![Spirent logo — Promise. Assured.]

Spirent **Umetrix® Playback | Beta**

Easily create and run automated test scripts on Android devices

Highlights:

- Full automation of any Android device, anytime, anywhere

- Simplified, intuitive script creation with no programming knowledge needed

- Easy translation of scripts across different devices and versions

- Define and collect Key Performance Indicators for successful test execution

- Create and store script libraries in the cloud for use amongst global teams

Testing applications and services on mobile devices can be tedious and time-consuming, but it is a critical step in every release to ensure functionality, usability, and quality of experience. Organizations are always searching for a better way to accomplish this necessary task faster and more cost-effectively, yet still achieve the same trusted results.

With this is mind, Spirent has developed Umetrix Playback, a script creation and automation solution that simulates user manipulation of Android handsets. When integrated with Spirent's Umetrix solutions for voice, video, battery and data quality of experience (QoE), it provides a powerful solution for efficiently testing mobile device performance.

- Easily **record** user interactions to create automated test scripts, then edit and fine tune through a **drag and drop** interface
- Quickly capture and playback nearly **any mobile device user interaction** to assess voice, video, data or app quality of experience
- Share scripts **via cloud** storage

Umetrix Playback facilitates objective, repeatable testing with no manual intervention, thereby eliminating user error and easing regression tests. But it brings much more than just test automation. Key Performance Indicators (KPIs), such as timings of user interactions and script execution status, are produced each time a script is executed. In addition, scripts that are created by individual users can be shared across global teams, streamlining the entire test process.

Umetrix Playback is built with **advanced automation capabilities** such as image recognition (IR), optical character recognition (OCR), and user interface (UI) element matching. This allows scripts to execute successfully even if icons are not in the same place or exactly alike for each device under test. With a simplified, intuitive graphical interface, scripts can be created and modified with little or no programming knowledge, enabling a broader audience to benefit from its capabilities.
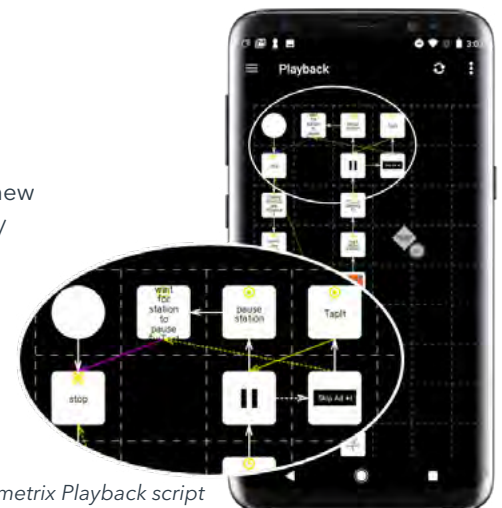
Supports Spirent User Experience Tools

- Calling and Audio Quality
- Web and App Performance
- Video Quality
- Real-World Battery Life

GET IT ON Google Play

Contact Spirent to access beta

Use Cases

1. **Repetitive testing of mobile devices**
   Friendly user trials at mobile operators for new device launches or network change control/regression on a regional or national scale

2. **Mobile user testing automation; human capital test optimization** Replace or augment direct human engagement with a means to test one or more functions of a mobile device


Sample Umetrix Playback script

Scripts are Built Iteratively via Simple Graphical Interface

Example: Modify script to skip over an ad during a test sequence

In the following scenario, a user is running a script that halts due to the unexpected appearance of an ad in the sequence of events. This is shown in Screen 1 by the highlighted step, the magnification of that step at the top of the screen, and the "x" for the error. The user can easily insert a brief script sequence that will look for the appearance of the "Skip Ad" button in this instance and "press" it to eliminate the issue in the future.
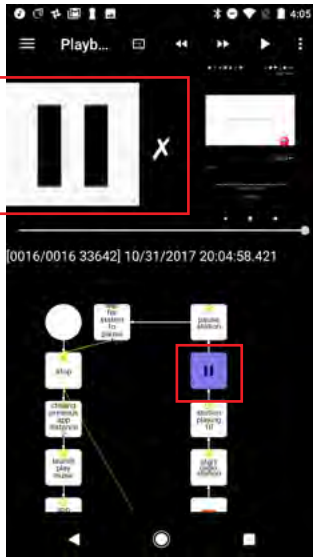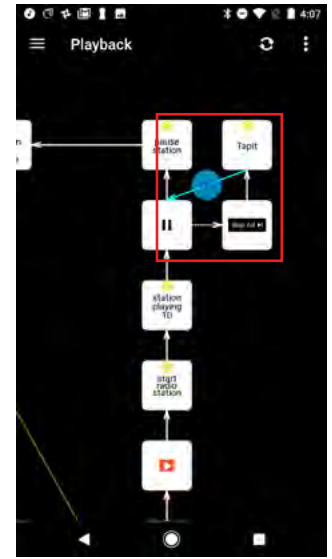

1. Image recognition did not match the expected graphic with the onscreen UI.
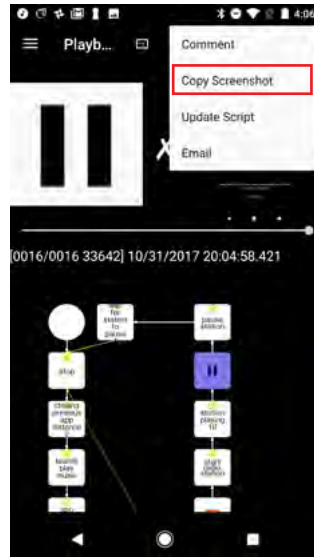
2. A user can copy the onscreen UI via the "Copy Screenshot" command...

3. ...and paste it into the script...

4. ...to update the deterministic logic for future runs.

Scripting Elements

- Features a variety of actions and events called "nodes"
  - Pre-recorded user actions
  - Image recognition events
  - Issue ADB commands
  - Execute a test set
  - Handset diagnostics information "decision points"
- Logic and test-path branching
- Iterative development approach allows script logic to be developed on one device and ported to other devices with relative ease

Results Output

- On-device results view supports the iterative script development approach
- Handset diagnostics information and timestamps are recorded at every node
- Screenshots taken at every image recognition node for failure analysis
- Optional video logging for a complete movie of script execution

Contact Us

For more information, contact the Tempest Telecom Team at 805.879.4800 or visit us online tempesttelecom.com