Introduction

How eBay uses Drone to deploy 200 Services to Kubernetes

Punit leads the DevOps team for the New Product Development Group at eBay. He helps deploy micro-services efficiently on Kubernetes and has worked closely on eBay’s transition to the public cloud. Punit has been focusing on automation technologies to help eBay developer productivity. One of those tools is Drone, where eBay has 100 users using Drone for 200 services, releasing 15,000 times a quarter.
I've been at eBay for five years. Prior to leading the DevOps team for the new product development group, I was working as an application backend engineer. When we started to move to the cloud and when we went all in on Kubernetes, I wanted to help eBay with that transition. I was interested in how we would help developers increase their productivity using tools like Kubernetes, docker and containers and how CI/CD could help us with deploying our applications.

When we started using containers, Drone was the obvious choice. We moved from Jenkins CI/CD to Drone. We started out using the open source version but eventually bought an enterprise version because the global secrets feature was valuable to us.

Both our eBay ShopBot Messenger and Haitao China are powered by Drone. In addition there are a lot of internal products (about 200 services) using Drone day to day. To give you a perspective of how much we use Drone, there are 100 developers using Drone, deploying about 15,000 times a quarter.

We use a managed Kubernetes service to host our applications, so we use Drone with Kubernetes and Google Cloud. We are interested in The New York Times Drone plug-in for GKE. We write our scripts in Golang, we encapsulate it in Docker and use Helm to deploy our applications.

First off there are a lot of good things about Kubernetes but we knew as we started adding more and more people, we would face scalability challenges. At the beginning we were spending a lot of our time educating our developers and also updating the software. I feel the biggest challenge facing the Kubernetes community is to develop canonical standards on its usage.
What other cloud native projects do you use?

We also use Istio and Prometheus. Almost all of the cloud native projects take time to learn and implement within your environment. It is my experience that none of this is easy, as advertised, but I see the value when our developers can be more productive.