

Phase 10: Quality Assurance Testing

The Testing Approach included Unit Testing for all automation features, System Integration Testing (SIT) for the end-to-end ticket lifecycle, and User Acceptance Testing (UAT) with IT Managers and Agents. The test cases below demonstrate the validation of the core business logic:

Use Case Scenario	Test Steps (with Input)	Expected Result	Actual Result
New Ticket Triage Flow	Create an IT Ticket. Input: Issue Category = Hardware.	The Ticket Owner field automatically changes to the Hardware Support Queue.	Actual Output: Owner is Hardware Support Queue.
Asset Replacement Approval	Create an IT Ticket. Input: Type = Asset Replacement; Asset Cost = \$1,200. Submit for Approval.	The Approval Status changes to 'Pending' and is routed to the IT Manager for action.	Actual Output: Status is 'Pending' and Approver is IT Manager.
Mandatory Resolution Notes (Validation Rule)	On an open IT Ticket, change Status to 'Resolved' while leaving Resolution Notes blank.	The Validation Rule prevents the save and displays the error message: "Resolution Notes are mandatory to close the ticket."	Actual Output: Error Message is displayed, record save failed.

Conclusion

The Corporate IT Helpdesk Hub project successfully delivered a robust, streamlined, and scalable IT Service Management solution built on the Salesforce Platform. By automating ticket assignment, enforcing data governance through validation and approvals, and centralizing data access, the system has successfully met all core business objectives: significantly improving operational efficiency, enabling data-driven management, and enhancing the quality of support service delivered to employees.

Future Enhancements

The following features are planned for future development phases:

1. Salesforce Experience Cloud Implementation: Deploy a dedicated self-service portal for End Employees to log and track tickets, reducing call volume and providing a seamless user experience.
2. Salesforce Einstein Bot Integration: Integrate a basic conversational chatbot on the portal for initial Tier-0 triage, handling common requests (e.g., "Check status of my ticket") and routing complex issues to an agent.

3. External CMDB Integration: Implement a full REST API Callout in Apex to integrate the IT Asset object with the corporate Configuration Management Database (CMDB) for automated, real-time asset synchronization.