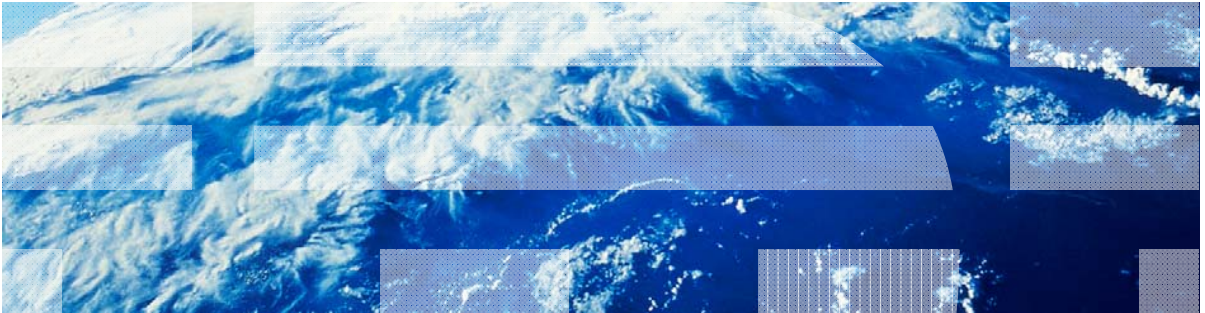


# ***IBM Worklight V6.0.0 Getting Started***

## **Testing Worklight Mobile Applications with the Mobile Test Workbench**



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## Overview

- The IBM Mobile Test Workbench for Worklight include several unique capabilities to test your Worklight applications.
- With the test workbench, you can create functional tests for IBM Worklight® hybrid and native applications that are running on iOS or Android.
- The test workbench creates tests in natural language and provides visual test editing.
- The test workbench runs within Eclipse and is integrated with Worklight Studio.



## Overview

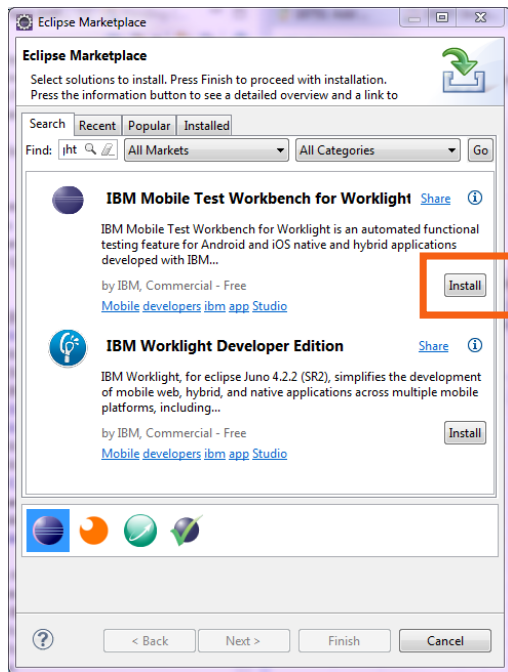
- The testing approach with test workbench proposes has four steps:
  - **Recording**: Play your test first with the recording-ready app and generate a test script.
  - **Authoring**: Edit and enhance the test script by adding verification points and others instructions.
  - **Playback**: Run the test script on a real device or a simulator.
  - **Reporting**: Generate an HTML report.

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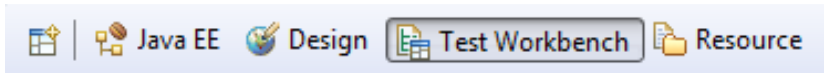
## Installing and configuring



- To use the IBM Mobile Test Workbench for Worklight, you must install an Eclipse plug-in on top of Worklight Studio.
- In Worklight Studio, use **Help/Eclipse Marketplace** and search for **Worklight**.
- When you locate the IBM Mobile Test Workbench for Worklight, click **Install**.
- Notice that both Worklight Studio V6.0 and the Mobile Test Workbench for Worklight run on top of Eclipse 4.2.2 (Juno).
- New installations of the Mobile Test Workbench for Worklight require the latest version of Worklight Studio.



## Installing and configuring

- After the test workbench is installed, you can see that a new Test Workbench Eclipse perspective is available:



- Notice also the icons in the toolbar of Eclipse:
  -  opens the **Mobile Applications** view. This view lists all the applications that are available for testing.
  -  opens the **Mobile Devices** view. This view is listing the devices that you are using for testing your application.

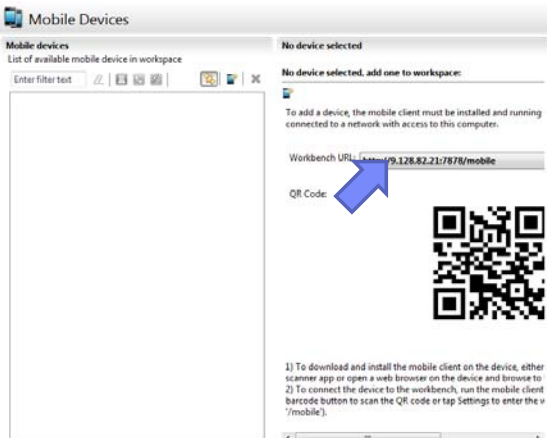


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## The mobile client

- With the mobile client application, you can record tests, playback tests, and view reports on the mobile device.
- This mobile application must be installed on a real device or on a simulator.
- The mobile client communicates with the test workbench to install applications, to store test scripts and test results. Notice the **Workbench URL** in the **Mobile Devices** view.



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## Installing the Android mobile client

- To install the mobile client on an Android device or a simulator:
  - Use the QR code that is available in the **Mobile Devices** view to open an installation page on the device.



**Mobile Devices**

Mobile devices  
List of available mobile device in workspace

Enter filter text

No device selected

No device selected, add one to workspace:

To add a device, the mobile client must be installed and running connected to a network with access to this computer.

Workbench URL: <http://9.128.82.21:7878/mobile>

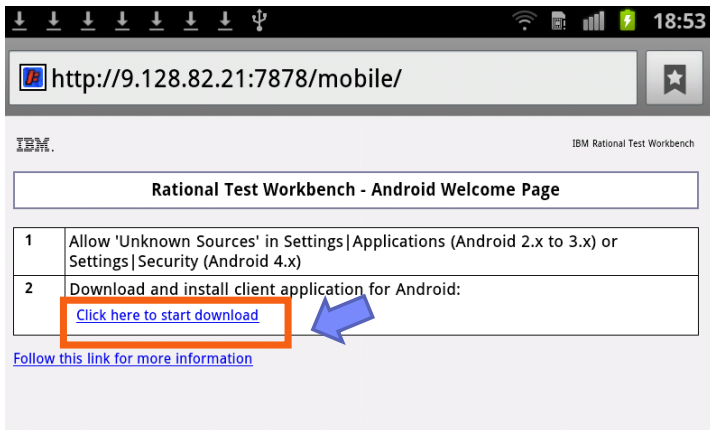
QR Code:



1) To download and install the mobile client on the device, either scanner app or open a web browser on the device and browse to  
2) To connect the device to the workbench, run the mobile client barcode button to scan the QR code or tap Settings to enter the v /mobile).

## Installing the Android mobile client

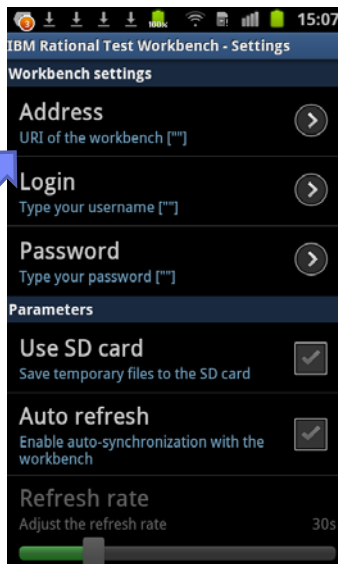
- The QR code leads you to a page on the device with installation instructions:



- Follow the instructions to download and install the mobile application on your Android device.

## Installing the Android mobile client

- When the **IBM Rational Test Workbench** application is installed on your device, start the application.
- You start by configuring the address of the test workbench in the settings.
- The URL is the same URL as the one from the QR code but without the `/mobile` extension.
  - This URL is similar to the following one: `http://< your-ip-address>:7878`



## Installing the Android mobile client

- If the connection is correctly established, you can see the connection icon at the bottom of the view.



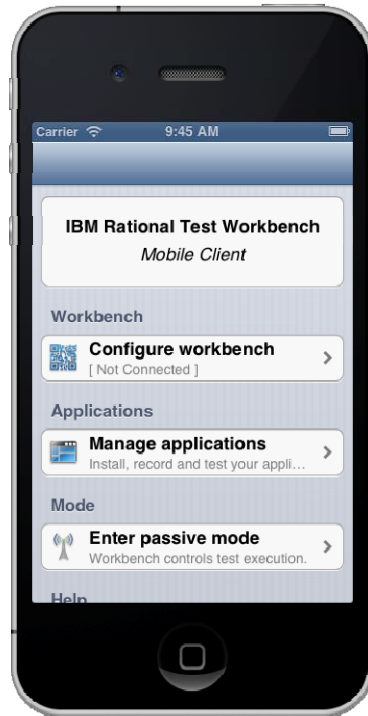
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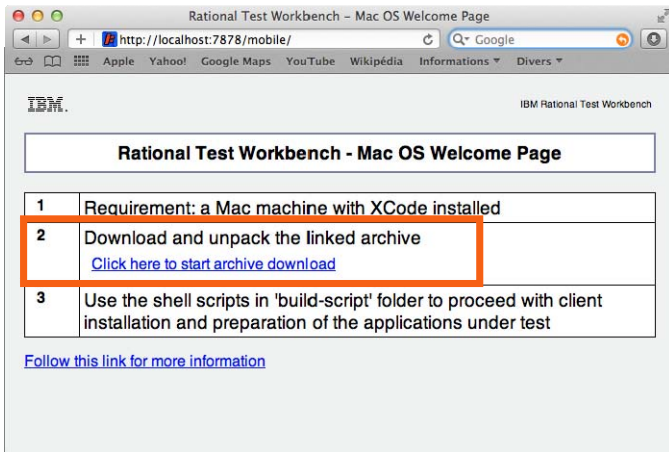
## Installing the iOS mobile client

- To set up and install the mobile client on an iOS device:
  - Download the [iOS mobile client sample](#) that is associated with this module.
  - The Xcode project in this sample (**IBM RTW.xcodeproj**) contains all the necessary elements to build the mobile client for iOS.
  - This Xcode project must be recompiled and signed with your enterprise or ad hoc certificate to produce an iOS application (IPA file) that can be distributed to the testers.
  - For more information about how to create an IPA from Xcode, see the Apple iOS Dev Center website.



## Installing the iOS mobile client

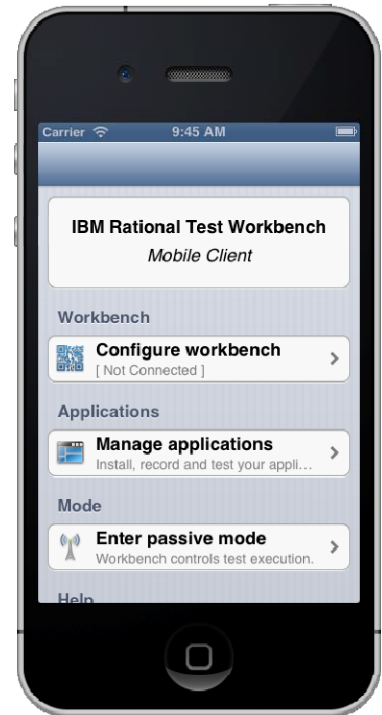
- To install the iOS mobile client on the iOS simulator:
  - Point Safari on your Mac to <http://localhost:7878/mobile/>:



- Download the archive and unpack it.

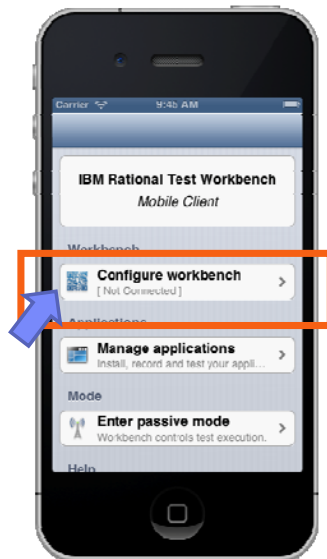
## Installing the iOS mobile client

- This archive file contains a version of the mobile client for the iOS simulator.
- Use the following command in the **buildscript** directory of the archive to install the application.
  - `installIPAINSimu.sh`  
`../client/iphonesimulator/RTWiOS.ipa`
- This command opens the simulator with the **IBM RTW** mobile client application installed.



## Installing the iOS mobile client

- After the mobile client is installed on the device or on the simulator, you must configure the test workbench URL.
- The test workbench URL is indicated in the **Mobile Devices** view.
  - This URL is similar to the following one: `http://< your-ip-address>:7878`

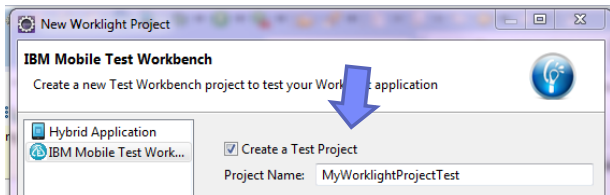
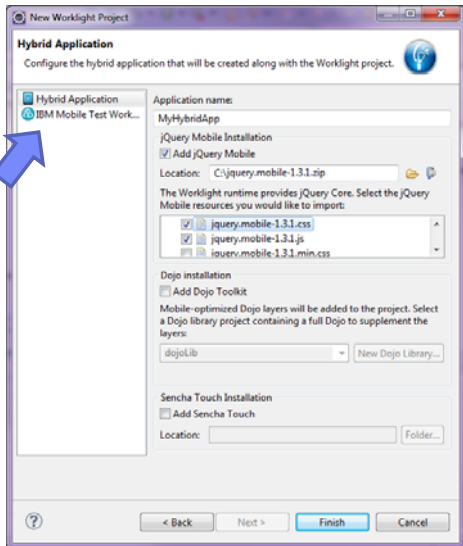


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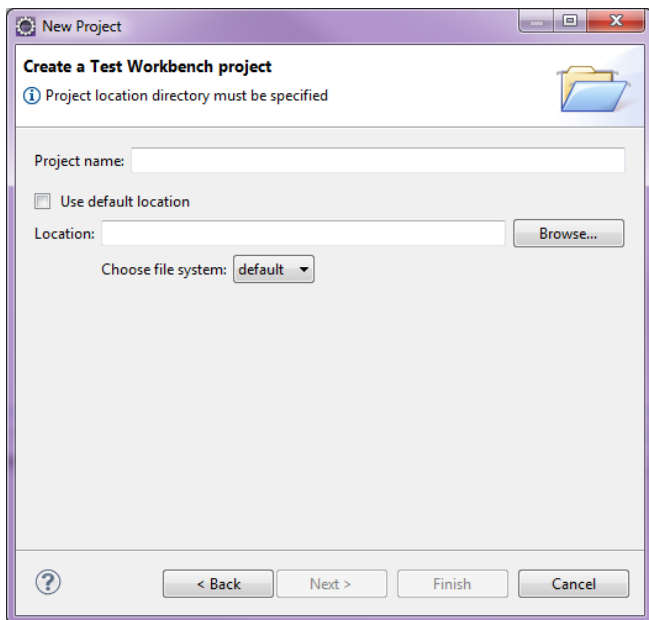
## Creating a test project

- To start testing an IBM Worklight application, you must create a test project.
- The test project can be created when you create your IBM Worklight project. To do so, select **IBM Mobile Test Workbench** in the **New Worklight Project** dialog, and select **Create a Test Project**.



## Creating a test project

- You can also use **File > New > Test Workbench Project** to create a test project.



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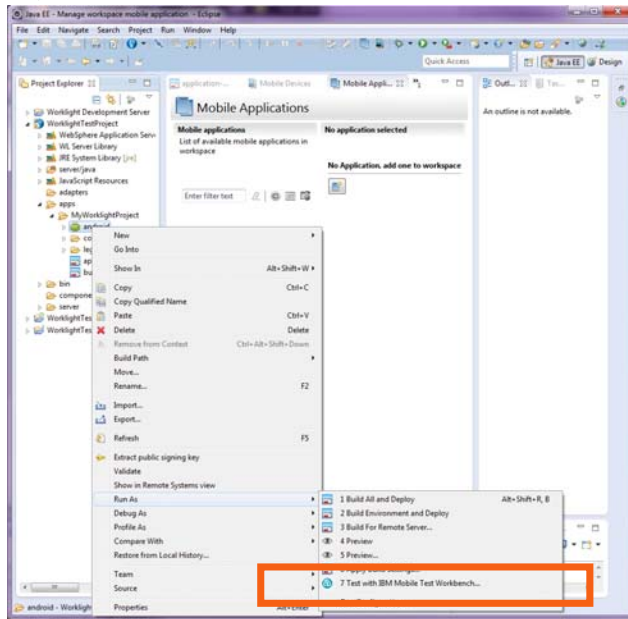


## ***Preparing the application for testing***

- Before you can test an IBM Worklight hybrid application, make sure that:
  - If you test an Android application, you created the native Android project by using Worklight Studio “**Build Environment and Deploy**”, and you created the application binary (the APK file) by using the Android tools.
    - For more information about Worklight Android applications, see the “*Previewing your application on Android*” module.
  - If you test an iOS application, you created the Xcode project by using Worklight Studio “**Build Environment and Deploy**”, and the appropriate certificate is specified in the Xcode project if you want to test on a real device.
    - For more information about Worklight iOS applications, see the “*Previewing your application on iOS*” module.

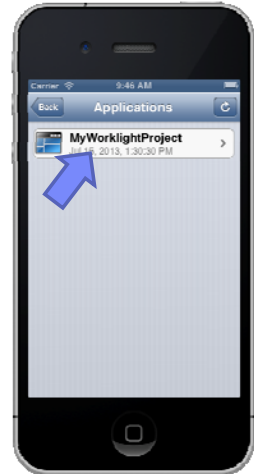
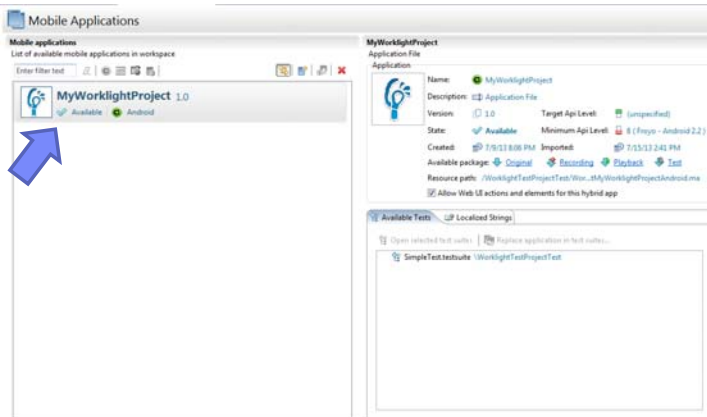
## Preparing the application for testing

- Right-click the android, iphone, or ipad environment in your IBM Worklight application, and select **Run As > Test with IBM Mobile Test Workbench**.



## Preparing the application for testing

- The test-ready application is now visible in the **Mobile Applications** view in the test workbench and also on the mobile client.



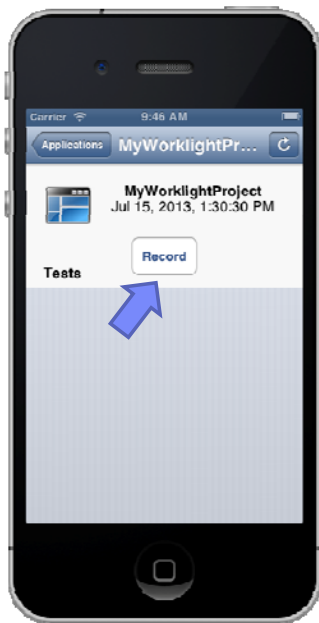
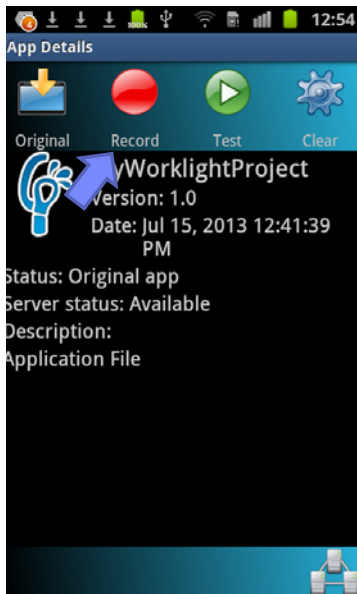
- The status of the application must be **Available** in the **Mobile Applications** view before you can start recording a test.

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## Creating a test



- To start recording a test, select the application in the list of managed apps, and click **Record** in the mobile client on the device.



## Creating a test

- The application runs on the device or emulator.
- Everything you do with the application is recorded and sent to the test workbench. The script records, for example, when you touch a button or enter text in an entry field.
- Close the application to stop the recording.
- A message is visible on the test workbench, which indicates that a new recording is available.



 There is a new incoming recording.  
[Click here](#) to generate a test. 

- Follow the instructions of the wizard to generate a test from the recording. You will be asked to store the test in the test project.
- For more information about how to create a test, see the topic [Creating a mobile test](#) in the IBM Worklight user documentation.

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## Editing a test

- After recording, you can edit the test in the natural language editor.

The screenshot displays the Eclipse IDE's Test Workbench. The main window is titled "Test - enterCredential" and shows a test suite with the following structure:

- Test Contents
  - enterCredential
  - Test Resources
    - Launch application: MyWorklightProject
    - Click on JQuery Input field whose Ty...
    - Enter text 'john@mycompany.com' in
    - Enter text 'john' in JQuery Input fie...
    - Enter text 'smilk' in JQuery Input fie...
    - Enter text 'PASSWORD' in JQuery Inpu...
    - Enter text 'PASSWORD' in JQuery Inpu...
    - Click on JQuery Button located at par...

A blue arrow points to the "Click on JQuery Input field whose Ty..." step. The right-hand pane, "Test Element Details", shows the configuration for the selected step:

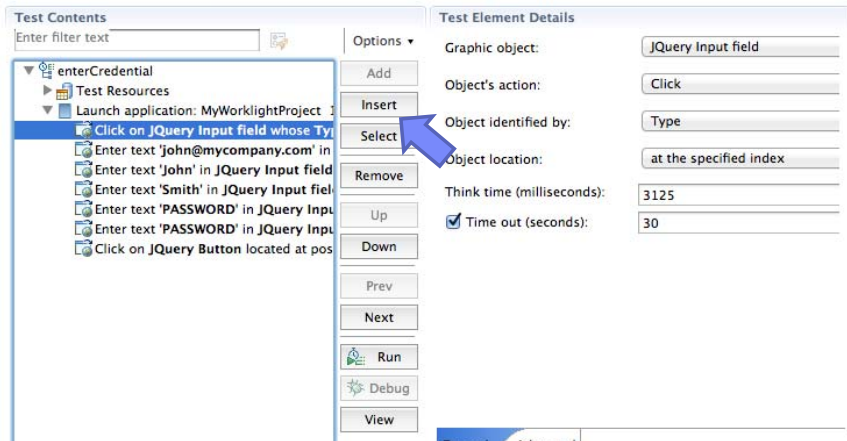
- Graphic object: JQuery Input field
- Object's action: Click
- Object identified by: Type
- Element location: at the specified index
- Think time (milliseconds): 5125
- Time out (seconds): 30

At the bottom, the "Recording Control" panel shows "No active recording session". The "Properties of JQuery Input" panel is also visible, showing fields like "Name", "Class", "Content", and "Coordinates".



## Editing a test

- You can edit the test for example to insert **verification points** (verify the value of a user interface element for example) or replace recorded test values with variable test data, or add dynamic data to the test.



- For more information about how to edit the test script, see the topic [Editing mobile tests](#) in the IBM Worklight user documentation.

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## Running the test (1 of 2)

- Run the test to ensure that the app matches the expected behavior that is defined in *verification points*.
- During the run, each verification point is checked and receives a **pass**, **fail**, or **inconclusive** status.
- The available tests are visible in the mobile client, and you can run the test from this application.



## Running the test (2 of 2)

- After the test is completed, a report is generated that shows the status of the test and all the verification points.
- You can read the report on the device or on the Eclipse test workbench.



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## ***What's Next***

- In this module, you learned how to set up and install the IBM Mobile Test Workbench for Worklight, and how to record and playback a first test.
- For more information about IBM Worklight functional testing and the IBM Mobile Test Workbench for Worklight, see the topic [Testing with IBM Worklight](#) in the IBM Worklight user documentation.

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