

Mobile Developer Community Meetup

December 10, 2025



Agenda

- Land Acknowledgement
- Program Updates
- Difference between Apple Developer & Apple Enterprise programs
- App Signing Deep Dive



Land Acknowledgement

- I would like to acknowledge the land on which I am privileged to work, live and recreate on is the traditional territory of the Malahat people.



DevX Team Updates: Roadmap 2025 for Mobile Apps

- ✓ Work with Kyndryl to provide a centralized place for them to access apple enterprise app build file
 - ✓ Done - May 2025
- ✓ Audit access to Apple and Google programs
 - ✓ Done - June 2025
- Add documentation for business owners on mobile app development and management
 - To be scheduled



DevX Team Updates: Google Account

- Remember this issue from the spring?
- It was caused because we used an existing Government of BC DUNS number
- The address associated with that number changed in May



Province of British Columbia, Canada

Organization account • Account ID: [REDACTED]

Your developer profile and all apps will be removed from Google Play on June 12, 2025

To help keep users safe, Google will remove your developer profile and apps from Google Play if issues are found with your account or the information you've provided.

Your developer profile and all apps will be removed if the following issues are not fixed and approved by June 12, 2025.

! Your organization name or address is no longer verified

[View details](#)



Google Account - Solution

- Short term:
 - We have verified the account with the existing DUNS number's new address
- Long term:
 - A DUNS number managed by the Developer Experience Team will be used instead
 - We have started the application process
 - 4000 Seymour will be the address associated with the account



DevX Team Updates: Apple Developer Program Certificate

- The Apple Developer Certificate was renewed November 6th
 - It will expire next year on Nov 6, 2026
- You will need to update your provisioning profile to use the new certificate (if you haven't already)
- [Instructions](#) are in the Mobile Developer's Guide



DevX Team Updates: Apple Enterprise Program

- Apple Enterprise Program application was submitted on Dec 8th.



Apple Developer vs Enterprise Programs

- Did you know there are 2 Apple programs?
 - Apple Developer Program
 - Apple Enterprise Program



Apple Developer Program

- Public apps available on Apple's App Store
- Certificate expires yearly
 - App works with an expired certificate and expired provisioning profile
- App goes through Apple's App Review
- Manage app through AppStoreConnect
- Use TestFlight for testing app





Apple Enterprise Program

- For internal apps released to managed employee phones.
 - App team works with the Mobile Device Services team to schedule a release
 - Mobile Device Services team releases the app to devices using MDM inTune
 - There is a cost associated with the release
- App does not go through Apple's App Review



Apple Enterprise Program

- App does NOT work with an expired certificate or expired provisioning profile
 - Certificate expires every 3 years
 - Provisioning profiles expire yearly
- Apply to the Enterprise program each year
- No TestFlight testing available



Do you wonder...

- Why do Apple Developer (App Store) apps work with an expired certificate/provisioning profile but Apple Enterprise apps do not?





Answer...

How the apps are signed



Apple Developer Program app signing

- The signing certificate you sign your app with allows you to upload your app to AppStoreConnect
- This signing certificate indicates that you are a developer of the app and are allowed to make updates to it
- This signing certificate prevents other developers from making updates to your app



Apple Developer Program app signing

- But this signing certificate is NOT used with your released app
- When you distribute an app on the App Store, the App Store re-signs your app as part of the distribution process
- The app is resigned with credentials that don't expire



Apple Developer Program app signing

- The provisioning profile is removed from the distributed app
- The app is also resigned for TestFlight releases
- The provisioning profile and certificate only need to be valid at the time you submit your app to AppStoreConnect



Apple Developer Program app signing

- All apps distributed through the AppStore are resigned by Apple
- You can verify this on a MacOS using:

```
codesign --display -vv "/Applications/My.app"
```



AppStore resigning

MacOs app downloaded from AppStore

```
> $ codesign --display -vv "/Applications/Slack.app"
Executable=/Applications/Slack.app/Contents/MacOS/Slack
Identifier=com.tinyspeck.slackmacgap
Format=app bundle with Mach-O universal (x86_64 arm64)
CodeDirectory v=20500 size=645 flags=0x10000(runtime) hashes=9+7 location=embedded
Signature size=4797
Authority=Apple Mac OS Application Signing
Authority=Apple Worldwide Developer Relations Certification Authority
Authority=Apple Root CA
Info.plist entries=39
TeamIdentifier=BQR82RBBHL
Runtime Version=26.0.0
Sealed Resources version=2 rules=13 files=63
Internal requirements count=1 size=228
```

MacOS app downloaded from web

```
> $ codesign --display -vv "/Applications/Wireshark.app"
Executable=/Applications/Wireshark.app/Contents/MacOS/Wireshark
Identifier=org.wireshark.Wireshark
Format=app bundle with Mach-O thin (arm64)
CodeDirectory v=20500 size=112675 flags=0x10000(runtime) hashes=3510+7 location=embedded
Signature size=8989
Authority=Developer ID Application: Wireshark Foundation (7Z6EMTD2C6)
Authority=Developer ID Certification Authority
Authority=Apple Root CA
Timestamp=Apr 16, 2025 at 9:23:59 AM
Info.plist entries=20
TeamIdentifier=7Z6EMTD2C6
Runtime Version=13.3.0
Sealed Resources version=2 rules=13 files=477
Internal requirements count=1 size=184
```



Apple Enterprise Program app signing

- Because the app is not released through the AppStore it is NOT resigned by Apple
- Apple Enterprise certificates are used to sign an app for release to devices
- These certificates expire every 3 years
- This is also why TestFlight is not available as TestFlight resigns an app



Apple Enterprise Program app signing

- The first time a user opens an app, the certificate is validated by contacting the Apple OCSP (Online Certificate Status Protocol) server.
- If the certificate has been revoked, the app won't launch.
- The OCSP response is cached 3 - 7 days.
- The validity of the certificate isn't checked again until the device has restarted and the cached response has expired

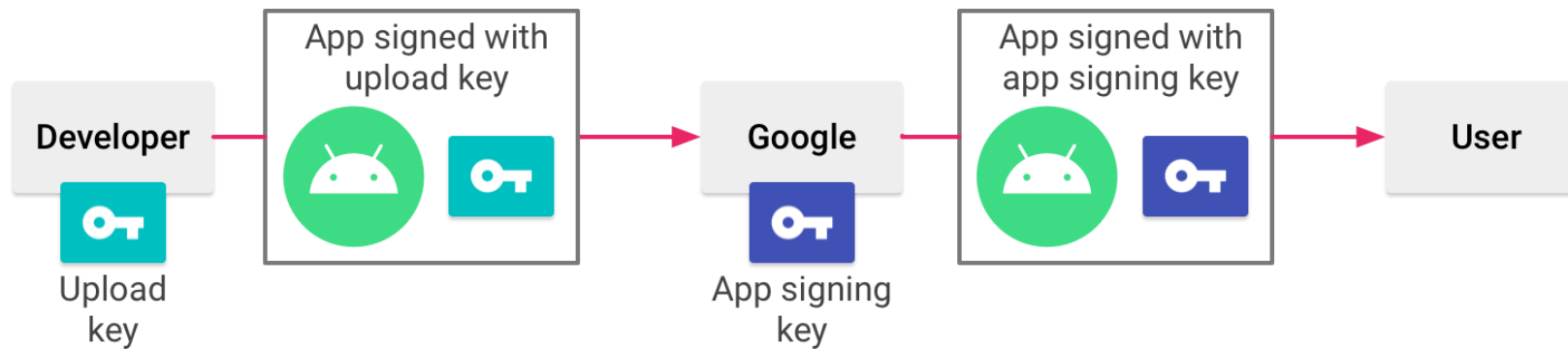


Apple Enterprise Program app signing

- The provisioning profile is distributed with the app (in contrast to the Apple Developer program)
- Distribution provisioning profiles expire 12 months after they're issued.
- After the expiration date, the profile is removed and the app won't launch.

What about Google?

- Google Play Store uses 2 keys:
 - Upload Key
 - App Signing Key





Google upload key

- The upload key is used to sign your app for upload to the Google Play Store
- Google uses the upload certificate to verify your identity
- Each team manages their own upload certificate



Google signing key

- The key that is used to sign APKs that are installed on a user's device.
- As part of Android's secure update model, the signing key never changes during the lifetime of your app.
- The app signing key is private and must be kept secret.



Google signing key

- Apps created after August 2021 use Play App Signing to sign your app for distribution
- You can either use your own key or have Google generate one for you
- You may want to use your own key if you release on stores other than Google Play



Apple vs Google

Apple Developer Program Signing

- Certificate used for the apple account. Multiple teams use it
- Distributed app resigned with Apple Certificate

Google Signing

- Each team manages their own upload key
- Distributed app resigned by Google with app team's own signing key



Questions

- Any questions?



2026 Meetups

- A new series of meetings will be sent out in the New Year
- Please contact the Developer Experience team if you would like to present at the next meetup!
- Developer.Experience@gov.bc.ca



References

- <https://developer.apple.com/documentation/technotes/tn3161-inside-code-signing-certificates>
- <https://developer.apple.com/documentation/technotes/tn3125-inside-code-signing-provisioning-profiles>
- <https://support.apple.com/en-ca/guide/deployment/depce7cefc4d/web>
- <https://help.apple.com/xcode/mac/current/#/dev154b28f09>
- <https://developer.android.com/studio/publish/app-signing>