

## **Release Notes - 24.8**

### **Introduction**

We're excited to present **Version 24.8.0**. Six months in the making, this release is our first step towards overhauling our technology stack and architecture, migrating to modern technologies and best practices that will enable Commit.Works to grow the product exponentially and secure the trust and confidence of potential and new clients in our product. This release also marks a change in the product team's culture - adopting a culture of continuous review and improvement with the focus on increasing reliability, security, performance, and interoperability while decreasing lead time from development to production.

### **Improvements**

#### **Database Version Upgrade from RavenDB 3.5 to RavenDB 5**

- Stronger Security. We have followed RavenDB security best practices between server and client communication, implementing the use of certificates only.
- Improved performance and reliability. RavenDB 5 is 10 times faster than RavenDB 3.5, potential to reach 1 million reads per second and 150 thousand writes per second. RavenDB 3.5 offered only the potential to reach 30 thousand reads per second and 15 thousand writes per second.

Indexing speed and reliability have also improved, previously with RavenDB 3.5 corrupted indexes were an expected occurrence during unplanned server outages, with RavenDB 5 the indexes will not be corrupted.

- Allows for the continuation of under the hood and infrastructure improvements increasing reliability, stability, and the decreased lead time from development to production.

#### **Removal of Job scheduler storage from RavenDB to Redis**

- **Performance & Reliability**
  - Hangfire with Redis job storage implementation processes jobs much faster and reliable than the pairing of Hangfire with RavenDB job storage.
  - Redis application is installed on our Azure cloud platform, dedicated server cluster ensuring high availability and performance - the ability to scale up resources on demand when required.
  - The move to Redis for our job storage improves the reliability of jobs execution, as well as removing the risk of an incident with Hangfire affecting RavenDB the application's primary database.