

# **UFT Digital Lab**

Micro Focus UFT Digital Lab amplifies team productivity by providing a centralized, enterprise-level, end-to-end lab and management gateway of distributed real mobile devices and emulators that helps teams develop, debug, test, monitor, and optimize their omnichannel mobile applications.

### What's New Over the Last 2 Years

## Increase Team Productivity with an Omnipresent Mobile Devices Lab

#### INTEGRATIONS TO SUPPORT END-TO-END MOBILE APP DEVELOPMENT

Any successful app will experience constraints unique to the mobile landscape. UFT Digital Lab's capabilities support a flexible mobile application development lifecycle with integrations to Micro Focus' broader portfolio and popular open source testing tools. With UFT Digital Lab, run manual and automated functional testing, performance testing, security testing, and interactive testing directly from a web browser.

- Connect to UFT Digital Lab from Micro Focus UFT One, UFT Developer, BPT, Sprinter, and Silk Test to create and run functional tests on available mobile devices
- Connect to Micro Focus LoadRunner Professional and LoadRunner Enterprise to record and run load and performance tests for mobile apps on devices hosted by UFT Digital Lab
- Connect to Micro Focus ALM to run mobile app tests directly from ALM
- Enable mobile testing as part of the build process by integrating with CI servers such as Jenkins. When combined with test automation, these capabilities enable enhanced workflows for developers and testers through shortened feedback cycles in Continuous Integration, Continuous Testing, and DevOps practices
- <u>Connect to Appium</u> to run Appium scripts utilizing the features of UFT Digital Lab
- Connect to Genymotion Cloud to emulate cloud Android devices and achieve broader test coverage

- AWS Device Farm integration to replay tests on-demand on real devices in the AWS Cloud with additional support for iOS devices
- Record and replay tests for Android and iOS apps built using the Google Flutter SDK

#### ENTERPRISE-GRADE LAB MANAGEMENT

- Extend the lab with the enhanced UFT Digital Lab hosted devices cloud lab, which enables interaction with a larger selection of devices and achieves maximal device coverage without having to deal with procuring, configuring, and maintaining all the devices needed for testing
- UFT Digital Lab integrates with LDAP, with the option to synchronize and distribute users to workspaces using LDAP groups.
- UFT Digital Lab's new Admin dashboard provides a visual summary of the overall lab status, device and license usage, and alerts that make it easier to verify if everything is up and running.
- Connect to hosted devices in the UFT Digital Lab lab and interact with them from within your IDE, with additional support for Dev Access with multiple connectors simultaneously and over a proxy.
- Activate device maintenance mode to temporarily indicate that a device is in maintenance (e.g. to upgrade or configure a device). Administrators can also easily distinguish between devices disconnected for maintenance purposes and devices with connection issues.
- Single Sign-on (SSO) is integrated to eliminate the need to log in to UFT Digital Lab separately and now users have the same set of credentials for UFT Digital Lab

as they do for other SSO applications in their organization

- Control UFT Digital Lab connector installations through token-based authentication, with an optional expiration date, instead of the UFT Digital Lab user name (email) and password
- New workspace management provides the capability to define and manage custom workspaces and shared spaces to segregate or share applications and devices between specific groups of users, and use the shared assets amongst all users
- Auto-detect device connection failures and get steps to help you resolve it.
- Different user roles are available: regular UFT Digital Lab users; workspace administrators, with the ability to assign and unassign users within the workspaces they manage; and shared space administrators, with full administration capabilities.
- The Administration Settings menu now allows the admin to define permissions for non-admin workspace users, thus extending user role management by restricting key operations such as restarting and reconnecting devices, as well as uploading, installing, and deleting apps
- The Public workspace has now been replaced by Shared Assets, for sharing devices and apps among users
- Free up reserved unused devices to improve the utilization of your devices. These settings include limiting the maximum number of reservations per user and limiting the duration of reservations.

#### IMPROVED USER EXPERIENCE

- Navigation of the Lab console is more user friendly with the addition of another level, making it simpler to access the items and information needed
- Admin users can now access the administration tabs from the Administration menu in the revamped masthead
- A new List view has been created for displaying a large number of devices and apps and allows the user to easily switch between the list and card views to display information in a way that best suits their needs
- Non-admin users can now also download Appium logs
- For easier debugging, testers can watch the behavior of one or more apps in real-time while conducting a manual test, providing insight into why an error occurs and helping with troubleshooting.
- Download logs collected from the server and all connectors, from specific machines, or download only the latest logs.

#### SIMPLIFIED IOS AGENT APPS SIGNING

- Upload a new provisioning profile directly from the UFT Digital Lab console to automatically re-sign the Agent apps
- If signing manually, after uploading the signed Agent apps, distribute them to the connectors directly from the UFT Digital Lab Console

# SCALABLE DEPLOYMENT AND CONFIGURATION MODELS

UFT Digital Lab offers complete deployment and configuration scalability to meet the needs of medium-size companies to global enterprises.

- Distributed architecture where different test clients can all interact with the same UFT Digital Lab server instance
- Connectors can be installed on multiple machines in distributed locations

- Managed devices can be connected locally, inside a corporate network, or as-aservice in <u>Micro Focus SaaS Private Cloud</u>, Genymotion Cloud, Amazon Device Farm, or an externally hosted devices provider
- Supports an unlimited number of connected devices
- Once connected, devices are pooled and available to users automatically
- Devices can be connected to the UFT Digital Lab server machine, or using the standalone connector, to a different machine

#### DEVICE HEALTH METRICS

UFT Digital Lab continuously monitors key health metrics, such as WiFi connectivity, battery, temperature, thermal state, disk space, and screen brightness, of each connected device. An alert is raised if a metric deviates from the configured threshold.

#### Accelerate Velocity by Eliminating Bottlenecks for Developers and Testers Alike

#### REMOTE DEVELOPMENT, DEBUGGING, AND TESTING

Dev Testers and Developers now have direct access to the mobile lab from within their preferred Integrated Development Environment (IDE).

- Quickly and efficiently execute and debug code or review a defect fix on a wide range of real devices hosted by UFT Digital Lab
- Eliminate the need to connect physical devices to the workstation or to use additional tools
- Easily connect devices in the UFT Digital Lab lab to your IDE and remotely control them using the new JetBrains plugin for Android devices and a new Mac app for iOS devices. The plugin provides a user-friendly interface for setting up the connection to UFT Digital Lab and

connecting to Lab devices. With the click of a button, developers can also switch back to their local devices

#### DIGITAL LAB

- While performing actions on a device, such as in an exploratory testing session, users can now download a report which includes an automatically generated transcript of actions performed on the device, together with screen captures, device logs, and details of the test.
  The report can be used to enter a defect or test case into quality and test management tools, such as Micro Focus ALM Octane.
- Defects detected during manual and exploratory testing sessions can now be submitted directly to ALM Octane, and all relevant details, such as the steps performed, screenshots, and the device logs, are added automatically.
- Tests built on native testing frameworks such as XCTest and Expresso can be run on devices connected remotely to the IDE of choice.

#### EMBEDDED SERVICE VIRTUALIZATION

The UFT Digital Lab lab also includes a built-in capability for Dev Testers and Developers to execute their tests with simulated APIs and Virtual Services powered by Service Virtualization.

- Simulation runtime built into UFT Digital Lab
- Create Virtual Services within ADM test tools
- Simulate REST API, NFC, Bluetooth and more

#### VIRTUALIZE SENSORS AND INTERFACES

Many mobile workflows can be tested directly on a physical device, but frequently native mobile and web app test automation is difficult if the apps use sensor and interface capabilities. Support for sensors and enhanced interfaces include photo and video simulation, fingerprint simulation, capturing audio output, virtualizing

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network conditions, phone call and text interruption, GPS injection, and gestures. Audio streaming for iOS devices is supported, allowing you to hear audio from the remote device on your workstation.

#### UFT DIGITAL LAB ADD-IN FOR LOCAL DEVICES

The UFT Digital Lab Add-in for Local Devices integrates UFT One and the mobile devices connected directly to the UFT One host machine. In just a few steps, UFT One users can start designing and running mobile app and web tests on local mobile devices without purchasing an additional license. This type of tight integration will allow UFT One users to:

- Execute omni-channel testing strategies using the same script for desktop and mobile web
- Support mobile testing in companies that do not yet have a lab management solution in place
- Run mobile tests without requiring a new tool for mobile devices

#### **Did You Know?**

- Engage and share knowledge or feedback about a wide range of UFT Digital Lab topics on the UFT Digital Lab Community Forum
- Learn more about recent releases by reviewing the <u>UFT Digital Lab Documentation</u> available on the Micro Focus Support website
- Keep up to date on the latest news and events with the <u>Application Delivery</u> <u>Management Blog</u>

This information reflects enhancements in Micro Focus UFT Digital Lab 2.51 and later.

