

GStaf

Customizable, integrated automation of appliance and application testing



GStaf – GS Lab’s Test Automation Framework – is designed to test appliances and applications having heterogeneous interfaces through single test interface. The pluggable framework of GStaf enables extensibility and flexibility for product test modules. The GStaf library provides a rich set of functions to access interfaces like web applications, databases, telnet, ssh, etc. The product test modules, written using the GStaf library functions, contain the flow and validations specific to the product being tested.

	Enabling Features	Benefits
Pluggable Framework	<ul style="list-style-type: none">Provision for standard modules like setup, pre-test, test execution/validation, failure analysisExecution and stat reports in html/xml formatChoice of using different types of test case files (xml /csv or ruby scripts)	<ul style="list-style-type: none">Flexible design of product test modulesAuto mail report for regression or sanitySanity tests integrated with build notificationFailure analysis module with ready-to-use information for logging a defect
Distributed Testing	<ul style="list-style-type: none">Runs test modules on different machinesCollects results on central GStaf serverExecution logs from distributed modules on central GStaf server	<ul style="list-style-type: none">Test execution on multiple platforms, e.g., XP, Vista, LinuxSimulation of multi-user environmentsSingle point of debugging and result verification
Parallel Execution	<ul style="list-style-type: none">Execution of different test cases or test steps in parallel on same or distributed environmentExecution of different modules simultaneously	<ul style="list-style-type: none">Multi-user concurrent test executionReal life use-cases with multiple users accessing the application/appliance simultaneously
Appliance Testing	<ul style="list-style-type: none">GStaf library modules for telnet and ssh accessData simulation with standard modules like http, ftp, etc.Support for web based management console using watir or firewatir library	<ul style="list-style-type: none">Execute commands on appliance and validates the resultExecution/verification with simulated dataEnd-to-end system testing by configuring the appliance through web console and then verifying the configuration from backend
Web Application Testing	<ul style="list-style-type: none">Library over open source modules like watir and firewatirUnified library for IE and Firefox browsersProvides “Control Neutral” API libraryDrives browser as if actual user is using itDatabase modules for backend validations	<ul style="list-style-type: none">Cross browser testing with small changes in the product test modules.Web control abstraction makes product modules more robust to web page changesIndicates true performance of web site as automated operations are done through browser
Testlink Integration	<ul style="list-style-type: none">GS Lab contributed a patch to TestlinkTestlink invokes GStaf, GStaf runs tests, sends results back to Testlink	<ul style="list-style-type: none">Run single test / test-suites from Testlink web interfaceUse Testlink to record test results

To learn more about GS Lab’s software assets and services, please write to us at services@gs-lab.com or visit www.gs-lab.com.