



Enhanced automation of courier operations for a leading logistics company in US

CASE STUDY | APPLICATIONS | TRANSPORTATION

Highlights

Automation of the courier operations for a leading logistics services company in US

Client Type

Cargo airline

Industry

Transportation

Type of Work

Testing, Integration

Why Mphasis-HP Enterprise Services?

- Wireless lab commissioned in two locations which are information security compliant
- GPRS Infrastructure for testing and network connectivity to star base, Wireless Data Manager
- Relationship with product vendors such as Mercury & Segue

MphasisS helped increase the operational efficiency and enhanced the automation of the courier operations for a leading logistics services company in US

Client

A leading logistics services company in US

Objectives

- To enhance automation in courier operations providing speed and cost benefits
- To increase operational efficiency

To integrate with other coordinating systems like backend servers and other tracking applications

Scope of the Solution

- Setup of off-site / offshore test environment
- Building offshore team
- Implementing QA processes to smoothen the testing process
- Testing handheld device application in domestic and international scenarios
- Verify data and analysis of metrics data
- Automation of work flow

Challenges

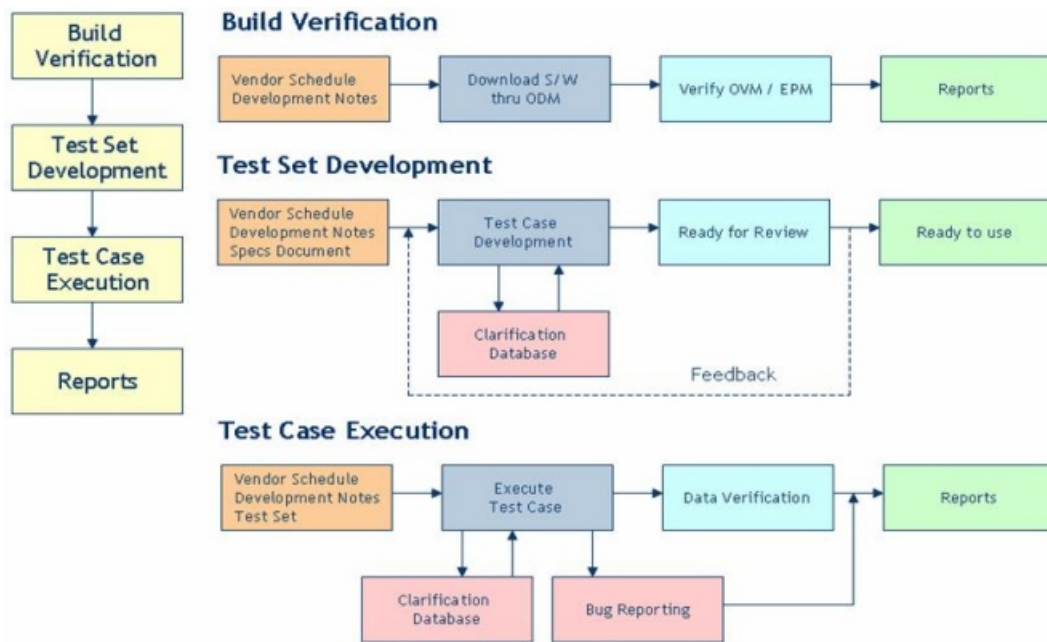
- Evaluate, implement, and practice automation testing tool for handheld devices
- Commissioning of wireless lab in Memphis and Bangalore
- Design and develop automation framework to suit functionality validations and defect fixes
- Quick ramp up of resources
- Reduction in test cycle time

Solution

- Testing functionality includes:
 - Testing handheld device functionalities
 - Signature capture and verification
 - Domestic and International shipments
 - Automation testing
- Software Testing Methodologies
 - Adherent to black box testing
 - Efficient usage of parameterization in QC for test case writing
 - Logical grouping of test cases in QC to support re-usability
- Automated Testing Methodologies
 - Excellent version control of the script
 - Verification of uploaded data in Mainframe application through QTP script

- Implementation of Intelligent Text Recognize feature
- HTML reporting for result verification
- Automation Approach
 - Identified stable functionality for automation
 - Designed and implemented automation framework
 - Effective implementation of reuse
 - Modular approach
 - Incremental / Modular additions to Test Design
 - Application Performance monitoring for mass scanning
 - Software metrics collected through automation
 - Parallel execution on different flavors of handheld devices
 - Testing of GPRS enabled features
 - Functional and navigational changes in handheld devices are determined by automation test scripts
 - Verification of fixed defects from previous builds through automation test scripts

Functionality



Adding Value

- Automate smoke tests, regression tests, acceptance tests, integration tests, and unit tests on the different handheld devices and platforms - New builds can be smoke tested daily, and regression tests can run weekly
- Quick turnaround time in testing new handheld devices
- Automation scripts could cater to testing on multiple handheld devices, thus reducing the cost of maintaining the script
- Over 100,000 handheld devices were rolled out in production
- No production defect was reported in the scope of our testing by end-users
- System integration has been reduced in half, from four weeks to two
- User acceptance testing has been reduced from five weeks to just one
- Automated data verification and the time for same reduced to half
- Automated approximately three fourth of verification effort



Innovation

'Automated Data Verification & Reporting' tool is an ingeniously developed automation solution to simplify test work flow.

Objectives

- Improve accuracy of verification of data elements
- Automation of solution to totally eliminate human errors
- Integration of manual and automation data verification activities
- Generating customized data verification reports for MIS uses
- Improve productivity by effective utilization of human resources

Salient Features

- Implemented using Open Test Architecture (OTA)
- Smart parsing algorithm for identifying test parameters
- Intelligent test status update
- Optimal solution with innovative concept

Statistics after the Tool in Practice

- 48.45% time savings (effort) due to automation
- Caters to 72% test coverage
- 17 test sets in practice

Benefits

- Saved time - Nearly 10 seconds saved for every transaction (for every courier stop)
- Effective handling of packages – reached 5 million a day
- Increase in Air Deliveries to 3.1 million
- Successful deployment of wireless devices
 - In Field – 90,000
 - In Sorting Facility – 70,000
 - Wireless Access points – 5,000

- Raise in visits to drop boxes each day to 50,000
- Elimination of paperwork by the end user
- Annual savings of US \$20 millions after employing the handheld devices in express fleet
- The integrated solution has resulted in instant tacking of shipment right from pickup till delivery effectively.

Increased Operational Efficiency

- Nearly 10 seconds saved for every transaction (for every - courier stop)
- Better utilization of available bandwidth
- Lower incidence of rejections / errors

About Mphasis

Mphasis is a leading Applications, Infrastructure Technology, and BPO services provider. The company delivers real improvements in business performance for clients through a combination of technology know-how, domain and process expertise. With currently over 36,000 people, Mphasis services clients in Financial Services, Manufacturing, Healthcare, Communications, Media & Entertainment, Transportation & Logistics, Energy & Utilities, Consumer & Retail, and Governments around the world. To know more, visit www.mphasis.com.

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