

Task 3: Definitions and Explanations

1. Why add additional elements? We've introduced one new server and one additional load balancer for improve redundancy and scalability. The new server allows us to segregate each component onto their dedicated servers. This setup enhances fault tolerance, as we now have an extra server housing all components to serve as a backup in case of failure. Each server is equipped with monitoring tools and firewalls for enhanced security. Additionally, the extra load balancer aids in distributing traffic more efficiently across the entire infrastructure, improving performance and reliability.