

# Handling Push Notifications in Cordova

## Overview

Before iOS, Android and Windows Cordova applications are able to receive and display push notifications, the **cordova-plugin-mfp-push** Cordova plug-in needs to be added to the Cordova project. Once an application has been configured, MobileFirst-provided Notifications API can be used in order to register & unregister devices, subscribe & unsubscribe tags and handle notifications. In this tutorial, you will learn how to handle push notification in Cordova applications.

**Note:** In the release, authenticated notifications are **not supported** in Cordova applications due to a defect. However a workaround is provided: each `MFPPush` API call can be wrapped by `WLAAuthorizationManager.obtainAccessToken("push.mobileclient").then( ... );`. The provided sample application uses this workaround.

### Prerequisites:

- Make sure you have read the following tutorials:
  - Setting up your MobileFirst development environment ([../..../setting-up-your-development-environment/](#))
  - Adding the MobileFirst Foundation SDK to Android applications ([../..../application-development/sdk/cordova](#))
  - Push Notifications Overview ([../..../](#))
- MobileFirst Server to run locally, or a remotely running MobileFirst Server
- MobileFirst CLI installed on the developer workstation
- Cordova CLI installed on the developer workstation

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## Notifications Configuration

Create a new Cordova project or use an existing one, and add one or more of the supported platforms: iOS, Android, Windows.

If the MobileFirst Cordova SDK is not already present in the project, follow the instructions in the Adding the MobileFirst Foundation SDK to Cordova applications ([../..../application-development/sdk/cordova](#)) tutorial.

## Adding the Push plug-in

1. From a **command-line** window, navigate to the root of the Cordova project.
2. Add the push plug-in to by running the command:

```
cordova plugin add cordova-plugin-mfp-push
```

3. Build the Cordova project by running the command:

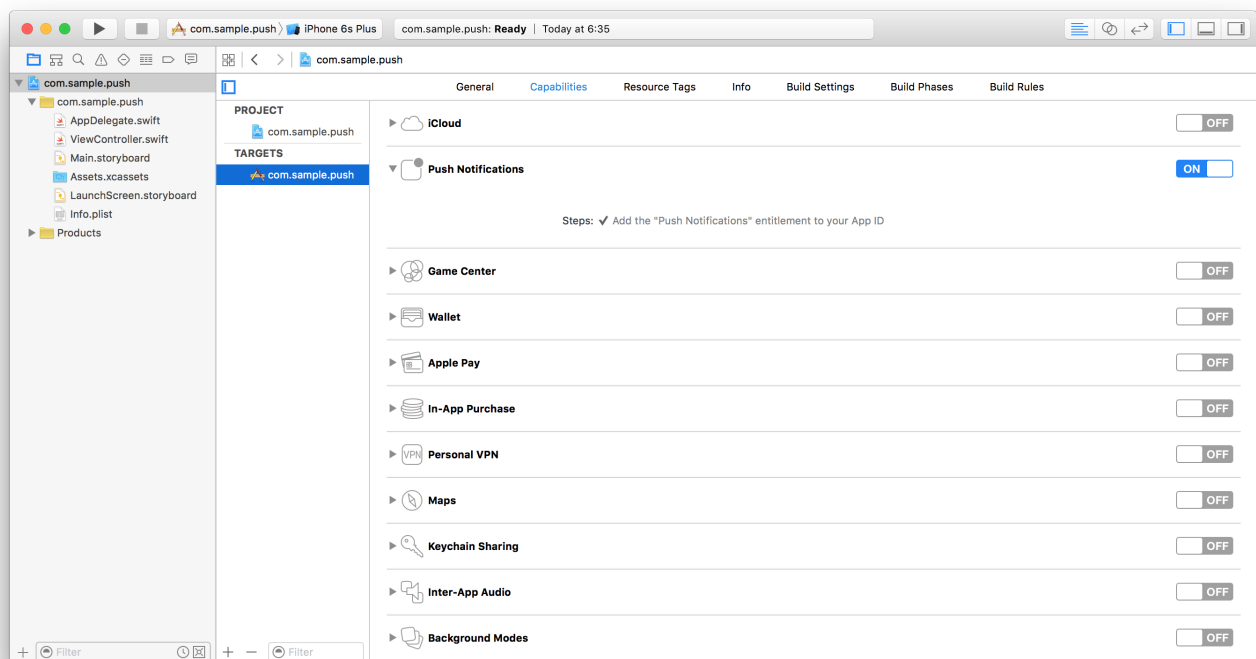
```
cordova build
```

## iOS platform

The iOS platform requires an additional step.

In Xcode, enable push notifications for your application in the **Capabilities** screen.

**❗ Important:** the bundleId selected for the application must match the AppId that you have previously created in the Apple Developer site. See the [Push Notifications Overview] tutorial.



## Notifications API

### Client-side

#### Javascript Function

```
MFPPush.initialize(success, failure)
```

```
MFPPush.isPushSupported(success,  
failure)
```

```
MFPPush.registerDevice(options,  
success, failure)
```

```
MFPPush.getTags(success, failure)
```

```
MFPPush.subscribe(tag, success,  
failure)
```

```
MFPPush.getSubscriptions(success,  
failure)
```

#### Description

Initialize the MFPPush instance.

Does the device support push notifications.

Registers the device with the Push Notifications Service.

Retrieves all the tags available in a push notification service instance.

Subscribes to a particular tag.

Retrieves the tags device is currently subscribed to

## Javascript Function

```
MFPPush.unsubscribe(tag, success,  
failure)
```

```
MFPPush.unregisterDevice(success,  
failure)
```

## Description

Unsubscribes from a particular tag.

Unregisters the device from the Push Notifications Service

## API implementation

### Initialization

Initialize the **MFPPush** instance.

- Required for the client application to connect to MFPPush service with the right application context.
- The API method should be called first before using any other MFPPush APIs.
- Registers the callback function to handle received push notifications.

```
MFPPush.initialize (  
  function(successResponse) {  
    alert("Successfully intialized");  
    MFPPush.registerNotificationsCallback(notificationReceived);  
  },  
  function(failureResponse) {  
    alert("Failed to initialize");  
  }  
);
```

### Is push supported

Check if the device supports push notifications.

```
MFPPush.isPushSupported (  
  function(successResponse) {  
    alert("Push Supported: " + successResponse);  
  },  
  function(failureResponse) {  
    alert("Failed to get push support status");  
  }  
);
```

### Register device

Register the device to the push notifications service. If no options are required, options can be set to `null`.

```
var options = { };  
MFPPush.registerDevice(  
  options,  
  function(successResponse) {  
    alert("Successfully registered");  
  },  
  function(failureResponse) {  
    alert("Failed to register");  
  }  
);
```

### Get tags

Retrieve all the available tags from the push notification service.

```
MFPPush.getTags (  
  function(tags) {  
    alert(JSON.stringify(tags));  
  },  
  function() {  
    alert("Failed to get tags");  
  }  
);
```

## Subscribe

Subscribe to desired tags.

```
var tags = ['sample-tag1','sample-tag2'];  
  
MFPPush.subscribe(  
  tags,  
  function(tags) {  
    alert("Subscribed successfully");  
  },  
  function() {  
    alert("Failed to subscribe");  
  }  
);
```

## Get subscriptions

Retrieve tags the device is currently subscribed to.

```
MFPPush.getSubscriptions (  
  function(subscriptions) {  
    alert(JSON.stringify(subscriptions));  
  },  
  function() {  
    alert("Failed to get subscriptions");  
  }  
);
```

## Unsubscribe

Unsubscribe from tags.

```
var tags = ['sample-tag1','sample-tag2'];  
  
MFPPush.unsubscribe(  
  tags,  
  function(tags) {  
    alert("Unsubscribed successfully");  
  },  
  function() {  
    alert("Failed to unsubscribe");  
  }  
);
```

## Unregister

Unregister the device from push notification service instance.

```
MFPPush.unregisterDevice(  
  function(successResponse) {  
    alert("Unregistered successfully");  
  },  
  function() {  
    alert("Failed to unregister");  
  }  
);
```

## Handling a push notification

You can handle a received push notification by operating on its response object in the registered callback function.

```
var notificationReceived = function(message) {  
  alert(JSON.stringify(message));  
};
```

## Sample application

Click to download (<https://github.com/MobileFirst-Platform-Developer-Center/PushNotificationsCordova/tree/release80>) the Cordova project.

**Note:** The latest version of Google Play Services is required to be installed on any Android device for the sample to run.

### Sample usage

Follow the sample's README.md file for instructions.

