
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

OPN202-R

Maintaining the AWS Amplify Framework in the open

Matt Auerbach

Manager, OSS DX
AWS Amplify

Ashish Nanda

Software Development Manager
AWS Amplify

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Agenda



How AWS Amplify balances the needs of the developer community and adapts the engineering roadmap to deliver the right open-source software

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

What is Amplify?

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Amplify provides tools for frontend developers to build, ship, and scale their apps

Build



Configure AWS backends fast



Seamlessly connect frontends

Ship



Deploy your app frontend and backend

Scale



Use AWS CDK to override, add, and export resources

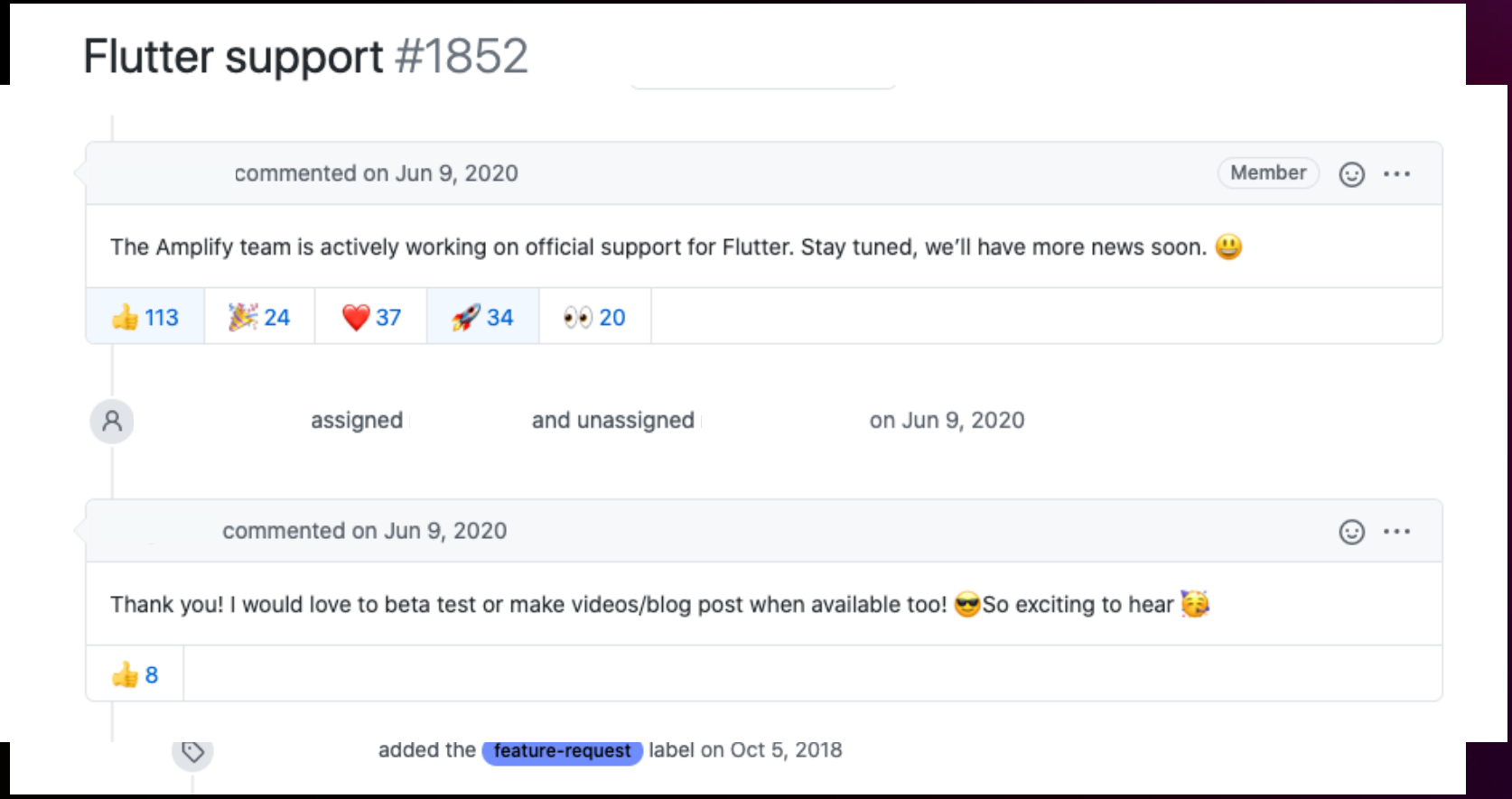
aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Building our open-source libraries

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

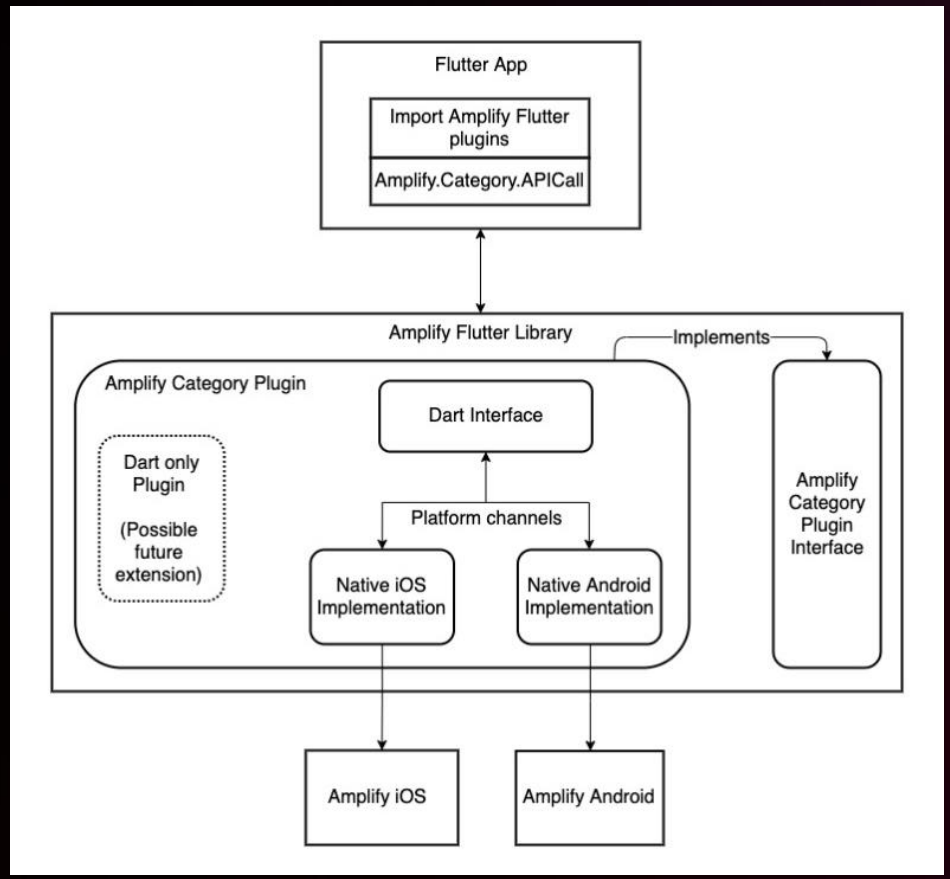
Working backwards from customer feedback



The origins of the Amplify Flutter library

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

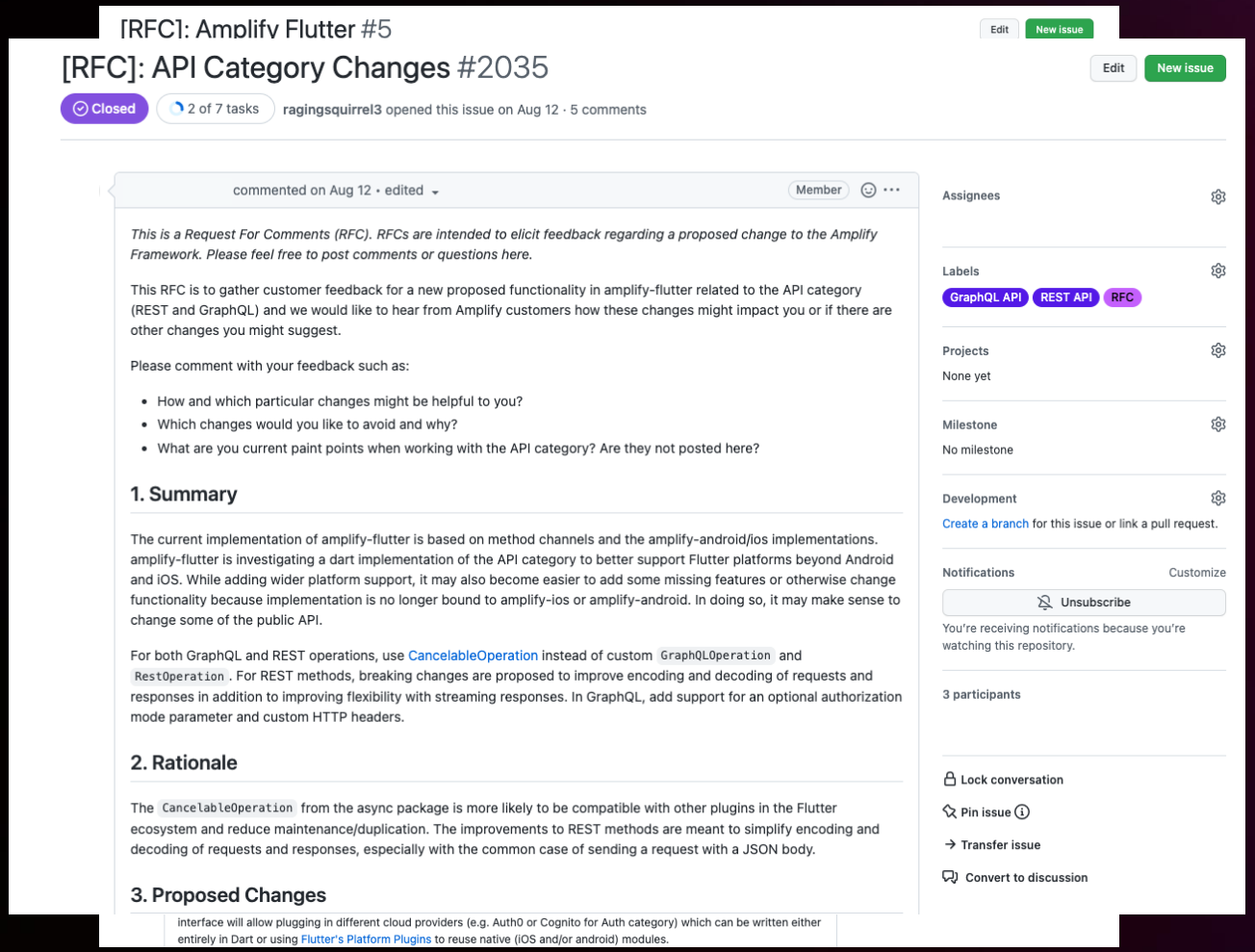
Original design for the Amplify Flutter library



An extensible architecture with 2-way door decisions

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Using RFCs to get customer feedback



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Focus on developer experience

```
// Save
final item = Post(
        name: "Lorem ipsum dolor sit amet");
await Amplify.DataStore.save(item);
```

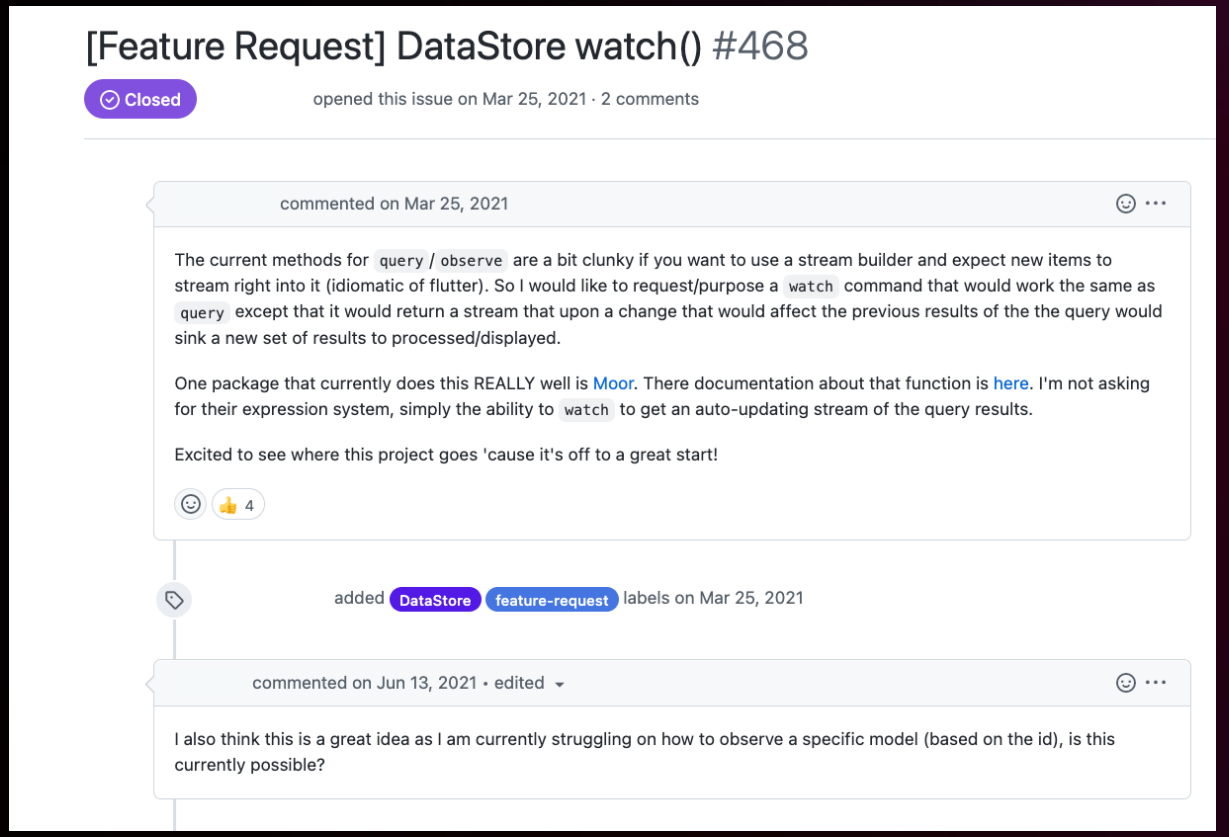
```
// Delete
await Amplify.DataStore.delete(item);
```

```
// Query
try {
  List<Post> items = await Amplify.DataStore.query(Post.classType);
} catch (e) {
  print("Could not query DataStore: " + e);
}
```

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Feature requests



[Feature Request] DataStore watch() #468

Closed opened this issue on Mar 25, 2021 · 2 comments

commented on Mar 25, 2021

The current methods for `query` / `observe` are a bit clunky if you want to use a stream builder and expect new items to stream right into it (idiomatic of flutter). So I would like to request/purpose a `watch` command that would work the same as `query` except that it would return a stream that upon a change that would affect the previous results of the the query would sink a new set of results to processed/displayed.

One package that currently does this REALLY well is Moor. There documentation about that function is here. I'm not asking for their expression system, simply the ability to `watch` to get an auto-updating stream of the query results.

Excited to see where this project goes 'cause it's off to a great start!

4

added DataStore feature-request labels on Mar 25, 2021

commented on Jun 13, 2021 • edited

I also think this is a great idea as I am currently struggling on how to observe a specific model (based on the id), is this currently possible?

Customer feedback and feature request that led to the ObserveQuery API

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Iterative improvements

```
// before

List<Post> posts = [];

Future<void> queryPosts() {
  return Amplify.DataStore.query(Post.classType).then((value) {
    setState(() => posts = value);
  });
}

await queryPosts();

Amplify.DataStore.observe(
  Post.classType,
).listen((SubscriptionEvent<Post> snapshot) {
  queryPosts();
});
```

```
// after

List<Post> posts = [];

Amplify.DataStore.observeQuery(
  Post.classType,
).listen((QuerySnapshot<Post> snapshot) {
  setState(() => posts = snapshot.items);
});
```

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

How we handle daily ops

aws-amplify / Projects / Amplify Flutter Project Board

Search or jump to...

Amplify Flutter Project Board

All Issues | Status | Triage | Triage Kanban | Feature Requests Triage | Bugs | Missing Category | New view

is:issue is:open 151

	Title	Assignees	Status	Pr...	LOE	Candidate to be worked ...	Labels	Asana Link
	P0 1							
2	Aws PinpointAnalytics sdk failed to initialize #2072		Triaged	P0			Analytics bug	
	Add item							
	P1 15							
3	Web support for amplify-flutter #234		In Progress	P1	XL		feature-request	https://app.asana.com/0/12
6	Support for TOTP(Time-based One-time Password) #574		Triaged	P1	TBD	Maybe	Auth feature-request	
7	Saving nested models in Android may raise GraphQL error for iOS devices that subscribe to the same mo #663		In Progress	P1	TBD	Blocked	bug DataStore requires-android-fix requires-ios-f	
8	Custom HTTP Interceptors #798		Triaged	P1		Yes	feature-request GraphQL API	
9	SignOut doesn't invalidates the browser cache in OAuth Google[External federated identity provider] #804		Triaged	P1		Blocked	Auth bug service-team	
10	Desktop Support Please #133		Triaged	P1	XL		feature-request	
11	Force token refresh #299		Triaged	P1	TBD	Blocked	Auth feature-request requires-android-fix require	
15	ModelSchema pluralName changing to listPluralName and syncPluralName #944		Triaged	P1		Blocked	DataStore feature-request GraphQL API	
17	AWS Amplify - AWS SNS Push Notification for Flutter #319		Triaged	P1	XL		feature-request requires-android-fix requires-ios-fix	
18	Force prompt to choose account to use for Hosted UI / Social Sign In #1528		Triaged	P1		Blocked	Auth feature-request service-team	
22	how to login using facebook , Google , Twitter ? #182		Triaged	P1	L		Auth feature-request	
23	DataStore.save() doesn't get the record saved in remote server #1708		Triaged	P1	XS	Blocked	bug DataStore requires-api-data-fix	https://app.asana.com/0/12
24	Merge Accounts in PreSignUp Trigger causes "Already found an entry for username" exception #1716		Triaged	P1	TBD	Blocked	Auth bug service-team	
27	DataStore throws an exception during initialization, when there are multiple GraphQL authorization types #1867		Triaged	P1	S		DataStore Documentation feature-request	https://app.asana.com/0/12
29	Datastore Hub Channel failing to emit "ready" hubEvent after calling Datastore.start() on Android #1921		Triaged	P1	XS	Blocked	bug DataStore pending-triage requires-ios-fix	
	Add item							
	P2 30							
37	Unable to perform multipart request #525		Triaged	P2	L		feature-request REST API	
38	Configure auth to handle SAML flow. #510		Triaged	P2	TBD	No	Auth feature-request	

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Building our OSS community

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Let’s dive in

- Setup and what’s at stake for a project
- Fostering an OSS culture
- Enter…Developer experience engineers
- Scale and growth initiatives

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

What makes a contributor program?



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Thank you!

Matt Auerbach
@mauerbac

Ashish Nanda
@theashishnanda



Please complete the session survey in the **mobile app**

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.