar can trigger metadata deployment rollback in case of test failures.



PDF AND TEXT VALIDATION

Provar supports validation of text and PDF files.



TABLE DATA VALIDATION

Provar offers robust capabilities for validating complex table data.



REUSABLE UTILITIES

Provar allows for creating reusable utilities.



GENERATIVE AI INTEGRATION

Provar is exploring generative AI integration.



1. **Automated Rollback:** Provar can trigger metadata deployment rollback in case of test failures, ensuring system integrity. This feature is critical to maintaining a stable FSC environment, especially when dealing with critical financial data and processes.
2. **PDF and Text Validation:** Provar supports validation of text and PDF files, crucial for document-centric financial processes. With Provar, teams can verify the content of financial statements, contracts, and regulatory documents generated by FSC.
3. **Table Data Validation:** Provar offers robust capabilities for validating complex table data – common in financial reports and dashboards. With Provar, testers can ensure the accuracy of financial summaries, transaction histories, and other tabular data crucial in financial services.
4. **Reusable Utilities:** Provar allows for creating reusable utilities, enhancing test efficiency and maintainability. These utilities can encapsulate common financial calculations, data transformations, or validation logic specific to FSC implementations.
5. **Generative AI Integration:** Provar is exploring generative AI integration to further enhance testing capabilities. These new developments may potentially assist in generating test data, predicting potential failure points, or even suggesting test scenarios based on FSC configurations.



Conclusion

Because of its complexity, industry-specific features, and stringent regulatory requirements, testing Salesforce Financial Services Cloud can be uniquely challenging. Provar's comprehensive testing solution addresses these obstacles with its metadata-driven approach, support for custom components, robust data handling capabilities, and integration with modern development practices empowers teams. By leveraging Provar, financial services organizations can ensure the quality, reliability, and compliance of their FSC implementations while significantly reducing testing time and effort. Provar's advanced features and ongoing innovations position it as a powerful tool in the maintenance and improvement of FSC implementations in the financial services technology sector.