

NY Swift^y

GETTING STARTED WITH XCODE CLOUD

APRIL 18,
2023

NEW YORK

Who am I?

- 💻 Senior software engineer at the BBC
- ✍️ Weekly blog writer at polpiella.dev
- 📬 iOS CI/CD Newsletter curator
- 🐝 Based in Manchester
- 📍 From Barcelona



What I'll talk about

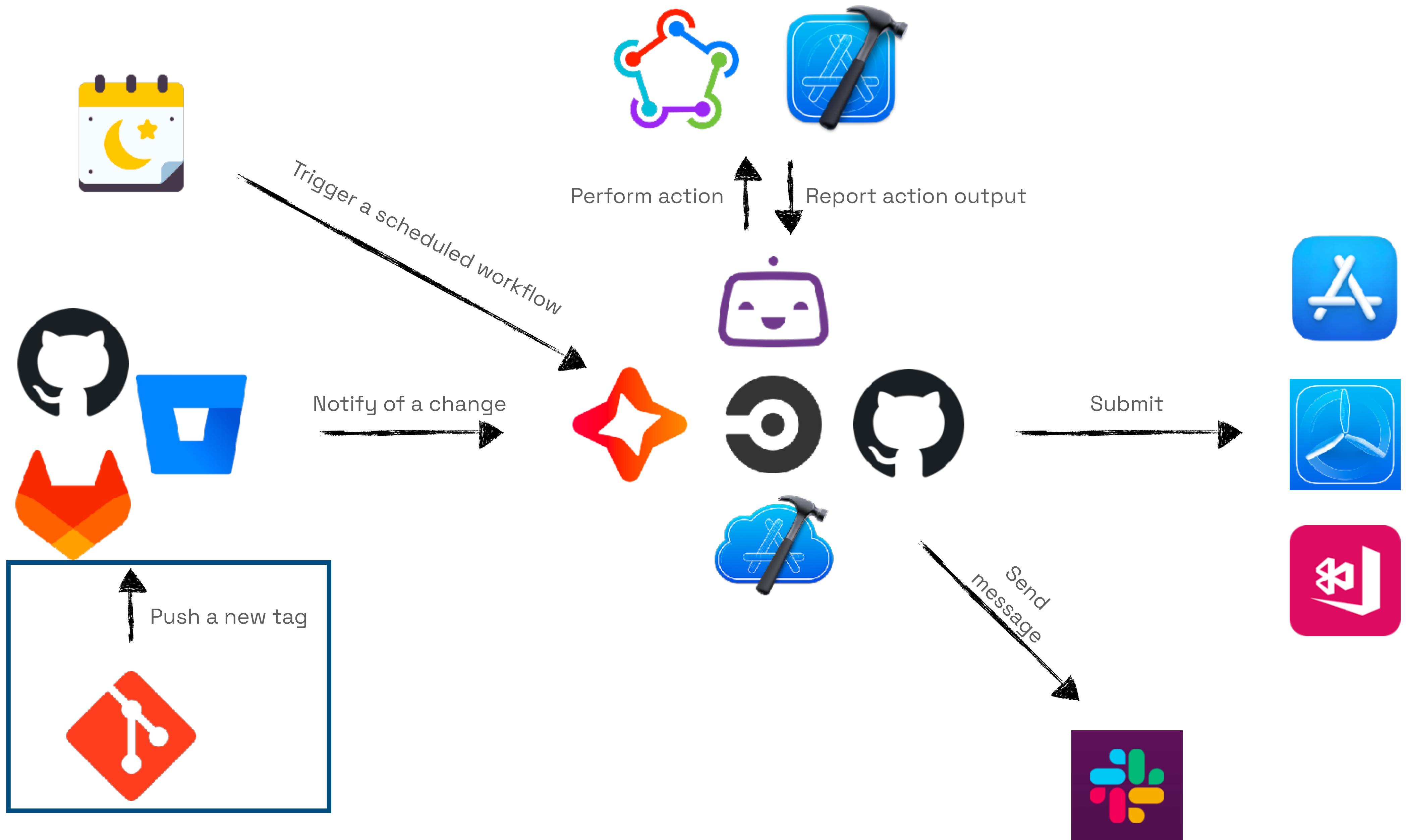
- What is **CI/CD** and **why** do you need it?
- **What is** Xcode Cloud?
- **Two** workflows
- **Programmatic** Xcode Cloud runs
- **Custom** Xcode Cloud functionality



What is CI/CD and why do you need it?

“Continuous Integration and Continuous Deployment is a method to frequently deliver apps to customers by introducing automation into the stages of app development.”

What is CI/CD? - RedHat





Why do you need CI/CD?

- **Automate** complex processes
- **Schedule** repetitive tasks
- **Flexibility** and **scalability**
- Build **confidence** on your codebase
- Guard against **vulnerabilities**
- **Enforce** code styles

The screenshot shows the GitHub organization page for Dependabot. At the top, there's a summary card for the organization:

- Dependabot**
- Automated dependency updates built into GitHub
- 844 followers
- United States of America
- <https://github.com/features/security>
- support@github.com
- Verified

Below the summary card, there are navigation links: Overview (highlighted), Repositories (21), Projects, Packages, and People (9).

The main area is titled "Pinned" and contains a pinned repository card for `dependabot-core`:

- dependabot-core** Public
- Dependabot's update PR creation logic. Feedback: <https://github.com/orgs/community/discussions/categories/code-security>
- Ruby
- 3.3k stars
- 785 issues

Below the pinned repository, there's a section titled "Repositories" with a search bar and filters for Type, Language, and Sort.

Three repositories are listed in the "Repositories" section:

- dependabot-core** Public
- Dependabot's update PR creation logic. Feedback: <https://github.com/orgs/community/discussions/categories/code-security>
- Ruby
- 3,259 stars
- 785 issues
- 578 (16 issues need help)
- 94 pull requests
- Updated 29 minutes ago

- cli** Public
- A tool for testing and debugging Dependabot update jobs.
- Go
- 43 stars
- MIT license
- 9 issues
- 3 pull requests
- 2 pull requests
- Updated 5 hours ago

- smoke-tests** Public
- A collection of manifest files for various package managers and is used to perform end-to-end tests for Dependabot.



Noam Efergan

@No_Wham

...

Do you think there's a reason to use CI/CD tools for personal projects? Besides of course the practice and all that, is there any benefit of doing it instead of just manually doing the steps ?

11:45 AM · Dec 13, 2022

2 Likes



Tweet your reply

Reply



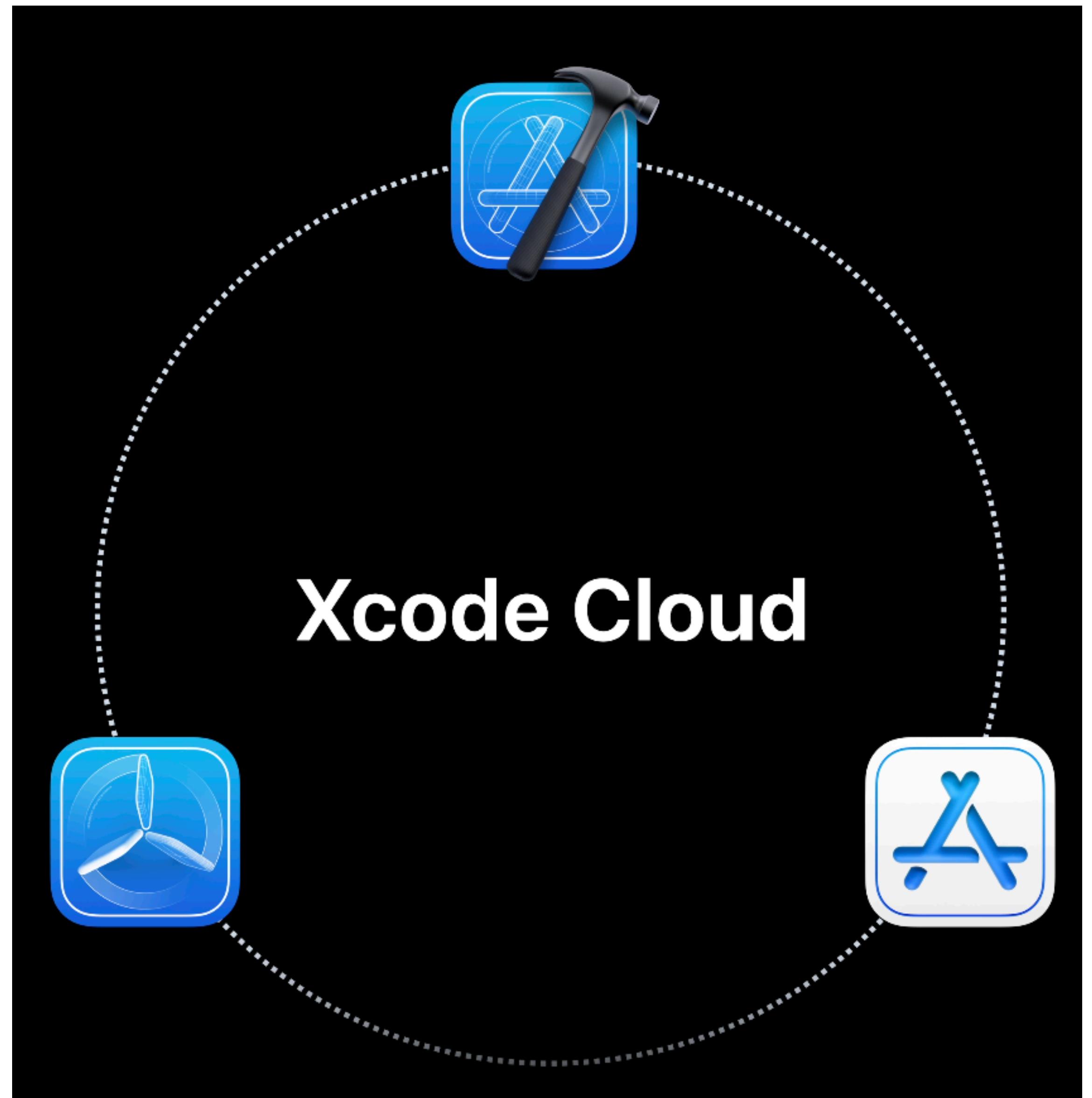
Pal Díaz @palpielladex · Dec 13, 2022

What is Xcode Cloud?



What is Xcode Cloud?

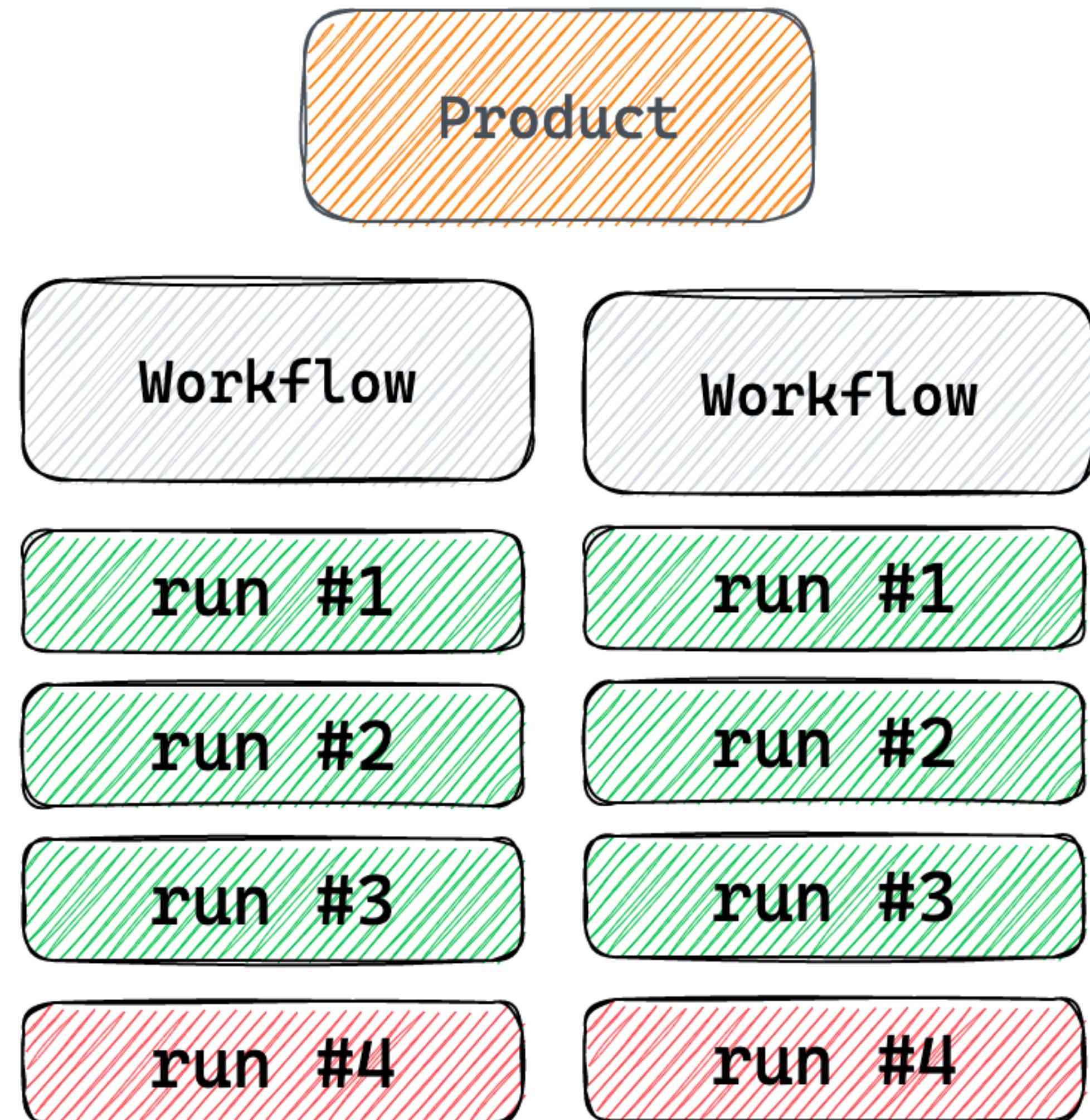
- Apple's **CI/CD service**
- **Equivalent** to GHA, Bitrise, etc.
- Deeply integrated into **Xcode** and **App Store Connect**
- Introduced in **WWDC21**
- Subscriptions were available from **August 2022**





How does it work?

- **Products, Workflows** and **Builds**.
- **Product** represents your app in Xcode Cloud.
- Multiple **workflows** in a product.
- **Builds** are runs of a specific workflow.





The anatomy of a workflow

- **Where - Environment**
 - macOS version, Xcode version, Environment variables and secrets, Clean
- **When - Start conditions**
 - Branch, PR, Tag, Scheduled
- **What - Actions + Post-Actions**
 - **Actions**
 - Build, Test - Multiple devices and versions, Archive and Analyse
 - **Post-Actions**
 - Deploy to Testflight, send Slack messages and send emails



Where can workflows run?

- macOS runners
- Set up per-workflow
- Multiple Xcode versions available
- Multiple macOS versions available
- No self-hosted runners
- Very app focused

Environment

Xcode Version: ✓ Latest Release

macOS Version: Latest Beta or Release (Currently Xcode 14.3 beta 2 (14E5207e))

Environment Variables

+ -

- Latest Release (Currently Xcode 14.2 (14C18))
- Xcode 13 (13A233)
- Xcode 13.1 (13A1030d)
- Xcode 13.2.1 (13C100)
- Xcode 13.3.1 (13E500a)
- Xcode 13.4.1 (13F100)
- Xcode 14.0.1 (14A400)
- Xcode 14.1 (14B47b)
- Xcode 14.2 (14C18)
- Xcode 14.3 beta (14E5197f)
- Xcode 14.3 beta 2 (14E5207e)

Environment

Xcode Version: Latest Release

macOS Version: ✓ Latest Release

Environment Variables

+ -

- macOS Ventura 13.3 beta 3 (22E5236f)
- macOS Ventura 13.3 beta 2 (22E5230e)
- macOS Ventura 13.3 beta (22E5219b)
- macOS Ventura 13.2.1 (22D68)
- macOS Ventura 13.1 (22C65)
- macOS Ventura 13.0.1 (22A400)
- macOS Monterey 12.6.4 (21G503)
- macOS Monterey 12.5.1 (21G83)
- Latest Release (Currently macOS Ventura 13.2.1 (22D68))
- Latest Beta or Release (Currently macOS Ventura 13.3 beta 3 (22E5236f))

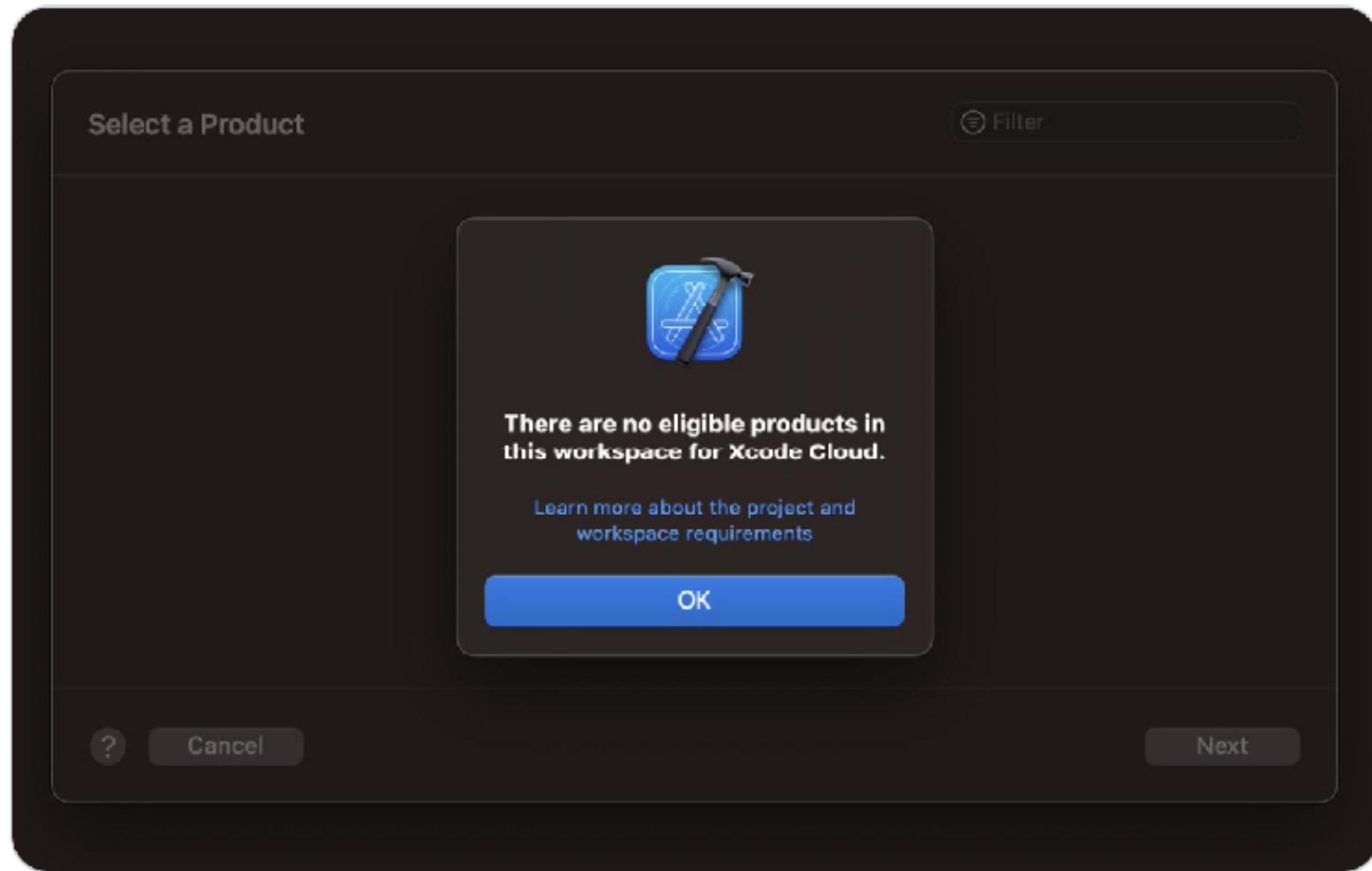


Pol Piella
@polpielladev

...

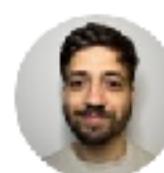
Am I right in thinking that Xcode cloud only works for projects with an app target?

So say if I had a Swift Package I couldn't use Xcode cloud to run tests and do some other CI-related work? I am happy to use GHA as I usually do but kinda wanted to check Xcode cloud out 😊



7:56 PM · Nov 22, 2022

View Tweet analytics



Tweet your reply

Reply

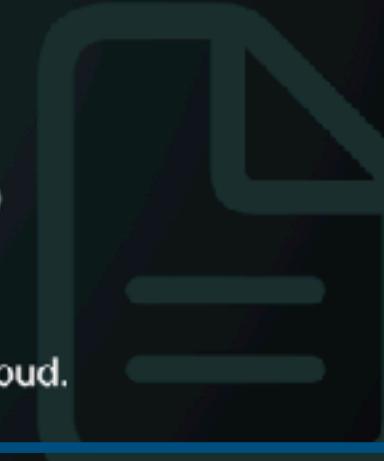
- Xcode IDE
 - > Projects and workspaces
 - > Capabilities
 - Code
 - Porting Your macOS Apps to Apple Silicon
 - Finding and refactoring code
 - Fixing issues in your code as you type
 - > Build system
 - > Application binary interfaces
 - > Source control management
 - Essentials
 - Configuring your Xcode project to use source control
 - Tracking code changes in a source control repository
 - Git
 - Organizing your code changes with source control
 - Combining code changes in a source control repository
 - Configuring source control preferences in Xcode
 - Continuous integration and delivery
 - > Xcode Cloud
 - Essentials
 - About continuous integration and delivery with Xcode Cloud
 - Requirements for using Xcode Cloud
 - Setup and maintenance
 - Configuring your first Xcode Cloud workflow
 - Making dependencies available to Xcode Cloud
 - Configuring Xcode Cloud for your team
 - Building Swift packages and Swift Playgrounds app projects ...
 - Setting the next build number for Xcode Cloud builds
 - Removing your project from Xcode Cloud
 - Usage data
 - Reviewing Xcode Cloud usage data
 - Workflows
 - Developing a workflow strategy for Xcode Cloud
- > Xcode Cloud workflow reference
 - Creating a workflow that builds your app for distribution
- Source code management
 - > Source code management setup
 - Configuring requirements for merging a pull request

 Filter

Article

Building Swift packages and Swift Playgrounds app projects with Xcode Cloud

Add your Swift package or Swift Playgrounds app project to an Xcode project to build it in Xcode Cloud.



Overview

Xcode Cloud comes with support for the Swift Package Manager, and using Swift package dependencies in your app project requires little to no configuration. However, Xcode Cloud can't build standalone Swift packages. To build your Swift package with Xcode Cloud:

1. Create an app project or workspace in Xcode.
2. Add your Swift package as a local package as described in [Organizing your code with local packages](#).
3. Commit your `Package.resolved` file.
4. Create your first workflow as described in [Configuring your first Xcode Cloud workflow](#).

When Xcode Cloud starts a build, it builds your Swift package as part of the app project.

Similarly, Xcode Cloud can't build standalone apps you create with [Swift Playgrounds](#). To build an app you created with Swift Playgrounds, save the Swift Playground app project to your Mac, add it to an Xcode project as described above, then configure your first workflow for the Xcode project.

Note

To learn more about building projects with Xcode Cloud that require Swift package dependencies, see [Use Swift package dependencies and Git submodules](#).

See Also

Setup and maintenance

- [Configuring your first Xcode Cloud workflow](#)
Configure your project or workspace to use Xcode Cloud and adopt continuous integration and delivery.
- [Making dependencies available to Xcode Cloud](#)
Review dependencies and make them available to Xcode Cloud before you configure your project to use Xcode Cloud.
- [Configuring Xcode Cloud for your team](#)
Start using continuous integration and delivery with Xcode Cloud as a team.

Pricing

Subscriptions available

You can subscribe to one of four monthly plans for Xcode Cloud, depending on the number of compute hours² you need. Upgrade or downgrade your subscription at any time. And all Apple Developer Program members receive 25 hours per month for free.³

**25 compute
hours/month**

Free³

**100 compute
hours/month**

US\$49.99/month

**250 compute
hours/month**

US\$99.99/month

**1000 compute
hours/month**

US\$399.99/month

1. Xcode Cloud requires Apple Developer Program membership.

2. A compute hour is an hour of time used to execute a specific task in the cloud, such as building an app or running automated tests. For example, running 5 tests of 12 minutes each equals one compute hour. Xcode Cloud runs tests in parallel with other actions, such as analyzing, archiving, and building, so you'll get results quickly.

3. Free through December 2023, then US\$14.99 per month if you choose to subscribe at that time.

Let's break it down

and let's read the small letter 😅

- A **compute hour** = 60 minutes of cloud execution.
- 12 **serial** tasks of 5 minutes each = 1 **compute hour**
- 12 **parallel** tasks of 5 minutes each = 1 **compute hour**.
- 25 **free** hours - It is more than you think!

⚠️ Free tier ends in **December 2023**! It's going to be
\$14.99/month on the cheapest plan

Let's break it down

and let's read the small letter 😅

App Store Connect Apps Analytics Trends Reports Users and Access Agreements Pol Piella Abadia ▾
QReate ▾ App Store Services TestFlight Xcode Cloud

Builds Usage Trends Team Usage Export as CSV Last 30 Days

Builds Created: 17 (+0%) Usage: 52m (+0%) 30-Day Avg. Usage: 48m (+0%)
+/- compared to preceding 30 days

1h
45m
30m
15m

Feb 18 23 28 Mar 5 10 15 20

Workflows

NAME	USAGE	BUILDS CREATED	AVERAGE PER BUILD
Main	33m (+0%)	9	4m
Testflight	17m (+0%)	7	2m

Highest Usage Builds

Setting up an Xcode Cloud product

XcodeCloudDemo

XcodeCloudDemo Ready | Today at 17:11

ContentView

Local Cloud

XcodeCloudDemo ContentView body

```
1 // ContentView.swift
2 // XcodeCloudDemo
3 // Created by Pol Piella Abadia on 20/03/2023.
4 //
5 import SwiftUI
6
7 struct ContentView: View {
8     var body: some View {
9         VStack {
10             Image(systemName: "globe")
11                 .imageScale(.large)
12                 .foregroundColor(.accentColor)
13             Text("Hello, world!")
14         }
15         .padding()
16     }
17 }
18
19 struct ContentView_Previews: PreviewProvider {
20     static var previews: some View {
21         ContentView()
22     }
23 }
```

Vertical Stack

Spacing: Inherited +

Alignment: Top Center

Modifiers

Accessibility

Label: Inherited

Identifier: Inherited

Padding

Padding: Default

Frame

Size: Inher. Width: Inher. Height:

Add Modifier

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started...

Learn More

Hello, world!

Line: 17 Col: 10

XcodeCloudDemo

XcodeCloudDemo Ready | Today at 17:11

Local Cloud

ContentView.swift

```
1 // ContentView.swift
2 // XcodeCloudDemo
3 // Created by Pol Piella Abadia on 20/03/2023.
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```

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started... Learn More

Select a Product

The project "XcodeCloudDemo" does not have a remote repository.

To create Xcode Cloud workflows, first add a remote source code repository from Bitbucket, GitHub, or GitLab.

Learn more OK

Cancel Next

Vertical Stack

Spacing: Inherited Alignment: Top

Modifiers

Accessibility

Label: Inherited Identifier: Inherited

Padding

Padding: Default

Frame

Size: Inter-Width: Inher. Height: Inher.

Add Modifier

XcodeCloudDemo

XcodeCloudDemo Ready | Today at 17:11

ContentView

Local Cloud

XcodeCloudDemo ContentView body

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Vertical Stack

Spacing: Inherited +

Alignment: Top Center

Modifiers

Accessibility

Label: Inherited

Identifier: Inherited

Padding

Padding: Default

Frame

Size: Inher. Width: Inher. Height:

Add Modifier

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started...

Learn More

Hello, world!

Line: 17 Col: 10

XcodeCloudDemo

main

My Mac

XcodeCloudDemo. Ready | Today at 17:19

Local Cloud

ContentView.swift

No Selection

Preview paused

```
1 // ContentView.swift
2 // XcodeCloudDemo
3 // Created by Pol Piella Abadia on 20/03/2023.
4 //
5
6 import SwiftUI
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8 struct ContentView: View {
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25     }
26 }
```

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started... Learn More

Select a Product

Product Platform Team

XcodeCloudDemo dev.polpiella.XcodeCloudDemo iOS, macOS Pol Piella Abadia ✓

Filter

Cancel Next

No Selection

Line: 27 Col: 1

XcodeCloudDemo

main

XcodeCloudDemo My Mac

XcodeCloudDemo: Ready | Today at 17:19

Local Cloud

ContentView.swift

No Selection

Preview paused

```
1 // ContentView.swift
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3 // Created by Pol Piella Abadia on 20/03/2023.
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```

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started... Learn More

Review Workflow

Name: Default

Start Condition: Branch Changes (main)

Environment: Latest Release (Currently Xcode 14.2 (14C18))

Actions: Archive (iOS, macOS)

Post-Actions: No TestFlight Deployments, No Notifications

Cancel Edit Workflow... Previous Next

Line: 27 Col: 1

XcodeCloudDemo

main

XcodeCloudDemo My Mac

XcodeCloudDemo: Ready | Today at 17:19

Local Cloud

ContentView.swift

No Selection

Preview paused

```
1 // ContentView.swift
2 // XcodeCloudDemo
3 // Created by Pol Piella Abadia on 20/03/2023.
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```

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started... Learn More

Grant Access to Your Source Code

GitHub github.com

polpielladev

polpielladev/xcode-cloud-demo

Grant Access...

No Selection

Line: 27 Col: 1

appstoreconnect.apple.com

App Store Connect

Connect Xcode Cloud with GitHub

To grant access to your repositories, complete the following steps in GitHub.

1 Authorize Xcode Cloud to link your Apple ID with your source control account.
This will enable a personalized view of your builds.

2 From the list of GitHub Organizations, choose "polpielladev" to navigate to the installation page.

On the installation page, select the following repositories:

- polpielladev/xcode-cloud-demo

Only an organization owner can install the app. Members can click "request" to have an organization owner approve before progressing.

Apple will access your code to build your project, store recently built artifacts and associated SCM metadata for you and display this information in Xcode and App Store Connect. You can revoke access at any time.

[Learn More](#) [Complete Step 2 in GitHub](#)

Local Cloud

github.com

Open in Personal ⌘O

Permissions

- ✓ Read access to code, metadata, and pull requests
- ✓ Read and write access to checks and commit statuses

Repository access

All repositories
This applies to all current *and* future repositories owned by the resource owner.
Also includes public repositories (read-only).

Only select repositories
Select at least one repository.
Also includes public repositories (read-only).

Select repositories ▾

No Selection

Selected 2 repositories.

polpielladev/xcode-cloud-scripts-demo

polpielladev/QRBuddy

Save Cancel

Danger zone

Suspend your installation

Cancel

Line: 27 Col: 1

XcodeCloudDemo

main

ContentView

Local Cloud

appstoreconnect.apple.com

Open in Personal

Pol Piella Abadia

App Store Connect

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests, and distribute apps to TestFlight and the App Store.

Get Started... Learn More

No Selection

Continue In Xcode

 Xcode Cloud has been successfully connected. Xcode Cloud can now access your source code.

XcodeCloudDemo

main

XcodeCloudDemo My Mac

XcodeCloudDemo: Ready | Today at 17:18

Local Cloud

ContentView.swift

No Selection

Preview paused

```
1 // ContentView.swift
2 // XcodeCloudDemo
3 // Created by Pol Piella Abadia on 20/03/2023.
4 //
5
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```

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started... Learn More

Grant Access to Your Source Code

GitHub github.com

polpielladev

polpielladev/xcode-cloud-demo

No Selection

Line: 27 Col: 1

XcodeCloudDemo

main

XcodeCloudDemo My Mac

XcodeCloudDemo: Ready | Today at 17:19

Local Cloud

ContentView.swift

No Selection

Preview paused

```
1 // ContentView.swift
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25     }
26 }
```

Create App on App Store Connect

There is no app on App Store Connect with bundle identifier "dev.polpiella.XcodeCloudDemo". A new app with the following properties will be created and Xcode Cloud builds for "XcodeCloudDemo" will be associated with it.

Name: XcodeCloudDemo

Team: Pol Piella Abadia

Bundle Identifier: dev.polpiella.XcodeCloudDemo

SKU: dev.polpiella.XcodeCloudDemo

Primary Language: English (United States)

Get Started... Learn More

No Selection

Line: 27 Col: 1

XcodeCloudDemo

main

My Mac

XcodeCloudDemo Ready | Today at 17:29

Local Cloud

PROJECT XcodeCloudDemo

TARGETS XcodeCloudDemo

General Signing & Capabilities Resource Tags Info Build Settings Build Phases Build Rules

bundle ident

Identity and Type

Name: XcodeCloudDemo

Location: Absolute

Containing directory: /Users/polpiella/dev/XcodeCloudDemo/XcodeCloudDemo.xcodeproj

Full Path: /Users/polpiella/dev/XcodeCloudDemo/XcodeCloudDemo.xcodeproj

Developer: XcodeCloudDemo

Project Document

Project Format: Xcode 14.0-compatible

Organization:

Class Prefix:

Text Settings

Indent Using: Spaces

Widths: 4 0 4 0

Tab: 4 0 Indent

Wrap lines

Create App on App Store Connect

There is no app on App Store Connect with the name "XcodeCloudDemo". Create a new app with the following properties associated with it.

Name: XcodeCloudDemo

Team: Pol Piella

Bundle Identifier: dev.polpiella.XcodeCloudDemoNYSwift

SKU: dev.polpiella.XcodeCloudDemoNYSwift

Primary Language: English

"XcodeCloudDemo" could not be added to Xcode Cloud

The app cannot be created in App Store Connect as the name "XcodeCloudDemo" is already being used. If you have trademark rights to this name and would like it released for your use, submit a claim.

Learn More...

OK

Send Feedback...

? Cancel Previous Complete

Build, Test, and Distribute with Xcode Cloud

Xcode Cloud helps you build high-quality apps, run automated tests in parallel, distribute apps to TestFlight, and the App Store.

Get Started...

Learn More

< >

XcodeCloudDemo

XcodeCloudDemo

□

General Signing & Capabilities Resource Tags Info Build Settings Build Phases Build Rules

PROJECT + Basic Customized All Combined Levels

▼ Packaging

Setting

XcodeCloudDemo

Product Name

XcodeCloudDemoPolPiellaDev

TARGETS

XcodeCloudDemo



The main workflow



Full blog explanation



The main workflow

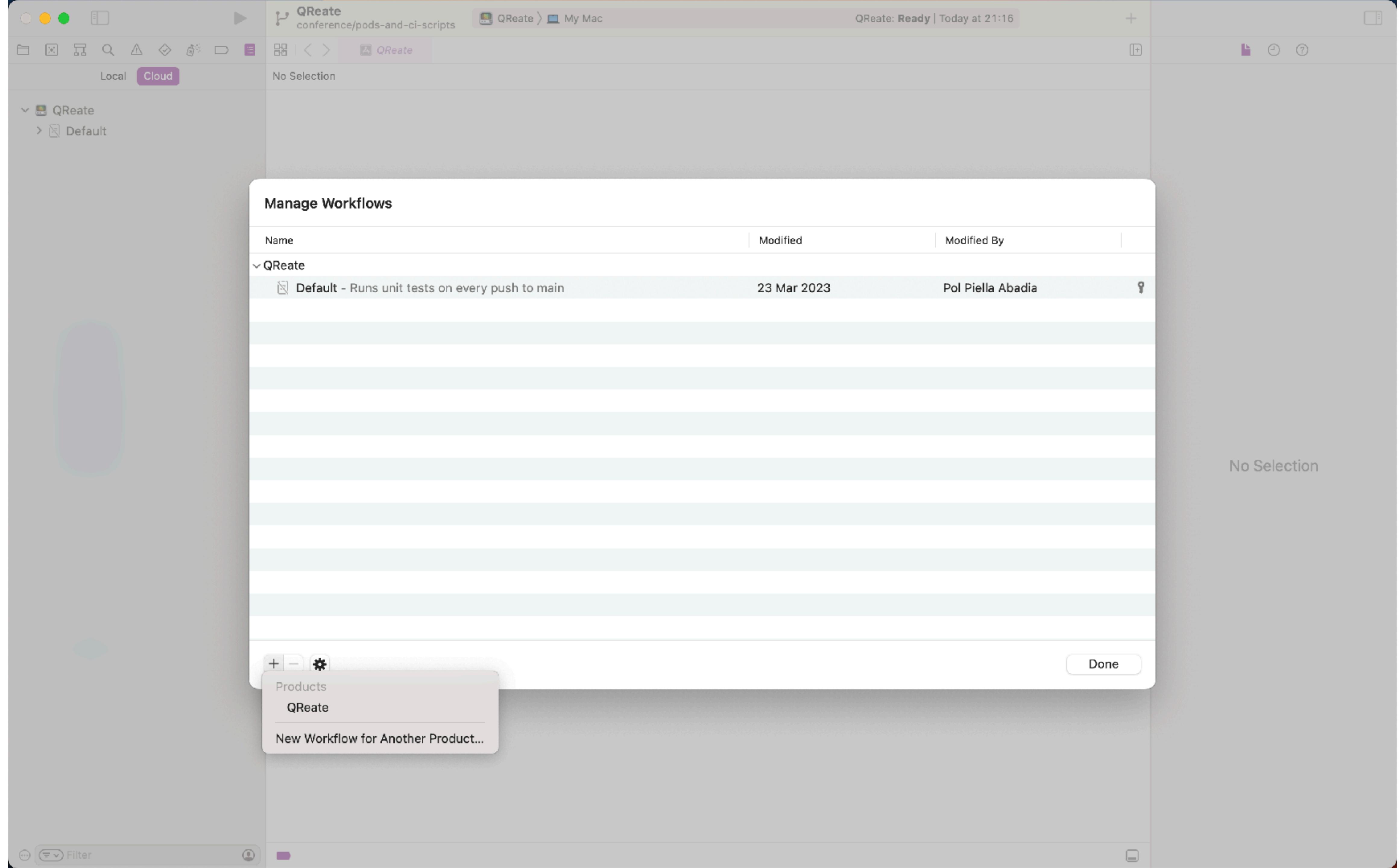
- Triggered on every **push** to the main branch
- Runs all **unit** tests
- **Archives** the app
- Distributes the app to **AppCenter**
- Distributes the app to **internal** testers
- Notifies a slack channel on **completion**
- Needs to make use of **cocoapods** !

▼ Version 1.0.0

BUILD	STATUS	GROUP
26	⌚ Ready to Submit Expires in 86 days	
25	⌚ Ready to Submit Expires in 85 days	
24	⌚ Ready to Submit Expires in 83 days	
23	⌚ Waiting for Review Expires in 83 days	
22	⌚ Ready to Submit Expires in 83 days	

> Version 0.1.1

> Version 0.1.0



QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16 +

Local Cloud No Selection

QReate Default

Main QReate

General

Name: Main

Description: Runs the unit tests on main and uploads to internal testflight and app center

Restrict Editing ⓘ Only Admins and App Managers on your team will be able to make changes.

Primary Repository: <https://github.com/polpielladev/QRBuddy.git>

Project or Workspace: QReate.xcworkspace QReate.xcodeproj Choose...

No Selection

?

Manage Workflows...

Cancel Save

Filter

Cloud

General Environment Start Conditions Branch Changes Actions Post-Actions

QReate conference/pods-and-ci-scripts QReate My Mac QReate: Ready | Today at 21:16

Local Cloud No Selection

QReate Default

Main QReate

General Environment

Start Conditions +

Branch Changes

Actions +

Post-Actions +

Environment

Xcode Version: Latest Release (Currently Xcode 14.3 (14E222b))

macOS Version: Latest Release (Currently macOS Ventura 13.3 (22E25...))

Clean
When enabled, Xcode Cloud will not restore derived data or other caches for your build. This may result in builds taking significantly longer.

Environment Variable	Value	Secret
APPCENTER_API_KEY	<input checked="" type="checkbox"/>

+ -

? Manage Workflows... Cancel Save

No Selection

QReate conference/pods-and-ci-scripts QReate My Mac QReate: Ready | Today at 21:16

Local Cloud No Selection

QReate Default

Main QReate

General

Environment

Start Conditions Branch Changes

Actions

Post-Actions

Branch Changes

Source Branch: Any Branch Custom Branches

main

+ -

Files and Folders: Start a Build If Any File Changes Custom Conditions

Options: Auto-cancel Builds
When a newer build is started from a code push on the same branch using this start condition, automatically cancel running or queued builds of the same kind.

? Manage Workflows... Cancel Save

No Selection

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16

Local Cloud No Selection

QReate Default

Main QReate Branch Changes

General Environment

Start Conditions + Branch Changes

Actions + Build Test Analyze Archive

Source Branch: Any Branch Custom Branches main

+ -

Files and Folders: Start a Build If Any File Changes Custom Conditions

Options: Auto-cancel Builds When a newer build is started from a code push on the same branch using this start condition, automatically cancel running or queued builds of the same kind.

? Manage Workflows... Cancel Save

No Selection

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16

Local Cloud No Selection

QReate Default

Main QReate Test - macOS

General Environment Start Conditions Branch Changes Actions Test - macOS Post-Actions

Platform: macOS Scheme: QReate Requirement: Required To Pass Not Required To Pass

Test: Use Scheme Settings

Destination OS Version
Mac Same As Selected macOS Version

No Selection

?

Manage Workflows...

Cancel Save

Filter

Cloud

Local

QReate

Default

Test - macOS

macOS

QReate

Required To Pass

Not Required To Pass

Use Scheme Settings

Mac

Same As Selected macOS Version

?

Manage Workflows...

Cancel

Save

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16 +

Local Cloud No Selection

QReate Default

Main QReate Test - macOS

General Platform: macOS

Environment Scheme: QReate

Start Conditions Requirement: Required To Pass
 Not Required To Pass

Branch Changes

Actions

+ Test - macOS Build

+ Post-Actions Test

+ Analyze Archive

Destination OS Version

Mac Same As Selected macOS Version

+ -

? Manage Workflows... Cancel Save

No Selection

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16 +

Local Cloud No Selection

QReate Default

Main QReate Archive - macOS

General Environment Start Conditions Branch Changes Actions Post-Actions

Archive - macOS Test - macOS

Platform: macOS Scheme: QReate Build For: Any Mac

Deployment Preparation: None TestFlight (Internal Testing Only) Recommended for pull requests and development branches. TestFlight and App Store Recommended for release branches. External testing is subject to beta app review.

No Selection

?

Manage Workflows...

Cancel Save

Filter

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16 +

Local Cloud No Selection

QReate Default

Main QReate Archive - macOS

General Environment Start Conditions Branch Changes Actions Post-Actions

Archive - macOS Test - macOS

TestFlight External Testing TestFlight Internal Testing Notify

Platform: macOS Scheme: QReate Build For: Any Mac Deployment Preparation: TestFlight (Internal Testing Only) Recommended for pull requests and development branches. TestFlight and App Store Recommended for release branches. External testing is subject to beta app review.

No Selection

?

Manage Workflows...

Cancel Save

Filter

Cloud

Archive - macOS

TestFlight Internal Testing

Notify

?

Manage Workflows...

Cancel Save

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:16 +

Local Cloud No Selection

QReate Default

Main QReate

General

Environment

Start Conditions

Branch Changes

Actions

Archive - macOS

Test - macOS

Post-Actions

TestFlight Internal Te...

TestFlight Internal Testing - macOS

Artifact: Archive - macOS

Groups

Beta Testers

+ -

No Selection

? Manage Workflows... Cancel Save

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:51 +

Local Cloud

QReate All Mine

QReate Default

Main QReate

General

Environment

Start Conditions +

Branch Changes

Actions +

Archive - macOS

Test - macOS

Post-Actions +

Notify - Successes a...

TestFlight Internal Te...

Notify - Successes and Failures

Build Success: All

Build Failure: All

Slack
qreate-ci

+ -

Email

Add an email

+ -

You automatically receive email or Slack notifications for your builds. [Edit Personal Notifications...](#)

? Manage Workflows... Cancel Save

conference/pods-and-ci-scripts Created from

Status Build Start Time ⚠ ! ✖ ✖ Last Commit

Filter

No Selection

The screenshot shows the QReate application interface. A central modal dialog is open, titled "Notify - Successes and Failures". It contains settings for "Build Success" (set to "All") and "Build Failure" (set to "All"). Below these are two sections: "Slack" containing the channel "# qreate-ci" and "Email" with a placeholder "Add an email". At the bottom of the dialog, it says "You automatically receive email or Slack notifications for your builds." and includes a link to "Edit Personal Notifications...". The dialog has standard buttons for "?", "Manage Workflows...", "Cancel", and "Save". In the background, the main QReate interface shows a project named "conference/pods-and-ci-scripts" with a status bar indicating "Created from". The sidebar on the left lists various actions like "General", "Environment", "Start Conditions", etc., with "Notify - Successes a..." currently selected. The top navigation bar shows "QReate conference/pods-and-ci-scripts" and "QReate: Ready | Today at 21:51".

QReate conference/pods-and-ci-scripts QReate My Mac QReate: Ready | Today at 21:16 +

Show in Finder
Open in Tab
Open in New Window
Open with External Editor
Open As >
Show File Inspector
New File...
Add Files to "QReate"..."
Add Packages...
Delete
New Group
New Group without Folder
New Group from Selection
Sort by Name
Sort by Type
Find in Selected Groups...
Source Control >
Project Navigator Help

General Signing & Capabilities Resource Tags Info Build Settings Build Phases Build Rules

Supported Destinations
Destination: Mac
SDK: macOS
+ -

Minimum Deployments
macOS 13.0
+ -

Identity
App Category: Utilities
Display Name: Display Name
Bundle Identifier: dev.polpiella.QReate
Version: 0.1.1
Build: 1

App Icons and Launch Screen
App Icon: AppIcon
App Icons Source: Include all app icon assets
Launch Screen File:

Supported Intents
Class Name:
Add intents eligible for in-app handling here
+ -

Frameworks, Libraries, and Embedded Content

Identity and Type

Name: QReate
Location: Relative to Group
QReate.xcodeproj
Full Path: /Users/polpielladev/Developer/QReate/QReate.xcodeproj

Project Document

Project Format: Xcode 14.0-compatible
Organization:
Class Prefix:

Text Settings

Indent Using: Spaces
Widths: Tab 4 Indent 4
 Wrap lines

QReate conference/pods-and-ci-scripts QReate > My Mac QReate: Ready | Today at 21:31

QReate

General Signing & Capabilities Resource Tags Info Build Settings Build Phases Build Rules

PROJECT Supported Destinations

Destination SDK

Mac macOS

+ -

TARGETS

QReate QReateTests

Supported Destinations

Minimum Deployments

macOS 13.0

Identity

App Category Utilities

Display Name Display Name

Bundle Identifier dev.polpiella.QReate

Version 0.1.1

Build 1

App Icons and Launch Screen

App Icon AppIcon

App Icons Source Include all app icon assets

Launch Screen File

Supported Intents

Class Name

Add intents eligible for in-app handling here

Frameworks, Libraries, and Embedded Content

Identity and Type

Name New Group

Location Relative to Group

ci_scripts

Full Path /Users/polpielladev/Developer/QReate/ci_scripts

Text Settings

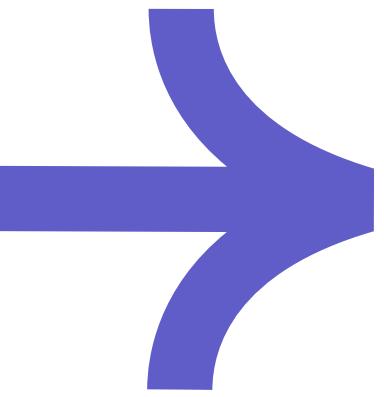
Indent Using Spaces

Widths Tab 4 Indent 4

Wrap lines

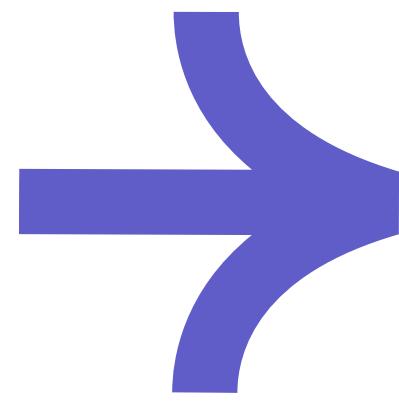
```
├── ci_scripts
    └── ci_post_clone.sh
```

```
.─ ci_scripts  
  └─ ci_post_clone.sh
```



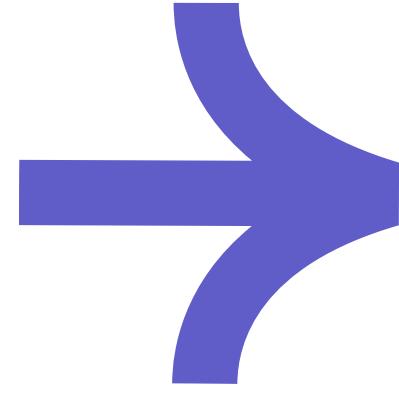
```
#!/bin/sh
```

```
.─ ci_scripts  
  └─ ci_post_clone.sh
```



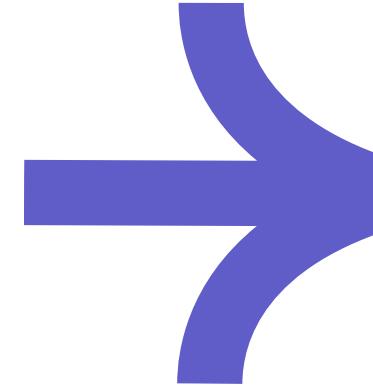
```
#!/bin/sh  
  
if [[ $CI_WORKFLOW = "Main" ]]; then  
fi
```

```
|- ci_scripts  
  └── ci_post_clone.sh
```



```
#!/bin/sh  
  
if [[ $CI_WORKFLOW = "Main" ]]; then  
    # Set the install path to a local directory  
    bundle config set --local path 'vendor'  
fi
```

```
├── ci_scripts
└── ci_post_clone.sh
```

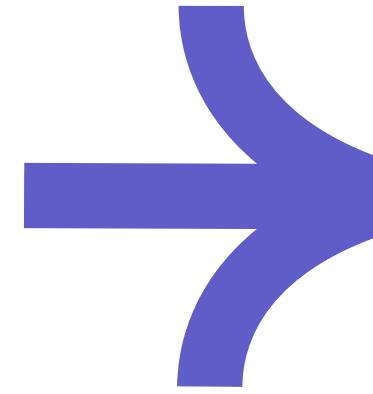


```
#!/bin/sh

if [[ $CI_WORKFLOW = "Main" ]]; then
    # 📁 Set the install path to a local directory
    bundle config set --local path 'vendor'

    # ⬇️ Install all dependencies
    bundle install
fi
```

```
.ci_scripts
  └── ci_post_clone.sh
```



```
#!/bin/sh

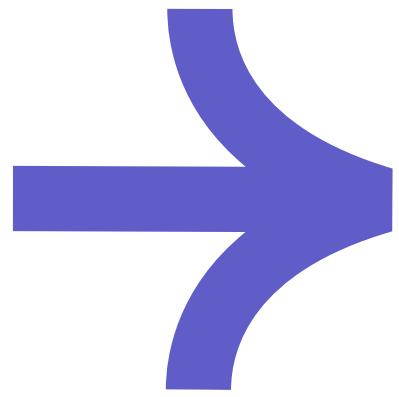
if [[ $CI_WORKFLOW = "Main" ]]; then
    # 📁 Set the install path to a local directory
    bundle config set --local path 'vendor'

    # ⬇️ Install all dependencies
    bundle install

    # ☕ Install all pods
    bundle exec pod install
fi
```

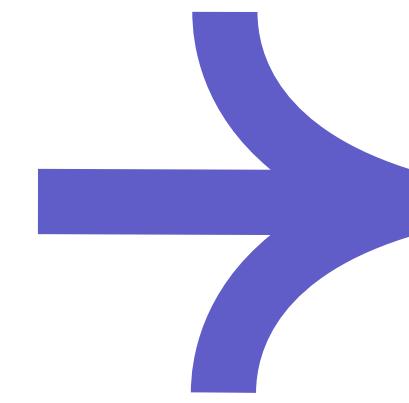
```
. └── ci_scripts
      └── ci_post_clone.sh
          └── ci_post_xcodebuild.sh
```

```
.-- ci_scripts  
   '-- ci_post_clone.sh  
   '-- ci_post_xcodebuild.sh
```



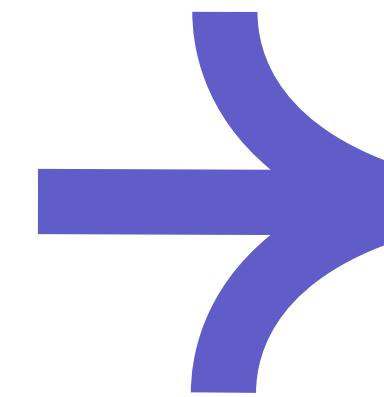
```
#!/bin/sh
```

```
.-- ci_scripts  
  '-- ci_post_clone.sh  
  '-- ci_post_xcodebuild.sh
```



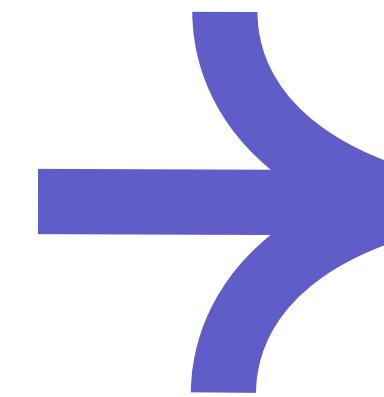
```
#!/bin/sh  
  
if [[ $CI_WORKFLOW = "Main" ]]; then  
fi
```

```
.  
|   └── ci_scripts  
|       └── ci_post_clone.sh  
|       └── ci_post_xcodebuild.sh
```



```
#!/bin/sh  
  
if [[ $CI_WORKFLOW = "Main" ]]; then  
    # UP! Go one directory up  
    cd ..  
fi
```

```
|  
|   └── ci_scripts  
|       └── ci_post_clone.sh  
|  
└── ci_post_xcodebuild.sh
```



```
#!/bin/sh  
  
if [[ $CI_WORKFLOW == "Main" ]]; then  
    # UP! Go one directory up  
    cd ..  
  
    # 🏃 Run the custom lane...  
    bundle exec fastlane upload_to_appcenter  
fi
```

```
default_platform(:mac)

platform :mac do
  desc "Description of what the lane does"
  lane :upload_to_appcenter do
    archive_path_dir = ENV["CI_ARCHIVE_PATH"]
    pkg_file = File.join(archive_path_dir, "Products", "Applications", "QReate.app")
    dsym_file = File.join(archive_path_dir, "dSYMs", "QReate.app.dSYM")

    appcenter_upload(
      api_token: ENV["APP_CENTER_API_TOKEN"],
      owner_name: "polpielladev",
      app_name: "QReate",
      release_notes: "Bug fixing and new features",
      file: pkg_file,
      dsym: dsym_file,
      notify_testers: false
    )
  end
end
```

```
default_platform(:mac)

platform :mac do
  desc "Description of what the lane does"
  lane :upload_to_appcenter do
    archive_path_dir = ENV["CI_ARCHIVE_PATH"]
    pkg_file = File.join(archive_path_dir, "Products", "Applications", "QReate.app")
    dsym_file = File.join(archive_path_dir, "dSYMs", "QReate.app.dSYM")

    appcenter_upload(
      api_token: ENV["APP_CENTER_API_TOKEN"],
      owner_name: "polpielladev",
      app_name: "QReate",
      release_notes: "Bug fixing and new features",
      file: pkg_file,
      dsym: dsym_file,
      notify_testers: false
    )
  end
end
```

```
default_platform(:mac)

platform :mac do
  desc "Description of what the lane does"
  lane :upload_to_appcenter do
    archive_path_dir = ENV["CI_ARCHIVE_PATH"]
    pkg_file = File.join(archive_path_dir, "Products", "Applications", "QReate.app")
    dsym_file = File.join(archive_path_dir, "dSYMs", "QReate.app.dSYM")

    appcenter_upload(
      api_token: ENV["APP_CENTER_API_TOKEN"],
      owner_name: "polpielladev",
      app_name: "QReate",
      release_notes: "Bug fixing and new features",
      file: pkg_file,
      dsym: dsym_file,
      notify_testers: false
    )
  end
end
```



Builds

macOS

Beta Testers [Edit Name](#)

You can add anyone from your team to this group, and they can test builds using the TestFlight app.

Feedback

Crashes

Tester Feedback ?

Build Distribution ?

Screenshots

Feedback On [Disable](#)

Automatic for Xcode Builds

Internal Testing +

Beta Testers

Test iPhone and iPad Apps on Apple Silicon Macs ?

Available [Disable](#)

External Testing +

External Testers

Tester (1) +

General Information

All Testers (1 of 10,100)

Test Information

About TestFlight Data ?

EMAIL NAME STATUS ^ SESSIONS CRASHES FEEDBACK

hi@polpiella.dev	Pol Piella Abadia	✓ Installed 1.0.0 (26) Mar 27, 2023	986		
------------------	-------------------	----------------------------------------	-----	--	--

Builds (12) +

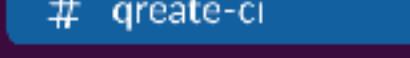
BUILD ▾	STATUS	PLATFORM	SESSIONS	CRASHES
1.0.0 (26)	✓ Testing Expires in 85 days	macOS	-	-
0.1.0 (16)	✓ Testing Expires in 71 days	macOS	-	-
0.1.0 (15)	✓ Testing Expires in 69 days	macOS	-	-
0.1.0 (14)	✓ Testing Expires in 69 days	macOS	-	-

Search polpiella.dev

polpiell... ▾ 

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Channels 
general
qreate-ci 
random
software-devel...
+ Add channels

Direct messa...  hi you
+ Add coworkers

Apps 
Xcode Clo... 9+
+ Add apps

qreate-ci

Friday, March 10th

QReate
Build 12 failed (main | Main)
Latest Commit by Pol Piella Abadia
Fixes issues
[View Build Report](#)

Thursday, March 23rd

Xcode Cloud APP 9:20 PM
QReate
Build 21 failed (main | weekly)
TestFlight External Testing - macOS encountered a failure that caused the build to fail.
Latest Commit by Pol Piella Abadia
Simplifies logic to `EditableText` component
[View Build Report](#)

Xcode Cloud APP 10:27 PM
QReate
Build 22 failed (main | weekly)
TestFlight External Testing - macOS encountered a failure that caused the build to fail.
Latest Commit by Pol Piella Abadia
Version 1.0.0
[View Build Report](#)

Xcode Cloud APP 11:06 PM
QReate
Build 23 failed (main | weekly)
TestFlight External Testing - macOS encountered a failure that caused the build to fail.
Latest Commit by Pol Piella Abadia
Select the first item on the list by default
[View Build Report](#)

B I S | ⌘ | ⌄ ⌅ | ⌂ ⌃ | ⌄ ⌃

Message #qreate-ci

+ |    @   

Scheduling a weekly build



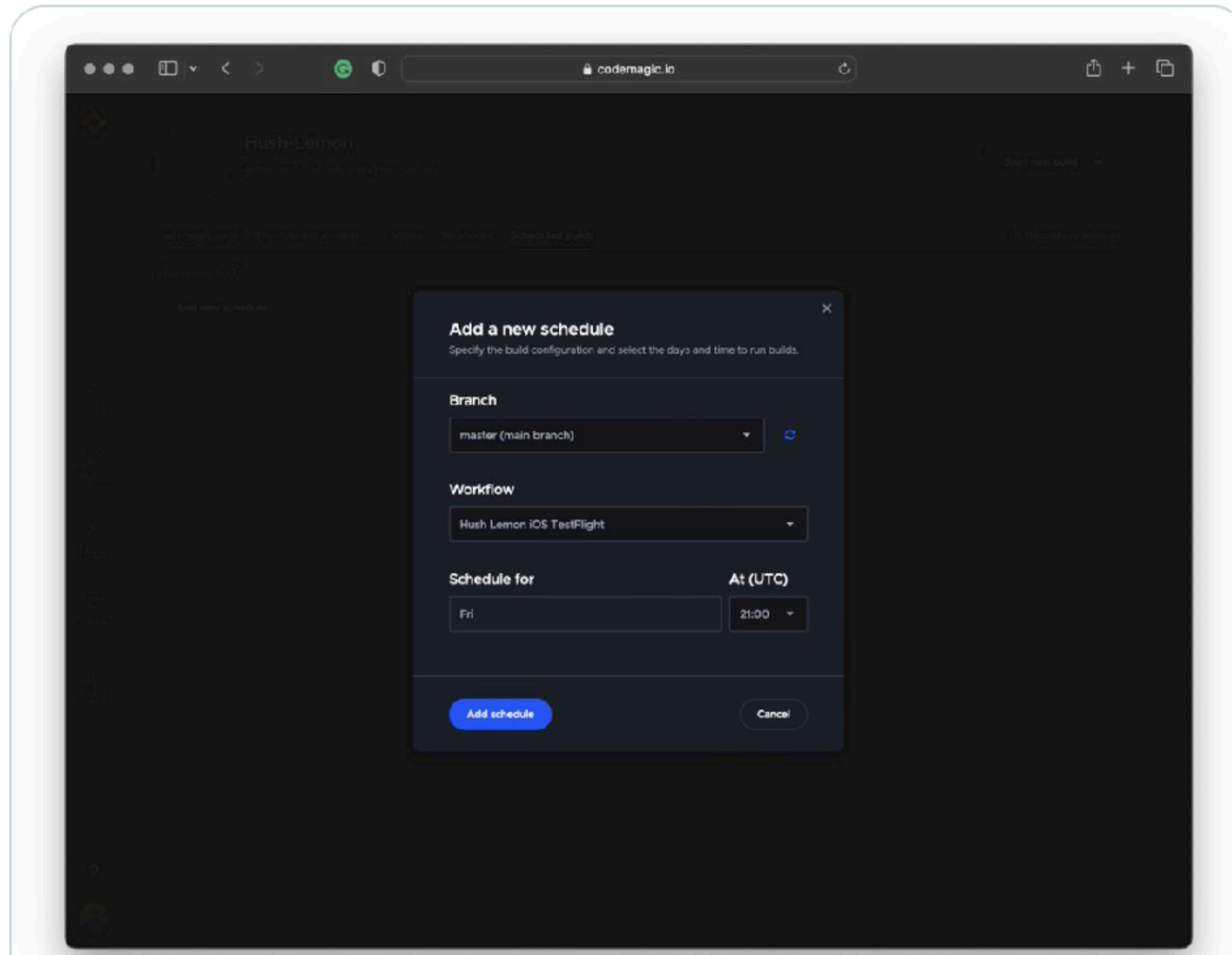
Rudrank

@rudrankriyam

...

To keep myself accountable for shipping apps, I am scheduling TestFlight builds every week!

Scheduling builds were previously available only for Teams, but now you can use it for personal accounts too on [@codemagicio!!](#)



Let's schedule a build

with Xcode Cloud 

- A build from the latest **main** commit
- Every **Sunday** evening
- Released only to **external testers** (me 😅)
- Once I have gathered feedback, I can **release** the version.

QReate
conference/pods-and-ci-scripts

QReate > My Mac

QReate: Ready | Today at 21:42

Local Cloud

QReate

All Mine

QReate Default

Weekly QReate

General Environment Start Conditions Branch Changes Actions Post-Actions

General

Name: Weekly

Description: Creates a weekly release for external testers

Restrict Editing ⓘ Only Admins and App Managers on your team will be able to make changes.

Primary Repository: <https://github.com/polpielladev/QRBuddy.git>

Project or Workspace: QReate.xcodeproj

No Selection

Manage Workflows... Cancel Save

conference/pods-and-ci-scripts

Created from

Status Build Start Time

Last Commit

Filter

The screenshot shows the QReate application interface. A modal window titled "General" is open, displaying settings for a workflow named "Weekly". The "Restrict Editing" checkbox is checked, with a blue arrow pointing to it. The primary repository is set to "https://github.com/polpielladev/QRBuddy.git" and the project workspace is "QReate.xcodeproj". The background shows a list of build groups, with "conference/pods-and-ci-scripts" selected.

QReate
conference/pods-and-ci-scripts

QReate > My Mac

QReate: Ready | Today at 21:42

Local Cloud

QReate

All Mine

QReate Default

Weekly QReate

General Environment

Start Conditions +

Branch Changes +

Actions +

Post-Actions +

Environment

Xcode Version: Latest Release (Currently Xcode 14.3 (14E222b))

macOS Version: Latest Release (Currently macOS Ventura 13.3 (22E25...))

Clean When enabled, Xcode Cloud will not restore derived data or other caches for your build. This may result in builds taking significantly longer.

Environment Variable Value Secret

Add an environment variable

+ -

No Selection

Manage Workflows... Cancel Save

conference/pods-and-ci-scripts

Created from

Status Build Start Time

Last Commit

Filter

A blue arrow points to the 'Clean' checkbox in the Environment configuration dialog.

QReate
conference/pods-and-ci-scripts

QReate > My Mac

QReate: Ready | Today at 21:42

Local Cloud

QReate

All Mine

QReate Default

Weekly QReate

General Environment

Start Conditions +

On a Schedule for a Branch

Actions +

Post-Actions +

Frequency: Weekly

Days: S M T W T F S

Time: 19:00 British Time (Europe/London)

Branch: main

No Selection

Manage Workflows... Cancel Save

conference/pods-and-ci-scripts

Created from

Status Build Start Time

Last Commit

Filter

Build Group Overview

QReate
conference/pods-and-ci-scripts

QReate > My Mac

QReate: Ready | Today at 21:42

Local Cloud

QReate

All Mine

QReate Default

Weekly QReate

General Environment

Start Conditions +
On a Schedule for a B...

Actions +
Archive - macOS

Post-Actions +

Archive - macOS

Platform: macOS

Scheme: QReate

Build For: Any Mac

Deployment Preparation:
 None
 TestFlight (Internal Testing Only)
Recommended for pull requests and development branches.
 TestFlight and App Store
Recommended for release branches. External testing is subject to beta app review.

No Selection

? Manage Workflows... Cancel Save

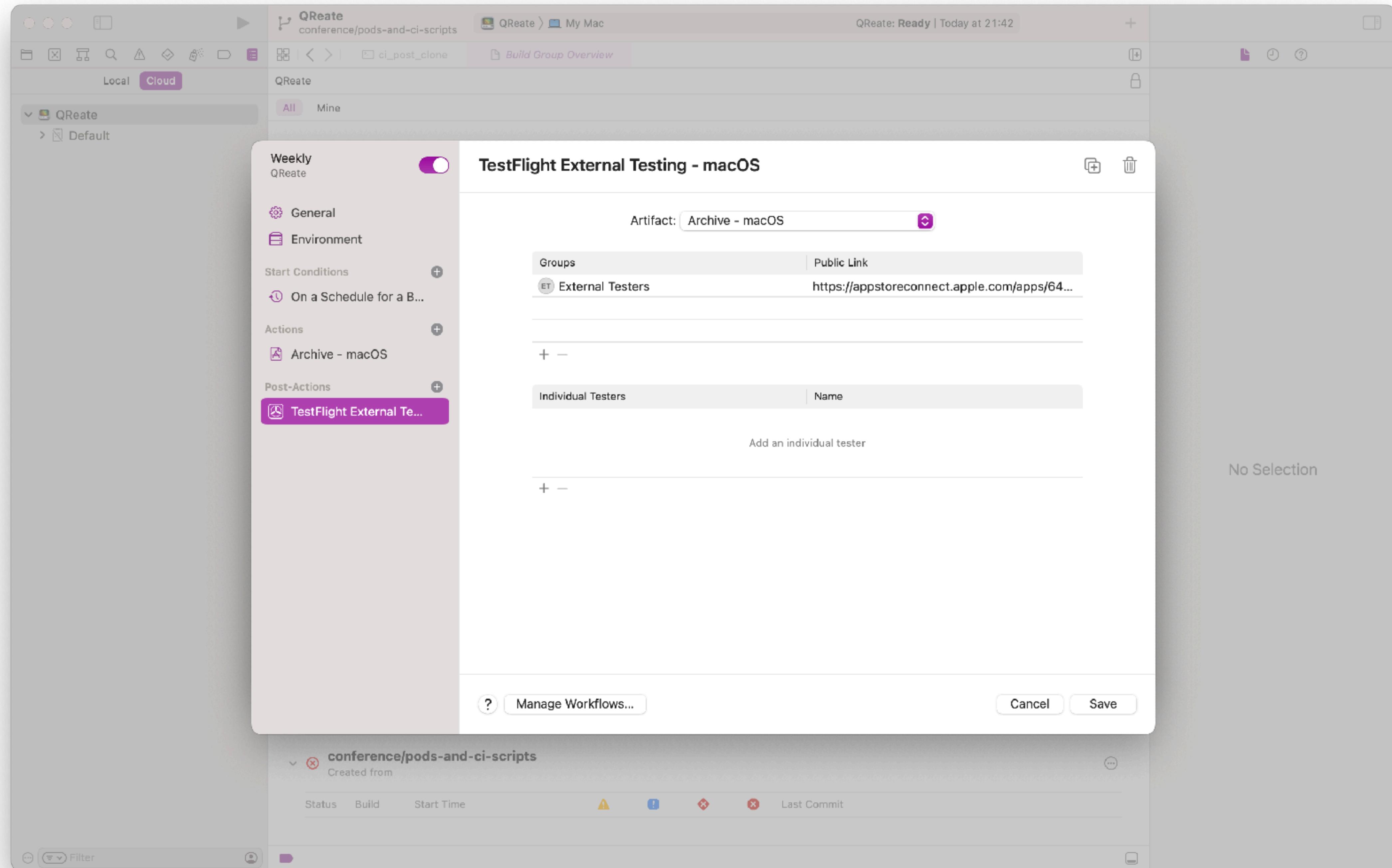
conference/pods-and-ci-scripts

Created from

Status Build Start Time

Last Commit

Filter





Builds

macOS

Feedback

Crashes

Screenshots

Internal Testing

Beta Testers

External Testing

External Testers

General Information

All Testers (1 of 10,100)

Test Information

About TestFlight Data ?

External Testers [Edit Name](#)

You can add anyone to this group, and they can test builds using the [TestFlight app](#). Builds may need approval from Beta App Review.

Tester Management

Public Link ?

<https://testflight.apple.com/join/B5D8pm9C> [Disable Link](#) | [Copy Link](#)

Tester Count ?

0 of 150 [Edit limit](#)

Tester Feedback ?

Feedback On [Disable](#)

Test iPhone and iPad Apps on Apple Silicon Macs ?

Available [Disable](#)

Testers (0)

Testers in this group will be notified when a new build is available and will have access to all builds added to this group.

Build (1)

BUILD ▾	STATUS	PLATFORM	SESSIONS	CRASHES
1.0.0 (23)	Waiting for Review Expires in 82 days	macOS	-	-

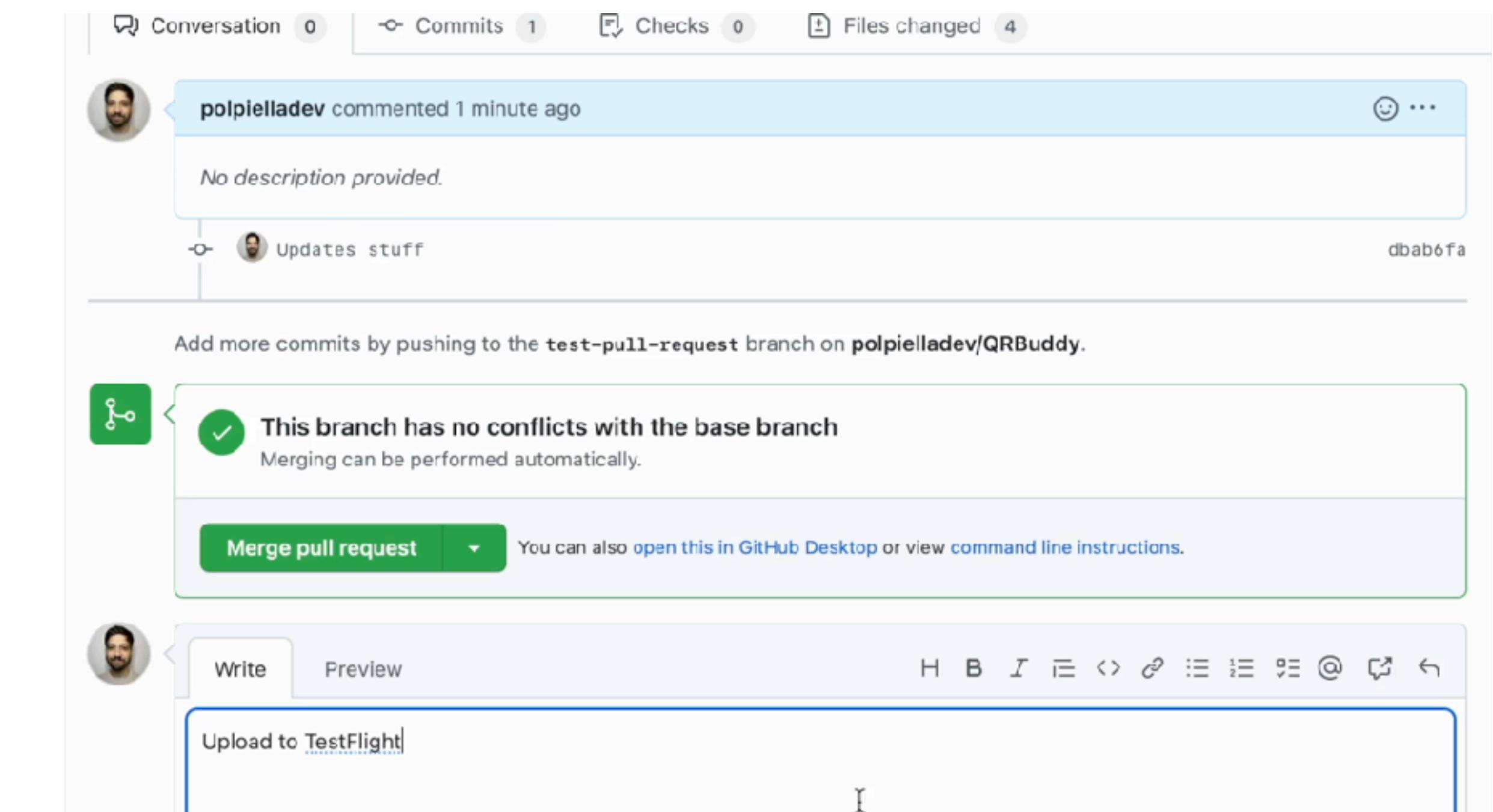
Building custom Xcode Cloud functionalities



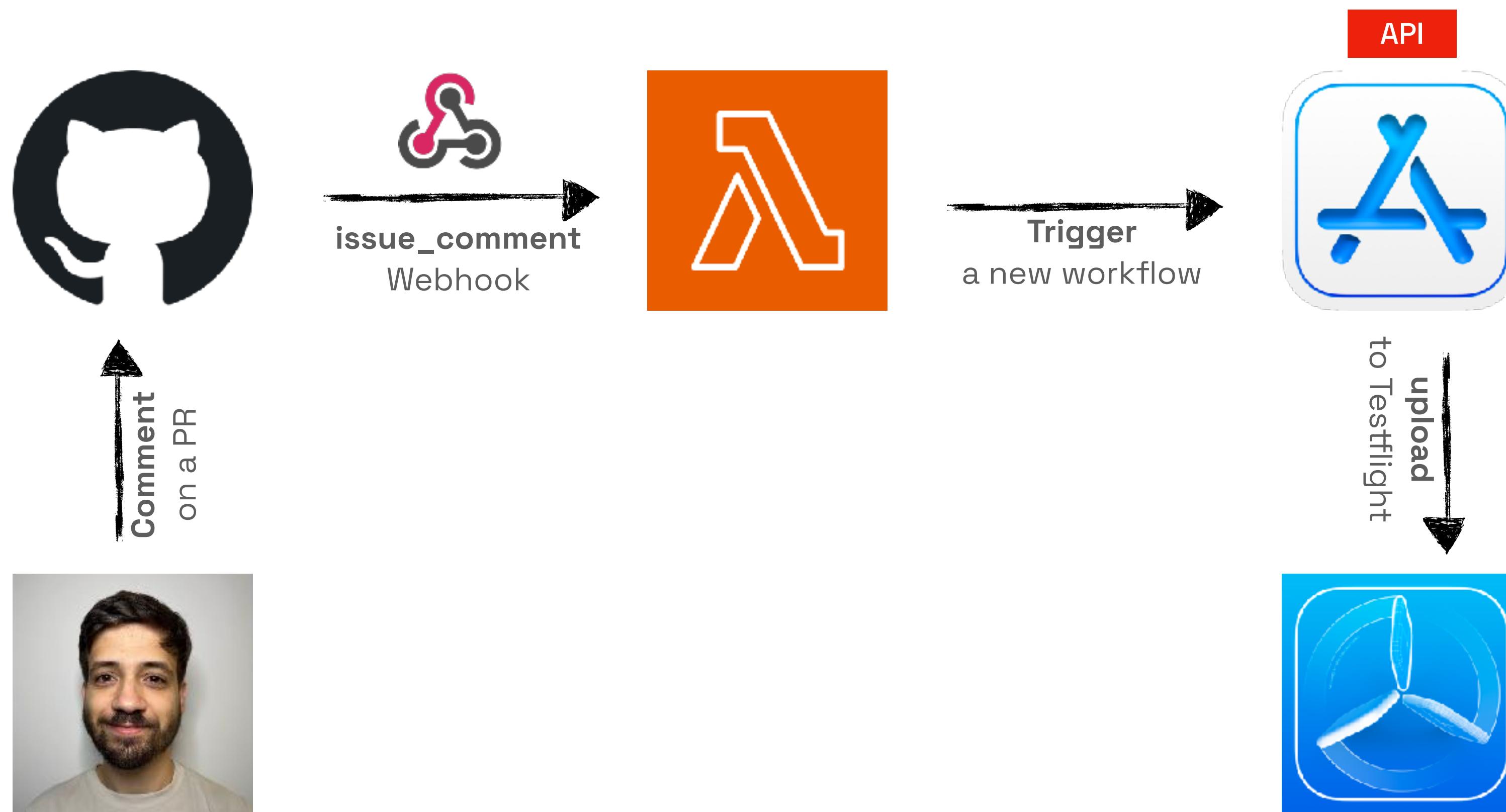
Full blog explanation

Building a custom start condition

- Upload internal **TestFlight** builds on PRs
- I don't want to upload automatically on **every PR change**
- I want to do this step **manually**
- I would like to trigger a build **directly from the PR page**.



How does it work?



- TestFlight
- > Prelease Versions and Beta Testers
- Provisioning
- > Bundle IDs
- > Bundle ID Capabilities
- > Certificates
- > Devices
- > Profiles

Xcode Cloud

Xcode Cloud Workflows and Builds

- Xcode Cloud Products and Workflows

- > Products

- > Workflows

- > macOS Versions

- > Xcode Versions

- Build Information

- > Build Runs

- > Build Actions

- > Artifacts

- > Issues

- > Test Results

- Source Code Management

- > Providers

- > Repositories

- > Pull Requests

- > Git References

- Reporting

- > Sales and Finance Reports

- > Power and Performance Metrics and Logs

- Users and Roles

- > Users

- > User Invitations

- > Sandbox Testers

- Paging

- > Large Data Sets

- Error Handling

- > Interpreting and Handling Errors

- > object ErrorResponse

- Filter

API Collection

Xcode Cloud Workflows and Builds

Automate reading Xcode Cloud data, managing workflows, and starting builds.

Overview

Xcode Cloud makes it easy to get started with continuous integration and delivery (CI/CD). Using either Xcode or [App Store Connect](#), you can create custom workflows to verify the quality of your apps or frameworks. However, you may need to further automate Xcode Cloud usage and integrate Xcode Cloud into existing back-end systems — often in a corporate context. For example, you may need to:

- Provide decision makers with data about workflows and builds using custom dashboards or reports.
- Integrate with other CI/CD systems that verify changes to back-end services and apps for other platforms.
- Create and manage numerous workflows for multiple apps.

To automate Xcode Cloud usage and integrate it with custom back-end systems, use the App Store Connect API to:

- Read information about Xcode Cloud products, workflows, and builds.
- Manage workflows.
- Start new builds.

Taking advantage of the App Store Connect API, you can combine functionality offered by the Xcode Cloud resources and other App Store Connect resources — for example, TestFlight resources — to create powerful custom tools.

If you're new to using the App Store Connect API, make sure to read the documentation in the Essentials section of [App Store Connect API](#).

Read Xcode Cloud Data

The App Store Connect API provides resources to access the following Xcode Cloud data:

- Products, workflows, and build environments
- Builds, artifacts, issues, and test results
- Source code management (SCM) providers, Git repositories, pull requests, and Git references

When you've identified the data you need to access, the next step is to identify the Xcode Cloud API endpoints you need to call. This is a customized task that depends on your use case. For example, you could follow these steps to read Xcode Cloud workflow information and display it in a custom dashboard:

1. Access Xcode Cloud product information by reading a list of objects that represent your Xcode Cloud products using the [List All Xcode Cloud Products](#) endpoint.
2. Choose the Xcode Cloud product for which you want to display information in the custom dashboard.
3. Pass the `id` of the Xcode Cloud product you chose to the [List All Workflows for an Xcode Cloud Product](#) endpoint and call it to read a list of workflow objects.

GitHub

issue_comment webhook

```
{  
  "action": "created",  
  "issue": {  
    "pull_request": {  
      "url": "https://api.github.com/..."  
    }  
  },  
  "repository": {  
    "name": "QRBuddy"  
  },  
  "comment": {  
    "body": "Upload to testflight"  
  }  
}
```

GitHub

issue_comment webhook

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  "action": "created",  
  "issue": {  
    "pull_request": {  
      "url": "https://api.github.com/..."  
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  "repository": {  
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  },  
  "comment": {  
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  }  
}
```

Serverless function



/v1/ciProducts?filter[productType]=APP&include= primaryRepositories

GitHub

issue_comment webhook

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  "action": "created",  
  "issue": {  
    "pull_request": {  
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Serverless function



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  }  
}
```

Serverless function



/v1/ciProducts?filter[productType]=APP&include=primaryRepositories

```
let productId: String  
let repositoryId: String
```

GitHub

issue_comment webhook

```
{  
  "action": "created",  
  "issue": {  
    "pull_request": {  
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  }  
}
```

Serverless function



/v1/ciProducts?filter[productType]=APP&include=primaryRepositories

```
let productId: String  
let repositoryId: String
```



/v1/ciProducts/productId/workflows?fields[ciWorkflows]=name

GitHub

issue_comment webhook

```
{  
  "action": "created",  
  "issue": {  
    "pull_request": {  
      "url": "https://api.github.com/..."  
    }  
  },  
  "repository": {  
    "name": "QRBuddy"  
  },  
  "comment": {  
    "body": "Upload to testflight"  
  }  
}
```

Serverless function



/v1/ciProducts?filter[productType]=APP&include=primaryRepositories

```
let productId: String  
let repositoryId: String
```



/v1/ciProducts/productId/workflows?fields[ciWorkflows]=name

```
let workflowId: String
```

GitHub

issue_comment webhook

```
{  
  "action": "created",  
  "issue": {  
    "pull_request": {  
      "url": "https://api.github.com/..."  
    }  
  },  
  "repository": {  
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  },  
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```

Serverless function



/v1/ciProducts?filter[productType]=APP&include=primaryRepositories

```
let productId: String  
let repositoryId: String
```



/v1/ciProducts/productId/workflows?fields[ciWorkflows]=name

```
let workflowId: String
```



/repos/OWNER/REPO/pulls/PULL_NUMBER

GitHub

issue_comment webhook

```
{  
  "action": "created",  
  "issue": {  
    "pull_request": {  
      "url": "https://api.github.com/..."  
    }  
  },  
  "repository": {  
    "name": "QRBuddy"  
  },  
  "comment": {  
    "body": "Upload to testflight"  
  }  
}
```

Serverless function



/v1/ciProducts?filter[productType]=APP&include=primaryRepositories

```
let productId: String  
let repositoryId: String
```



/v1/ciProducts/productId/workflows?fields[ciWorkflows]=name

```
let workflowId: String
```



/repos/OWNER/REPO/pulls/PULL_NUMBER

```
let gitReferenceId: String
```



/v1/scmRepositories/repositoryId/gitReferences

GitHub

issue_comment webhook

```
{  
  "action": "created",  
  "issue": {  
    "pull_request": {  
      "url": "https://api.github.com/..."  
    }  
  },  
  "repository": {  
    "name": "QRBuddy"  
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  "comment": {  
    "body": "Upload to testflight"  
  }  
}
```

Serverless function



/v1/ciProducts?filter[productType]=APP&include=primaryRepositories

```
let productId: String  
let repositoryId: String
```



/v1/ciProducts/productId/workflows?fields[ciWorkflows]=name

```
let workflowId: String
```



/repos/OWNER/REPO/pulls/PULL_NUMBER

```
let gitReferenceId: String
```



/v1/scmRepositories/repositoryId/gitReferences



/v1/ciBuildRuns

 Conversation 0

-o Commits 1

 Checks 0

 Files changed 4



polpielladev commented 1 minute ago



No description provided.



Updates stuff

dbab6fa

Add more commits by pushing to the **test-pull-request** branch on **polpielladev/QRBuddy**.



This branch has no conflicts with the base branch

Merging can be performed automatically.

Merge pull request

You can also [open this in GitHub Desktop](#) or view [command line instructions](#)



Write

Preview

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[Upload to TestFlight](#)

Xcode Cloud webhooks



Xcode Cloud webhooks

- There are only **3 types**
 - **Create** build
 - **Start** build
 - **Complete** build
- Only configurable in **Actions**
- **Can't** subscribe to specific builds
- **⚠️ Only 5 webhooks per project**



