# Current

# Thunderbird for Android/Mobile Team Blog Notes

Hello! Please attach any screenshots or mockups to the post in Notion as well! (They are very difficult to pull out of Google Docs):

https://www.notion.so/mzthunderbird/TMDD-September-2842df5d45ae8071b98ecb21373 95f6b?source=copy link

• TB12 monthly release! First ever! Congrats!

## September

### A Brief Self-Introduction

Hello community, it's a pleasure to be here and help take part in a product I've used for many years, but now with the focus on Mobile. I am Jon Bott, and am the new Engineering Manager for the Thunderbird Mobile teams. I am passionate about native mobile development and am excited to be helping both mobile apps moving forward.

## Refining our Roadmaps

For now, as we develop, we are refining the roadmap and making more concrete plans for iOS Thunderbird's Alpha release in a couple of months, and finalizing our initial pass with Account Drawer on the Android (planned for release in the next beta). We also have Notification and Message List improvements under development.

### Carpaccio

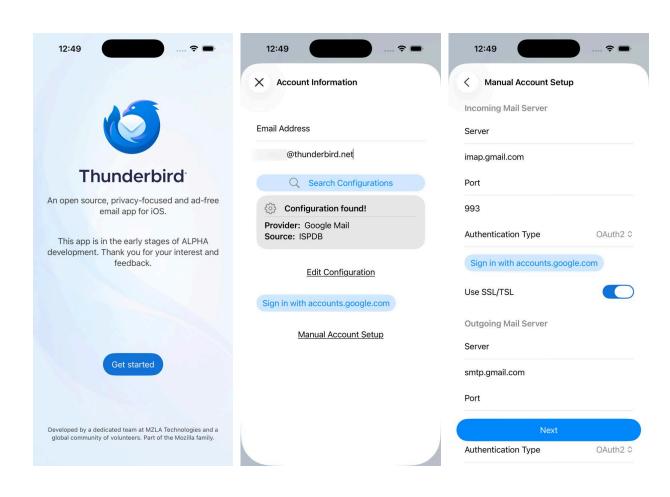
As a mobile product, we've gone through several changes over the last year or so, from large annual releases, to our more recent monthly beta and release process. Our next steps are to start sizing our features so they fit better into that monthly cadence, and you'll see the benefits of this over the next few months as we simplify our planning & process - breaking our large features into smaller, more frequently delivered pieces. This is based on the Carpaccio method for breaking down features into thin slices with the goal of delivering usable features to our users more quickly, and focusing more on the iterative process helping us take feedback sooner from the community on a feature experience and designs. Not everything will fit in this, of course, but more will go out sooner as we carve away with our larger goals for the platforms.

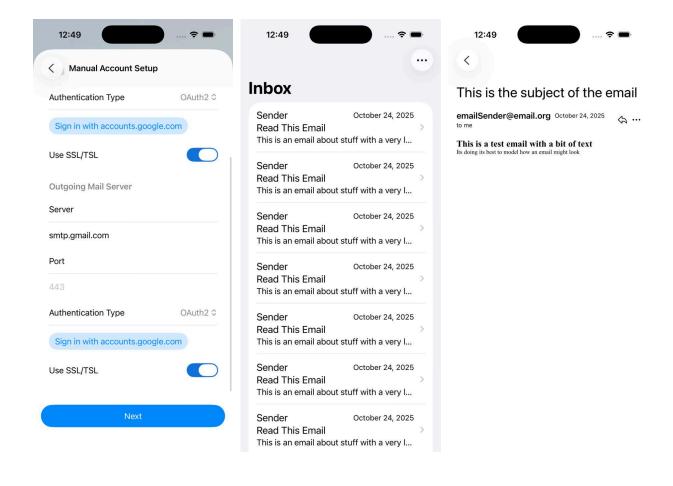
## Stay Tuned

Over the next few weeks we'll update our timelines and roadmaps, to what pieces we have high confidence in delivering over the next few months, and a 50,000 foot (15,000 meter) view of our larger pieces we hope to tackle in the next year. Ultimately our goal is to more quickly reduce pain points you might have, and keep adding polish to Thunderbird's mobile experience.

## Progress with Thunderbird iOS

We are excited to show the progress we are making in getting the iOS up and running. Some things are connected, others have sample data for now, but it helps us move quickly and start to share what the UI will be like moving forward. Here are the actual screen we've coded up:





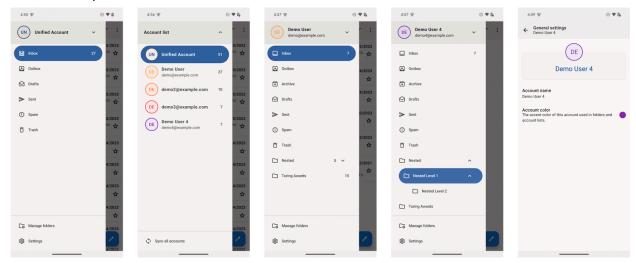
## July/August

Hello wonderful community, it has been a while since the last Mobile update. A lot has happened in the past 2 months, so let's jump right into a quick overview of current work in progress and primary efforts.

## Account Drawer in progress

If you're rocking the Beta version of Thunderbird for Android, you might have noticed that all your unified folders have disappeared! Don't panic, that's just temporary. We're still churning through the technical debt and the database inconsistencies in order to create through virtual unified folders for all your accounts.

The final goal is the same as the one we shared in a previous update, which you can see the final mock-ups here:



Expect more updates in the coming releases.

## iOS account setup

The work on the iOS version is moving at full speed!

We found ourselves in a bit of a tight spot due to the recent announcements of Apple with their new iOS 26 version, and a somewhat complete redesign of all the SwiftUI and general Human Interface Guidelines.

When will iOS 26 be widely available and adopted?

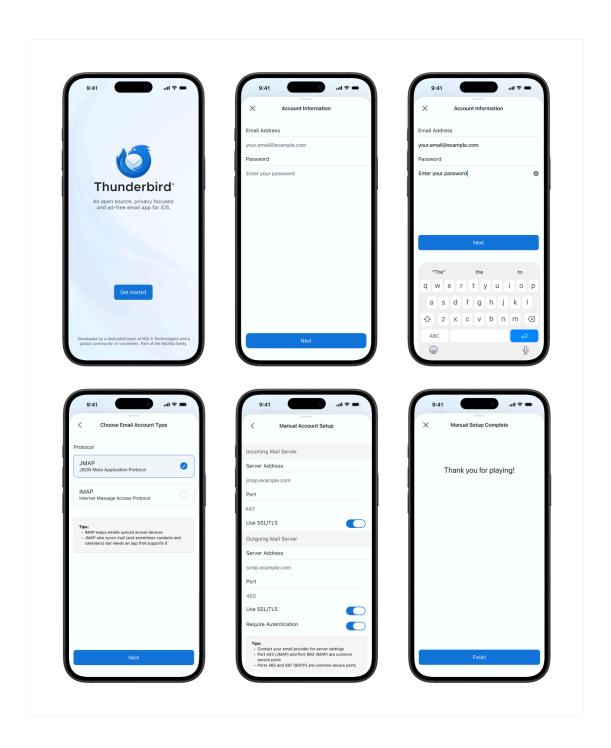
Will we have our iOS version of Thunderbird ready before that?

If we build it on current iOS 18 design guidelines, how would that look on the new version? Will we need to update everything right after releasing the first version?

Due to these uncertainties, we decided to focus only on the new iOS 26 user interface and be compatible with the new version right off the bat.

We will need to test and explore carefully how that behaves on iOS 18 and prior, hoping for some available translation layers in order to guarantee compatibility.

For now, here's a sneak peek of the Account Setup flow for iOS!



## Read/Unread status improvements

As we move through an old codebase and we work hard to modernize components and layouts, it is unfortunately inevitable that we accidentally break old features or setups that are familiar to users.

We apologize for the inconvenience, especially in this latest highlighted issue which created some discomfort when it comes to the visual distinction between read and unread messages.

The old UI offered an option to customize the background color of those states. Even if this solution sounds like a good approach, it created multiple problems related to following system themes, light/dark mode variations, and the overall outdated implementation that needed to be removed.

Some users were dissatisfied, and rightly so, due to the less than optimal visual distinction between those states that solely relied on background colors.

We already improved the overall visual consistency and distinction in that area, but we're working towards implementing a much clearer visual representation for each state that doesn't just rely on background colors.

We're implementing a combination of background and foreground colors, font weight variation, and a visual indicator that specifically represents unread and new messages. This approach will remove any confusion and hopefully completely fix this problem.

Thank you all those involved for your feedback and concerns, and for using the Beta version to provide early feedback and test the new updates.

#### A new release cadence

Starting from September, we're switching to a faster and more consistent release cadence. The first week of every month we will release a new beta version, for example v13b1, followed by a new incremental beta version with improvements and fixes directly from the main branch, being released every week during that month (eg: v13b2, v13b3, etc).

At the end of that month, the current beta, after being deemed reliable and having passed our QA steps, will be promoted as a stable version and at the same time a new beta branch will be released.

In summary, starting from September you can expect a new stable version and a new beta cycle every month.

Changing our cadence will allow us to expose new and work in progress features more quickly to our beta audience, and shorten the waiting time for users on the stable branch, with smaller and consistent incremental improvements.

# **Archive**

### June

#### Thunderbird for iOS

We've been going back and forth between database and JMAP for Thunderbird for iOS. Most of the visible work has flown into creating an initial JMAP library that we can use to access the parts that we need from Thunderbird for iOS. This work will continue into July as well. Progress so far means making JSON requests and parsing responses and making standard get/set/query requests. There is support for working with sessions as well.

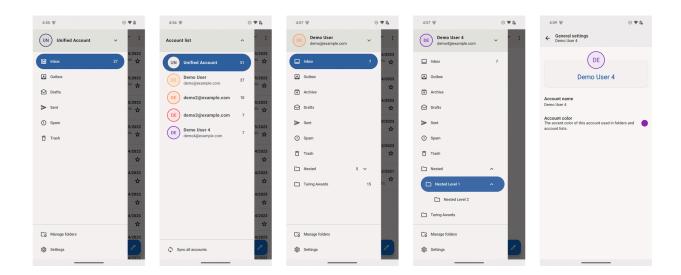
In July we'll have a few things to show for viewing actual folders and email messages. Very preliminary, but already quite some progress! I'm almost tempted to post the screenshots now but I'll wait until next month. We'll also be releasing a new (currently still internal) Testflight version when everything has landed.

#### Thunderbird for Android

We want to make Thunderbird for Android more accessible to contributors and improve some of our documentation. Part of that is our brand new <u>testing guide</u> which talks about which testing patterns to use, how to adhere to our naming conventions and some guidelines around fakes vs mocks. We've recently been talking about making more use of the <u>Maestro</u> testing framework, as it makes it very simple to add tests even for folks without engineering experience.

Further we've made some strides on our <u>overall architecture documentation</u>. If you've been reluctant to contribute because of the learning curve, this might be your chance to make another attempt. Even if you are an existing contributor, we believe the docs will help you understand the codebase a bit better. Let us know what you think, if you see a way that our documentation can be improved go ahead and file an issue.

Next up, we're nearing the end of the drawer updates we've been working on. We know a bunch of folks weren't very happy with the navigation rail given the extra space it uses, and it being unclear which account you actually have selected. We're returning the account selector to the top, and sporting a separate "Unified Account" where you can find not just your unified inbox, but also some other unified folders. If you've set up custom unified folders previously these will appear there as well.



#### Here are a few additional updates:

- Ashley has worked on <u>sync debug tooling</u> so we can get a better understanding of any issues related to emails not arriving in time.
- <u>Jan</u> has switched the EHLO string from 127.0.0.1 to <u>ehlo.thunderbird.net</u> to increase compatibility with email servers that don't accept 127.0.0.1.
- <u>João</u> has improved accessibility of the contact pictures in the message view, and fixed an issue where the "Download Complete Message" button was hidden by the navigation bar.
- <u>Rafael</u> has been working on the foundations of <u>in-app error notifications</u>. He
  improved swiping actions for when the account does not have an archive folder set,
  to avoid surprises. Through this work a bunch of files have been migrated from Java
  to Kotlin, great work!
- <u>Stefan</u> has fixed an issue where some I/O errors were not correctly caught. I'm particularly excited about this since it smooths over the situation where you change from one network to the next, so that push email will arrive a little more reliably.
- Wolf has revamped some of our internal logging support to be more consistent. We really don't need multiple different loggers and might want to change the implementation once in a while:) There has also been a bunch of Java/Kotlin conversion going on, and some refactoring in the local search code. Above mentioned work on the drawer and documentation was also Wolf's work.
- <u>Shamim</u> continues to rock the refactoring. By far the most Java to Kotlin conversion, fixing a crash when adding an account after removal, making threaded view update correctly when in the message list. Notably, the [Gmail] folder placeholder is now no longer visible, you'll see the subfolders directl

## May

#### Thunderbird for iOS

We're growing a few more stars! We're so happy to hear there is great interest in Thunderbird for iOS and hope to reach a stage soon where you all can be a bit more involved. We're also seeing an increasing <u>number of ideas</u> via Mozilla Connect.

Todd has been preparing the JMAP implementation for iOS, which will allow us to test the app with real data. We're exploring the possibility of releasing the first community TestFlight a bit earlier by working directly with live data instead of syncing everything to a database upfront. The app may crash if your inbox has 30GB of email, but this approach should help us iterate more quickly. We still believe offline-first is the right path, and designing a database that supports this will follow soon after.

Further we've set up the initial localization infrastructure. This was surprisingly easy using Weblate's translation propagation feature. We simply needed to add a new component to our <u>Android localization project</u> that pulls from the iOS repository. While Weblate doesn't auto-propagate when the component is set up, if there are changes across iOS and Android in the future, the strings will automatically apply to both products.

#### Thunderbird for Android

We spent a lot of time thinking about the beta and making adjustments. Fast forward to June, we're still experiencing a number of crashes. If you are running the beta, please report crashes and try to find out how to trigger them. If you are not using Beta, please give it a try and report back on the beta list or issue tracker. We'd greatly appreciate it! Here are a few updates worth noting for the month of May:

- Some folks on beta may have noticed the "recipient field contains incomplete input" error which kept you from sending emails. We've noticed as well, and halted the rollout of 11.0b1 on app stores where supported. This issue was fixed for 11.0b2 by Shamim.
- Another important issue was when attaching multiple issues, only one image would be attached. This happens all the way back to 10.0, and we'll release a 10.1 that includes this fix. Again thank you to <a href="Shamim">Shamim!</a>

- Final round of fixes from <a href="Shamim">Shamim</a>: new mail notifications can be disabled again, we have a bunch of new tests and refactoring, we have a few new UI types for the new preference system that <a href="Wolf">Wolf</a> created.
- <u>Timur Erofeev</u> solved a crash on Android 7 due to some library changes in dependency updates we didn't anticipate
- Wolf is getting closer to finishing the drawer updates that we're excited to share in a beta soon. He has also been working diligently to remove some of the crashes we've been experiencing on beta due to the new drawer and some of the legacy code it needs to fall back to. Finally, as we're venturing into Thunderbird for iOS, Wolf has been thinking about the KMP (Kotlin Multiplatform) approach and added support to the Thunderbird for Android repository. He will soon separate a simple component and get things set up so we can re-use it from Thunderbird for iOS.
- Rafael and Marcos have fixed some issues with the system bar appearing transparent. The issue has been very persistent, we're still getting reports of cases where this isn't yet resolved.
- Philipp has fixed an issue for our release automation to make sure the changelog doesn't break on HTML entities.

I also wanted to highlight the new <u>Git Commit Guide</u> that <u>Wolf</u> created to give us a little more stability in our commits and set expectations for pull requests. We have a few more docs coming up in June, stay tuned.

You could be on this list next month, please get in touch if you'd like to help out!

## **April**

Here is an update of what Thunderbird's mobile community has been up to in April 2025. We have a new team member, are getting Thunderbird for iOS out in the open, and continue to work on release feedback from Thunderbird for Android.

#### **New Team**

Last month we introduced Todd and Ashley to the mobile team, and now we have another new face in the team! <u>Rafael Tonholo</u> joins us as a Senior Android Engineer to focus on Thunderbird for Android. He also has much experience with Kotlin Multiplatform, which will be beneficial for Thunderbird for iOS as well.

#### Thunderbird for iOS

We've published the initial repository of <u>Thunderbird for iOS</u>! The application doesn't really do a lot right this moment, since we intend to work very incrementally and start in the open. You'll see a familiar welcome screen, slightly nicer than Thunderbird for Android and have the opportunity to make a financial contribution.

#### **Testflight Distribution**

We're planning to distribute Thunderbird for iOS through TestFlight. To support that, we've set up an Apple Developer account and completed the required verification steps.

Unlike Android, where we maintain separate release and beta versions, the iOS App Store will have a single "Thunderbird" app. Apple prefers not to list beta versions as separate apps, and their review process tends to be stricter. Once the main app is published, we'll be able to use TestFlight to offer a beta channel.

Before the App Store listing goes live, we'll use TestFlight to distribute our builds. Apple provides an internal TestFlight option that doesn't require a review, but it only works if testers have access to the developer account. That makes it unsuitable for community testing.

#### Initial Features for the Public Testflight Alpha

To share a public TestFlight link, we need to pass an initial App Store review. Apple expects apps to meet a minimum bar for functionality, so we can't publish something like a simple welcome screen. Our goal for the first public TestFlight build is to support manual account setup and display emails in the inbox. Here are the specifics:

- Initial account setup will be manual with hostname/username/password
- There will be a simple message list that will only show the INBOX folder messages, with a sender, subject, and maybe 2–3 preview lines.
- You'll have the opportunity to pull to refresh your inbox.

That is certainly not what you'd call a fully functional email client, but it could qualify for bare minimum functionality required for the Apple review. We have more details and a feature comparison in this document.

Exciting news, we're going to build Thunderbird for iOS with JMAP support first and foremost. While support on the email provider side is limited, we start with a modern email stack. This will allow us to build towards some of the features that email from the late 80's was missing. We'll be designing the code architecture in a way that adding IMAP support is very simple, so it will ideally follow soon after.

#### iOS Release Engineering and Localization

We've also gone through a few initial conversations on what the release workflow might look like. We're currently deciding between:

- GitHub Actions with Upload Actions (Pro: very open, re-use of some work on the Thunderbird for Android side. Con: Custom work, not many well-supported upload actions)
- GitHub Actions with Fastlane (Pro: very open, well-supported, uses the same listing metadata structure we already have on Android. Con: Ruby as yet another language, no prior releng work)
- Xcode Cloud (Pro: built in to Xcode, easy to configure, we'll probably get by with the free tier for quite some time. Con: Not very open, increasing build cost)
- Bitrise (Pro: Easy to configure, used by Firefox for iOS, we'll get some support from Mozilla on this. Con: Can be pricy, not very open)

For now, our release process is pressing a button every once in a while. Xcode makes this very easy, which gives the release operations more time to plan a solution.

For localization, we're aiming to use <u>Weblate</u>, just as Thunderbird for Android. The strings will mostly be the same, so we don't need to ask our localizers to do double work.

#### Thunderbird for Android

We're still focusing on release feedback by working on the drawer and looking to improve stability. April has very much been focused on onboarding the new team. I'll keep the updates in this section a bit more brief, as we have less to explore and more to fix :-)

- We've <u>accepted a new ADR</u> to change the shared modules package from app.k9mail and com.fsck to net.thunderbird. We'll be doing this gradually when migrating over legacy code.
- Ashley has fixed a few keyboard accessibility issues to get started. She has also resolved a crash related to duplicate folder ids in the drawer. Her next projects are improving our sync debug tooling and other projects to resolve stability issues in retrieving emails.
- <u>Clément Rivière</u> added initial support for showing hierarchical folders. The work is behind a feature flag for now, as we need to do some additional refactoring and crash fixes before we can release it.
- <u>Fishkin</u> removed a deprecated progress indicator, which provides slightly better support for Android watches.
- <u>Rafael</u> fixed an issue related to Outlook/Microsoft accounts. If you have received the "Authentication Unsuccessful" message in the past, please try again on our <u>betachannel</u>.
- <u>Shamim</u> continues on his path to refactor and move over some of our legacy code into
  the new modular structure. He also added support to attach files from the camera, and
  has resolved an issue in the drawer where the wrong folder was selected.

- <u>Timur Erofeev</u> added support for algorithmic darkening where supported. This makes
  dark mode work better for a wider range of emails, following the same method that is
  used on web pages.
- Wolf has been working diligently to improve our settings and drawer infrastructure. He
  took a number of much needed detours to refactor legacy code, which will make future
  work easier. Most notably, we have a new settings system based on Jetpack Compose,
  where we will eventually migrate all the settings screens to.

That's a wrap for April! Let us know if you have comments, or see opportunities to help out. See you soon!

## March

### First Draft

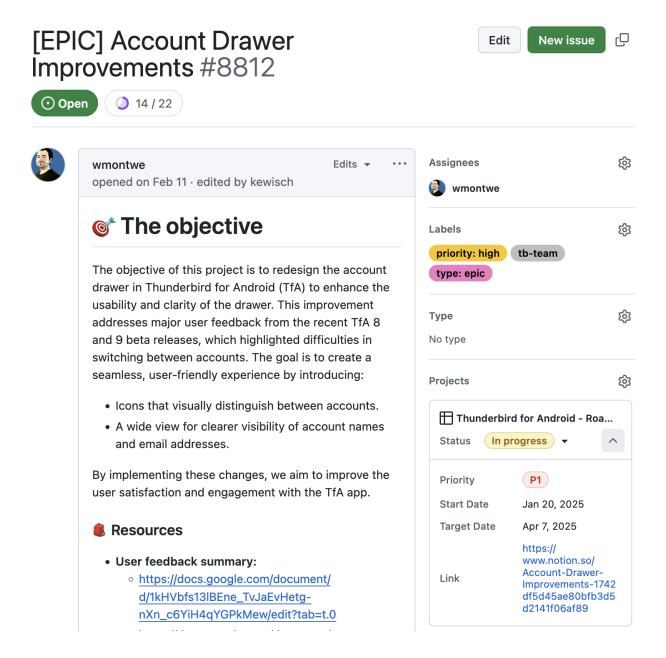
Hello, everyone, and welcome to the Thunderbird for Android March 2025 Progress Report. We're keeping our community updated on everything that's been happening in the Android team, which is quickly becoming a more general mobile team with some recent hires. In addition to team news, we're talking about our roadmap board on GitHub.

## **Team Changes**

In March we said goodbye to <a href="cketti">cketti</a>, the K-9 Mail maintainer who joined the team when Thunderbird first <a href="announced plans for an Android app">announced plans for an Android app</a>. We're very grateful for everything he's created, and for his trust that K-9 Mail and Thunderbird for Android are in good hands. But we also said hello to Todd Heasley, our new iOS engineer, who started March 26. We also have just added Ashley Soucar, an Android/iOS engineer, who joined us on April 7. If all continues to go well, we'll also be adding another Android engineer in the next couple of weeks.

## Our Roadmap Board

Our <u>roadmap board</u> is now available! We're grateful to the Council for their trust and support in approving it. As the board will reflect any changes in our planning, this is the most up-to-date source for our upcoming development. Each epic will show its objective and what's in scope - and as importantly, what's out of scope. The project information on the side will tell you if an epic is in the backlog or work in progress.



If you'd like to know what we're working on right now, check out our sprint board.

## Contribute by Triaging GitHub Issues

Another way to contribute is by triaging open GitHub Issues. In March, we did a major triage with over 150 issues closed as duplicates, marked with 'works for me,' or elevating them up to the efforts and features described in the roadmap above. Especially since we're a small team, helping us know where to act on incoming issues (is a huge service/is immensely helpful), and is a great way to get started as a Thunderbird for Android contributor.

To start triaging bugs, have a look at the 'unconfirmed' issues. Try to reproduce the issue to help verify that the issue exists. Then add a comment with your results and any other information you found that might help narrow down the issue. If you see users generally saying "it doesn't work", ask them for more details or to enable logs. This way we know when to remove the unconfirmed label. If you have questions along the way or need someone to confirm a thought you had, feel free to ask in the community support channel.

#### **Account Drawer**

Our main engineering focus in March has been the account drawer we shared screenshots on in the January/February update. Given the settings design includes a few non-standard components, we took the opportunity to write a modern settings framework based on Jetpack Compose and make use of it for the new drawer. There will be some opportunities to contribute here in the future, as we'd like to migrate our old settings UI to the new system.

We have a few crashes and rough edges to polish, but are very close to enabling the feature flag in beta. If you aren't already using it and want to get early access, install our beta today.

I'd also like to call out a pull request by Clément, who contributed support for a folder hierarchy. The amazing thing here—our design folks were working out a proposal because we were interested in this as well, and without knowing, Clément came up with the same idea and came in with a pull request that really hit the spot. Great work!



## **Community Contributions**

In addition to the folder hierarchy mentioned above, here are a few community activities in March:

- <u>Shamim</u> made sure the Unified Inbox shows up when you add your second account, retained scroll position in the drawer when rotating, removed font size customizations in favor of Android OS controls, flipped the default for being notified about new email and helped out with a few refactorings to make our codebase more modern.
- <u>Sergio</u> has improved back button navigation when editing drafts.
- <u>Salkinnoma</u> made our workflow runs more efficient and fixed an issue in the find folders view where a menuitem was incorrectly shown.
- <u>Smatek</u> improved our edge to edge support by making the bottom Android navigation bar background transparent
- Husain fixed some inconsistencies when toggling "Show Unified Inbox".
- <u>Vayun</u> has begun work to update the Thunderbird for Android app widgets to Jetpack compose (including dark theming)
- SttApollo has made the logo size more dynamic in the onboarding screen.

This is quite a list, great work! When you think about Thunderbird for Android or K-9 Mail, what was the last major annoyance you stumbled upon? If you are an Android developer, now is a good time to fix it. You'll see your name up here next time as well :-)

#### cketti

- https://cketti.de/2025/02/26/goodbye-k9mail/
- We're very grateful for what he has created
- We're thankful for the trust that K-9 is in good hands
- Onwards!

#### Hiring

- o Todd Heasley, the iOS Engineer starting March 26th. We can introduce him.
- Tease that we'll have an Android/iOS engineer in April, and if all goes well also an Android engineer

#### • Roadmap board is available!

- Council has approved the roadmap, thank you for the trust and support.
- This board will reflect any changes to our planning, so it is the most up to date source
- o In each epic you will see the objective, what is in scope, what is out of scope
- You might see a few other epics on our issue tracker, check the project information on the side if they are still in the backlog or something we're going to be working on
- If you are interested in contributing towards any of these features please let us know. We might need to do some initial work first.
  - Find a nice way to say we might also say it isn't something we can accept contributions on
- If you are interested in what we're working on at the moment, please also see our sprint board

#### Roadmap

- Based on the roadmap board we could write a quick summary of what we are up to. Each epic has an objective that could help with that, and there is also the
   2025 Product Strategy Mobile document with more details.
- Note that we consider refactoring and improving stability a major component as we want to provide a great experience. We're focusing on release feedback first.
   We might have said this in the last update.
- Note also we're a small team since cketti left.

#### Triage

- We did a major triage with over 150 issues closed as duplicates, works for me, or rolling them up to the efforts we have planned on the roadmap
- TODO maybe there is an opportunity to describe how to help triage? Reach out to Heather Ellsworth and Wayne Mery

- Engineering
  - Drawer updates
    - Nested folder support
  - o Any new screenshots?

# Draft

## September

#### Self Introduction

Hello community, it's a pleasure to be here and help take part in a product I've used for many years, but now with the focus on Mobile. I am Jon Bott, and am the new Engineering Manager for the Thunderbird Mobile teams. I am passionate about native mobile development and am excited to be helping both mobile apps moving forward.

### Refining our Roadmaps

For now, as we develop, we are refining the roadmap and making more concrete plans for iOS Thunderbird's Alpha release in a couple of months, and finalizing our initial pass with Account Drawer on the Android (planned for release in the next beta). We also have Notification and Message List improvements under development.

## Carpaccio

As a mobile product, we've gone through several changes over the last year or so, from large annual releases, to our more recent monthly beta and release process. Our next steps are to start sizing our features so they fit better into that monthly cadence, and you'll see the benefits of this over the next few months as we simplify our planning & process - breaking our large features into smaller, more frequently delivered pieces. This is based on the Carpaccio method for breaking down features into thin slices with the goal of delivering usable features to our users more quickly, and focusing more on the iterative process helping us take feedback sooner from the community on a feature experience and designs. Not everything will fit in this, of course, but more will go out sooner as we carve away with our larger goals for the platforms.

## Stay Tuned

Over the next few weeks we'll update our timelines and roadmaps, to what pieces we have high confidence in delivering over the next few months, and a 50,000 foot (15,000 meter) view of our larger pieces we hope to tackle in the next year. Ultimately our goal is to more quickly reduce pain points you might have, and keep adding polish to Thunderbird's mobile experience.

## Progress with Thunderbird iOS

We are excited to show the progress we are making in getting the iOS up and running. Some things are connected, others have sample data for now, but it helps us move quickly and start to share what the UI will be like moving forward.

