

# Broadcast notifications in native Android applications

## Overview

Broadcast notification are in fact tag-based notification, where a subscription to a reserved tag, `Push.ALL`, is auto-created for every device. Broadcast notifications are thus notification messages that are targeted to all subscribed devices. Broadcast notifications are enabled by default for any push-enabled MobileFirst application. This ability can be disabled by unsubscribing the device from the reserved `Push.ALL` tag.

For more information about broadcast notification, see the topics about broadcast notification topic in the user documentation.

## Common API methods for tag-based and broadcast notifications

### Client-side API:

- `WLNotificationListener` Defines the callback method to be notified when the notification arrives.
- `client.getPush().setWLNotificationListener(listener)` This method sets the implementation class of the `WLNotificationListener` interface.
- The `onMessage(props,payload)` method of `WLNotificationListener` is called when a push notification is received by the device.
  - **props** - A JSON block that contains the notifications properties of the platform.
  - **payload** - A JSON block that contains other data that is sent from MobileFirst Server. The JSON block also contains the tag name for tag-based or broadcast notification. The tag name appears in the "tag" element. For broadcast notification, the default tag name is `Push.ALL`.

### Server-side API:

This method submits a notification that is based on the specified target parameters.

- `WL.Server.sendMessage(applicationId,notificationOptions)`
  - **applicationId** - (mandatory) The name of the MobileFirst application
  - **notificationOptions** - (mandatory) A JSON block containing message properties

For a full list of message properties, refer to the `WL.Server.sendMessage` API in the API reference of the user documentation.

## Sample application

Before running the application, check the adapter's `PushAdapter-impl.js` file and verify that the `WL.Server.sendMessage()` method use the correct application name. The correct application name can be determined from the `id` attribute in `application-descriptor.xml`. Click to download (<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/PushNotificationsNativeProject.zip>) the Studio project. Click to download (<http://public.dhe.ibm.com/software/products/en/MobileFirstPlatform/docs/v700/AndroidNativePushProject.zip>) the Native project.