

Enclave Reference Architecture



Aptible Enclave is a secure deployment platform for applications that handle regulated data. Each Enclave stack is an isolated, private environment where you can deploy highly available, scalable applications and databases.

We manage servers, network topology, security, backups, access controls, and encryption.

You get to focus on building great products.

System Overview

- 1** Internet traffic is routed to a managed Aptible SSL/TLS endpoint using a DNS provider of your choice.
- 2** Aptible SSL/TLS endpoints scale and balance traffic across available app containers. Aptible endpoints receive automatic security updates, can be configured for high-security or high-compatibility modes, and can force HTTPS at the endpoint layer.
- 3** Application code runs in Docker containers in the app layer. Apps are easily portable across staging and production environments. Zero-downtime deploys, unified logging, and cross-Availability Zone scaling all help ensure availability.
- 4** Easily manage your engineering team's backend access using Aptible's role-based access control system. Engineers can SSH or tunnel into apps and databases. Access events are logged and auditable for compliance.
- 5** App and database containers run in a private subnet, inaccessible from the outside Internet. Access is restricted to the app and bastion layers. Internal database traffic is encrypted when the database type supports it.
- 6** Database filesystems are backed by SSD and are encrypted using Aptible-managed keys. Encrypted backups are taken nightly, or more often if you require, and stored in a separate geographic region.

