PayOnDelivery

PayOnDelivery faced scalability challenges with its Amazon ECS infrastructure as transaction volumes grew, prompting a migration to Amazon EKS. Partnering with 9Acts, they leveraged Terraform, Kubernetes, and GitHub Actions to automate deployments, enhance observability, and optimize resource utilization. The migration resulted in improved scalability, faster deployments, and a resilient, future-ready infrastructure for seamless digital payments.



Before

Amazon ECS struggling to keep pace as transaction volumes grew.

After

Amazon EKS built with Terraform, GitHub Actions releases 40% faster, Prometheus and Grafana monitoring.

About the Company

PayOnDelivery is a next-generation payment platform that provides secure and seamless transaction solutions for e-commerce businesses. With a commitment to enhancing digital payment reliability and transparency, PayOnDelivery has built a strong reputation, serving thousands of merchants and customers across multiple regions. By leveraging cutting-edge technology and a user-centric approach, the company ensures smooth payment processing, real-time updates, and an optimized payment experience.

The Challenge

As PayOnDelivery's user base expanded, their Amazon Elastic Container Service (Amazon ECS) infrastructure struggled to keep pace with growing scalability and operational demands. While ECS initially met their needs, the team required a more flexible, scalable, and efficient solution to support increasing transaction volumes.

To address these challenges, PayOnDelivery decided to migrate to Amazon Elastic Kubernetes Service (Amazon EKS), a more robust container orchestration solution. However, achieving this migration with minimal downtime while ensuring automation, security, and operational efficiency posed a significant challenge.

Solution

PayOnDelivery partnered with 9Acts to facilitate a seamless migration from Amazon ECS to Amazon EKS, leveraging AWS best practices and automation tools. The migration was executed in a phased approach to minimize disruption and ensure a smooth transition:

- **Infrastructure as Code (IaC).** Using Terraform and AWS CloudFormation, the infrastructure was rebuilt on Amazon EKS, ensuring high availability,

scalability, and alignment with the AWS Well-Architected Framework.

- **Container optimization.** Workloads were reconfigured for Kubernetes, enabling auto-scaling, self-healing, and efficient resource utilization.
- **CI/CD modernization.** A GitHub Actions-based CI/CD pipeline was implemented to automate deployments, streamline software releases, and enable quick rollbacks when needed.
- **Enhanced observability.** Prometheus and Grafana were integrated for real-time monitoring, while Fluentd centralized logging for improved visibility and troubleshooting.
- **Phased rollout and testing.** Extensive testing in a staging environment ensured stability before gradually rolling out changes to production, preventing downtime and service disruptions.

Outcome

The migration to Amazon EKS significantly enhanced PayOnDelivery's infrastructure, bringing these improvements:

- **Improved scalability.** Kubernetes-based infrastructure allowed seamless scaling, ensuring smooth transaction processing even during peak hours.
- **Optimized resource utilization.** Kubernetes' intelligent resource allocation led to cost savings and enhanced performance.
- **Faster deployments.** The GitHub Actions CI/CD pipeline reduced deployment times by 40%, enabling faster feature rollouts and updates.
- **Operational resilience.** Kubernetes' self-healing capabilities minimized downtime, while automated rollbacks improved system reliability.
- **Future-ready infrastructure.** PayOnDelivery is now equipped with a scalable, efficient, and resilient architecture, ready to integrate with evolving cloud technologies.

By adopting Amazon EKS and GitHub Actions, PayOnDelivery has successfully modernized its infrastructure, enhanced its operational efficiency, and posi-

tioned itself for long-term growth in the digital payments industry.

> **Talk to 9Acts about your AWS: contact@9acts.com · 9acts.com/contact**