

```
git config user.name "Josh Holtz"
```

```
git commit -m "Added in CI/CD with fastlane"
```

```
git commit -m "Does this work?"
```

```
git commit -m "How about now?"
```

```
git commit -m "Ugggghhh"
```

```
git commit -m "sfjiowejfiojewfj"
```

```
git commit -m "Please work 🙏"
```

```
git commit -m "Oh... I forgot an env variable"
```

```
git commit -m "It works!!! Removing all my logs"
```

Who is Josh Holtz?

- ***fastlane*** - 2015 to present
 - Core contributor of *fastlane* since early 2015
 - Lead maintainer of *fastlane* since March 2018
- **RokkinCat** - 2011 to present
 - Software consulting agency focused on new product development
- From **Milwaukee** and now **Chicago** (suburbs)

Another thing about me...

I do have a **stutter** 😞

I have a fear of public speaking 🐼



**The Josh Holtz
Approach To CI/CD
With *fastlane***

So... what *is* CI/CD?

It is...

- CI 📌 Continuous Integration
 - Running the tests???
- CD 📌 Continuous Delivery
 - Builds can be made???
- CD 📌 Continuous Deployment
 - Push to production???

Why CI/CD?

Time is money, friend.

– **Gazlowe, World of Warcraft**

Time is money

- CI *probably* faster
- Jobs scale
- Catches test/build errors ASAP
- Do other work while jobs run
- Documented test/build/release process

Josh's CI Goals

- Validating...
 - that things **still** build
 - no **secret hacks** in build process
- No reliance on **me** to make a build
- Deliver **PR specific** builds for testing
- Latest always on **Test Flight** and **Google Play Beta**

Okay cool, but how?

Where do we start?

Make it *simple*
Build local *first*

Simple and local

```
platform :ios do
  lane :staging
    cocoapods
    match
    gym
    aws_s3
  end
end
```

```
platform :android do
  lane :staging
    gradle
    aws_s3
  end
End
```

Environment variables

```
# .env.dev (committed to version control)
```

```
FASTLANE_TEAM_NAME=Josh Holtz
```

```
GYM_CONFIGURATION=release
```

```
GYM_EXPORT_METHOD=ad-hoc
```

```
GYM_EXPORT_TEAM_ID=<redacted>
```

```
GYM_XCARGS=DEVELOPMENT_TEAM="<redacted>" CODE_SIGN_IDENTITY="Apple Distribution"
```

```
PRODUCE_APP_NAME=Test Ionic
```

```
PRODUCE_SKIP_ITC=true
```

```
PRODUCE_APP_IDENTIFIER=com.joshholtz.testionic
```

```
MATCH_APP_IDENTIFIER=com.joshholtz.testionic
```

```
MATCH_TYPE=adhoc
```

```
MATCH_GIT_BRANCH=master
```

```
IONIC_BUILD_CONFIGURATION=
```

```
S3_BUCKET_APP_DIRECTORY=testionic/dev
```

Links to PR specific builds

1. Build binary with gym or gradle
2. Get PR number from env with `ci_pr_number`
3. Generate S3 bucket path - ex: `"dev/ios/pr/404"`
4. Upload to S3 with `aws_s3`
5. Post comment with link to GitHub with `comment_on_pr`

**But this should also work without a PR
when run locally 🙌**

fastlane iOS

```
lane :staging
  cocoapods
  match
  gym
```

```
path = [ENV['S3_BUCKET_APP_DIRECTORY'], 'ios']
path += ['pr', ci_pr_number] if ci_pr_number
path << 'latest' unless ci_pr_number
```

```
aws_s3(app_directory: File.join(path))
```

```
url = Actions.lane_context[SharedValues::S3_HTML_OUTPUT_PATH]
comment_on_pr(body: "Download iOS app at #{url}")
end
```


fastlane **Android**

```
lane :staging
  gradle
```

```
  path = [ENV['S3_BUCKET_APP_DIRECTORY'], 'android']
  path += ['pr', ci_pr_number] if ci_pr_number
  path << 'latest' unless ci_pr_number
```

```
  aws_s3(app_directory: File.join(path))
```

```
  url = Actions.lane_context[SharedValues::S3_HTML_OUTPUT_PATH]
  comment_on_pr(body: "Download Android app at #{url}")
```

```
end
```

Run on local

```
$ bundle exec fastlane ios staging --env dev
```

```
$ bundle exec fastlane android staging --env dev
```

Run on CI

jobs:

 build-ios:

 macos:

 xcode: '11.2.1'

 steps:

- checkout
- run: echo "ruby-2.4.5" > ~/.ruby-version
- run: sudo gem install bundler
- run: bundle install
- run: bundle exec fastlane ios staging --env dev

Tada



Pr 1 #1

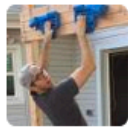
 **Open** joshdholtz wants to merge 2 commits into `master` from `pr-1` 

 Conversation 0

 Commits 2

 Checks 0

 Files changed 5



joshdholtz commented 10 hours ago

+  ...

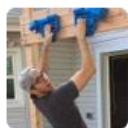


  Pr 1

✖ c6c65d0

  Whoops

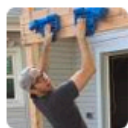
✔ c4f6bc4



joshdholtz commented 9 hours ago

Author +  ...

Download Android app at <https://testionic.s3.amazonaws.com/testionic/dev/android/pr/1/index.html>



joshdholtz commented 9 hours ago

Author +  ...

Download iOS app at <https://testionic.s3.amazonaws.com/testionic/dev/ios/pr/1/index.html>

That was too ez 🤔

Secret environment variables

```
# .env.secret (not committed to version control)
# Match
MATCH_GIT_URL=https://github.com/joshdholtz/fastlane-match-repo.git
MATCH_PASSWORD=<redacted>
```

```
# Android
ANDROID_KEYSTORE_KEYSTORE_NAME = testionic.keystore
ANDROID_KEYSTORE_ALIAS_NAME = testionic
ANDROID_KEYSTORE_PASSWORD = <redacted>
ANDROID_KEYSTORE_KEY_PASSWORD = <redacted>
ANDROID_KEYSTORE_FULL_NAME = testionic
ANDROID_KEYSTORE_ORG = testionic
ANDROID_KEYSTORE_ORG_UNIT = testionic
ANDROID_KEYSTORE_CITY_LOCALITY = Milwaukee
ANDROID_KEYSTORE_STATE_PROVINCE = WI
ANDROID_KEYSTORE_COUNTRY = US
```

```
# Used for commenting install links on PR
FL_GITHUB_API_TOKEN=<redacted>
```

```
MATCH_USERNAME=<redacted>
DELIVER_USERNAME=<redacted>
```

```
S3_ACCESS_KEY=<redacted>
S3_SECRET_ACCESS_KEY=<redacted>
S3_BUCKET=testionic
S3_REGION=us-east-1
```

Upload secrets to CI

Environment Variables

Environment Variables for joshdholtz/fastlane-ionic-demo

Import Variables

Add Variable

Add environment variables to the job. You can add sensitive data (e.g. API keys) here, [rather than placing them in the repository](#).

Environment Variables for joshdholtz/fastlane-ionic-demo

[Import Variables](#)[Add Variable](#)

Add an Environment Variable ✕

To disable string substitution you need to escape the `$` characters by prefixing them with `\`. For example, a value like `usd$` would be entered as `usd\$`.

Name

Value

Cancel

Add Variable

Use dotenv_to_ci

https://github.com/joshdholtz/dotenv_to_ci

```
$ dotenv_to_ci circleci -V github -u joshdholtz -p "fastlane-circleci-test" -d ".env.test" --verbose
Setting key=DISABLE_HOOKS} value=true
Setting key=FASTLANE_TEAM_ID value=12345321234
Setting key=AWS_SNS_ACCESS_KEY value=less secrecy but you know
Setting key=AWS_SNS_SECRET_ACCESS_KEY value=sshhhhhhh
Setting key=AWS_SNS_REGION value=us-east-1
Setting key=AWS_SNS_PLATFORM_GCM_API_KEY value=a key you dont need to see
Setting key=SIGH_APP_IDENTIFIER value=com.app.ios
Setting key=SIGH_USERNAME value=dontenable2fa@email.com
Setting key=SIGH_TEAM_ID value=324324324
Setting key=CORDOVA_IOS_TEAM_ID value=324324324
Setting key=FASTLANE_PASSWORD value=fastlaneisthebest
Setting key=FL_HOCKEY_API_TOKEN value=riphockeyiwillmissyou
Setting key=FL_HOCKEY_NOTES_TYPE value=1
Successfully added!
```

Environment Variables for joshdholtz/fastlane-ionic-demo

Import Variables

Add Variable

Add environment variables to the job. You can add sensitive data (e.g. API keys) here, [rather than placing them in the repository](#).

Name	Value	Remove
ANDROID_KEYSTORE_ALIAS_NAME	xxxxonic	×
ANDROID_KEYSTORE_CITY_LOCALITY	xxxxukee	×
ANDROID_KEYSTORE_COUNTRY	xxxxS	×
ANDROID_KEYSTORE_DATA	xxxxqlPQ	×
ANDROID_KEYSTORE_FULL_NAME	xxxxonic	×
ANDROID_KEYSTORE_KEYSTORE_NAME	xxxxtore	×
ANDROID_KEYSTORE_KEY_PASSWORD	xxxxonic	×
ANDROID_KEYSTORE_ORG	xxxxonic	×
ANDROID_KEYSTORE_ORG_UNIT	xxxxonic	×
ANDROID_KEYSTORE_PASSWORD	xxxxonic	×
ANDROID_KEYSTORE_STATE_PROVINCE	xxxxl	×
DELIVER_USERNAME	xxxx.com	×
FL_GITHUB_API_TOKEN	xxxx0f2c	×
MATCH_GIT_URL	xxxx.git	×
MATCH_PASSWORD	xxxxt01	×
MATCH_USERNAME	xxxx.com	×
S3_ACCESS_KEY	xxxxWCVQ	×
S3_BUCKET	xxxxonic	×
S3_REGION	xxxxst-1	×
S3_SECRET_ACCESS_KEY	xxxxr7p8	×

Add ssh key for match

Checkout keys for joshdholtz/fastlane-ionic-demo

Here are the keys we can currently use to check out your project, submodules, and preferred key is revoked.

See the documentation about [how to get SSH keys injected into your jobs](#).

Description

[joshdholtz/fastlane-ionic-demo deploy key](#) 

Add user key

If a deploy key can't access all of your project's private dependencies, we can co

Create and add joshdholtz user key

Description

[joshdholtz user key](#) 

[joshdholtz/fastlane-ionic-demo deploy key](#) 

Be extra!

Add more cool things

- Run **tests**?
- Post **success/failure** to Slack?
- Take **screenshots** and post to PR?
- Send to **Test Flight** and **Google Play** on master merge



Thank you!
@joshdholtz
Q & A???