

# Mobile Developer Community Meetup

Sept 11, 2024



# Agenda

- Land Acknowledgement
- Apple Developer Program Update
- Apple Enterprise Program Update
- Google Update
- GitHub Advanced Security



# Land Acknowledgement

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



# Apple Developer Program

- Distribution Certificate **expires September 19<sup>th</sup>**
- This affects teams that use a pipeline to sign their app
- Teams that use XCode managed signing certificates are NOT affected



# What happens when a certificate expires?

- Users of your app are NOT affected
- The app will function as usual
- Developers cannot upload new versions of the app to the app store with the expired certificate
  - The app must be signed with a current certificate



# Developer Experience Team Actions

- **Monday, September 16<sup>th</sup> at 8:30 am**
- Create the new certificate
- Create new provisioning profiles for affected apps
- Place new certificate in GitHub secrets



# Developer Experience Actions

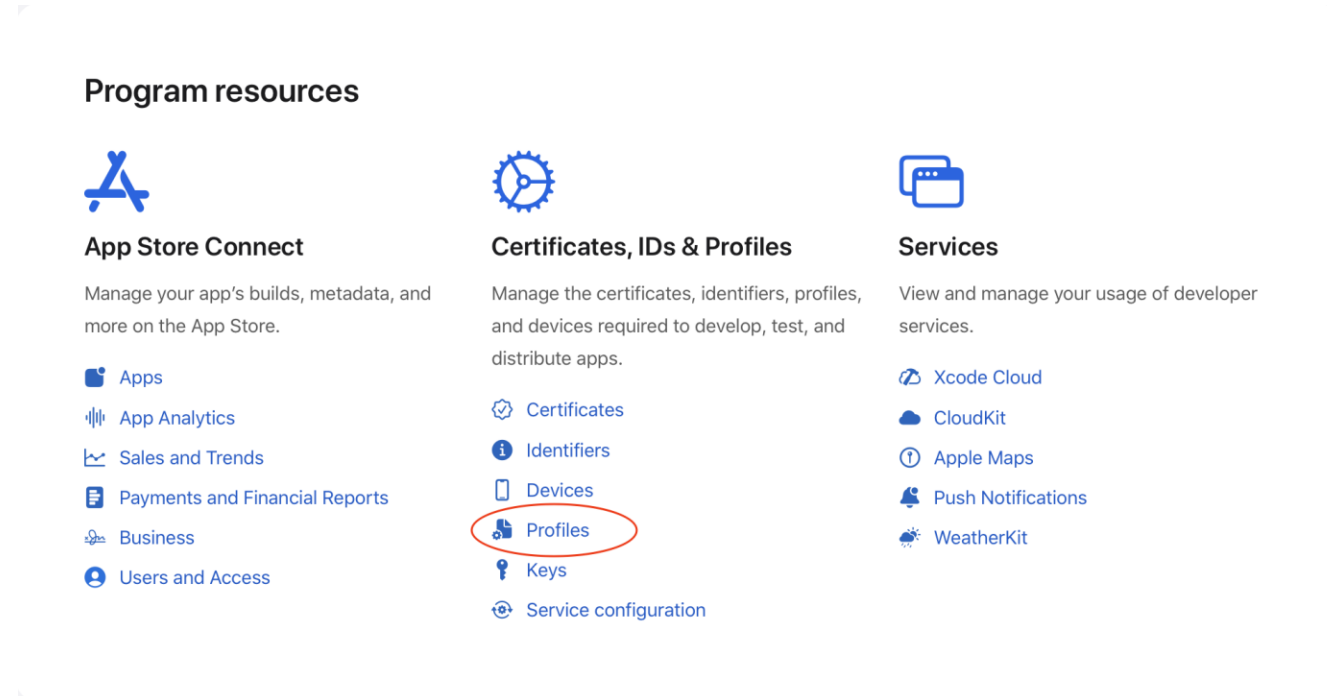
- The following bcgov GitHub organization secrets will be updated:
  - APPLE\_APP\_STORE\_BUILD\_CERTIFICATE\_BASE64
  - APPLE\_APP\_STORE\_BUILD\_CERTIFICATE\_PASSWD
- Notification of when work is completed will be posted to the [#devops-mobile-development](#) channel in Rocket.Chat



# What your team needs to do

- Download the new provisioning profile at:

<https://developer.apple.com/account>







# What your team needs to do

- The new provisioning profile will be named “app name -2024/25”
- Update your GitHub repo’s secret to use the new provisioning profile

## Profiles +

🔍 All Types ▾ All Platforms ▾ [Edit](#)

NAME ▾	PLATFORM	TYPE	EXPIRATION	
BC Secure Wallet - 2023/24	iOS	App Store	2024/09/19	
BC Services Card DEV - Dev Distribution	iOS	Development	Expired	
BC Virtual Visit Notification Ext. Patient 2023/24	iOS	App Store	2024/09/19	
BC Virtual Visit Notification Ext.Provider 2023/24	iOS	App Store	2024/09/19	
BC Virtual Visit Patient 2023/24	iOS	App Store	2024/09/19	
BC Virtual Visit Provider - 2023/24	iOS	App Store	2024/09/19	
BC WILD - 2023/24	iOS	App Store	2024/09/19	<a href="#">Download</a>
BC WILD - Development	iOS	Development	Expired	
BC Wildfire Information - 2023/24	iOS	App Store	2024/09/19	
Developer Experience Mobile Test App - 2023/24	iOS	App Store	2024/09/19	
InvasivesBC - Plants and Animals - 2023/24	iOS	App Store	Invalid	
InvasivesBC Muscles - 2023/24	iOS	App Store	2024/09/19	
WorkBC - 2023/24	iOS	App Store	2024/09/19	
WorkBC Test - 2023/24	iOS	App Store	2024/09/19	



# What your team needs to do

- Base64 encode the provisioning profile and update your GitHub secret with it.
  - **Do NOT CHECK IT INTO YOUR CODEBASE. USE A GitHub SECRET**
- Optionally: Update your exportOptions.plist file to use new provisioning profile id.
- Refer to [GitHub's documentation on installing certificates](#) for details



# What your team needs to do

- Trouble?
  - Contact the developer experience team:

[Developer.Experience@gov.bc.ca](mailto:Developer.Experience@gov.bc.ca)



# Questions?

- Does this timeline and strategy work for you?

# Apple Enterprise Program

- All Enterprise Program apps are now signed in a GitHub workflow
- Build artifacts are created in either a private bcgov-c repo or in a private project in Artifactory
- The Enterprise Certificate and build files are now handled securely and meet Apple's requirements for belonging to the Enterprise Program
- **Thank you to all the teams for your work on this project!**





# Apple Enterprise Program

- One internal app is scheduling deployment
- The old certificate will be revoked once that app is deployed
- A notice will be sent via email and in Rocket.Chat before the old certificate is revoked



# Apple Certificates Milestone

- For both the Developer and Enterprise program all apps are now either signed by a CI/CD pipeline or via XCode managed signing
- Certificates are no longer emailed to teams
- **Thank you everyone for your work on this over the past year!**





# Questions?

Any questions?





# Google Program – Developer Profile

- Developer Experience Team working to verify account
- Account verification requires contact info to display on listing page
- We are working with OCIO IT Service Desk to setup a phone number and email address for this.
- We expect very little contact via this. Any inquiries received will be forwarded to appropriate teams

## Your developer profile and all apps will be removed from Google Play on 25 September 2024

All developers must complete account verification to comply with the updated [Play Console requirements policy](#). If you do not complete account verification by 25 September 2024, your developer profile and apps will be removed from Google Play.

To learn more about account verification, [visit the Help Centre](#).

### ! Verify your developer account

Only the account owner can verify this developer account

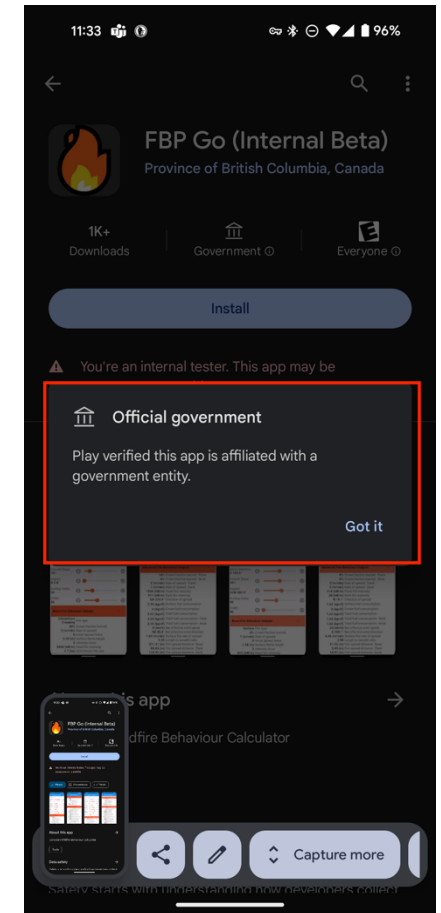
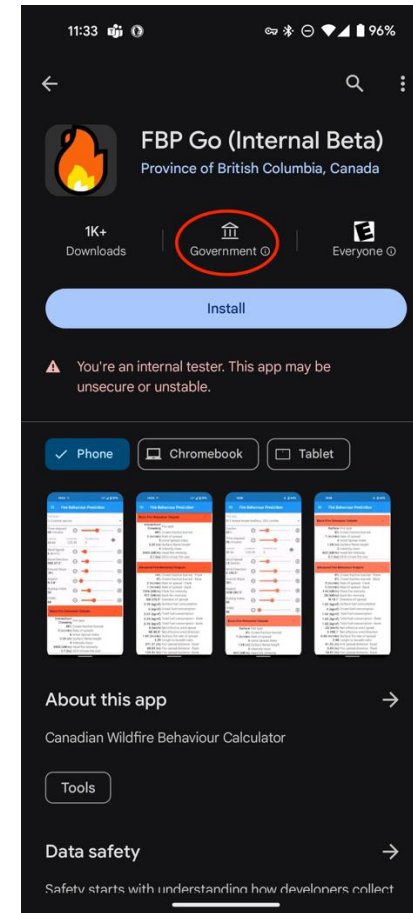
Need more time? [Request an extension](#)

Get started



# Google Program - Reminder






- Google now adds a “Government” badge in the app listings on official apps
- App teams can declare an app as an official government app by providing details to Google








# Google Program

## Monetise

-  Products
-  Price experiments
-  Promo codes
-  Financial reports
-  Monetisation setup

## Policy and programmes

-  Policy status
-  App content
-  Teacher approved

## Government apps

Tell us if your app is for use by a government of any kind. This includes national, state and city governments, and local authorities. This helps us make sure that the right teams review your submission. [Learn more](#)

### Why this impacts your app

All developers are required to tell us if their app is a government app. Submit this declaration to release app updates.

Start declaration

## Financial features

Apps that provide financial features may need to comply with certain regulations in some countries/regions. Submit accurate and up-to-date details of the financial features in your app to help us make sure that the right teams review your submission. [Learn more](#)

### Why this impacts your app

All developers are required to submit this declaration for their apps

Start declaration



# Google Program



## **Make sure that you have provided proof that your app meets our requirements**

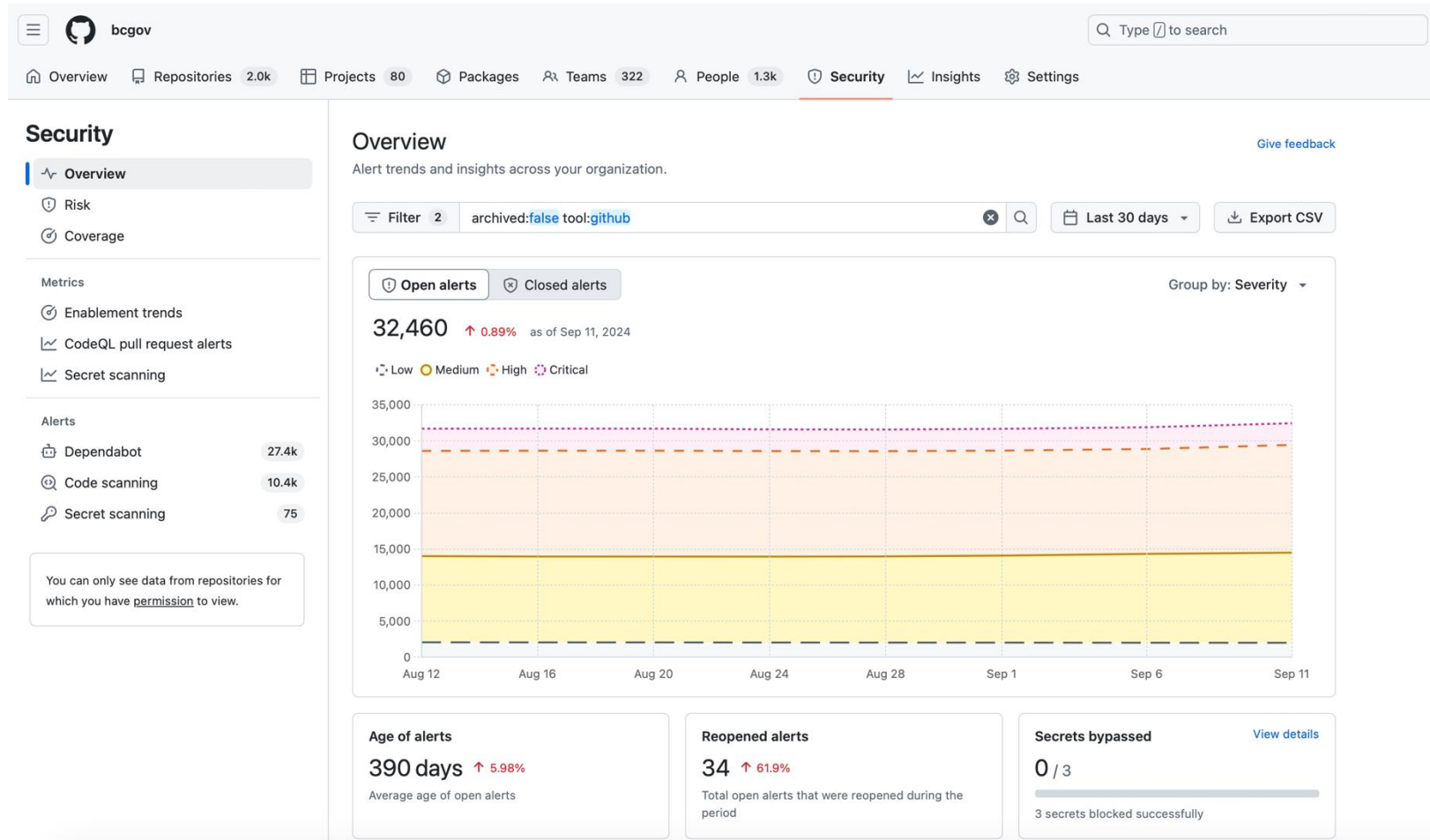
If you are a third-party developer facilitating a government process (such as voting or ID validation) you need to provide proof of authorisation. The relevant government or government entity must submit this documentation.

If you are a government entity, you can provide proof of permission by submitting documentation. This documentation must include government contact information for validation.

[Go to advance notice form](#)    [Learn more](#)



# GitHub Advanced Security





# GitHub Advanced Security

- Available to all public repositories
  - If your repo is in the bcgov organization, you have access to it
- View alerts to repos you have access to from the “Security” tab on the top menu bar
- Coming soon to private repos in bcgov-c organization



# GitHub Advanced Security

- Settings available in repo's:

Settings -> Security -> Code security and analysis menu

The screenshot shows the GitHub repository settings page for a repository named '31'. The 'Settings' tab is selected in the top navigation bar. A blue banner at the top states: 'Repository settings saved. This initial setup might take a while because CodeQL will perform a full scan of the repository.'

The left sidebar contains a list of settings categories: General, Access, Code and automation, Security, Integrations, and Custom properties. The 'Security' category is expanded, showing 'Code security and analysis' as the selected option.

The main content area is titled 'Code security and analysis' and contains the following settings:

- Private vulnerability reporting**: Allow your community to privately report potential security vulnerabilities to maintainers and repository owners. [Learn more about private vulnerability reporting.](#) Disable
- Dependency graph**: Understand your dependencies. Enabled
- Automatic dependency submission**: Automatically detect and report build-time dependencies for select ecosystems. Disabled
- Dependabot**: Keep your dependencies secure and up-to-date. [Learn more about Dependabot.](#)
- Dependabot alerts**: Receive alerts for vulnerabilities that affect your dependencies and manually generate Dependabot pull requests to resolve these vulnerabilities. [Configure alert notifications.](#) Disable
- Dependabot rules**: Create your own custom rules and manage alert presets. 1 rule enabled Settings
- Dependabot security updates**: Enabling this option will result in Dependabot automatically attempting to open pull requests to resolve every open Dependabot alert with an available patch. If you would like more specific configuration options, leave this disabled and use [Dependabot rules](#). Enable
- Grouped security updates**: Groups all available updates that resolve a Dependabot alert into one pull request (per package manager and directory of requirement manifests). This option may be overridden by group rules. Enable



# Secret Scanning

- Alerts on [supported partner secrets](#)
- Can dismiss alerts as false positives or resolve them

Overview

Reporting

Policy

Advisories

Vulnerability alerts

Dependabot 59

Code scanning 1

Secret scanning ^

High confidence 4

Other

### Secret scanning alerts

High confidence Other 0

☐ 4 Open 0 Closed

Bypassed Validity Secret type Provider Sort

<input type="checkbox"/>	<input type="checkbox"/>	<b>Google API Key</b>	AIzaSyCL37I5zpWEauPopROB...	Active	#4 opened on Nov 8, 2023 • Detected secret in app/ios/GoogleService-Info.plist:6
<input type="checkbox"/>	<input type="checkbox"/>	<b>Google API Key</b>	AIzaSyB9TMILh7AQmEGCdwvv...	Active	#3 opened on Nov 8, 2023 • Detected secret in app/.../app/google-services.json:23
<input type="checkbox"/>	<input type="checkbox"/>	<b>Google API Key</b>	AIzaSyDIeHtE0Ds_P8LduRhU...	Active	#2 opened on Sep 26, 2023 • Detected secret in app/.../app/google-services.json:23
<input type="checkbox"/>	<input type="checkbox"/>	<b>Google API Key</b>	AIzaSyByvJDrhcSJTy27Qqu9...	Active	#1 opened on Sep 26, 2023 • Detected secret in app/ios/GoogleService-Info.plist:10





# Code Scanning

- [CodeQL](#) scanning is enabled with “default setup” for all bcgov GitHub orgs
- Scans repos that use a supported language:
  - C/C++
  - C#
  - Go
  - Java/Kotlin
  - JavaScript/TypeScript
  - Python
  - Ruby
  - Swift
- You can configure multiple code scanning tools



# Code Scanning

- GitHub will automatically detect the language of your repo
- If you are using a cross platform framework, you may need to configure the default settings
- Either exclude languages or provide an advanced codeql workflow



# Code Scanning – ReactNative Example

- GitHub detects Java/Kotlin from the android directory in my repo, but no custom code exists in that directory
- Turn off Java/Kotlin for the repo

⚙️ General

Access

👤 Collaborators and teams

👥 Team and member roles

🗨️ Moderation options

Code and automation

🌿 Branches

🏷️ Tags

📄 Rules

🎬 Actions

🔗 Webhooks

📁 Environments

📄 Pages

📁 Custom properties

Security

🔍 Code security and analysis

Code security and analysis / CodeQL default configuration

Languages

Select one or more languages detected on the default branch for CodeQL to scan.

☐ Java / Kotlin \*

☒ JavaScript / TypeScript

☐ Python

☐ Ruby

\* These languages may [require a custom build configuration](#) for a successful setup.

Scan settings

Adjust the CodeQL scanning strategy to suit the needs of this application

Query suite

Select the [group of CodeQL queries](#) to run against your code

Default

Threat model

Select the sources of [tainted data](#) that may pose a risk to this application.

This setting only applies to Java / Kotlin and C# analysis.

Remote sources



# Code Scanning – ReactNative Example

- GitHub detects Java/Kotlin and I want to provide a custom configuration for it
- Turn on “Advanced” CodeQL Anaylasis
- This will provide a boilerplate workflow you can edit

```
1  name: "CodeQL Advanced"
2  on:
3    push:
4      branches: [ "main" ]
5    pull_request:
6      branches: [ "main" ]
7    schedule:
8      - cron: '34 8 * * 4'
9  jobs:
10   analyze:
11     name: Analyze (${ matrix.language })
12     runs-on: ${ (matrix.language == 'swift' && 'macos-latest') || 'ubuntu-latest' }
13     permissions:
14       security-events: write
15       packages: read
16       actions: read
17       contents: read
18     strategy:
19       fail-fast: false
20     matrix:
21       include:
22         - language: java-kotlin
23           build-mode: none # This mode only analyzes Java. Set this to 'autobuild' or 'manual' to analyze Kotlin too.
24         - language: javascript-typescript
25           build-mode: none
26     steps:
27       - name: Checkout repository
28         uses: actions/checkout@v4
29       - name: Initialize CodeQL
30         uses: github/codeql-action/init@v3
31         with:
32           languages: ${ matrix.language }
33           build-mode: ${ matrix.build-mode }
34       - if: matrix.build-mode == 'manual'
35         shell: bash
36         run: |
37           echo 'If you are using a "manual" build mode for one or more of the' \
38             'languages you are analyzing, replace this with the commands to build' \
39             'your code, for example:'
40           echo ' make bootstrap'
41           echo ' make release'
42           exit 1
43       - name: Perform CodeQL Analysis
44         uses: github/codeql-action/analyze@v3
45         with:
46           category: "/language:${matrix.language}"
```



# What's next

- Turn on Advanced Security for bcgov-c
- Investigate additional configurations:
  - example:
    - block uploads of .env files
    - Provide custom secret patterns to scan for



# Questions

Any questions?



# Next Meetup - Dec 4th @1pm

We are looking for presenters!

- Please contact the Developer Experience team if you would like to present at the next meetup
- [Developer.Experience@gov.bc.ca](mailto:Developer.Experience@gov.bc.ca)