

# **Data Sheet**

Application Delivery Management

# **UFT Developer**

Accelerates software delivery with a shift-left functional test automation tool designed for continuous testing and integration that enables easy test creation using IDE, language, and testing frameworks of choice.

## **Product Highlights**

# How UFT Developer Can Help

Micro Focus® UFT Developer accelerates software delivery by providing a shift-left functional test automation tool that enables easy test creation using the IDE, language, and testing frameworks of choice. Designed for continuous testing and integration, it empowers DevTesters and Automation Engineers to test earlier while improving code quality; build upon existing or create new robust and reusable Selenium tests within minutes; run multiple tests in parallel on physical, virtual, or dockerized environments; eliminate testing bottlenecks with embedded services simulations; maintain consistency of testing models with object identification tools; and rapidly identify reasons for test failure with detailed reports on test execution flow.

UFT Developer is part of the industry-leading UFT family of integrated Functional Testing solutions which enables customers to test earlier and faster by combining a breadth of technology support with Al-driven capabilities to deliver the speed and resiliency required to achieve automation at scale that is tightly integrated with an organization's current DevOps toolchain.

### **Key Benefits and Features**

# Accelerate Delivery with a Shift-Left Test Automation Tool for Developers

Increase productivity by creating tests at the same time the application is being developed with shift-left testing enabled by UFT Developer—the software test automation tool

designed specifically for Developers to support continuous testing and continuous integration processes. By supporting the most common technologies and integrating with standard IDEs on multiple platforms, UFT Developer brings a new level of productivity and collaboration to Agile and DevOps teams alike.

# MODERN PROGRAMMING LANGUAGES AND SDKS

UFT Developer supports writing test scripts using modern programming languages by providing SDKs for Java, JavaScript, and C#

# INTEGRATED DEVELOPMENT ENVIRONMENTS (IDE)

Create tests using preferred IDE, such as Visual Studio, Eclipse, IntelliJ, and others

# **TESTING FRAMEWORKS**

Leverage Behavior Driven Development (BDD) frameworks like Cucumber, or TDD frameworks like JUnit, NUnit, MSTest, etc.

#### SUPPORTED TECHNOLOGIES

UFT Developer supports the most common technologies: browser, mobile, desktop, and mainframe. For a full list of the 200+ supported technologies, please see the <u>PAM</u> for details.

# CROSS-PLATFORM SUPPORT / OPERATING SYSTEMS (OS)

UFT Developer supports Mac, Windows, Linux

#### SOURCE CONTROL MANAGEMENT (SCM)

UFT developer supports any SCM tool, including GIT, SVN, and others

# **Key Features**

- Designed for Developers—create tests using the IDE (Visual Studio, Eclipse, IntelliJ), language, and testing frameworks of choice
- Modern Programming Languages and SDKs—supports writing test scripts using modern programming languages by providing SDKs for Java, JavaScript, and C#
- Continuous Integration (CI) Software supports any CI server, including Jenkins, TeamCity, Bamboo, and Azure DevOps Server
- Selenium WebDriver API Extension expand the power of Selenium by building upon existing or creating new, robust and reusable Selenium tests within minutes
- HTML Run Report—view detailed reports on test execution flow, including clear reasons for test failure
- Embedded Service Virtualization—realistically simulate back-end APIs and Virtual Services
- Object Identification Tools—maintain consistency of testing models with a tool that adapts to changes in the underlying application
- Parallel Testing—run multiple tests in parallel on physical, virtual, or dockerized environments

### **CONTINUOUS INTEGRATION (CI) SOFTWARE**

UFT Developer supports any Cl server, including Jenkins, TeamCity, Bamboo, Azure DevOps Server

#### **PROJECT TEMPLATES**

UFT Developer's out-of-the box IDE project templates enable developers to quickly and easily begin creating functional tests using standard unit- testing frameworks, as well as Selenium-based projects.

# Rapidly Enhance Open Source Testing Frameworks

Expand the power of Selenium by building upon existing or creating new, robust and reusable Selenium tests within minutes

#### WEBDRIVER API EXTENSION

UFT Developer enhances the popular Selenium WebDriver API with new capabilities such as object locators and the Object Identification Center (OIC) to create more robust and maintainable identifiers for objects using built-in utilities rather than writing from scratch. UFT Developer also provides a solution for automating web applications with Selenium, where developers can leverage IDE templates for Selenium-based projects.

#### **HTML RUN REPORT**

UFT Developer creates an HTML run report each time a test is run and the report can be viewed on any platform in any given browser (no extra result-viewer is required). This report includes all steps that involve UFT Developer SDK test objects and the resulting interaction with the application objects, allowing the Tester to quickly identify errors from the test. Additionally, reports can be configured to include screen snapshots or return custom details of steps where errors may have occurred.

### SELENIUM PLUS SERVICE VIRTUALIZATION

Level up your existing Selenium test-set and start testing while the application is still in

development or key services are under maintenance. UFT Developer's embedded Service Virtualization capabilities for web and mobile allows for the running of test automation against virtualized backend services, saving time, cost, and effort, making the test automation even more stable.

# Speed Up Test Execution While Improving Code Quality

Agile and DevOps practices encourage rapid iterations and change, creating a significant challenge for code-driven testing. Increase test execution speed with object identification tools, parallel testing, and record/replay capabilities.

### **OBJECT IDENTIFICATION CENTER**

UFT Developer's object identification tools help maintain consistency of testing models by adapting to changes in the underlying application. The Object Identification Center lets users spy on the objects in the application, experiment with different ways to identify those objects, generate code to use in the test scripts, or add objects to application models.

### APPLICATION MODEL

The Application Model enables users to maintain test objects in a single location for use across the entire testing suite, allowing for the faster development of code without the need to write manual programmatic descriptions for each object. If the underlying test objects need to be changed, change once in the application model and all the scripts will automatically be updated with no need to go over thousands of code-lines.

#### PARALLEL TESTING

Efficient and fast test execution is key in test automation. Running multiple tests in parallel on physical, virtual or dockerized environments guarantees fastest possible test execution. Run more in the given time.

### **RECORD/REPLAY SUPPORT**

Record/replay support helps to create scripts within minutes.

# Eliminate bottlenecks with Embedded Service Virtualization

Achieve delay-free continuous testing with built-in services simulations.

# EMBEDDED MICRO FOCUS SERVICE VIRTUALIZATION

UFT Developer also includes a built-in capability for DevTesters and Developers to execute their tests with simulated APIs and Virtual Services powered by Service Virtualization. Service Virtualization enables application teams to easily create Virtual Services that can replace targeted services in a composite application or multi-step business process. By accurately simulating the behavior of the actual component, it enables developers and testers to begin performing functional or performance testing right away, in parallel—even when the real services are not available, when data access is restricted, when data is difficult to attain, or when the services are not suitable for the particular test.

# Improve Visibility of Automated Test Execution with Quality Measurement and Reporting

Get straight to the bottom of issues with UFT Developer's detailed description of test execution flow, including clear, actionable reasons for test failure at each step.

# COMPREHENSIVE REPORTING

UFT Developer creates an HTML run report each time a test is run. This report includes all steps that involve UFT Developer SDK test objects and the resulting interaction with your application objects, allowing the tester to quickly identify errors from the test. Additionally, reports can be configured to include screen snapshots or return custom details of steps where errors may have occurred.

"With UFT Developer, we release higher quality software and deliver new functionality faster and more frequently. It gives us a great platform to expand our thinking around Agile processes and DevOps. We want to increase our application coverage and integration and have created a scalable test framework to achieve this."

**FABRIZIO SUNNA** 

Test Automation Business Lead Helsana Group Contact us at: www.microfocus.com

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### **AUTOMATED TEST REPORTS**

No need for the time-consuming process of manual test reports generation, UFT Developer generates them with every test execution, automatically.

#### HTML RUN REPORT

Gain visibility into test execution regardless of the platform or devices being used. The HTML-based report can be easily viewed in any browser and on any platform.

#### **SCREEN SNAPSHOTS**

Visualize the activity of unattended test executions and quickly learn if the test execution was successful or encountered errors.

#### **ROOT CAUSE ANALYSIS**

Detailed step descriptions let users perform root-cause analysis within minutes and without the need to look into the actual test suite.

# Gain Efficiencies through a Broad Ecosystem of Integrations

UFT Developer's broad ecosystem of integrations include open source, third-party, and Micro Focus solutions that support multiple testing strategies, eliminate bottlenecks, and gain efficiencies across the lifecycle. Within the agile development methodology, development and testing goes hand in hand.

### FOSTER DEVELOPER AND QA COLLABORATION

UFT Developer can ease cultural tensions between DevTest and Automation Engineer roles and can become a bridge for Automation Engineers to develop new technical abilities. Also, easily convert UFT Developer application models to UFT One object repositories or UFT One object repositories to UFT Developer application models.

# SHIFT RIGHT WITH BUSINESS PROCESS TESTING (BPT)

Shift-left and -right testing co-exist in a multimodal environment. Create business components in BPT and implement them in UFT Developer for test automation and integration into business testing.

# MOBILE TESTING WITH INTEGRATED UFT MOBILE

Using UFT Developer with UFT Mobile provides an end-to-end solution for automating mobile applications and integrating test automation into continuous testing processes. This integration grants full access to UFT Mobile devices and applications. When tests are designed, these devices and applications are available directly from the Developer's IDE. These same devices are used in the test runs. UFT Developer provides comprehensive Mobile APIs that can be used to automate any flow in the mobile application, whether it is native, hybrid, or mobile Web application. Analyze run results using the UFT Developer run report. The report includes useful information for understanding the execution flow, analyzing errors, as well as specific information on the device running the test.

Learn more at

www.microfocus.com/uft-dev

