

No Need to Reinvent the DevOps Wheel for Mac



Why top enterprises are choosing Orka over DIY

Executive Summary

In today's digital-first landscape, mobile applications are strategic revenue engines. For enterprise organizations, ensuring fast, reliable, and secure iOS application delivery is not optional—it's business-critical.

As a technology leader, you're tasked with balancing innovation and efficiency while mitigating risk. When considering whether to build a custom cloud-based CI/CD pipeline for Apple platforms or adopt a commercial solution, the data is clear: purchasing a turnkey solution like Orka by MacStadium is significantly more cost-effective, scalable, and secure than building your own.

For enterprises looking for an alternative to DIY CI, Orka offers:

- **50–80% lower total cost of ownership (TCO) compared to custom or open-source solutions**
- **Immediate scalability and reduced build times**
- **Enterprise-grade security and compliance**
- **Future-proof infrastructure with flexible deployment (on-prem, AWS, or MacStadium)**

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The Build vs. Buy Dilemma in Apple CI/CD

It's common for DevOps and engineering teams to gravitate towards custom solutions—it's in their DNA. While it may be tempting, a complete solution like Orka can save your business, especially when it comes to total ROI, speed to market, compliance, and operational resilience.

In the past, cost-effective, out-of-the-box enterprise-grade virtualized CI pipeline solutions for iOS application development were non-existent. That is no longer true today. Not only does an enterprise-grade virtualized CI solution for Xcode-based application development exist, but it also excels in two areas that are top of mind in the DevOps sphere: reduced build times and security compliance.

While open-source tools like Tart and Orchard may appear attractive initially, the hidden costs—development time, maintenance, security exposure, and opportunity cost—paint a different picture.

Ask Yourself These Questions Before Building Your Own CI Pipeline

- Are we in the business of building CI tools?
- Can our internal platform meet enterprise-grade availability, compliance, and scale requirements?
- How do the costs of in-house support and maintenance impact the business over time?
- Can we afford the risk of infrastructure obsolescence within a 3–6 year window?

Hidden Costs of DIY CI/CD for iOS

Building and maintaining a custom CI/CD setup for Apple platforms is expensive and resource-intensive. Let's break it down:

COST BREAKDOWN

Estimated costs to build a 30-node platform

- Millions of dollars in development
- Ongoing support and upgrades
- Significant opportunity cost (time and talent)
- Possible security vulnerabilities from unvetted open-source components

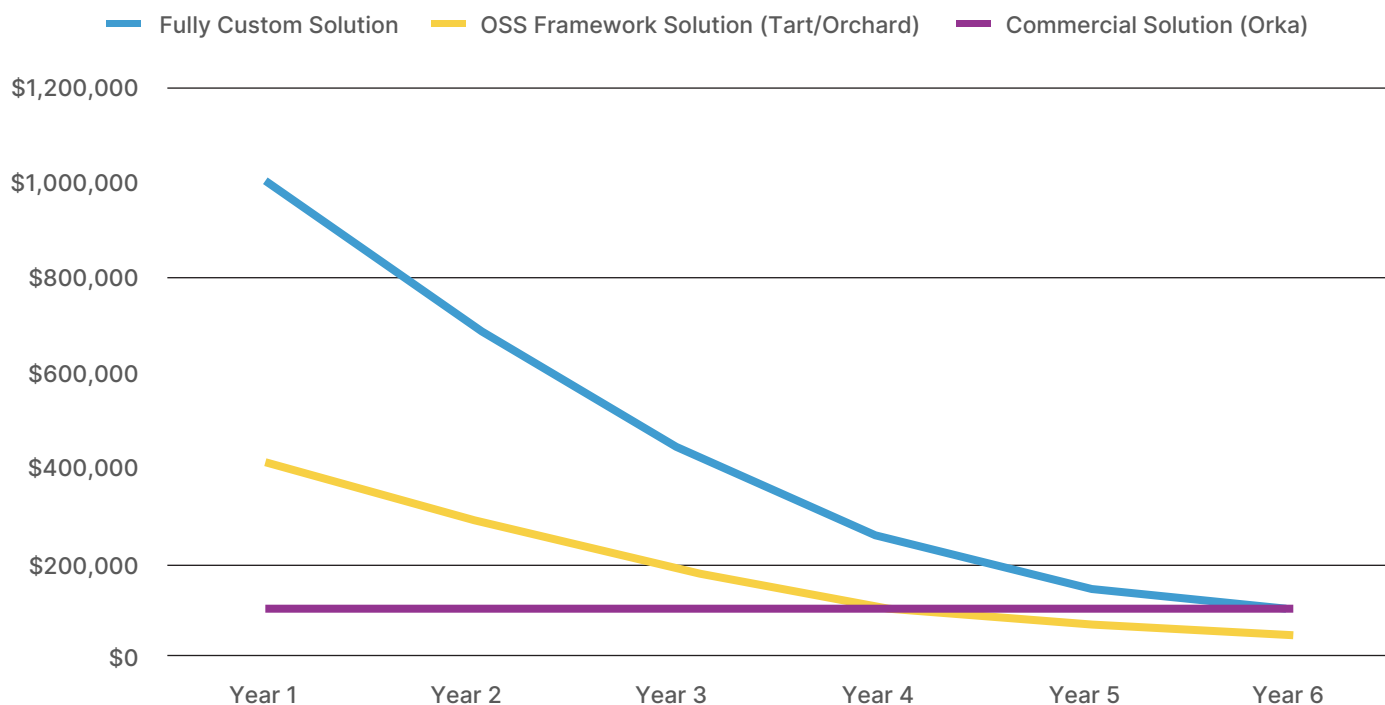
The following TCO/ROI analysis compares three options for building a macOS CI platform: a fully custom-built solution, Cirrus Labs' Tart/Orchard open-source framework, and MacStadium's turnkey Orka solution. The analysis reflects software development costs and applicable licensing for a 30-node CI environment supporting up to 60 VMs, integrated with leading CI tools (Jenkins, GitLab, TeamCity, etc.), and assumes a 20% annual capacity growth rate.

Drawing on MacStadium's experience developing Orka, we've modeled realistic cost estimates for each approach.

Both DIY paths—whether fully custom or based on Tart/Orchard—incur significant upfront engineering investment and ultimately deliver a higher total cost of ownership than Orka's ready-to-deploy, enterprise-grade solution.

The chart below shows how a fully custom solution and OSS framework solution like Tart/Orchard have significant upfront costs, 4-10x greater than Orka's. Orka maintains a consistent, steady cost of ownership from Day 1, allowing business leaders to achieve better ROI, faster.

Annual Cost to Implement iOS CI Pipeline



Open-Source Software (OSS): The Security & Support Liability

OSS consists of great tools for your team to utilize, but at what cost? Open-source solutions lack formal support and introduce cybersecurity risks due to complex dependency chains and unmanaged vulnerabilities. Building your own CI platform based on open-source software can be risky for businesses since you would be supporting it yourself. The open-source communities are notorious for rapidly developing features but then neglecting all but the most severe bugs.

Orka, on the other hand:

- Includes SLAs for support
- Prioritizes security fixes over feature development
- Undergoes cybersecurity regression testing with every release

The Orka Advantage: Purpose-Built for Apple CI/CD

Orka is the only Kubernetes-native, OCI-compliant, enterprise-grade Apple virtualization platform designed for automated CI/CD pipelines.

Developers building applications with Xcode can leverage Orka's virtualization and cloud orchestration platform, built on proven DevOps technologies like Docker and Kubernetes. With Orka, Apple OS developers can deploy containerized CI workloads just as efficiently as Android and Linux teams, without the expense of creating a separate CI platform for Apple apps. Orka is ready to be installed anywhere and can run on-premises, on AWS, or in MacStadium's data centers.



The Glovo team transitioned to Orka on a Mac cloud with MacStadium to handle their iOS app development processes. With Orka, Glovo achieved a 30% reduction in build time, allowing them to increase development throughput and scale the organization faster. [Read the case study.](#)

Orka delivers:

- Rapid deployments: Ephemeral runners launch in seconds
- Scalable environments: From a single node to hundreds
- Security-first architecture: TLS, RBAC, SSO, and signed OCI images
- Toolchain compatibility: Jenkins, GitHub Actions, GitLab, Buildkite, and more
- Hybrid flexibility: Deploy on-prem, AWS, or in MacStadium's secure data centers

Orka Ecosystem for Apple DevOps



Orka: a Kubernetes-native hybrid cloud offering for fully automated CI/CD pipelines running large numbers of build and test workloads across many macOS nodes supporting permanent or ephemeral runners that run on-prem or in public clouds.

Orka Desktop: a free Apple virtualization application with a user-friendly interface to create, configure and share Apple virtual machines locally with support for OCI compliant images.

Orka Hub: an image marketplace for Orka OCI images offering the latest versions of macOS with necessary tools to quickly adopt new releases of macOS and Xcode.

The Benefits of Being Kubernetes-native

Being Kubernetes-native means your macOS virtualization runs on the same industry-standard orchestration framework powering today's most efficient, scalable cloud-native applications. It helps simplify resource management, speeds up team collaboration, and eliminates inefficiencies from rigid, custom-built systems. The result: faster delivery, optimized compute usage, and lower operational costs—directly improving your bottom line.

Why OCI Images are Important

OCI images drive operational efficiency by enabling faster VM deployments, reducing storage requirements, and simplifying image sharing across clusters. For IT and development teams, this means faster transfers, reduced storage use, and easy portability, helping IT teams deploy and share macOS environments across clusters with less overhead



With the transition to Orka, Swift Package Index gained a scalable, secure environment to run thousands of builds. Now the team can handle over 350,000 builds a month without any manual intervention, freeing them to focus on improving the Swift Package Index and serving the Apple developer community.

[Learn more.](#)

Conclusion: Why Orka is the Optimal Solution for Development and IT Teams

When it comes to building a custom CI/CD pipeline, your internal DevOps and iOS application teams may present various arguments for in-house solutions. However, the reality is clear: Orka outperforms any custom approach in the two key areas that matter most to business leaders: ROI and TCO.

In today's market, it's rare to find a solution that is both superior in functionality and cost-effective. By choosing Orka, you join leading enterprises already benefiting from our CI/CD ecosystem for Apple platform builds, ensuring you're making a sound business decision for your organization.

Long story short, your peers are already making the switch. Orka provides the secure, scalable, and cost-effective foundation your enterprise needs to innovate in the Apple development ecosystem, without reinventing the wheel. Orka isn't just the most cost-effective option – It's the strategic one.