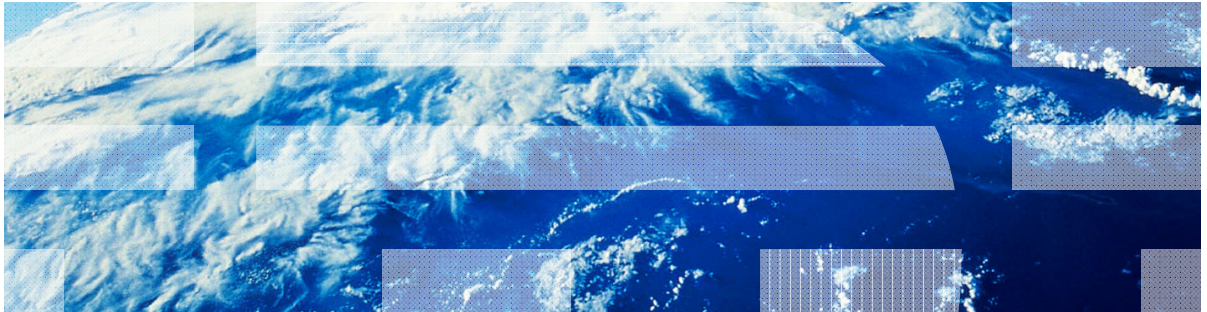


# ***IBM Worklight V5.0.5*** ***Getting Started***

## **Module 60.2 – Running the Dojo-based Mysurance End-to-End Sample**



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## **About IBM**

- See <http://www.ibm.com/ibm/us/en/>

## Agenda

- General information
- Running the Mysurance End-to-End sample for Android
- Running the Mysurance End-to-End sample for iOS

## About this task

- The Mysurance sample app is a hybrid sample application that illustrates an end-to-end insurance scenario.
- Two projects are provided in the Mysurance sample app:
  - `module_60_2_Mysurance` is a project for both the Android and iOS client platforms.
  - `module_60_2_MysuranceWar` is a web project that runs on the application server.
- The Mysurance sample app is a hybrid sample application. Hybrid applications consist of an application that is developed with web technologies such as HTML, CSS, and JavaScript.
  - The JavaScript invocations call into a JavaScript native bridge.
  - The bridge enables hybrid applications to access native device capabilities (such as GPS or a camera) and to use native device UI controls and navigation.

## About this task

- This style of application enables developers to use their existing web skills without needing to learn to program in other languages such as Objective-C or Java™
  - It also frees them from writing multiple versions of the same application for various different platforms
  - A hybrid application tends to have a similar performance and look and feel to a pure native application
- The Mysurance sample app is a business-to-consumer example which demonstrates different capabilities of a hybrid application in an end-to-end insurance scenario
  - The scenario covers an individual who is involved in a road traffic accident
  - The individual can record and document pertinent information on-site and submit necessary documentation to the insurance company for further processing and handling

## ***Starting the application server***

- This task is only required if you want the client to send information to the service
- Start the service by using the following instructions:
  1. Deploy the mysurance.war file provided in module\_60\_2\_MysuranceWar to an active application server
    - module\_60\_2\_MysuranceWar is included in module\_60\_2\_Mysurance.zip
    - See your server administration guide for instructions
  2. Confirm that the Mysurance application started normally by accessing URL:  
`http://<host>:<port>/mysurance/`

The following message on your browser indicates that the service is started and ready to accept requests:  
simple index.html

## ***GPS capabilities***

- To allow GPS capabilities to function correctly, ensure WiFi or cellular data is enabled on your device

## ***Previewing Mysurance with the Mobile Browser Simulator***

- **Note:** This version of Mysurance cannot be previewed with the Mobile Browser Simulator
  - Mysurance uses data synchronization which is not supported by the Mobile Browser Simulator



## Agenda

- General information
- Running the Mysurance End-to-End sample for Android
- Running the Mysurance End-to-End sample for iOS

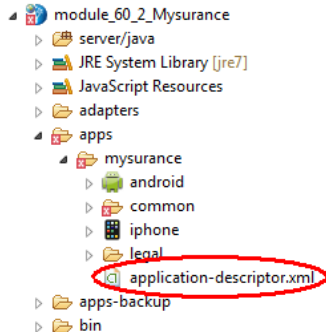
## ***Before you begin***

- See the following modules for how to build and deploy the Showcase:
  - Module 2 Setting Up Your Development Environment
  - Module 2.2 Setting Up Your Android Development Environment

## Before you begin

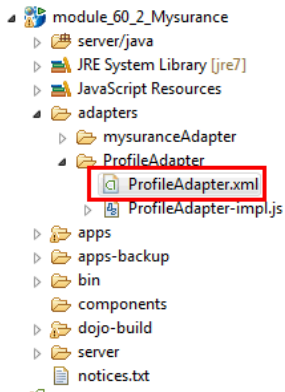
### ■ Enable Push Notification

- The Push Notification feature uses the Google Cloud Messaging (GCM) service
- Perform the following steps to configure the Showcase to use the GCM service:
  - Follow the instructions at <http://developer.android.com/guide/google/gcm/gcm.html> to create a GCM sender ID and API key
    - You need to create a Google Gmail account, if you do not already have one
  - Edit application-descriptor.xml in the /apps/mysurance folder of the Android project
  - Add the following element:
    - `<pushSender key="API_key" senderId="GCM_sender_ID"/>`



## Before you begin

- Set the **<domain>** element in ProfileAdapter.xml
  - Edit ProfileAdapter.xml in the /adapter/ProfileAdapter folder of the generated project
  - Set the **<domain>** element to the running IBM® Worklight® Server IP address



```

<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!--
Licensed Materials - Property of IBM
5725-G92 (C) Copyright IBM Corp. 2011, 2012. All Rights Reserved.
US Government Users Restricted Rights - Use, duplication or
disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
--><wl:adapter xmlns:wl="http://www.worklight.com/integration" xmlns:
<displayName>ProfileAdapter</displayName>
<description>ProfileAdapter</description>
<connectivity>
  <connectionPolicy xsi:type="http:HTTPConnectionPolicyType">
    <protocol>http</protocol>
    <domain>9.181.110.33</domain>
    <port>80</port>
  </connectionPolicy>
  <loadConstraints maxConcurrentConnectionsPerNode="2"/>
</connectivity>

<procedure name="getAllProfile"/>
<procedure name="getProfile"/>
<procedure name="updateProfile"/>
<procedure name="removeProfile"/>
<procedure name="addProfile"/>

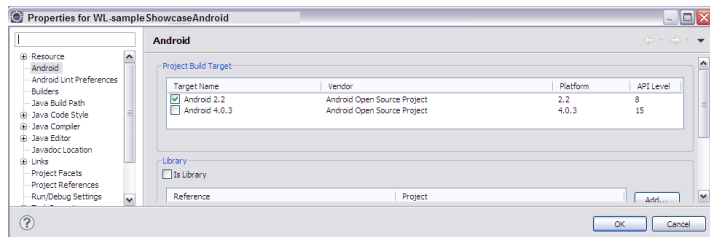
```

## Known limitations

There are some known limitations in this Showcase. The following instructions describe how to implement workarounds to these limitations:

- Zooming on Android tablets

- On Android 3.0+ tablets, the Showcase is automatically zoomed which gives a poor user experience
- To disable zooming, perform the following steps to set the SDK version to 11 or above:
  - Right-click the generated Android project and then **Properties**



- Click **Android** in the properties list
- Change **Project Build Target** to Android 3.0 or above and click **OK**
- Edit AndroidManifest.xml in the root of the generated project
  - Set android:minSdkVersion to the API level of the **Project Build Target**

```

</application>
<uses-sdk android:minSdkVersion="15" />
</manifest>

```

## Known limitations

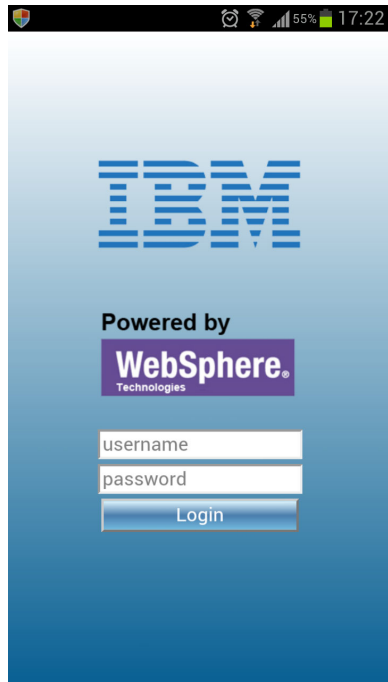
- Enable Showcase features
  - Edit AndroidManifest.xml in the root of the generated project
    - Add the following permission elements:

<code>&lt;uses-permission android:name="android.permission.CAMERA" /&gt;</code>	Allows access to the camera device
<code>&lt;uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" /&gt;</code>	Allows access to a coarse location such as Cell-ID or WiFi
<code>&lt;uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" /&gt;</code>	Allows access to a fine location such as GPS
<code>&lt;uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" /&gt;</code>	Allows access to write to external storage

- Please also check the product Release Notes for information about known defects

## Explore the demos

- Load the Mysurance Showcase app
  - The Login screen is displayed
- Log in to the app
  - User name = **demo**
  - Password = **demo**
- Click Login
  - The main screen is displayed



## Explore the demos

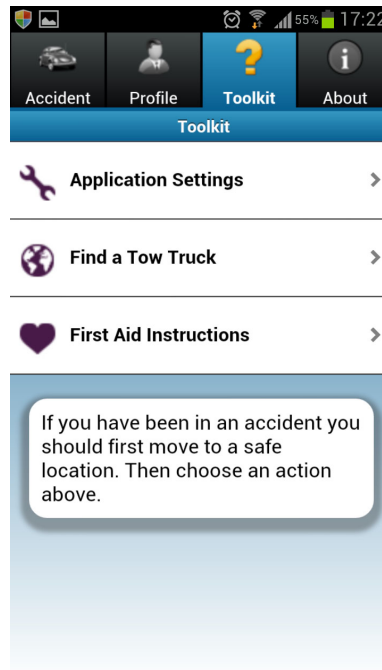
- A tab bar at the top of the screen separates the different demo features
- There are four features:
  - About
  - Toolkit
  - Profile
  - Accident
- Click the **About** tab to read a brief introduction about the app





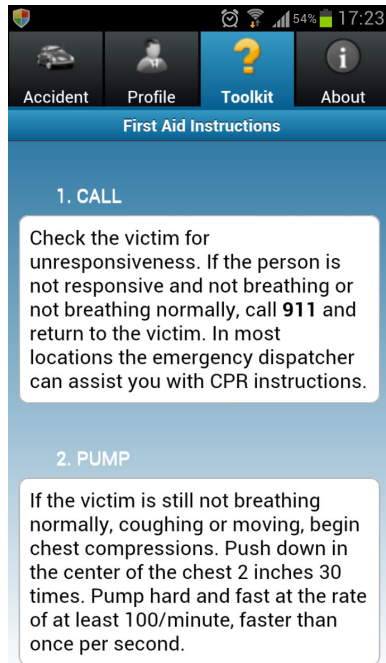
## Explore the demos: Toolkit

- Click the **Toolkit** tab
- There are three features:
  - Application Settings
  - Find a Tow Truck
  - First Aid Instructions



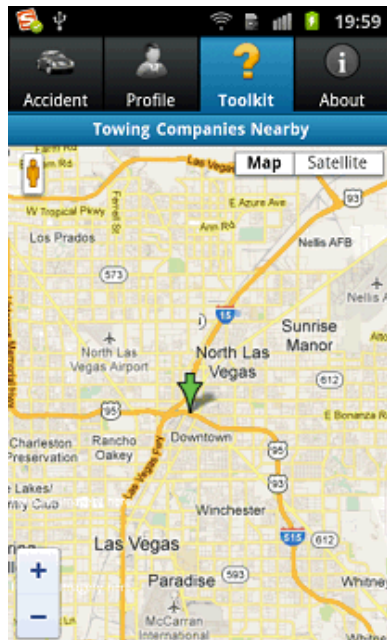
## Explore the demos: Toolkit

- Click **First Aid Instructions**
- You are shown useful emergency and first aid information in case you are involved in an accident
- Ensure that the view is scrollable



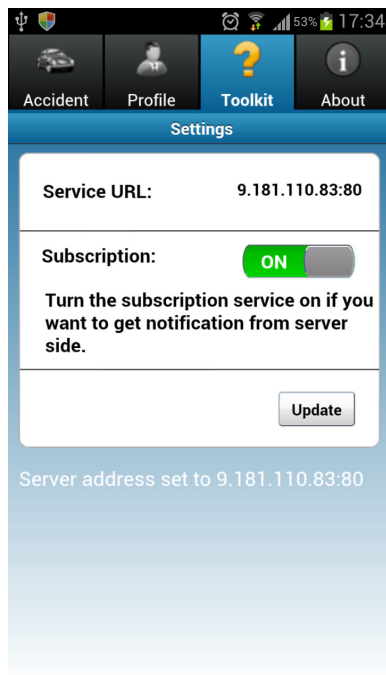
## Explore the demos: Toolkit

- Click Find a Tow Truck
- Check that Google Maps correctly identifies your current position\* and displays nearby tow service suppliers
- \* Assumes a working GPS or wireless-based location. By default, a map of Las Vegas is displayed if the current position cannot be established.



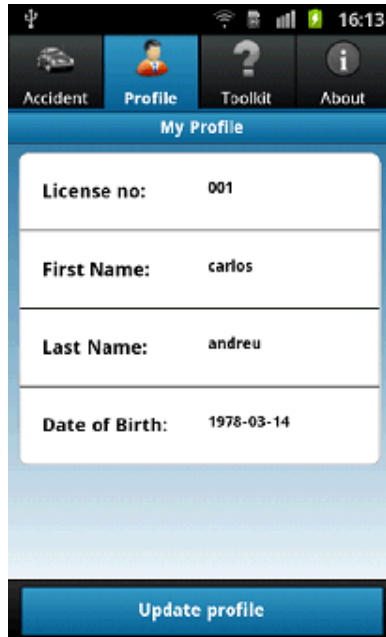
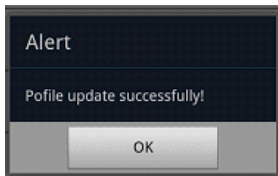
## Explore the demos: Toolkit

- Click **Application Settings**
- In the **Service URL** field, enter the correct URL in the format <host>:<port>
- Use the **Subscription** slider to turn on subscription and enable the notification feature
- Click **Update**
  - Message 'Server address set to <host>:<port>' is displayed
  - If the URL is not valid, message 'host not reachable' is displayed instead



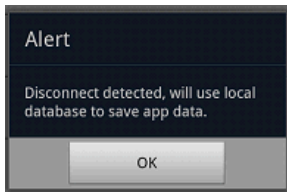
## Explore the demos: Profile – online mode

- Click the **Profile** tab
  - The existing profile is automatically loaded from the IBM Worklight Server
- You can update the retrieved profile data
  - Edit any of the profile fields and then click **Update profile**
- The profile data is updated on the IBM Worklight Server immediately

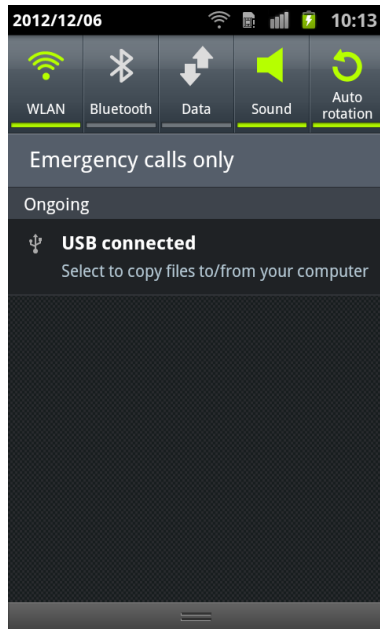
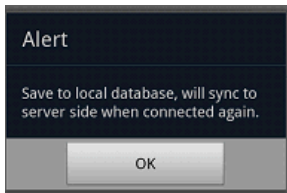


## Explore the demos: Profile – offline mode

- Switch off WiFi to take the app offline
  - An alert informs you that data will now be saved in a local database

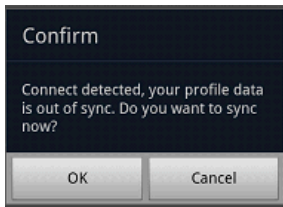


- Edit any of the profile fields and then click **Update profile**
  - An alert informs you that the data was saved in the local database

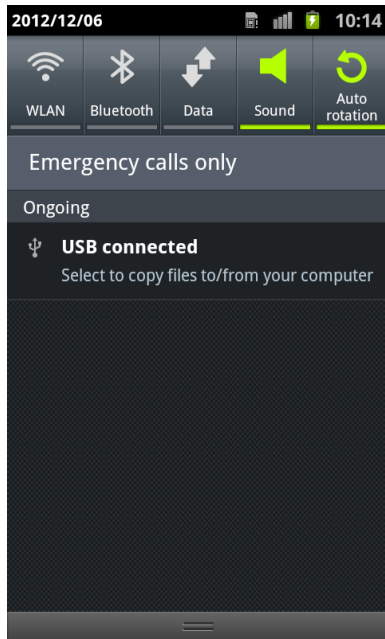
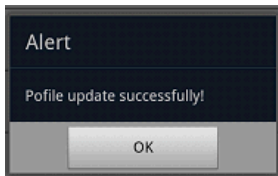


## Explore the demos: Profile – offline mode

- Switch WiFi back on to take the app online again
  - An alert informs you that an online connection has been detected

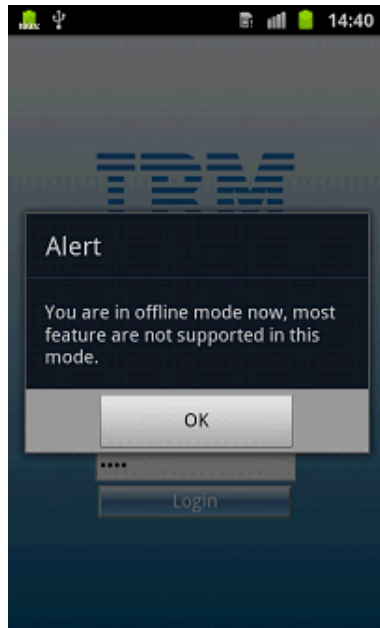


- Click **OK** to synchronize the local data with the IBM Worklight Server
  - An alert informs you that the profile data is now updated on the IBM Worklight Server



## Explore the demos: Profile – offline mode

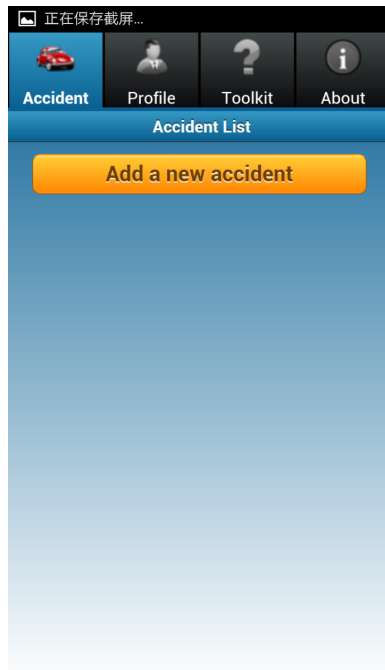
- If WiFi is already switched off when you start the app, an alert informs you that the app is in offline mode
- Now follow the same steps as just described:
  - Edit any of the profile fields and then click **Update profile**
  - Switch WiFi back on to take the app online again
  - Click **OK** to synchronize the local data with the IBM Worklight Server





## Explore the demos: Accident

- Click the **Accident** tab
  - This feature shows all the steps that are required to build and send an accident request
  
- Click **Add a new accident** to begin the process



## Explore the demos: Accident

- Step 1: Record Accident Location
  - Enter the accident location details manually
  - Or obtain your current position\* by clicking **Retrieve Current Location**
  - Click **Next** to proceed to Step 2

The screenshot shows a mobile application interface for recording an accident location. At the top, there is a navigation bar with four tabs: "Accident" (selected), "Profile", "Toolkit", and "About". Below the navigation bar, the title "Step1: Record Accident Location" is displayed. The main content area contains a form with the following fields:

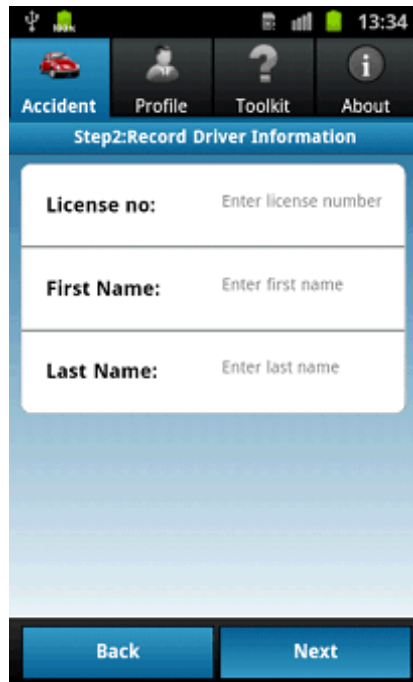
Street:	600 Las Vegas Blvd N
City:	Las Vegas
State:	Nevada
Zip:	89101

Below the form is a button labeled "Retrieve Current Location". At the bottom of the screen, there are two buttons: "Back" and "Next".

- \* Assumes a working GPS or wireless-based location. By default, a Las Vegas location is displayed if the current position cannot be established.

## Explore the demos: Accident

- Step 2: Record Driver Information
  - Enter driver information
  - Click **Next** to proceed to Step 3



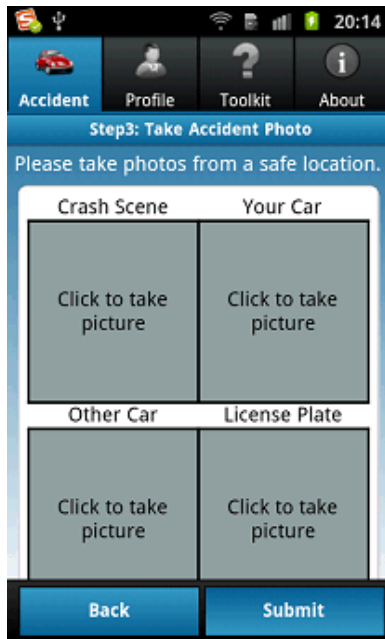
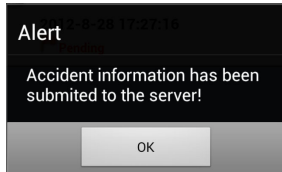
The screenshot shows a mobile application interface for recording driver information. At the top, there is a navigation bar with four tabs: "Accident" (with a red car icon), "Profile" (with a person icon), "Toolkit" (with a question mark icon), and "About" (with an information icon). Below the navigation bar is a header for the current step: "Step2:Record Driver Information". The main content area contains three input fields, each with a label and a placeholder text:

<b>License no:</b>	Enter license number
<b>First Name:</b>	Enter first name
<b>Last Name:</b>	Enter last name

At the bottom of the screen, there are two buttons: "Back" and "Next".

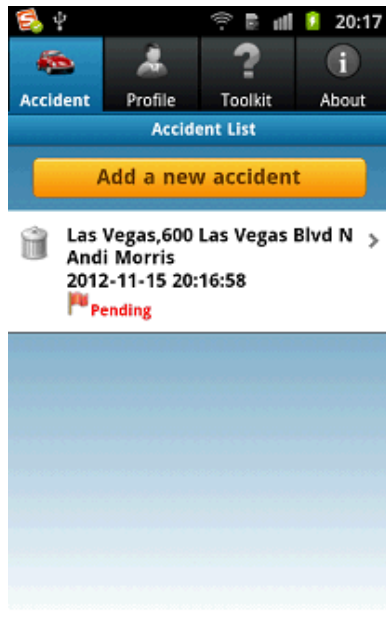
## Explore the demos: Accident

- Step 3: Take Accident Photo
  - Click a photo box to switch to your camera application
  - Take a photo
    - Control returns to the “Take Accident Photo” page and the photo image is displayed
  - Optionally repeat for further photos
  - Click **Submit** to submit the completed accident request to the IBM Worklight Server



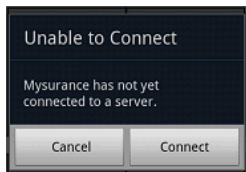
## Explore the demos: Accident

- The submitted accident request is displayed on the “Accident List” page with status **Pending**



## Explore the demos: Accident

- If the Service URL is not configured, warning message ‘Mysurance has not yet connected to a server’ is displayed







- Click **Connect** to access the Toolkit “Application Settings” page and follow the instructions to enter the Service URL

## Explore the demos: Accident

- Server Notification
  - Go to the Mysurance server to send a notification after you submit the accident request
    - `http://<host>:<port>/mysurance/accident.html`
    - Subscription must already be turned on
  - Set the IBM Worklight Server address
  - Select one report from the User Request List
  - Click **Approve**

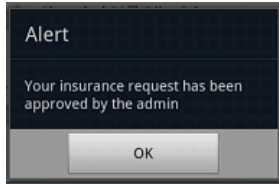
### User Request List

Option	Id	User	Crash Scene	Customer's Car	Other Car	License Plate	Status
<input type="checkbox"/>	2	datta					Pending

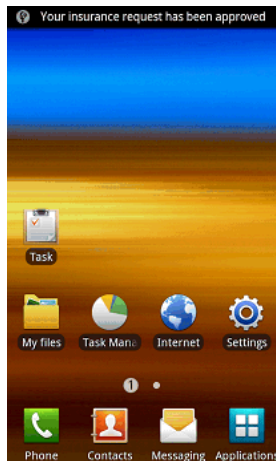
Worklight Server Address:

## Explore the demos: Accident

- Client Notification
  - If the app is running in the foreground, an alert informs you that the request is approved



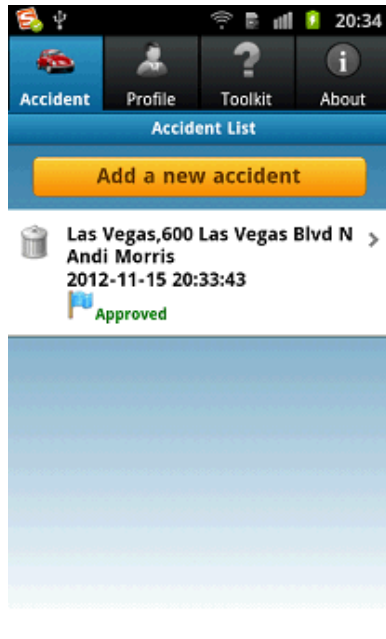
- If the app is not running, the notification is displayed in the status bar
  - Click the notification to wake up the app





## Explore the demos: Accident

- The accident request status that is displayed on the “Accident List” page is now **Approved**



## Agenda

- General information
- Running the Mysurance End-to-End sample for Android
- Running the Mysurance End-to-End sample for iOS

## ***Before you begin***

- See the following modules for how to build and deploy the Showcase:
  - Module 2 Setting Up Your Development Environment
  - Module 2.1 Setting Up Your iOS Development Environment

## Before you begin

- Enable Push Notification
  - The Push Notification feature uses the Apple Push Notification service (APNs)
  - Perform the following steps to configure the Showcase to use APNs:
    - Configure App for APNs through the iOS Provisioning Portal:
      1. Create an App ID at the iOS Provisioning Portal
      2. Enable the App ID for APNs
      3. Generate an App ID-specific client Development Push SSL certificate
      4. Create an APNs-enabled provisioning profile for the App ID created in step 1
    - Export the APNs SSL Certificate:
      5. Download the certificate generated in step 3 onto your MAC
      6. Double-click the certificate (.cer file) to open it in Keychain
      7. Expand "My Certificates", and then expand your certificate
      8. Select the certificate and the private key, and export them as a Personal Information Exchange (.p12) file
        - The file name must be **apns-certificate-sandbox.p12**
      9. Specify a password to protect the certificate
      10. Save apns-certificate-sandbox.p12 into the /apps/mysurance folder of the Worklight project

## ***Before you begin***

- Configure Worklight Studio:
  11. Update the <ipad> and <iphone> sections in application-descriptor.xml to specify the password chosen in step 9
    - <pushSender password="your\_pwd"/>
  12. Update the bundleId attribute of the <ipad> and <iphone> elements in application-descriptor.xml to match the App ID created in step 1
- Verify project settings:
  13. Open the project in Xcode
  14. Ensure that the App Identifier matches the App ID created in step 1 and that the correct provisioning profiles are being used to build and sign the application

## Known limitations

There are some known limitations in this Showcase. The following instructions describe how to implement workarounds to these limitations:

### ■ Screen rotation

- Apache Cordova disables screen rotation by default
- To enable free rotation, perform the following step:
  - Edit CDVMainViewController.m
    - Update method **shouldAutorotateToInterfaceOrientation** to always return **YES** in the generated native Xcode project

```
- (BOOL)shouldAutorotateToInterfaceOrientation:(UIInterfaceOrientation)interfaceOrientation
{
    // Return YES for supported orientations
    return (interfaceOrientation == YES);
}
```

### ■ Photo thumbnails

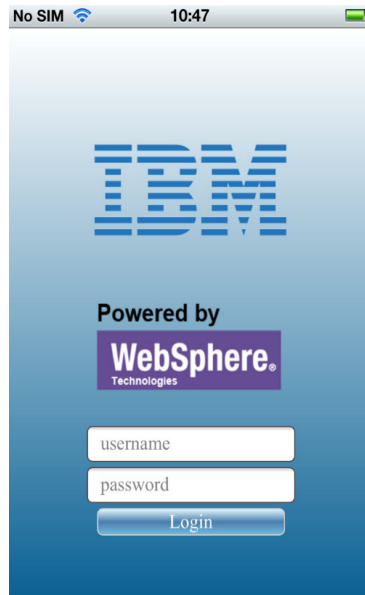
- The photo thumbnail does not display on the server in the Notifications feature due to a file path issue during the photo upload step
- This problem will be resolved in a future release

## ***Known limitations***

- Starting the application server
  - 'java.lang.NoClassDefFoundError' exception is thrown when the server is started
  - This exception does not affect the Showcase and can be ignored
  
- Please also check the product Release Notes for information about known defects

## Explore the demos

- Load the Mysurance Showcase app
  - The Login screen is displayed
- Log in to the app
  - User name = **demo**
  - Password = **demo**
- Click Login
  - The main screen is displayed





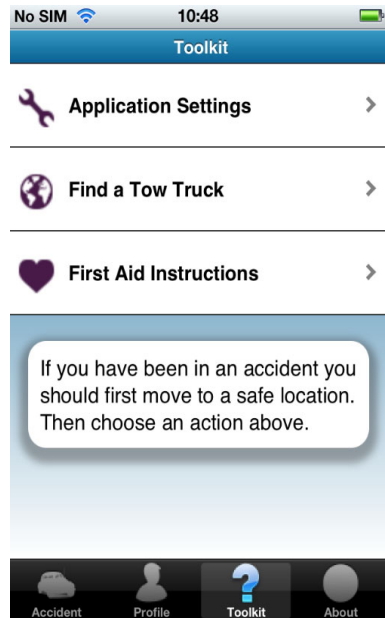
## Explore the demos

- A tab bar at the top of the screen separates the different demo features
- There are four features:
  - About
  - Toolkit
  - Profile
  - Accident
- Click the **About** tab to read a brief introduction about the app



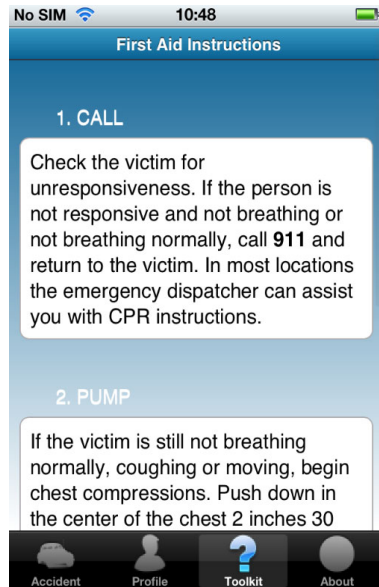
## Explore the demos: Toolkit

- Click the **Toolkit** tab
- There are three features:
  - Application Settings
  - Find a Tow Truck
  - First Aid Instructions



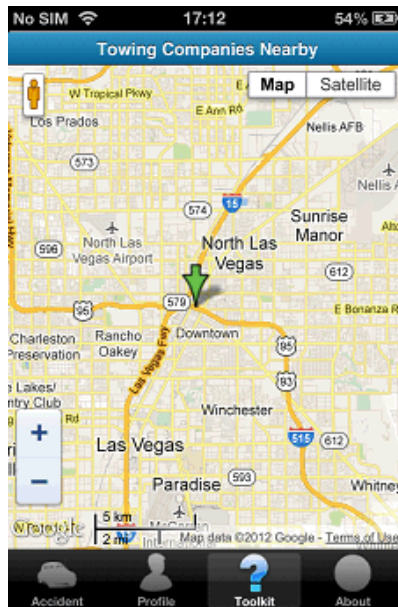
## Explore the demos: Toolkit

- Click **First Aid Instructions**
- You are shown useful emergency and first aid information in case you are involved in an accident
- Ensure that the view is scrollable



## Explore the demos: Toolkit

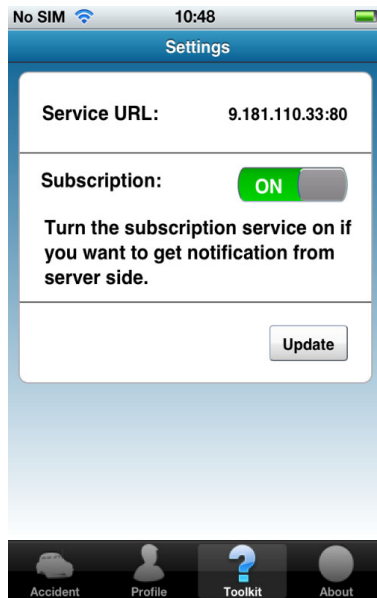
- Click Find a Tow Truck
- Check that Google Maps correctly identifies your current position\* and displays nearby tow service suppliers



- \* Assumes a working GPS or wireless-based location. By default, a map of Las Vegas is displayed if the current position cannot be established.

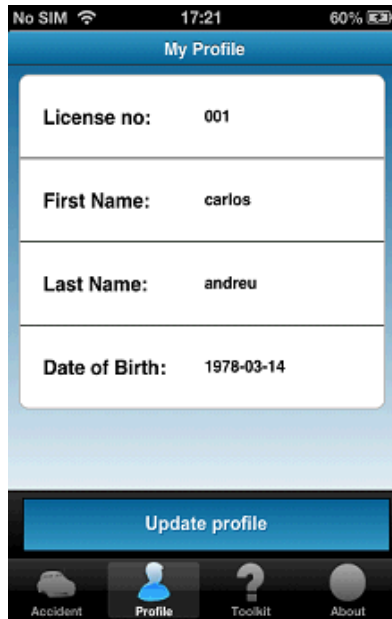
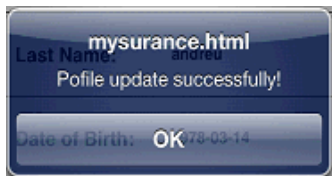
## Explore the demos: Toolkit

- Click **Application Settings**
- In the **Service URL** field, enter the correct URL in the format <host>:<port>
- Use the **Subscription** slider to turn on subscription and enable the notification feature
- Click **Update**
  - Message 'Server address set to <host>:<port>' is displayed
  - If the URL is not valid, message 'host not reachable' is displayed instead



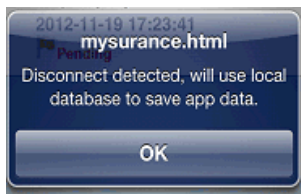
## Explore the demos: Profile – online mode

- Click the **Profile** tab
  - The existing profile is automatically loaded from the IBM Worklight Server
- You can update the retrieved profile data
  - Edit any of the profile fields and then click **Update profile**
- The profile data is updated on the IBM Worklight Server immediately

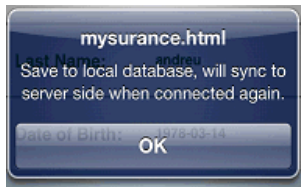


## Explore the demos: Profile – offline mode

- Switch off WiFi to take the app offline
  - An alert informs you that data will now be saved in a local database

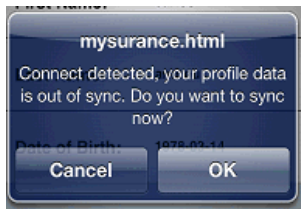


- Edit any of the profile fields and then click **Update profile**
  - An alert informs you that the data was saved in the local database

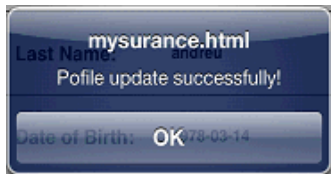


## Explore the demos: Profile – offline mode

- Switch WiFi back on to take the app online again
  - An alert informs you that an online connection has been detected



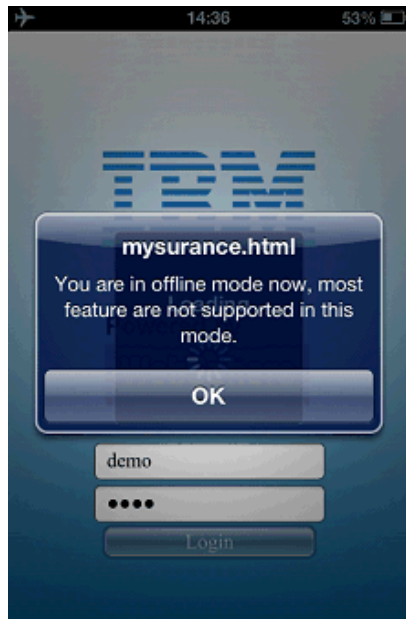
- Click **OK** to synchronize the local data with the IBM Worklight Server
  - An alert informs you that the profile data is now updated on the IBM Worklight Server





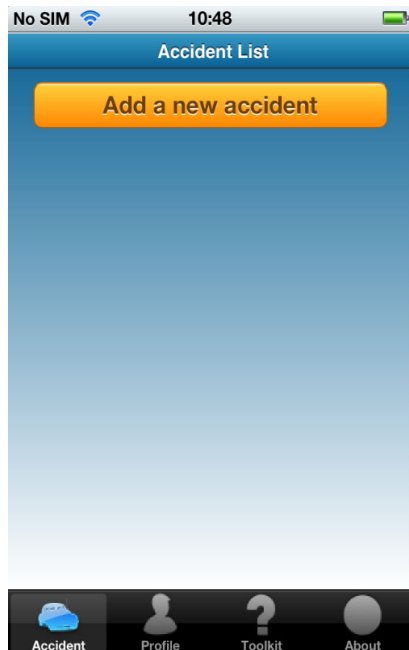
## Explore the demos: Profile – offline mode

- If WiFi is already switched off when you start the app, an alert informs you that the app is in offline mode
- Now follow the same steps as just described:
  - Edit any of the profile fields and then click **Update profile**
  - Switch WiFi back on to take the app online again
  - Click **OK** to synchronize the local data with the IBM Worklight Server



## Explore the demos: Accident

- Click the **Accident** tab
  - This feature shows all the steps that are required to build and send an accident request
- Click **Add a new accident** to begin the process



## Explore the demos: Accident

- Step 1: Record Accident Location
  - Enter the accident location details manually
  - Or obtain your current position\* by clicking **Retrieve Current Location**
  - Click **Next** to proceed to Step 2

The screenshot shows a mobile application interface titled "Step 1: Record Accident Location". The interface is displayed on a device with "No SIM", signal strength, Wi-Fi, time "17:21", and battery "60%" indicators at the top. The form contains the following fields:

Street:	600 Las Vegas Blvd N
City:	Las Vegas
State:	Nevada
Zip:	89101

Below the form is a button labeled "Retrieve Current Location". At the bottom of the screen are two navigation buttons: "Back" and "Next". Below these are four icons representing different sections: "Accident" (cloud icon), "Profile" (person icon), "Toolkit" (question mark icon), and "About" (globe icon).

- \* Assumes a working GPS or wireless-based location. By default, a Las Vegas location is displayed if the current position cannot be established.

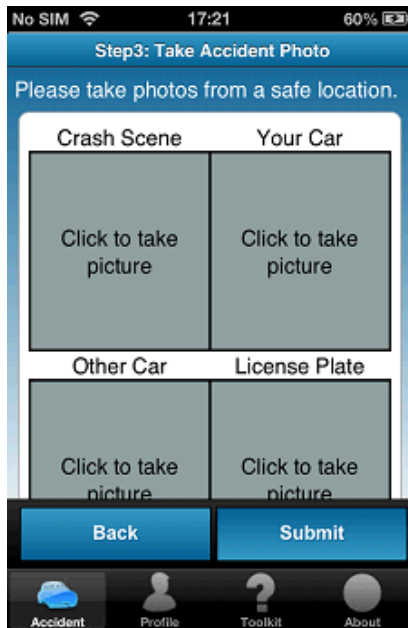
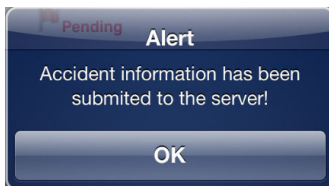
## Explore the demos: Accident

- Step 2: Record Driver Information
  - Enter driver information
  - Click **Next** to proceed to Step 3

The screenshot shows a mobile application interface on an iPhone. At the top, the status bar displays "No SIM", signal strength, Wi-Fi, the time "13:49", and "53%" battery. Below the status bar is a blue header with the text "Step2:Record Driver Information". The main content area is a white rounded rectangle containing three input fields, each with a label and a placeholder text: "License no:" with "Enter license number", "First Name:" with "Enter first name", and "Last Name:" with "Enter last name". At the bottom of the screen, there are two blue buttons labeled "Back" and "Next". Below these buttons is a dark navigation bar with four icons: a car icon labeled "Accident", a person icon labeled "Profile", a question mark icon labeled "Toolkit", and a circle icon labeled "About".

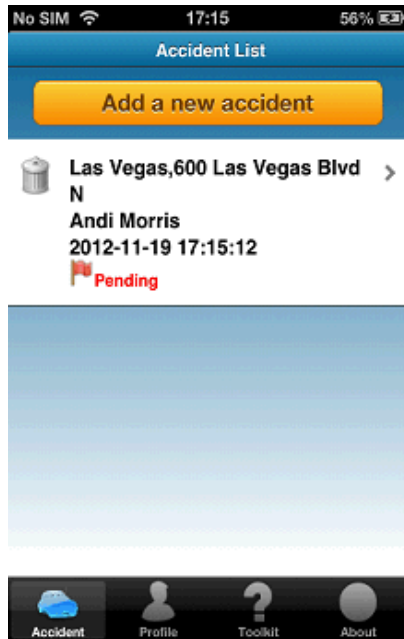
## Explore the demos: Accident

- Step 3: Take Accident Photo
  - Click a photo box to switch to your camera application
  - Take a photo
    - Control returns to the “Take Accident Photo” page and the photo image is displayed
  - Optionally repeat for further photos
  - Click **Submit** to submit the completed accident request to the IBM Worklight Server



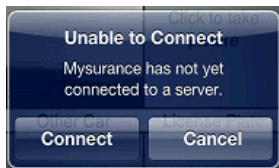
## Explore the demos: Accident

- The submitted accident request is displayed on the “Accident List” page with status **Pending**



## Explore the demos: Accident

- If the Service URL is not configured, warning message ‘Mysurance has not yet connected to a server’ is displayed







- Click **Connect** to access the Toolkit “Application Settings” page and follow the instructions to enter the Service URL

## Explore the demos: Accident

- Server Notification
  - Go to the Mysurance server to send a notification after you submit the accident request
    - `http://<host>:<port>/mysurance/accident.html`
    - Subscription must already be turned on
  - Set the IBM Worklight Server address
  - Select one report from the User Request List
  - Click **Approve**

### User Request List

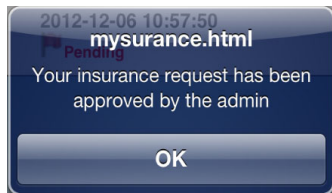
Option	Id	User	Crash Scene	Customer's Car	Other Car	License Plate	Status
<input type="checkbox"/>	2	dento					Pending

Worklight Server Address:



## Explore the demos: Accident

- Client Notification
  - If the app is running in the foreground, an alert informs you that the request is approved

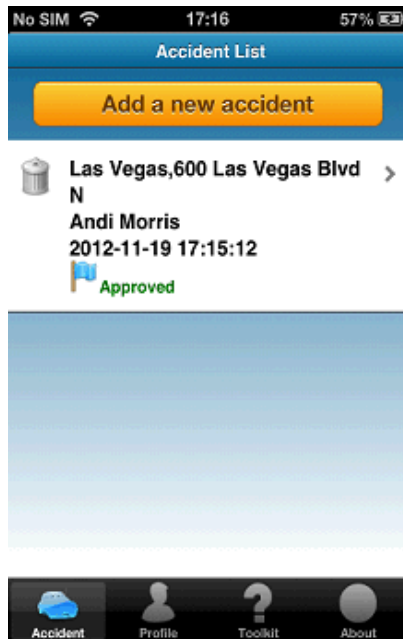


- If the app is not running, the notification is displayed in the status bar
  - Click the notification to wake up the app



## Explore the demos: Accident

- The accident request status that is displayed on the “Accident List” page is now **Approved**



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