



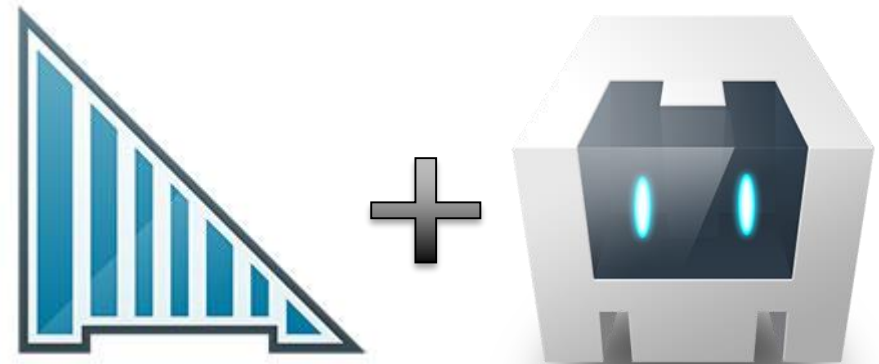
Integrating DataWedge into your Cordova application

DevTalk – 5th October 2016

Darryn Campbell

Agenda:

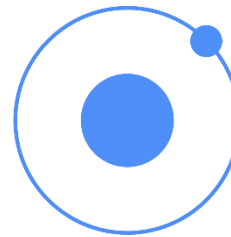
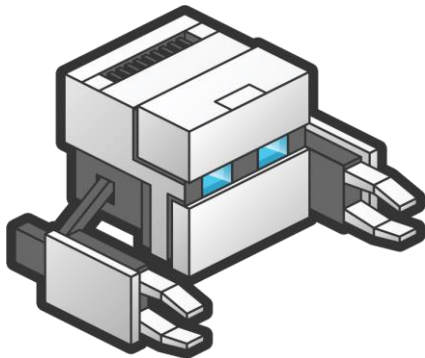
- What is a Cordova Application? (Briefly!)
- What is DataWedge?
- How to integrate DataWedge into your Cordova application
- Live Demo
- Benefits / restrictions of this approach
- Other approaches
- We want your feedback!!
- Resources



What is a Cordova Application (Briefly!)



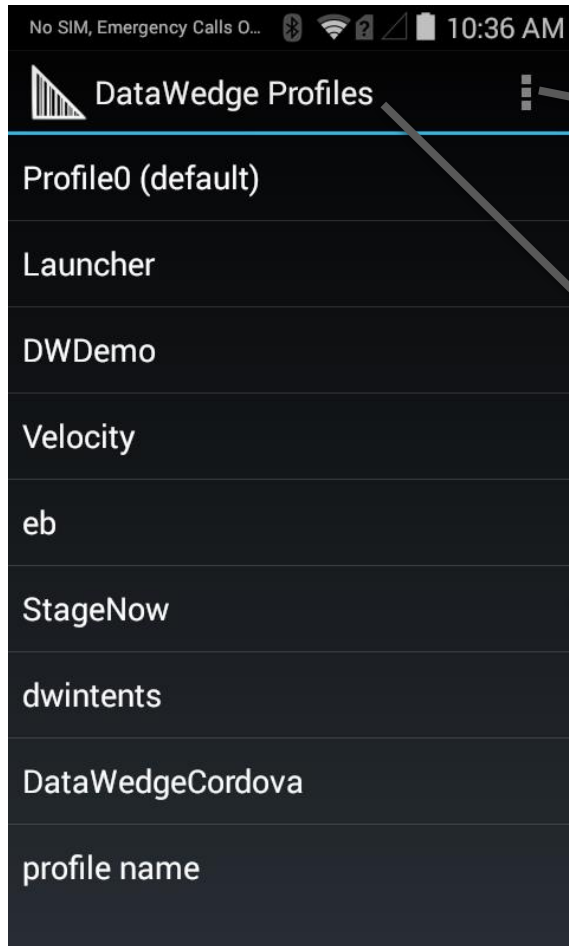
APACHE
CORDOVA™



ionic



What is DataWedge?



Options to enable
DataWedge or import /
export settings

Profiles encapsulate the
behaviour of the
scanner

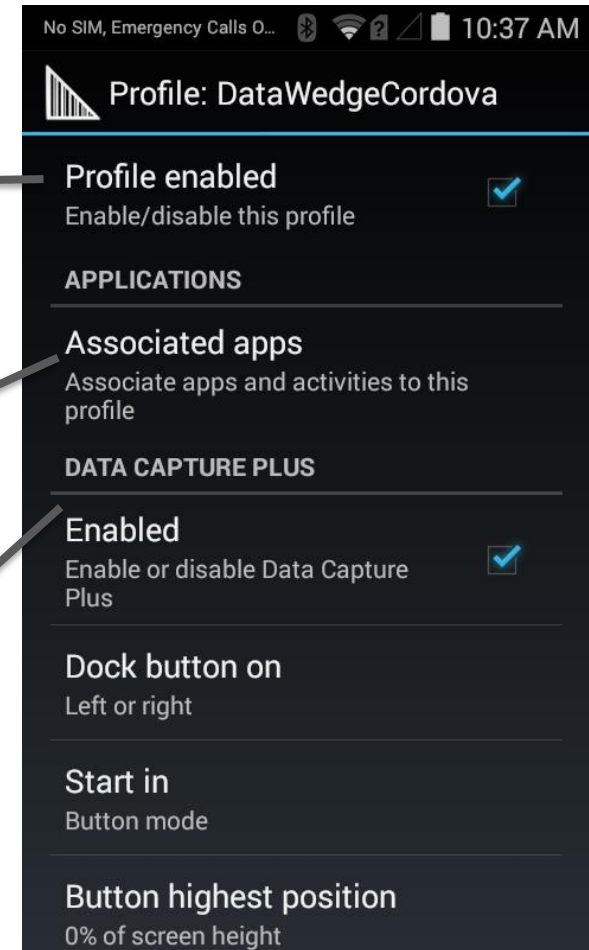
List of available profiles
on device

What is DataWedge?

Profiles can be individually enabled / disabled

Profiles are applied when specified applications come to the foreground

Profiles encapsulate many features outside the scope of this presentation

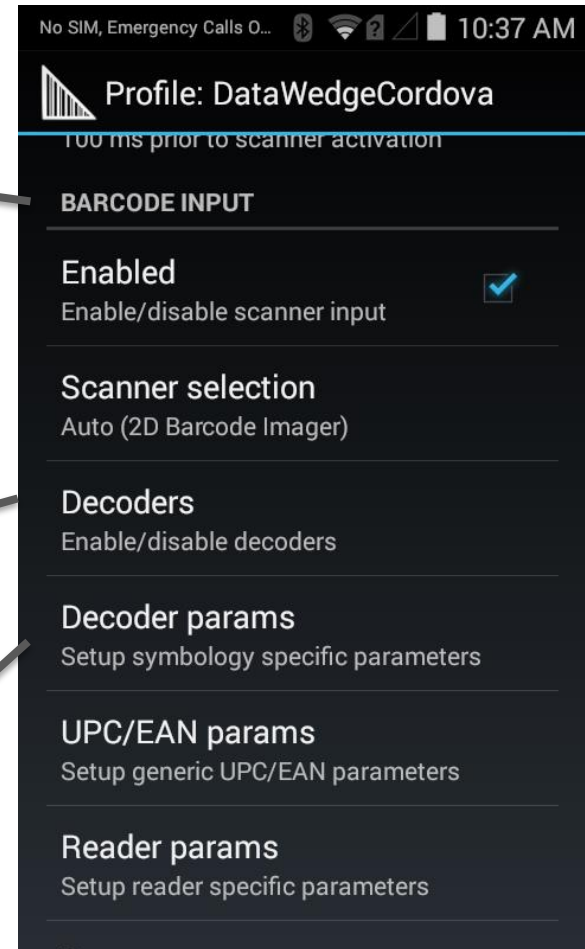


What is DataWedge?

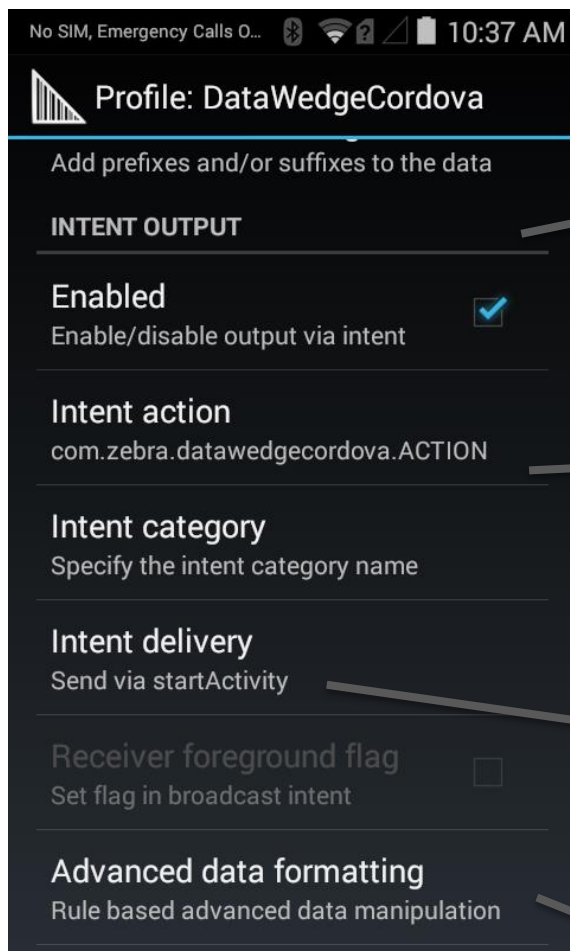
The barcode scanner is one possible method of data capture

Scanner is fully configurable in the profile (but not the Intent API)

Correct configuration can lead to better capture efficiency



What is DataWedge?



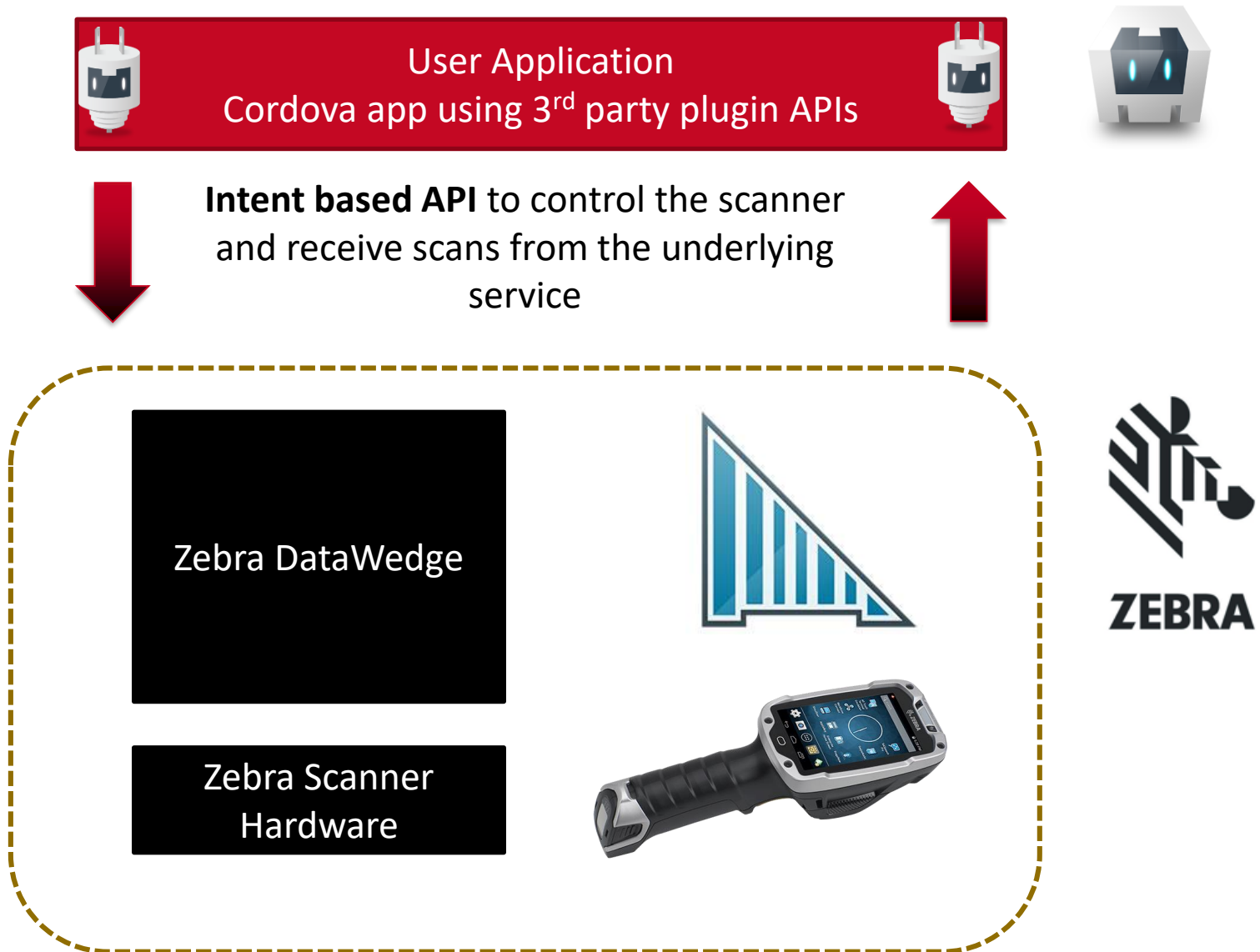
Intents can be sent on every barcode scan

Can specify an action and category

Method of sending intents is configurable

Additional formatting is possible

How to integrate DataWedge into your Cordova application



Pre-requisites:

- NodeJS (<https://nodejs.org/en/>) and Cordova (<https://cordova.apache.org/>)
- Android SDK. Note, no Zebra SDK is required.
- Similar demo app: <https://github.com/darryncampbell/DataWedgeCordova>

Goal: Create a Cordova based application to capture **barcode data** and provide some **control** over the scanner such as **disabling the scanner** when the application is in a specific state.

No SIM, Emergency Calls O... 10:38 AM



APACHE CORDOVA

DEVICE IS READY

START SCANNING

DISABLE SCANNING

No SIM, Emergency Calls O... 10:38 AM



APACHE CORDOVA

DEVICE IS READY

BARCODE: 5060024800364

START SCANNING

DISABLE SCANNING

Benefits:

- Same application can be run on multiple devices
 - Consider a solution that also uses a 3rd party ZXing plugin to cater for non-Zebra devices.
- Can configure the scanner outside of the application during staging
- No need to build libraries into your application or write a custom native plugin
- Simple, powerful API
- No native Java API is available for MSR capture

Restrictions:

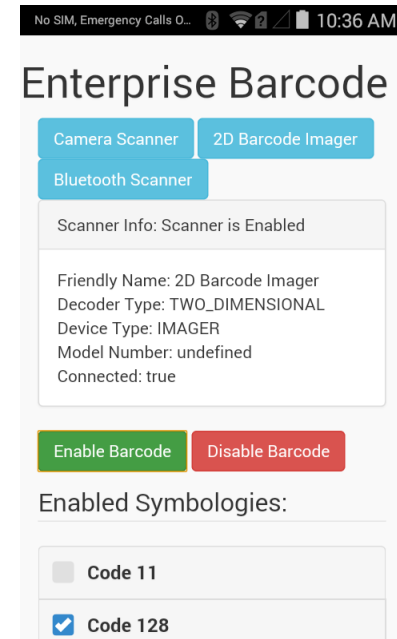
- Dependent on 3rd party solutions (Cordova plugins)
 - Could write our own intent handling plugins.
- Do not have fully control over the scanner through the API, we depend on profiles.

We have presented the current official recommended approach for data capture through Cordova based applications.

Other Cordova plugins:

A google search will produce several Cordova plugins targeted at Zebra's devices. These have **no official endorsement from Zebra** but if they provide a better solution for you then please use them and **tell us how we can improve**.

1. Released under Apache license and uses the DataWedge API to present a Javascript interface to the calling application. Couple of years old now:
 - <https://github.com/BlueFletch/motorola-datawedge-cordova-plugin>
2. Uses the EMDK Java API to access the barcode scanner
 - <https://github.com/darryncampbell/EnterpriseBarcodePoC>
 - <https://github.com/darryncampbell/EnterpriseBarcodeDemo>
3. Custom solution
 - You may write your own plugin or customize one of the above solutions



- Would the Intent approach meet your customer use cases?
 - Would you much rather a 'traditional' Cordova plugin approach?
 - Are you a fan of ngCordova or Ionic Native?
- Does this approach provide you enough control over data capture
- Would you like to see solutions for JavaScript Native frameworks (e.g. ReactNative or NativeScript)?
- Would you like to see solutions for browser-based applications beyond Zebra's Enterprise browser e.g. Progressive Web Apps.
- Is there anything missing from the Intent API?

FEEDBACK

Feedback: developer.zebra.com



3rd party Cordova plugin to receive intents:

<https://github.com/napolitano/cordova-plugin-intent>

3rd party Cordova plugin to send intents:

<https://github.com/lnitsogar/cordova-webintent>

Demo Cordova application integrating 3rd party plugins with DataWedge:

<https://github.com/darryncampbell/DataWedgeCordova>

Blog post on this topic:

<https://developer.zebra.com/community/android/android-forums/android-blogs/blog/2016/08/04/integrating-datawedge-into-your-cordova-application>

DataWedge API documentation:

<http://techdocs.zebra.com/datawedge/5-0/guide/api/>

Proof of concept Cordova plugin to directly speak with the Barcode Scanner:

<https://github.com/darryncampbell/EnterpriseBarcodePoC>

And sample application that uses that proof of concept:

<https://github.com/darryncampbell/EnterpriseBarcodeDemo>