HCLTech | Supercharging Progress™

MAGNUS Intelligent End to End Automation

Magnus is no-code test automation platform enabling quicker test design and optimized test execution of applications and devices by co-existing with your current test ecosystem

BUSINESS SCENARIO AND NEED

- Very High Manual effort involved in » testing of wide range of applications and devices
- Commercial tools are not open to integrate with other tools to customize and provide single solution
- Demand for shorter test cycle lead to insufficient test coverage and defect leakage
- Testing of wide array of applications » and devices needing expertise on wide variety of tools
- Difficulty in automating complex test » scenarios, for e.g., tests involving touch inputs or tests involving combination of embedded software and other channels
- Testing budgets optimization »
- Dependency on high skilled resources

Quick and Fast releases

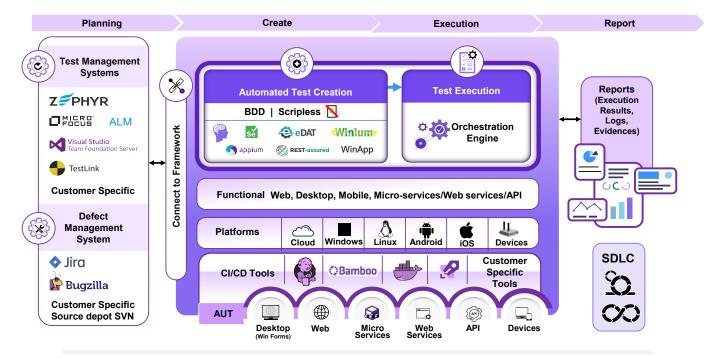
SOLUTION BRIEF

Magnus is no code/scriptless test automation framework for Web, Mobile, Desktop, Microservices, web services and API testing. This framework supports BDD and AI/ ML based Scriptless automation approach for test creation and execution on any platform.

It pulls the test artifacts from Test Management Systems (TMS) for execution, once executed it pushes the test result back to the TMS.

It provides Advanced Multichannel Orchestration where single test is run on multiple channels viz web, mobile etc either parallelly or serially through its Orchestration engine.

Regression testing support with popular features like CI/CD and connectors like Jenkins, Multi test data to support different environments, Live logs and Scheduler etc..



KEY FEATURES

Three Modes of Executions



BDD Mode

Web UI. Mobile. Microservices. Desktop, Web Services & API testing



Zip Mode

Customer Specific Scripts & **COTS Tool Scripts**

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AI / ML Based Solution for Scriptless

- Natural Language Processing
- Powered by Vision Analytics
- Support complex test steps using Deep Segment
- Automated Test Script Generation for BDD Generate test script for the test cases to
- execute on targeted environment
- Supports Java, Python and Powershell

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Microservices

- Rest, GraphQL, Soap based, GRPC, Web Sockets and JMS messages
- » Synchronous and Asynchronous calls
- Test data generation
- Multi-environment Support
- Execution by Feature, Test Type, Row wise and Full execution
- Third Party Integration validations



Multi Channel Execution

Facilitates Multichannel execution through its Orchestration engine

RBAC support

- Provides different roles viz Admin, Read-only, Read-Write
- Ensures right content is available to the right user
- 2 factor authentication



Third-party Defect and Test Management Tool Integration

Integrated with most popular agile testing tools viz Jira, TFS, ALM etc



Dashboards

- Provides different dashboard reports viz work package, advanced orchestration, evidence reports
- Step wise screen capture to facilitate easy triage
- Provides HTML and PDF reports

Scriptless

No-code / scriptless »

- Directly executes on targeted environment »
- Easily deploy and adopt »
- Manual tester can easily learn and create » automation

Intelligent Test Execution

- Dynamic object Identification
- Intelligent Test Execution
- Automated BVT, FVT & Regression execution Self-healing

Containers



Ensures Docker, Kubernetes and MS layers are secure

Repository of Keywords



Facilitates product specific custom keywords through its Hot keyword feature

Advance Orchestration

Enables easy and fast to configure & setup for web, desktop, mobile and Microservices by providing facilities viz test envirnoments, devices, hardware, type of execution - parallel or serial way and enabling test execution scheduling

CI/CD Support

- Exposed services can be used to trigger Test plans/Test plan Group
- Supports any CI tool integration viz Jenkins

Backup and Recovery

- Ensures Backup/Recovery of All File artifacts/ Data generated over a period of time
- Configuration and scheduler Driven

Platforms Coverage

Windows, Linux, Mac, Android and iOS Supports web, mobile, desktop, Micro/Web » Services/API and Devices



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BENEFITS

- » Reduction in test automation efforts by 20% to 25% over traditional tools
- » Increase in project margin by 2 to 5%
- » Maximising test coverage compared to treditional tools
- » Field defects reduced by 10 to 15%

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PROOF POINTS

- » Automated testing of Unified Communication application on web, mobile and desktop channels for multinational corporation that provides communication and collaboration solutions
- » 17% incremental test coverage achieved till date over customer target
- » Reduced time to Market by 10%
- » 72% Cycle Time Reduction Over Manual test execution
- » Reduced testing costs by about 28% and testing cycle times by about 78%





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