



Plugins



Topics

- What are Plugins?
 - Apache Cordova
- Supported Plugins
 - Useful Plugins supported by OutSystems
- Available Plugins
 - Other Plugin downloadable from the Forge
- Creating a new Plugin (in OutSystems)
 - Steps to create a reusable Plugin module

Cordova Plugins

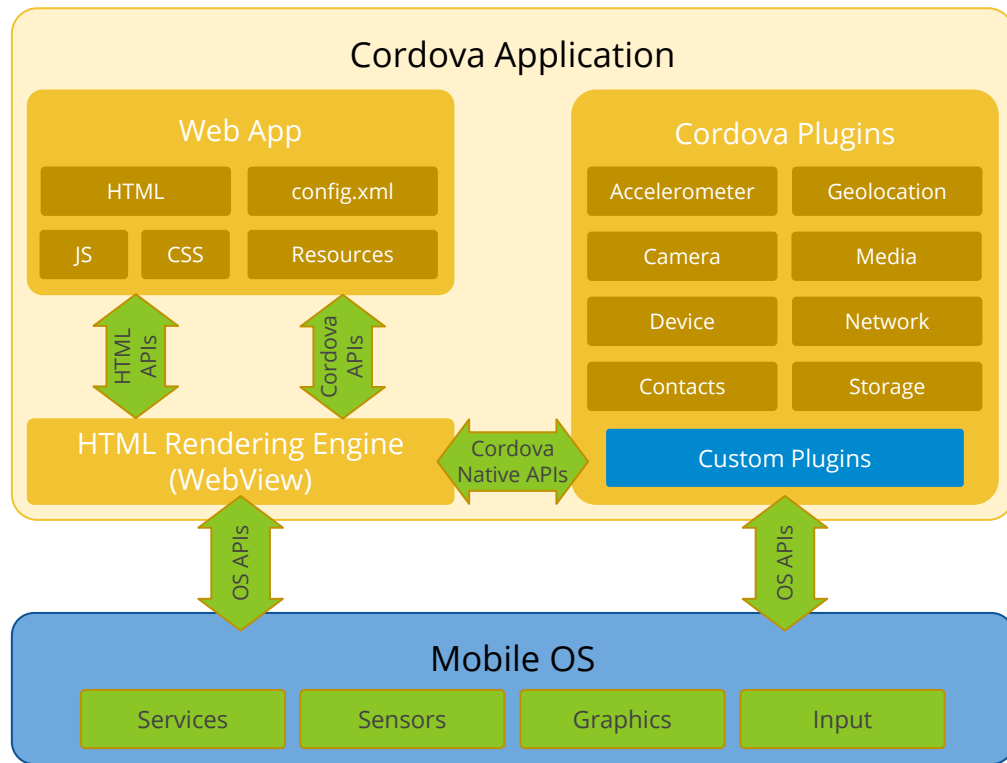


Cordova Plugins

- What is Apache Cordova?
 - An open-source mobile development framework that allows the use of standard web technologies for cross-platform development
 - HTML5, CSS3, JavaScript
- What are Plugins?
 - A Plugin is the code that provides the interface between Cordova and native components
 - Allows Cordova to bind to and communicate with standard device APIs
 - Allows native code to be invoked from JavaScript

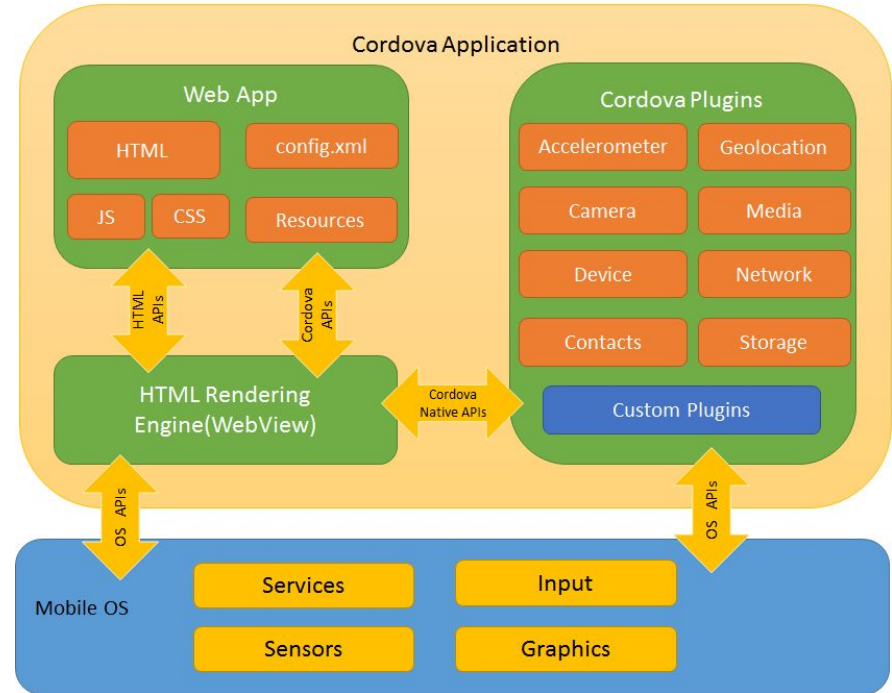
Cordova Application

- Web App
 - Application code (web page)
- Cordova Plugins
 - Interfaces to device capabilities
 - Core and custom plugins
- Rendering Engine (WebView)
 - Browser-based rendering
- Mobile OS
 - Sensors, input, graphics, services



Cordova Application

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Supported Plugins

A full-page background image featuring an astronaut in a white spacesuit floating in the black void of space, surrounded by numerous small white stars. The astronaut is holding a silver laptop in front of their chest. The text 'Supported Plugins' is overlaid in white, bold, sans-serif font on the left side of the image.

Plugins are Available on the Forge

Forge

The OutSystems Forge is the Willy Wonka factory of reusable app modules, connectors, and components. Community users can add their new app features or consult the work of others to speed up app delivery in a collaborative environment.

[Check our FAQs for more information.](#)

New Component

SEARCH

VIEW

- ☒ All Activity
- ☐ Downloaded
- ☐ Following
- ☐ My Components

Sort by: **Most Popular** ▾

206 results for type **Mobile** , category **Mobile Plug-ins**

Common Plugin

by OutSystems R&D

Common actions and webblocks to be used by OutSystems Now extensions plugins.

★★★★★ 10

12407

Location Plugin

by OutSystems R&D

Plugin that enables an application to access the GPS capabilities of the users device. For example the

★★★★★ 18

5897

Camera Plugin

by OutSystems R&D

Plugin that enables an application to access the camera capabilities of the users device.

★★★★★ 11


5089

8

outsystems

Plugin Details

[Go to List](#)[Report](#)




Camera Plugin

Latest stable version **3.0.0**

Last published on **26 Sep** by [OutSystems R&D](#)

DOWNLOAD


Mobile

 11 ratings

0 reviews

5090

80

 **OutSystems R&D** Created on 30 June 2016

[Follow](#) [Actions](#)

OverviewReviewsVersionsSupport

What's new (3.0.0)

First release of the Camera Plugin for OutSystems 11

Details

Plugin that enables an application to access the camera capabilities of the users device.

Category

Mobile Plug-ins

Tags

camera native P10 plugin

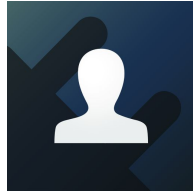
Support Options

Basic Plugins



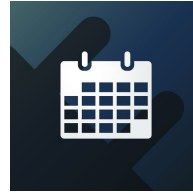
Camera

Access the camera
capabilities



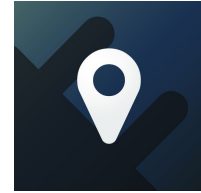
Contacts

Access to
contacts/address
book



Calendar

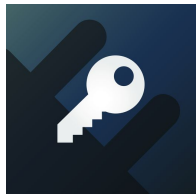
Access to the calendar



Location

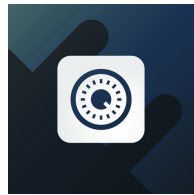
GPS information
(lat, lon, alt)

Security related Plugins



Key Store

Store small amount of
sensitive data
(encrypted)



Ciphered Local
Storage

Ciphered local storage
database



Touch ID

Fingerprint
authentication

Notifications & other Plugins



Local Notifications

Notifications from the app while it is in the background



Pushwoosh

Push notification using One Signal



Barcode scanner

Scans barcodes & QR codes



In App Browser

Open external URLs in the app

Available Plugins

A full-page background image featuring an astronaut in a white spacesuit floating in the black void of space, surrounded by distant stars. The astronaut is holding a silver laptop in front of their chest. The text 'Available Plugins' is overlaid in white, bold, sans-serif font on the left side of the image.

Other Available Plugins



Privacy Screen



Card IO



NFC



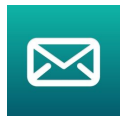
Audio Record



MicroBlink



3D Touch



Email Composer



Social Sharing



Shake



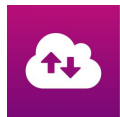
Screen Orientation



Facebook Login



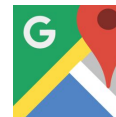
Aptelligent



File Transfer

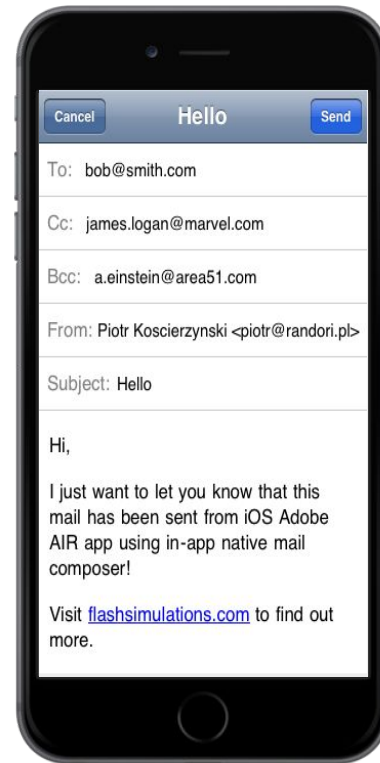


Google Analytics



and more ...

Audio, Barcode, CardIO, & E-mail examples



Creating a new Plugin

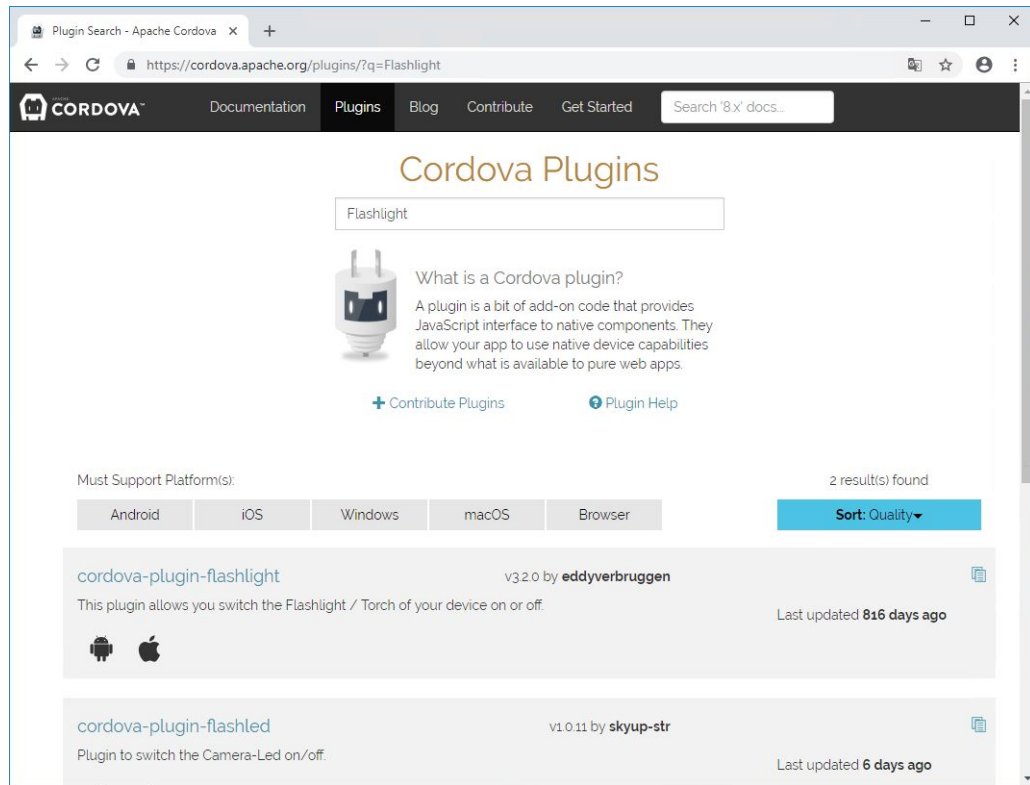


Creating a new Plugin

- Find a cordova Plugin
 - <http://cordova.apache.org/plugins> (1500+plugins)
- Create and publish the OutSystems resources in a module (in an app)
 - Create an application with a Blank module
 - Enter the Configuration for the module (URL)
 - Create Client Action(s) to define the API for the Plugin
 - Make sure they are public so they can be reused
 - Publish the application
- Use the API (actions) in the application that wants to use the Plugin

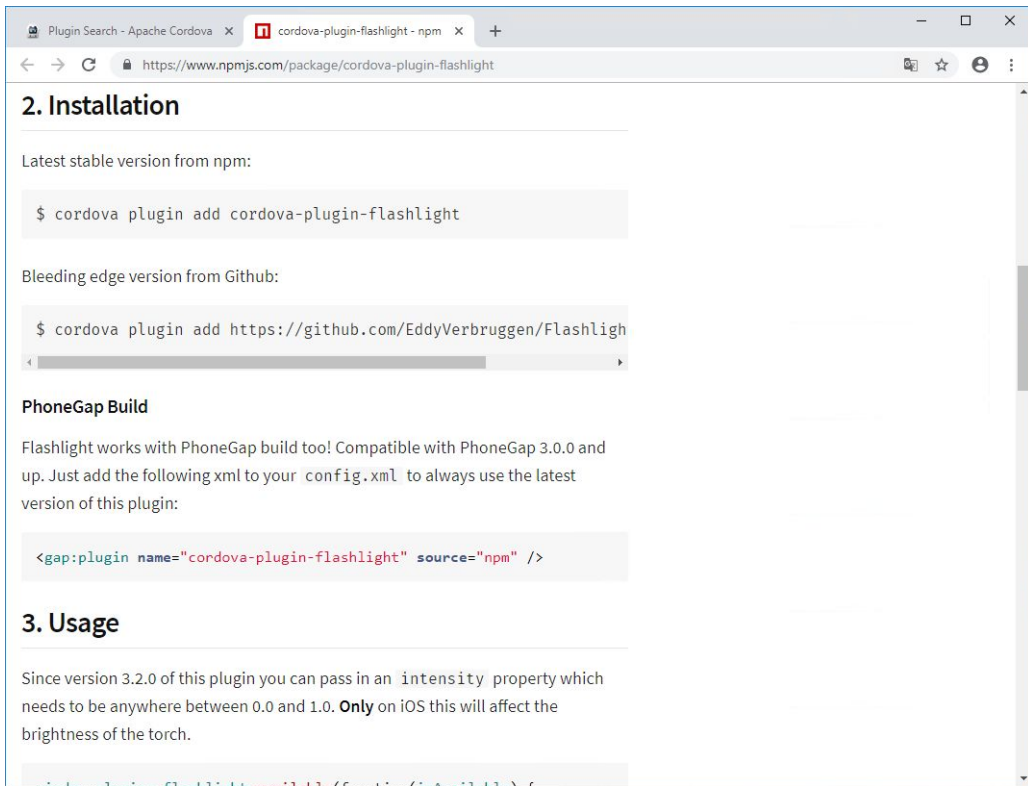
Search for a Plugin

- cordova.apache.org/plugins
- Search & sort by
 - Platform
 - Quality
 - Recent updates
 - # of downloads



Plugin Details

- Description
- Install info
 - Use for configuration
- Usage
 - Javascript code which can be used in Actions



The screenshot shows a web browser window with two tabs: 'Plugin Search - Apache Cordova' and 'cordova-plugin-flashlight - npm'. The address bar shows the URL 'https://www.npmjs.com/package/cordova-plugin-flashlight'. The page content includes:

2. Installation

Latest stable version from npm:

```
$ cordova plugin add cordova-plugin-flashlight
```

Bleeding edge version from Github:

```
$ cordova plugin add https://github.com/EddyVerbruggen/Flashlight
```

PhoneGap Build

Flashlight works with PhoneGap build too! Compatible with PhoneGap 3.0.0 and up. Just add the following xml to your `config.xml` to always use the latest version of this plugin:

```
<gap:plugin name="cordova-plugin-flashlight" source="npm" />
```

3. Usage

Since version 3.2.0 of this plugin you can pass in an `intensity` property which needs to be anywhere between 0.0 and 1.0. **Only** on iOS this will affect the brightness of the torch.

Plugin Configuration

- Configuration is defined on the module
 - Simple JSON defining the plugin and url

The screenshot displays the 'Extensibility Configurations' dialog box. The main area shows a JSON configuration for the 'FlashlightPlugin' module. The configuration is as follows:

```
1 {  
2   "plugin":  
3   {  
4     "url": "https://github.com/EddyVerbruggen/Flashlight-PhoneGap-Plugin.git"  
5   }  
6 }
```

At the bottom of the dialog are 'CLOSE' and 'HELP' buttons.

Overlaid on the right side of the dialog is a preview of the 'FlashlightPlugin Module' configuration table:

FlashlightPlugin Module	
Invalid Text	Text expected!
Invalid Phone	Phone Number expected!
Invalid Email	Email expected!
Upgrade Messages	
Upgrade Complete	Your application has been up
Upgrade Failed	An error occurred while trying
Upgrade Failed on Resources	An error occurred while trying
Upgrade Failed on Data Mo...	An error occurred while trying
Upgrade Required	Your application needs to be u
Upgrade Required with Data...	Your application needs to be u
Advanced	
Is Multi-tenant	No
Web Services Namespace	
Extensibility Configurations	{ ...

Creating the Plugin API

- Bind the needed Javascript behaviors
 - Copy them into the Action's JavaScript node
 - Make them Public, so other apps can find them



The screenshot shows the OutSystems interface with the 'FlashlightPlugin' configuration. The 'Interface' tab is selected, showing a tree view of the plugin's structure. The 'TurnOn' client action is highlighted.

FlashlightPlugin

- Client Actions
 - TurnOff
 - TurnOn**
 - (System)
- Server Actions
- Integrations
- Roles
- Exceptions

TurnOn Client Action

Name	TurnOn
Description	...
Public	Yes ▼
Function	No ▼
Icon	Default Icon ▼

Summary

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A low-angle, long-exposure photograph of a city skyline at night. The image features several tall skyscrapers with illuminated windows. In the foreground, there are bright, horizontal light trails from traffic, suggesting a busy street. The sky is dark, and the overall scene conveys a sense of urban energy and modern technology.

Plugins
Thank You!