

Leading VoIP Provider Cuts Down Manual Regression Effort by 80% with GoLang Automation

Learn how we built a GoLang-based automation framework that streamlined API testing for 500+ endpoints, slashing test time and boosting product reliability for the client.





About the Client

Our client is a premier white-label VoIP provider, delivering cloud-based communication solutions to MSPs and resellers. Their platform depends on a complex network of 500+ APIs supporting provisioning, billing, routing, and real-time communications.

The Need

The client's manual testing processes couldn't keep pace with frequent API updates across multiple environments. The lack of automation led to slow regression cycles, limited test coverage, and increased chances of production issues.

Our Solution

QASmartz engineered a robust, high-performance API automation framework tailored to our client's needs.



Tech Stack



GoLang-Based Automation Framework

Our QA experts designed a modular and maintainable framework using GoLang to efficiently execute REST API tests with minimal overhead and high throughput.



Parallel Execution & Environment Management

We enabled parallel test execution and implemented dynamic, environment-specific configurations, ensuring consistent test coverage across staging, pre-prod, and production mirrors.



CI/CD Pipeline Integration

Lastly, we also integrated test execution into the client's CI/CD pipelines, triggering automated test runs nightly and automatic validation on every pull request for early regression detection.



Outcomes Achieved

Automated testing across 500+ APIs



80% reduction in manual regression effort



Higher test coverage, stability, and release reliability



60% faster test execution through parallelization



Early defect detection via CI-integrated test runs



Why QASmartz



25+ Years of Expertise in Automation & QA Testing



24x7 Global Testing Power



Comprehensive Application Testing



Effortless API Testing



In-House SaaS Expertise



Affordable QA Services



About QASmartz

QASmartz is a trusted **QA and automation testing partner** for businesses worldwide. With over **25 years of industry expertise**, the company has successfully tested **2000+ products** across various domains. QASmartz operates with a **dedicated team of over 100 expert resources** in its QA Lab, strategically positioned across **10 global locations**.

From **seamless integration during every sprint to early bug detection for improved code quality**, QASmartz ensures **comprehensive testing coverage and robust performance**. Leveraging **AI-driven tools**, the company enhances testing accuracy and efficiency, helping businesses accelerate release cycles and maintain high software reliability.

2000+

Products
Tested Worldwide

100+

Expert Resources
in Our Dedicated
QA Lab

25+

Years of
Industry Experience

10+

Global
Locations



NORTH AMERICA
Rochester, NY, Vancouver,
Mississauga

EUROPE
Oslo

ASIA
Singapore, Dubai, Chandigarh,
Mohali, Noida, Gurugram,
Pune

AUSTRALIA
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