## Negative Developer Experiences with Meteor.js

**Common Pain Points Reported by Developers:** Over the years, many developers have shared why they found Meteor.js challenging or eventually abandoned it. Key pain points include:

- Scaling & Performance Issues: Meteor's default real-time data sync (DDP + pub/sub) can strain apps at scale. Everything is realtime by default, which is overkill for many apps and makes scaling to many users difficult without careful optimization (Ask HN: Is Meteor.js dead? | Hacker News) (Ask HN: Is Meteor.js dead? | Hacker News). One developer noted Meteor "doesn't scale well... great for proof-of-concept, but painful to scale," due to DDP's resource-heavy design (e.g. caching every client's data) (Ask HN: Is Meteor.js dead? | Hacker News). This led some early heavy users (e.g. community figure Arunoda) to move on, as Meteor was seen as hard to optimize for high concurrency.
- Slow Build Times: As projects grow, Meteor's rebuild times can become frustratingly slow. Developers have reported multi-minute rebuilds, which hurts productivity. In fact, Meteor maintainers acknowledged that "many people do complain about the build times and have stopped using Meteor because of this." (Faster builds/rebuilds for development and production ★ · meteor meteor · Discussion #11587 · GitHub) Long reload times (20–30+ seconds) disrupt development flow, especially compared to newer toolchains. Improving build performance is seen as crucial to winning back developers (Faster builds/rebuilds for development and production ★ · meteor meteor · Discussion #11587 · GitHub).
- Monolithic, "All-In" Architecture: Meteor has historically required going "all-in" on its stack (MongoDB, its build system, its realtime layer, etc.). This benefited rapid prototyping, but felt too inflexible for large projects. Developers worried that Meteor was "really monolithic" (The State of Meteor Part 1: What Went Wrong | Hacker News) for example, swapping out parts was non-trivial. Early Meteor tied you to MongoDB; one commenter noted "with Meteor, it's Mongo or nothing," which deterred those who preferred SQL databases (The State of Meteor Part 1: What Went Wrong | Hacker News) (The State of Meteor Part 1: What Went Wrong | Hacker News). Before official SQL support, this hard MongoDB dependency was a deal-breaker for many, causing them to choose other solutions (The State of Meteor Part 1: What Went Wrong | Hacker News). Similarly, front-end was initially tied to Blaze (later alleviated by React/Vue integration). This tight coupling made some developers feel locked-in and wary of Meteor for long-term projects.
- Complexity Beyond the Basics: Meteor is famously easy to get started with, but developers often hit a "learning cliff" as their app grows. Features like custom routing, fine-grained pub/sub management, pagination, server-side rendering, or handling complex data relations revealed steep complexity (Is React the Future of Meteor? InfoQ). As one team put it, managing subscriptions and caching in Meteor took far more effort than expected, and "near the end of the project we realized none of us actually had a total mastery of what was going on under the hood...which was a terrifying realization." (Is React the Future of Meteor? InfoQ) In other words, Meteor's magic can become a black box, making debugging and advanced use cases difficult without deep framework knowledge.
- Stagnation and Community Concerns: Around 2016–2018, Meteor's momentum seemed to falter, leading to a perception that it was "dying". The core team (MDG) shifted focus to Apollo/GraphQL, leaving Meteor's roadmap unclear. Users noticed key Meteor engineers and community leaders leaving and fewer updates. One long-time user returning in 2020 said "Meteor felt abandoned...the client side

story was split (React vs Blaze), a bunch of the team moved on to Apollo, [and] all sorts of new frameworks...were getting popular." (Why not Meteor in 2020? - Planet Earth - Meteor Forum) Missing modern essentials (like official service worker/PWA support) added to the feeling that Meteor was lagging (Why not Meteor in 2020? - Planet Earth - Meteor Forum). This uncertainty (fear Meteor might be deprecated) caused some to jump to more actively maintained stacks, despite fond memories of Meteor's productivity. As a forum member noted, the lack of communication from MDG became "a constant source of FUD in the community." (Some Exciting Meteor News - #79 by vlasky - announce - Meteor Forum)

- Ecosystem & Tooling Gaps: In its early years, Meteor had a walled-garden ecosystem (Atmosphere packages, no npm support until Meteor 1.3). This meant popular npm libraries weren't directly usable, which frustrated developers. Testing was another pain point: Meteor lacked good testing tooling for a long time, making it hard to adopt in enterprise scenarios. Some also critiqued Meteor's use of global namespace and magic file loading, which could lead to tightly coupled code and difficulty modularizing (Is React the Future of Meteor? - InfoQ). While many of these issues improved over time (npm support, modules, etc.), the initial shortcomings left a negative impression on some developers.

#### Sources:

- Developer comments on Hacker News detailing Meteor's scaling problems and DDP's real-time overhead (<u>Ask HN: Is Meteor.js dead? | Hacker News</u>) (<u>Ask HN: Is Meteor.js dead? | Hacker News</u>).
- Meteor forum posts and GitHub discussions noting slow rebuild times driving developers away (<u>Faster builds/rebuilds for development and production  $\checkmark$  · meteor meteor · Discussion #11587 · GitHub).</u>
- Hacker News discussion of Meteor's monolithic nature and lack of SQL support (pre- Apollo) which alienated some developers (<u>The State of Meteor Part 1: What Went Wrong | Hacker News</u>) (<u>The State of Meteor Part 1: What Went Wrong | Hacker News</u>).
- InfoQ summary of community feedback: Meteor's *"learning cliff"* after the initial easy start (<u>Is React the Future of Meteor? InfoQ</u>).
- Accounts from Meteor forums about the framework feeling abandoned circa 2017–2019 (<u>Why not Meteor in 2020? Planet Earth Meteor Forum</u>) and Meteor's own community acknowledging the need for renewed direction (<u>Some Exciting Meteor News #79 by vlasky announce Meteor Forum</u>).

# Naming Conventions for Branding & Searchability

Adopting unique naming schemes for software releases has proven effective for branding and discoverability in several projects. Notable examples include:

- Apple's macOS (OS X) Codenames: Instead of bland version numbers, Apple gives each major macOS release a distinctive name. Early versions were named after big cats (Cheetah, Panther, Leopard, etc.), later switching to California landmarks (Mavericks, Yosemite, etc.). This strategy makes releases more memorable to users. As Apple itself realized, it's "less confusing to remember a name like Lion instead of a number like 10.7." (Why does Apple name its OSs after big cats? | HowStuffWorks) (Why does Apple name its OSs after big cats? | HowStuffWorks) The catchy names build brand identity and are consumer-friendly it's easier to talk about "Mac OS X Tiger" than "10.4". This also improves searchability: a query for "macOS Catalina issues" is more specific than "macOS 10.15 issues," reducing ambiguity.
- **Google's Android Dessert Names:** For years, Android versions were code-named after desserts in alphabetical order (Cupcake, Donut, Éclair, ... up to Pie). These playful names became part of

Android's brand. Users would eagerly await what dessert comes next, and terms like "Android KitKat" or "Android Oreo" were highly distinctive in web searches (Why does Apple name its OSs after big cats? | HowStuffWorks). The uniqueness of "Jelly Bean" or "Lollipop" (in a software context) made it easy to find information about a specific Android release. Even though Google moved to numeric names now, the dessert codenames created strong consumer mindshare and fun marketing collaborations (e.g. Android KitKat).

- Ubuntu's Alliterative Animal Names: Ubuntu Linux versions are famously named with an adjective + animal formula (e.g. "Bionic Beaver" for 18.04, "Focal Fossa" for 20.04). This quirky tradition, started by Ubuntu's founder, gives each release a memorable identity (Why Every Ubuntu Release named after animal? DEV Community). The codenames often reflect the release's character (e.g. "Precise Pangolin" was chosen to emphasize precision) (Why Every Ubuntu Release named after animal? DEV Community). These names are much more recognizable than version numbers; many users refer to "Trusty Tahr" or "Jammy Jellyfish" in conversation. From a branding perspective, it adds personality to the software, and from a searchability perspective, the names are unique phrases that reliably point to Ubuntu content (a search for "Ubuntu Bionic issue" will directly relate to Ubuntu 18.04).
- WordPress Jazz Musician Names: The WordPress project names all major releases after legendary jazz musicians (e.g. "Miles Davis", "Dinah Washington", "Billy Joel"). This is less about user marketing (WordPress users often just use version numbers), but it's an internal naming convention that still surfaces in announcements. It contributes to brand culture and produces unique identifiers for each release. WordPress credits this to the core developers' love of jazz, naming versions in "honor of jazz musicians we admire." (History WordPress.org) For instance, WordPress 5.0 was code-named "Bebo" (after Bebo Valdés). While not as public-facing as Apple or Ubuntu's names, it's another example of a consistent theme reinforcing project identity.
- Others: There are many other cases of naming conventions aiding branding. Android was already mentioned; Fedora Linux used Schrödinger's Cat, Heisenbug, etc. as release mottos; Debian uses Toy Story character names (Woody, Squeeze, etc.) for releases, making them easy to refer to. Even Node.js LTS releases are named after elements in the periodic table (Argon, Boron, Carbon...), which, while mostly for fun, do create a unique reference point for documentation and discussion. In all these cases, a themed naming scheme makes it simpler for community and press to talk about the software a catchy name is more engaging than a version number, and it avoids the confusion of numeric increments (especially if version numbers get out of sync or non-sequential).

Why It Works: The underlying benefit of such naming conventions is brand consistency and memorability. A distinctive codename becomes a hook in people's minds. It also improves search engine optimization since the code names are often unique words or combinations – searching for "Ubuntu Focal Fossa" or "macOS Big Sur features" yields focused results. In contrast, generic terms or version numbers might collide with other meanings. These names humanize the software (or at least make it more approachable) and can generate press buzz on their own. As one commentary on Apple's strategy noted, "catchy OS names are chosen with consumers in mind" – they are easier to remember and discuss than technical numbers (Why does Apple name its OSs after big cats? | HowStuffWorks).

#### Sources:

- HowStuffWorks article on Apple's big-cat naming strategy (noting consumer memorability) (<u>Why does Apple name its OSs after big cats?</u> | HowStuffWorks) (<u>Why does Apple name its OSs after big cats?</u> | HowStuffWorks).

- Android OS dessert names mentioned in same article (<u>Why does Apple name its OSs after big cats?</u>]
   HowStuffWorks).
- Ubuntu release naming explained by an Ubuntu trivia post (Mark Shuttleworth's rationale for memorable, fun names reflecting each release's qualities) (<u>Why Every Ubuntu Release named after animal? - DEV Community</u>).
- WordPress official history page citing the jazz musician naming tradition for major releases (<u>History WordPress.org</u>).

## Modernizing Meteor's Mobile App Support

Meteor historically enabled mobile apps via integrated **Cordova**, packaging the Meteor web app into a hybrid WebView for iOS/Android. However, Cordova's relevance has waned, and developers are exploring better alternatives:

### Moving from Cordova to Capacitor

**Capacitor** (by the lonic team) is a modern drop-in replacement for Cordova that has gained popularity. It serves a similar purpose – running web code as a native app – but is more actively maintained and developer-friendly. Meteor's maintainers have recognized this trend. Meteor's official roadmap now includes Capacitor integration, acknowledging that "unlocking Capacitor will keep us modern and enable more powerful hybrid apps" as Cordova's approach "becomes limiting over time" (Cordova support waning. Capacitor is more popular? - mobile - Meteor Forum). Capacitor offers several advantages:

- Up-to-date Plugin Ecosystem: Capacitor can use most Cordova plugins and has its own growing plugin ecosystem. Many new native device features (camera, GPS, payments, etc.) have Capacitor plugins maintained by the community or lonic. Cordova plugins, by contrast, may be unmaintained. For example, the makers of a popular mobile purchase SDK (RevenueCat) announced deprecating their Cordova plugin and advised switching to Capacitor (Cordova support waning, Capacitor is more popular? mobile Meteor Forum) (Cordova support waning, Capacitor is more popular? mobile Meteor Forum). By moving to Capacitor, Meteor developers can tap into these modern plugins and fixes.
- Better Maintenance & Tooling: Capacitor is actively maintained to support the latest iOS/Android SDK changes. It doesn't require special CLI commands to build; you build your web app as usual and then run Capacitor CLI to copy the assets and open Xcode/Android Studio. This simpler workflow means less Meteor-specific magic. In fact, a developer noted that using Capacitor with Meteor should be straightforward: "build your Meteor app like normal... then do the whole npx cap copy routine and build the app in Xcode/Android Studio" (lonic 4 native components + Capacitor + Meteor, is it possible? Capacitor Ionic Forum) (lonic 4 native components + Capacitor + Meteor, is it possible? Capacitor Ionic Forum). No custom build process is needed, since Capacitor projects are essentially standard native projects with your Meteor bundle included.
- Unified Development: If Meteor adopts Capacitor officially, developers could have a more unified experience across web, mobile, and even desktop (Capacitor has an Electron platform). This means one consistent set of tools and potentially easier cross-platform hot code push (if implemented). The Meteor team member indicated they are "definitely willing to work on [adding Capacitor] as part of future work", likely around Meteor 3.x (Cordova support waning, Capacitor is more popular? mobile -

<u>Meteor Forum</u>). In the meantime, some in the community have experimented with Capacitor manually. Initial reports are positive, suggesting Meteor apps can run under Capacitor with little friction.

Current Status: As of late 2024, Meteor does not yet have built-in Capacitor support, but it's on the horizon (Cordova support waning, Capacitor is more popular? - mobile - Meteor Forum) (Cordova support waning, Capacitor is more popular? - mobile - Meteor Forum). Ambitious developers can already try it by creating a Capacitor project and pointing it to Meteor's web output. This involves building the Meteor app (perhaps as a static bundle or running Meteor in production mode), then in a Capacitor app, setting the webDir to Meteor's client bundle directory and using npx cap copy to pull in the files. From there, standard Xcode/Android Studio builds apply. While a bit manual, this route lets you leverage Capacitor's features today. Once Meteor officially integrates it, we can expect smoother configuration (possibly a meteor add-platform ios-capsule or similar command in the future).

### Alternative Mobile Approaches

Aside from hybrid web wrappers, Meteor can support mobile apps via other strategies:

- React Native Integration: React Native allows building fully native mobile apps using JavaScript and React, and Meteor can serve as the backend for those apps. In fact, Meteor has a guide and community packages to integrate with React Native. You can connect a React Native app to a Meteor server using DDP (Meteor's data protocol) or GraphQL. With the @meteorrn/core library, a React Native app can call Meteor Methods, use Meteor's real-time data subscriptions, and even leverage Meteor's Accounts system, all over a WebSocket connection to the Meteor server (React Native | Meteor Guide). This means you don't have to use Cordova/Capacitor at all your mobile UI is truly native, but you still write backend logic in Meteor and reuse your database and publish/subscribe logic. The Meteor team notes that most Meteor features "including Methods, Pub/Sub, and Accounts" are usable from React Native with the right setup (React Native | Meteor Guide). The catch is you'll be maintaining two codebases (one for the Meteor web app and one for the React Native app), but you get native performance and UI. For developers already comfortable with React, this is a compelling route, and several apps in the wild use Meteor as a backend with a React Native front-end.
- Progressive Web Apps (PWA): An increasingly popular approach to "mobile app" support is making the Meteor web app a PWA. A Progressive Web App is a web application that can be installed to a user's home screen and run offline, using modern web APIs (service workers, web push, etc.). Meteor is inherently a single-page app platform, which makes it a good candidate for PWA conversion. Out of the box, Meteor doesn't ship with service worker support for caching, but it's relatively easy to add (Transform any Meteor App into a PWA DEV Community). By adding a service worker file and a manifest, a Meteor app can become installable on mobile devices and even work offline to some extent. This gives a near-native experience (launch from home screen, fullscreen app, offline content) without going through app stores or maintaining separate code. Several community tutorials show how to do this with tools like Workbox or manual service worker scripts. While a PWA isn't a native app, it addresses many use cases (especially content-oriented apps) and avoids the need for Cordova/Capacitor entirely. It's essentially leveraging the web platform to reach mobile users.
- Native SDKs with DDP/GraphQL: For completeness, Meteor's real-time protocol DDP has client
  implementations in other languages. In the past, developers have written native iOS and Android clients
  (e.g. using Swift or Kotlin) that connect to a Meteor server. These aren't officially maintained now, as
  most have opted for higher-level solutions like React Native or simply REST/GraphQL APIs. But if one

wanted, they could use Meteor as a pure backend (exposing methods over DDP or an HTTP REST API via Meteor's server), and write a native app that talks to it. This is akin to using Meteor like any Node.js backend. It forfeits Meteor's integrated front-end, but it's an option if you needed full native capabilities or wanted to use a framework like Flutter (which could consume a REST/GraphQL API provided by Meteor).

In summary, to improve Meteor's mobile support, **moving to Capacitor** is the most straightforward enhancement – it modernizes the hybrid approach and is in line with current industry tools. For those seeking truly native experiences, **React Native integration** with Meteor provides a well-trodden path. And for a lighter-weight solution, **PWAs** allow Meteor apps to behave like mobile apps without any native wrapper at all. Each approach has trade-offs, but they ensure Meteor apps aren't limited by Cordova's aging technology.

#### Sources:

- Meteor forum post by a core team member confirming plans to integrate Capacitor for mobile, citing the need to keep Meteor's cross-platform support modern (<u>Cordova support waning, Capacitor is more</u> <u>popular? - mobile - Meteor Forum</u>).
- Meteor forum discussion where a developer describes Cordova's growing limitations as "painful," prompting interest in Capacitor (<u>Cordova Migration to Capacitor mobile Meteor Forum</u>).
- lonic Forum reply explaining how a Meteor app could be built and packaged with Capacitor (showing the relative ease of dropping Meteor's web output into Capacitor's workflow) (lonic 4 native components + Capacitor + Meteor, is it possible? Capacitor lonic Forum) (lonic 4 native components + Capacitor + Meteor, is it possible? Capacitor lonic Forum).
- Meteor Guide on React Native integration, highlighting that Meteor's pub/sub and accounts system can be used in a React Native app via DDP integration (React Native | Meteor Guide).
- Meteor community blog on PWAs noting that Meteor apps can be turned into PWAs with a few steps, since Meteor already uses a single codebase for web/mobile similar to the PWA philosophy (<u>Transform any MeteorJS App to a PWA in 2024 - DEV Community</u>).

# Improving Desktop App Distribution for Meteor

Beyond web and mobile, Meteor can target desktop environments. The primary way to do this is by packaging the Meteor app into an **Electron** application (essentially a desktop app that contains an embedded browser and Node.js). There are a couple of approaches to achieve this, and ongoing efforts to streamline the process:

### Meteor-Desktop Project (Electron Integration)

**Meteor-Desktop** is a community-maintained project that wraps a Meteor app in Electron, enabling you to distribute it as a native desktop application for Windows, macOS, and Linux. This project was originally created by developers at Mixmax and Arunoda's team, and it provides tight integration – including support for Meteor's Hot Code Push (HCP) in the desktop app. Hot Code Push means the desktop app can retrieve updates from the Meteor server without the user reinstalling the app, a very powerful feature for keeping desktop clients in sync.

Status and Recent Revival: Meteor-Desktop was dormant for a while, but in 2022 the Meteor Community Packages (MCP) group forked and revived it, releasing Meteor-Desktop 3.0 (Meteor Desktop 3.0 - announce - Meteor Forum). This update made it compatible with Meteor 2.x and Node 14+ (Meteor Desktop 3.0 - announce - Meteor Forum). The npm package was renamed to

@meteor-community/meteor-desktop as part of the revival. Community members were excited, noting that if kept in shape, it allows a true "write your app for Web, Mobile, and Desktop with Meteor" story (Meteor Desktop 3.0 - announce - Meteor Forum). In essence, Meteor-Desktop gives Meteor the "Electron shell" it needs to be a cross-platform desktop app.

- Meteor-Desktop Capabilities: It not only packages the app, but also provides hooks to write Electron "main process" code and use native modules. You can add desktop-specific features (like file system access, system notifications, menus, etc.) alongside your Meteor code. Under the hood, it runs an Electron browser window for the Meteor client and can either embed the Meteor server or connect to a remote server. The project's selling point was that it had full-stack bundling you could even bundle a portion of your Meteor server code to run offline in the desktop app, and still receive HCP updates to that code. This makes it possible to have an offline-first desktop app with Meteor's reactivity when online.
- Need for Improvements: Despite the 3.0 release, Meteor-Desktop as of 2023 was lagging behind the latest Electron versions. One community member noted it was "very far behind (uses Electron 14)" (Meteor + Electron for desktop game on steam deployment Meteor Forum) while current Electron is v25+. This is an area to improve: updating Meteor-Desktop to use newer Electron (with security patches and features) and supporting newer Node versions is important. The Meteor community has discussed plans to continue upgrading this package. In August 2023, members of the MCP indicated interest in a "new meteor-desktop package with the latest versions" once Meteor 3 (Node 18+) is out, potentially even considering alternatives to Electron if something better arises (Meteor + Electron for desktop game on steam deployment Meteor Forum). In short, enhancing Meteor-Desktop would involve upgrading Electron, ensuring compatibility with future Meteor/Node versions, and possibly simplifying its API. There's also room to improve documentation and examples, so more developers can easily package their apps.
- Electron Updates & Stability: Some users caution that switching away from Electron is not necessary

   Electron itself is very stable and well-supported. They urge that any new solution should maintain backward compatibility, as teams have production apps reliant on Meteor-Desktop's Electron-specific code (Meteor + Electron for desktop game on steam deployment Meteor Forum). So, the likely path is sticking with Electron but bringing Meteor-Desktop up to date, rather than a radical change.
   Community contributions here (testing, updating dependencies, etc.) can help sustain Meteor-Desktop as a viable solution.

### Other Approaches for Desktop Integration

Apart from Meteor-Desktop, developers have experimented with more generic or alternative solutions:

- Using Capacitor's Electron Platform: As mentioned in the mobile section, Capacitor can target desktop via Electron. This provides an alternative way to wrap a Meteor app for desktop. In a Meteor forum discussion, a developer reported using Capacitor's Electron wrapper "in production, [and] it works perfectly fine." (Cordova support waning, Capacitor is more popular? - mobile - Meteor Forum)
The idea would be to leverage Capacitor to manage the Electron packaging, instead of Meteor-Desktop. Capacitor's Electron support essentially creates an Electron app that loads your web code, with access to Node APIs via preload scripts. If Meteor integrates Capacitor officially, this could become a one-stop solution: one codebase deployed to web, mobile (Capacitor iOS/Android), and desktop (Capacitor Electron). The upside is consistency and possibly better maintenance (since the lonic team maintains Capacitor). The downside is that Meteor-Desktop's special features like HCP

might not be supported out-of-the-box. However, one could implement an auto-update mechanism using Electron's autoUpdater or by tying into Meteor's update feed.

- **DIY Electron Packaging:** Even without special packages, one can create an Electron app manually for Meteor. This might involve using Meteor's build output. For example:
  - Use meteor build to generate a production bundle of your app (which yields a Node server bundle and client assets).
  - Write a small Electron main. js that either starts the Meteor server in a child process or points a BrowserWindow to a running Meteor server (local or remote).
  - Package that with a tool like electron-builder or electron-packager to create installers for each OS.

Some older community projects took this approach, such as **Electrify** and **Electrometeor**, which provided CLI tools to bundle Meteor with Electron. Many of those are now abandoned or outdated (Meteor + Electron for desktop game on steam - deployment - Meteor Forum) (Meteor + Electron for desktop game on steam - deployment - Meteor Forum), largely because Meteor-Desktop superseded them with a more integrated solution. Still, for a developer who just needs a quick desktop wrapper (and maybe doesn't need hot code push), doing a custom Electron setup is viable. You would handle updates by prompting users to download new versions (or implement Electron's auto-update from a file server or GitHub releases).

- Progressive Web App for Desktop: This is a bit outside the box, but with the advent of PWA support on desktop (e.g. in Chrome and Edge, you can "install" a PWA which then runs in a window like a native app), one could leverage that for simpler use cases. A Meteor app that's a PWA can be "installed" on Windows or macOS without any Electron wrapper, just through the browser's menu. However, distribution is manual (or via Microsoft Store for PWA). It also won't have system-level capabilities beyond what web APIs allow. This is more a convenience than a true distribution strategy, but worth noting as it requires little effort once PWA features are added.

Which to choose? For a fully robust solution, Electron remains the go-to for desktop Meteor apps. The Meteor-Desktop project is the most Meteor-aware implementation, so improving it (updating Electron, fixing bugs, maybe adding features like native auto-update integration) would directly benefit those who want to target desktop. It effectively lets developers reuse 100% of their Meteor code for a desktop app, which is a huge win for productivity.

If Meteor-Desktop's pace is too slow or a team needs something more custom, using **Capacitor or a custom Electron setup** are practical alternatives. Capacitor's approach might appeal if you're already using it for mobile – you'd get a unified workflow and plugin system for all platforms. A custom approach might be warranted if you have very specific needs (for example, bundling a heavy offline database or custom Node integrations).

In all cases, the goal is to make desktop deployment as painless as Meteor's web deployment. The good news is that multiple paths exist, and with community effort, these paths are becoming easier. The Meteor community clearly values desktop support (as seen by the revival of meteor-desktop and forum discussions), so we can expect continued improvements in this area.

#### Sources:

- Announcement of Meteor-Desktop 3.0 by the Meteor Community, reviving the Electron-based solution and calling for further upgrades (<u>Meteor Desktop 3.0 announce Meteor Forum</u>) (<u>Meteor Desktop 3.0 announce Meteor Forum</u>).
- Forum discussion highlighting Meteor-Desktop as the current best option while noting it's behind on Electron versions (<u>Meteor + Electron for desktop game on steam - deployment - Meteor Forum</u>), and MCP's intention to update it (possibly after Meteor 3) (<u>Meteor + Electron for desktop game on steam - deployment - Meteor Forum</u>).
- Meteor forum thread where users discuss integrating Meteor with Capacitor's Electron support as an alternative, with reports of success (<u>Cordova support waning</u>, <u>Capacitor is more popular? mobile Meteor Forum</u>).
- Historical context from Meteor forums about older Electron packaging tools (meteor-electron, Electrify) being abandoned in favor of Meteor-Desktop (Meteor + Electron for desktop game on steam deployment Meteor Forum) (Meteor + Electron for desktop game on steam deployment Meteor Forum).
- Mixmax blog (and HN discussions) from the early days of Meteor + Electron, which underscored the
  demand for desktop apps and led to projects like meteor-desktop (<u>Turn-key Electron apps with Meteor-Mixmax</u>). (Mixmax managed to ship a Meteor-based desktop app, proving the concept and inspiring the
  community tooling.)