



WEBINAR

# React Native Deployment

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# DEPLOYING TO APP STORES



- Many steps are required
- Summarized at <https://apiko.com/blog/deploying-react-native-apps-to-app-store-and-play-market/>
- For Android need **.apk** files (Android Package) can download directly from any website
- For iOS need **.ipa** files (iOS App Store Package) must install from iOS App Store
- Developer accounts are not free
  - iOS - need an Apple Developer account which is \$99 per year
  - Android - need a ? which is a \$25 one-time registration fee



# BUILDING SIGNED ANDROID APK

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- See <https://facebook.github.io/react-native/docs/signed-apk-android>
- Steps
  - generate signing key
  - edit **gradle.properties**
  - add signing config to gradle config
  - build
    - `cd android`
    - `./gradlew assembleRelease`
  - test
    - `react-native run-android --variant=release`



## VISUAL STUDIO APP CENTER ...



- “Continuously build, test, release, and monitor apps for every platform”
- Supports many kinds of apps
  - Android, iOS, React Native, Xamarin, Cordova, Windows, macOS, tvOS
- <https://appcenter.ms/>
  - “Connect to GitHub, Bitbucket, or Azure DevOps”
  - “build your app in the cloud on every commit”
  - “automatically run unit tests, release to testers and stores, or test your UI on real devices”

may not work with  
Expo projects!

## ... VISUAL STUDIO APP CENTER ...

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- Free features
  - 240 build minutes per month
  - 30 day free trial for running tests
  - unlimited app distribution
  - analytics
  - crash reporting





# APP CENTER SETUP

<https://docs.microsoft.com/en-us/appcenter/sdk/getting-started/react-native>



- Browse <http://appcenter.ms>
- Click "Add new app"
- Enter name and description
- Select iOS or Android for OS
- Select "React Native" for Platform
- Click "Settings" in left nav.
- Click vertical "..." in upper-right and select "Copy app secret"
- `npm install appcenter appcenter-analytics \ appcenter-crashes --save-exact`
- For iOS, one-time  
`sudo gem install -n /usr/local/bin cocoapods`
- `react-native link`
- Enter the secret when prompted or modify secret in file path that is output
- May need to add "setup" section to package.json
- Commit all code to a GitHub repo



# KEYSTORE GENERATION

Is anything on this slide really needed?  
It seems like commands on the next  
slide generate this file again.



- `keytool -genkeypair -v -keystore my-release-key.keystore \`  
`-alias my-key-alias -keyalg RSA -keysize 2048 -validity 10000`
- Answer a bunch of questions
  - remember the password you entered
- Generates **`my-release-key.keystore`**



## ADDING KEYSTORE TO JDK ...



- Determine location by entering `/usr/libexec/java_home`
- `cd` to that directory
- `sudo keytool -genkey -v -keystore my-release-key.keystore \`  
`-alias my-key-alias -keyalg RSA -keysize 2048 -validity 10000`
- Copy `my-release-key.keystore` to `android/app` directory of application
- Edit `android/gradle.properties`

```
MYAPP_RELEASE_STORE_FILE=my-release-key.keystore
MYAPP_RELEASE_KEY_ALIAS=my-key-alias
MYAPP_RELEASE_STORE_PASSWORD=*****
MYAPP_RELEASE_KEY_PASSWORD=*****
```

password from  
previous slide



## ... ADDING KEYSTORE TO JDK

- Edit `android/app/build.gradle`

```
android {  
    ...  
    signingConfigs {  
        release {  
            if (project.hasProperty('MYAPP_RELEASE_STORE_FILE')) {  
                storeFile file(MYAPP_RELEASE_STORE_FILE)  
                storePassword MYAPP_RELEASE_STORE_PASSWORD  
                keyAlias MYAPP_RELEASE_KEY_ALIAS  
                keyPassword MYAPP_RELEASE_KEY_PASSWORD  
            }  
        }  
    }  
    buildTypes {  
        release {  
            ...  
            signingConfig signingConfigs.release  
        }  
    }  
}
```

## BUILDING AND TESTING ANDROID .APK

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- `cd android`
- `./gradlew assembleRelease` I get an error in this step!
- `react-native run-android --variant=release`



# APP CENTER BUILD

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- Click "Build" in browser left nav.
- Once for each project
  - select a repository service such as GitHub
  - select a repository
  - click a branch name such as "master"
  - click "Configure build" and choose options
  - for signed builds
    - click wrench icon in upper-right
    - turn on "Sign builds"
- press "Save & Build"
- Subsequent builds
  - click a branch name
  - click "Build now"
    - will see build output in browser



## APP CENTER DOWNLOAD/RUN/TEST

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- Click "Download" and click "Download build"
  - downloads a **build.zip** file
- Unzip to get **app-release.apk**
- Install on an Android phone



# APPLE DEVELOPER ACCOUNT

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- Steps to create
  - browse <https://developer.apple.com/enroll/>
  - See [notes/AppleDeveloperNotes.md](#)

