

# Automating Your Way out of the Dark Ages

*Our experience with  
(and without)  
PhoneGap Build*

**@burin**

# *This Talk*

our experience w/ PhoneGap Build  
and how it spoiled us

what we did when we couldn't use  
it anymore

~~about PhoneGap specifically~~

# *Timeline*

Building Manually w/ Xcode & Eclipse

Building/Distributing w/ PhoneGap Build

Manual Builds (again)

Distribution w/ TestFlight & HockeyApp

Automated Build & Distribution

# *The Redesign*

# *From:*

Native iOS

Native Android

Native BlackBerry

Native Windows Mobile

mobile web

touch web

Android touch

*To:*

HTML5!

mobile web, iOS, Android, BlackBerry\*





*Building stuff.*

*Feeling productive.*

*HTML5 all the things.*

creative commons licensed (BY-NC-SA) flickr photo by x-ray delta one:

[http://flickr.com/photos/x-ray\\_delta\\_one/3928200642](http://flickr.com/photos/x-ray_delta_one/3928200642)

# *Test in Chrome, because WebKit.*

Chrome = WebKit

Safari = WebKit

Android browser = WebKit

BlackBerry browser = WebKit



QA team:

*“I wonder how it behaves on  
Android 2.3 wrapped”*

*Test in Chrome, because  
WebKit?*

*Nope. :(*

iOS:

Safari. WebView. Chrome.

Android:

Browser. WebView. Chrome.

BlackBerry:

6.0? 7.0? 10?

Chrome Blink?

*I'll just Build  
Manually with  
Xcode & Eclipse*

# The Dark Age



```
git pull
```

compass compile

```
node r.js -o app.build.js
```

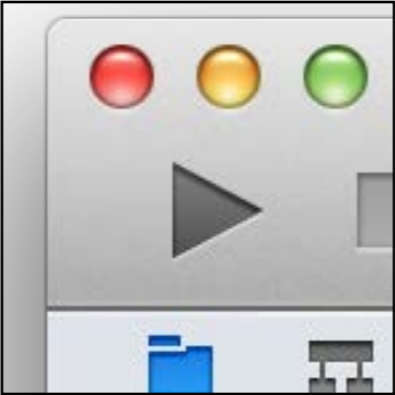
Copy/Paste Files into **WWW**

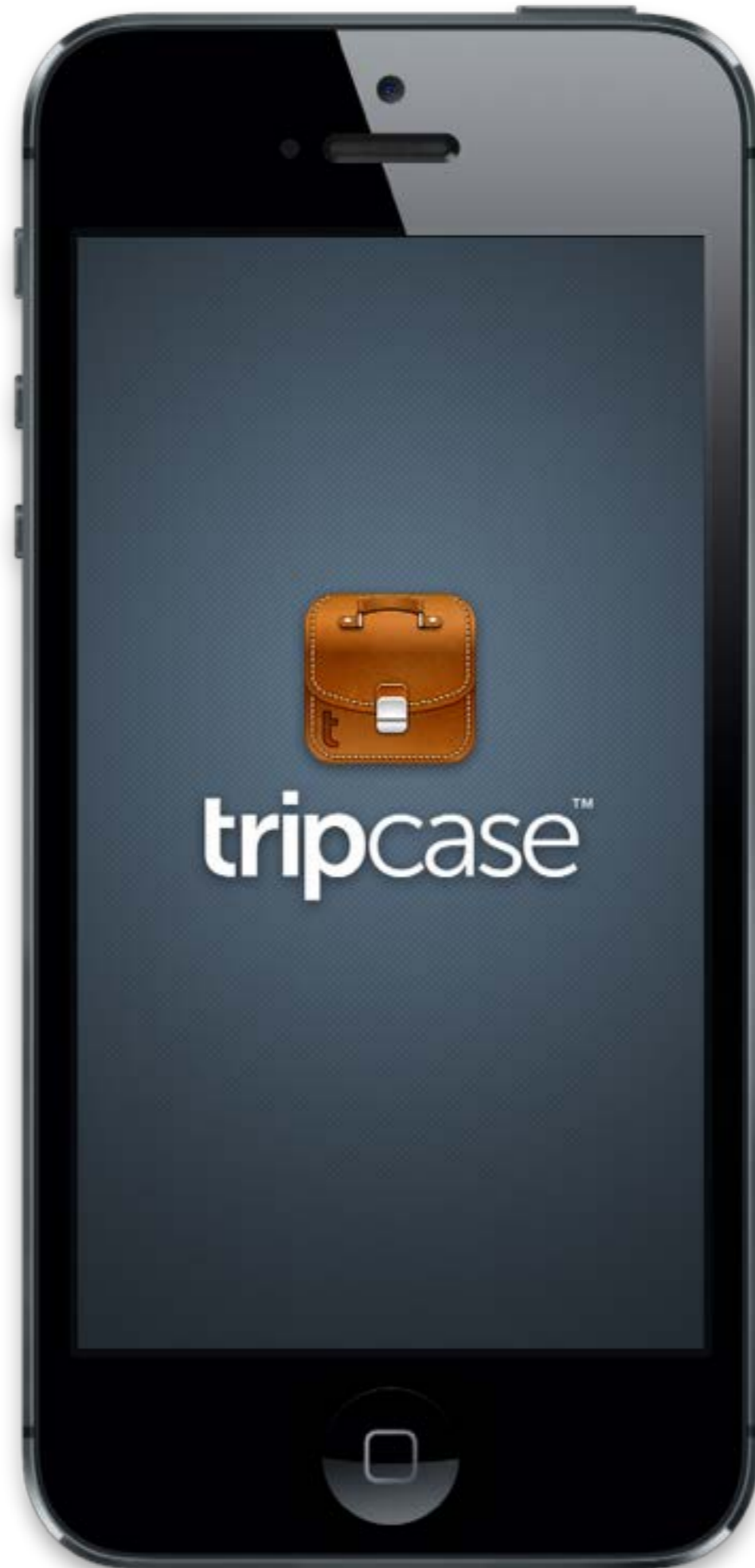
⌘ C

⌘ P

Plug In Phone







tripcase™

Plug In Phone #2





tripcase™



Plug In Phone #3





## **Xcode cannot run using the selected device.**

No provisioned iOS devices are available with a compatible iOS version. Connect an iOS device with a recent enough version of iOS to run your application or choose an iOS simulator as the destination.

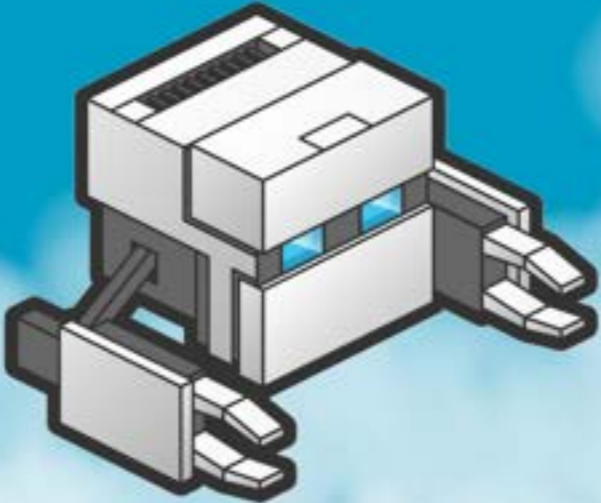
OK

# The Renaissance

Adobe PhoneGap Build x

https://build.phonegap.com

Bd Home Plugins Docs Blog FAQ Support Sign in Register




# Adobe® PhoneGap™ Build


Package mobile apps in the cloud.


Get started!

## Take the pain out of developing mobile apps.

Simply upload your **HTML5**, **CSS**, and **JavaScript** assets to the **Adobe® PhoneGap™ Build** cloud service and we do the work of compiling for you.

-  **Take advantage of the strengths of PhoneGap.**

Build great apps powered by open web standards. Cut down on development time by re-using your existing web dev skills, frameworks and tools. Get all the benefits of cross-platform development while building apps just the way you like.
-  **We compile for you.**

Get app-store ready apps without the headache of maintaining native SDKs. We do the work for you in the cloud and your app will always be built with the most up-to-date SDK for the platform you are targeting.
-  **Support multiple platforms.**

Maximize your productivity while minimizing production time. Target iOS, Android™, Windows® Phone, BlackBerry® 5/6/7 and webOS all with a single codebase.

*With PhoneGap Build:*

```
git pull
```


```
./build.sh
```

Adobe PhoneGap Build

https://build.phonegap.com/apps

Bd Apps Plugins Docs Blog FAQ Support

Your apps + new app



# Awesome App

no description

App ID	Version	PhoneGap
B511B5		3.3.0

Owned by burinasavesna@gmail.com

Last built (s) 1 minute


Source <https://github.com/burn/node-insertion-detection.git>

private

Feedback

Update code Rebuild all

iOS Android Windows BlackBerry HP Symbian



## Part of Adobe Creative Cloud

Your PhoneGap Build plan includes a Creative Cloud free membership. Sign in with an AdobeID to receive 2GB of storage access to Adobe Edge Tools & Services and more.

Get started

Language: English

Navigation

- Apps
- Plugins
- Docs
- Blog
- Help

Account (burinasavesna@gmail.com)

Sign out

Powered by Adobe® PhoneGap™

Find out more

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PhoneGap is a trademark of Adobe. You may not use PHONEGAP or GAP in the title of any application built using PhoneGap or the PhoneGap Build service.

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# Awesome App

no description

Install



Update code

Rebuild all



App ID	PhoneGap	Owned by
861185	Version: 3.3.0	burinasavesna@gmail.com
Last built (4)		
1 minute		
Source		
<a href="https://github.com/burin/node-insertion-detection.git">https://github.com/burin/node-insertion-detection.git</a>		



*Automate All the Things!*

# on every commit

# 1) build app

# 2) zip it

# 3) upload via API

*Went from building once a week  
(maybe)  
to  
building multiple times a day*

# *Timeline*

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Distribution w/ TestFlight & HockeyApp

Automated Build & Distribution

*Outgrowth:  
Manual Builds Again*

# Unsupported Plugins

Manually Building (again)



Manually Distributing (again)

# The Dark Age 2.0

*“Building”*

```
git pull
```

```
./build.sh
```



1. ▲ **Supreme Court to hear arguments on Aereo this week** (washingtonpost.com)  
28 points by xhrpost 1 hour ago | 14 comments
2. ▲ **The ticking time-bomb at the bottom of the Baltic Sea** (economist.com)  
190 points by neverminder 6 hours ago | 59 comments
3. ▲ **Scala 2.11.0 Release Notes** (scala-lang.org)  
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21. ▲ **Nokia mobile will be renamed Microsoft Mobile** (india.com)

Run ⌘R

Test ⌘U

Profile ⌘I

Analyze ⌘B

**Archive**

Build For ▶

Perform Action ▶

Build ⌘B

Clean ⌘K

Stop ⌘.

Scheme ▶

Destination ▶

Create Bot...



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*“Distributing”*

Me: "Want to help? Install this app and email me your UDID"

Teammate: \*"I emailed you my UDID the other day, when can I install the app?"\*

"Um.. let me check. I need to add it to the provisioning profile."

Add UDID to provisioning profile

git pull

Run javascript build script

Push a button

Forgot to get new provisioning profile into Xcode

Refresh profiles

Push a button

Send it out

"it wouldn't install, what's the deal?"\*

"lemme try again"

restart xcode

push a button

"ok try now"

# The Renaissance 2.0

*TestFlight to the rescue! (for  
iOS)*

TestFlight » Upload a build x

https://testflightapp.com/dashboard/builds/add/

TestFlight Dashboard Apps People Tools Support TripCase

TripCase Upload Build

# Upload Build

Upload your build file to TripCase. Builds will be grouped into apps by bundleID.

### Build file (IPA)


Maximum size: 800MB.  
Having trouble [creating an IPA?](#)


### Release Notes

What's new in this build?

Drop your IPA here or click to select a file

Don't have a build yet? [Manually add an app](#) » [Upload](#) »

 **The TestFlight Desktop App for iOS**  
Want screaming fast build uploads? ▶

 **Upload API**  
Plug in and automate your uploads. ▶

Carrier

3:59 PM



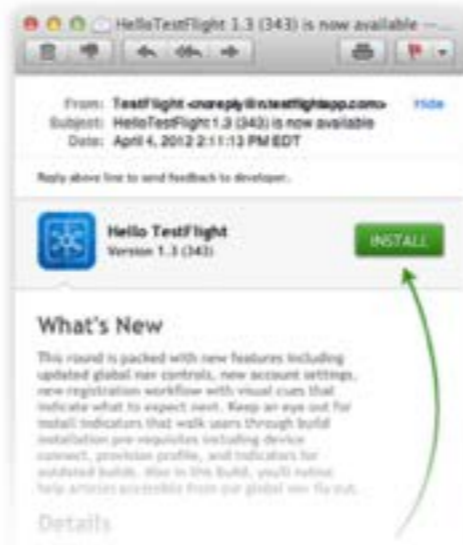
testflightapp.com



Apps



There are no available builds. You will receive an install email when a build is available.



*Hockey App to the rescue! (for  
Android)*

# *Automating the Build AND Distribution*



# *Goals*

Push button “deploy”

Continuous Integration

Reduce TTHN (Time to HackerNews)

*Xcode*

# *Xcode Command Line Tools*

xcrun

xcodebuild

agvtool

# *Shenzhen*

Ruby gem that creates .ipa files

Distributes to TestFlight

Part of nomad (<http://nomad-cli.com/>)

gem install shenzhen

```
ipa build -s {{projectName}} -c Release
```

```
ipa distribute \  
--api_token {{apiToken}} \  
--team_token {{teamToken}} \  
--lists "Core" --notes {{notes}} \  
--notify --replace
```

*Eclipse*



ant release

```
mv bin/{{AppName}}.apk \  
~/Dropbox/Builds/{{appName}}.apk
```

*More Automation*

# *Grunt Tasks for JS Code*

configure api endpoint

add build information

concatenate/minify

compile templates

compass compile

move files to xcode

move files to eclipse

# *Grunt Tasks for Xcode/Eclipse*

configure xcode project bundle id to be branch name

configure xcode project app name to be branch name

configure xcode project build id to be commit revision

build xcode project

distribute app to test flight

build eclipse project

distribute to server for download

*Cordova CLI does some of this  
for you, too*

# *Cordova CLI*

```
cordova build ios
```

```
cordova prepare ios
```

```
cordova compile ios
```

```
cordova emulate ios
```

# *Resources*

[PhoneGap](https://phonegap.com/)

[PhoneGap Build](https://build.phonegap.com/)

[TestFlight](https://testflightapp.com/)

[Hockey App](http://hockeyapp.net/)

[GruntJS](http://gruntjs.com/)

[shenzhen](https://github.com/mattt/shenzhen)

Twitter: **@burin**