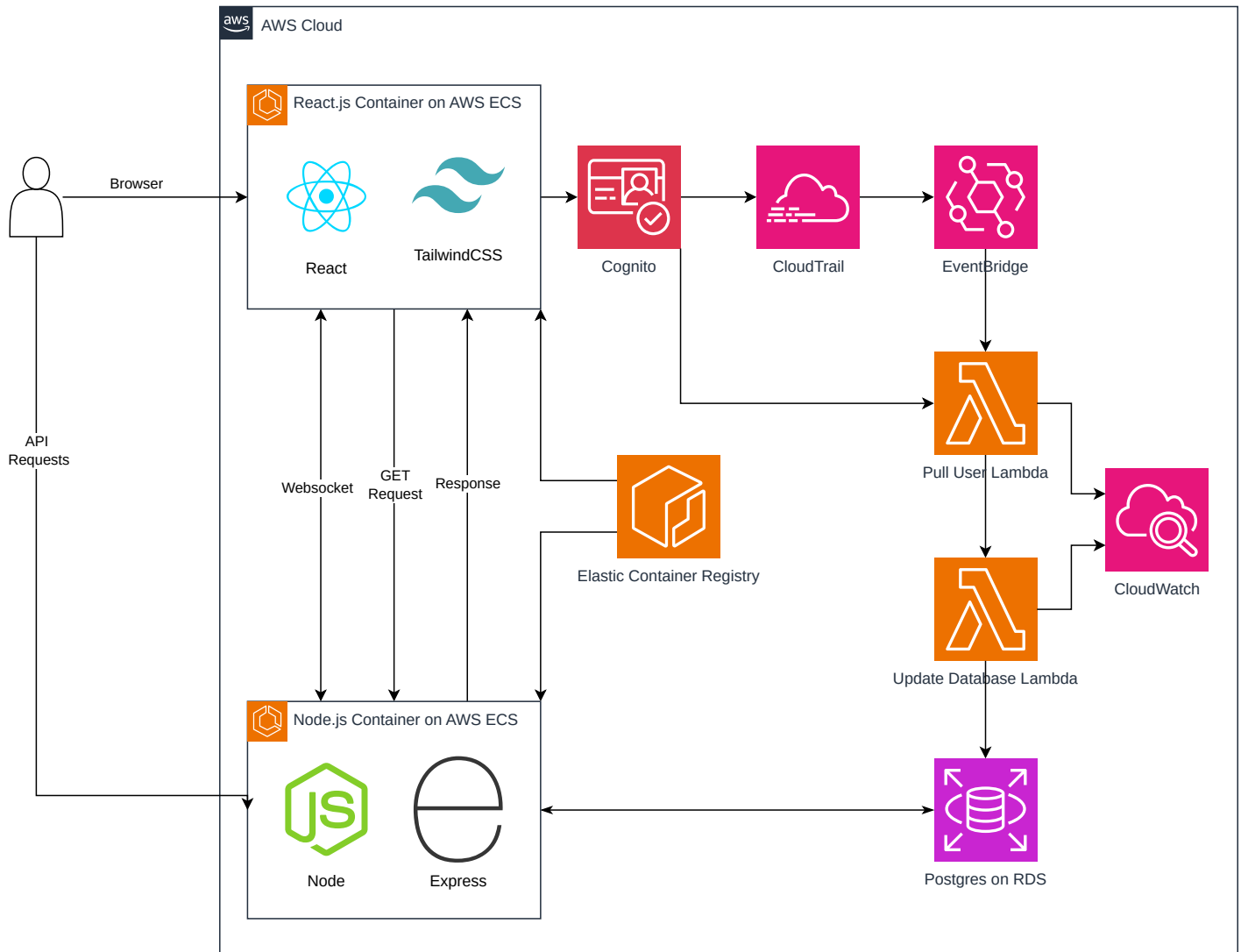


Enterprise Protected Infrastructure Example



This project serves as a foundational example of an architecture that can be expanded upon to create large-scale enterprise applications. It is designed with scalability, maintainability, and extensibility in mind, utilizing a set of modern technologies and AWS services to provide a robust, scalable, and event-driven environment. This architecture can be tailored and expanded to meet the unique requirements of a variety of applications, making it an ideal starting point for developers building complex solutions. Below, we highlight the key features, technologies, and AWS services leveraged in this architecture.

Hosted Project: <http://aploadbalancer-6149276-228010628.us-east-1.elb.amazonaws.com/about>

Project Features

Frontend:

- **React:** User interface, written in JavaScript and styled using TailwindCSS to provide a responsive and modern design.

- **WebSockets:** Real-time messaging for features like chat functionality, notifications, and collaborative interactions.
- **AWS Cognito:** Client authentication, including email confirmations, MFA, and password management.

Backend:

- **Node.js & Express.js:** Backend written in TypeScript, with REST API endpoints and secure CORS implementation.
- **JWT Authentication:** Secure and scalable stateless authentication.

Database:

- **PostgreSQL:** Reliable and efficient database for handling complex queries with features like indexing, transactions, and data consistency.

Hosting and Deployment:

- **AWS ECS:** Hosting both frontend and backend applications with automatic scaling based on demand.

Event-Driven Architecture:

- **AWS CloudTrail, EventBridge, and Lambda:** Automates user onboarding, processes events, and keeps data consistent across components.

Infrastructure as Code (IaC):

- **Pulumi:** Efficient, repeatable, and maintainable infrastructure provisioning written in TypeScript for seamless integration with application code.

GitHub Repositories

- [Frontend Repository](#)- Complete React-based frontend code.
- [Backend Repository](#)- Node.js backend code with REST APIs and JWT authentication.
- [Infrastructure Repository](#)- Pulumi scripts for provisioning infrastructure.