indium
Make Technology Work

TESTING TELECOM PORTAL

PROJECT OVERVIEW

There was a lack of a QA process, proper documentation, and test cases. The client required an end-to-end test case repository and was on the lookout for VOIP Performance testing to guarantee call quality. He also wanted to ensure call functionality. In order to make the process run smoothly, we developed the test strategy using End-to-End testing, Sprint-based testing, and VOIP Performance testing. We also streamlined test management and other areas.

CLIENT DOMAIN

Telecom

SOLUTION DELIVERED

Functional Testing, Performance Testing, Automation Testing

KEY HIGHLIGHTS

- Growing functional test suite with 2200+ test cases

- Categorization of test suites – Smoke, Compatibility, End-to-End, VOIP Performance, Call Functionality

ABOUT CLIENT

i-Comm Connect is a cloud service provider offering a platform for real-time multichannel communications. i-Comm Connect is a Software as a Service solutions company with a mission to transform the customer service industry through innovative products that allow businesses to seamlessly engage, convert, and retain customers at every stage of their online journey.

BUSINESS CHALLENGES

- Adhoc QA Process.
- Lack of proper documentation and test cases.
- Pre-merge and Post-merge testing.
- No compatibility Test Process & VOIP Framework.
- Lack of VOIP Monitoring tool which is the core of the application performance.

BUSINESS REQUIREMENTS

- Ongoing QA for the weekly changes.
- VOIP Performance testing to ensure call quality.
- Call functionality testing across 20+ trending OS and Browsers in both Desktops and Devices toensure compatibility .
- Need for End-to-End test case repository.
- Need for Smoke, Functional and Regression testing suites.

SOLUTION HIGHLIGHTS

Test Strategy: With the understanding of the test requirements, we formulated the test strategy with End-to-End testing, Sprint based testing and VOIP Performance testing.

Identified a test repository tool and added all our test cases designed to ensure complete test coverage.

Well-equipped Test Lab: To keep the application compatible in the trending OS and browsers, test lab is well equipped and frequently updated.

Known issues in the browsers are captured and maintained in a defect repository.

Compatibility testing is done across the identified test combinations. Call Functionality is also monitored in the test combinations and issues are reported.

Test Management: Test Cases are maintained in the tool and test folders are created for various test suites namely: Smoke Test Suite, End-to-End Suite, Regression Suite, VOIP Performance Testing Suite and Call Functionality Test Suite.

TestLink, JIRA, Wireshark, iSAFE framework are the various tools in our test execution and management.

Test cases are automated and batch executed in multiple platforms thereby reducing the regression timelines.

We ensured delivery in line with the customer expectations ahead of release.

DIFFERENTIATING FACTOR

Product Knowledge: Our Strong product knowledge helped us to proactively monitor the module changes based on the change requests.

We could identify the modules that required additional focus. To support scripted testing for increased test coverage, 30 to 40% exploratory testing was performed.

Defect Knowledge: For supporting the defect triagewith the onsite team, we prioritize the defects and discuss with the stakeholders.

Root Cause Analysis was performed to identify the key origin of the defect which helped the development teams to address the source.

Daily Status Reports, Slack and Daily Scrums helped in seamless communication between the development teams, stake holders and QA teams.

METRICS

- 2200 Test cases designed covering end to end functional tests.
- A total of 293 functional defects are reported 106 – High, 90 – Medium and 97 – Low.
- A total of 113 compatibility defects are reported across desktop and mobile devices.

- Call functionality testing across 27 OS/browser combinations.
- VoIP performance testing across 15 OS/browser combinations.

BUSINESS IMPACT

- Streamlined QA process with continuous improvement.
- Growing functional test suite with 2200+ test cases.
- Categorization of test suites – Smoke,Compatibility, End-to-End, VOIP Performance,Call Functionality.
- Prioritization of defects and RCA on the defects.
- Test Automation folder in the test repository to enable batch execution.

TECH STACK

Streamlined QA Process,
Multi environments testing with
Test Automation,
Test Repository tailored with test
suites for various types of testing,

ANGULARJS

SQL

ABOUT INDIUM

Indium is a Digital Engineering Services leader and Full Spectrum Integrator that helps customers embrace and navigate the Cloud-native world with Certainty. With deep expertise across Applications, Data & Analytics, AI, DevOps, Security and Digital Assurance we "Make technology work" and accelerate business value, while adding scale and velocity to customer's digital journey on AWS.

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