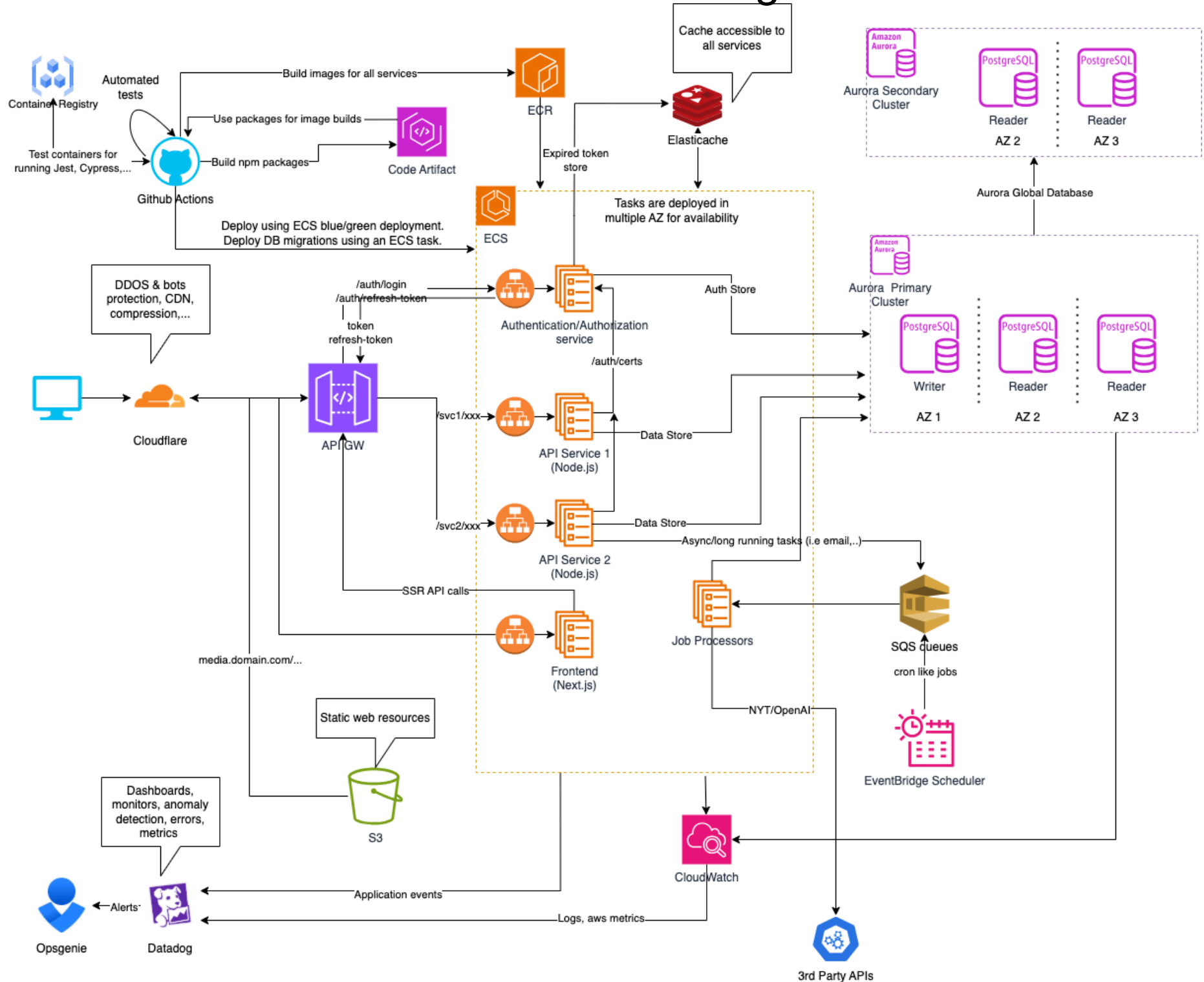


# Architectural Design



The above diagram is the proposed high level architecture for the new SaaS product. I'm looking forward to a deep dive into architecture during our interview.

I want to add a few notes on the proposed architecture:

- The Frontend is a monolith Next.js service but it could easily evolve to a micro frontend architecture for better scalability and ease/autonomous deployment with the ALB in front of it routing requests, based on the path, to different services.
- The CI/CD pipeline managed by Github Actions Workflows is also responsible for applying database migrations by launching ECS tasks and taking advantage of ECS blue/green deployment hooks to sync the rollout of new tasks with the migrations.
- All the infrastructure is provisioned with IAC (Terraform/Terragrunt) allowing it to easily support multiple environments (dev, test, staging, prod) and rebuild environments in case of disaster recovery.