### aws re: Invent

CON417-R

## Live debug microservice running on Kubernetes cluster

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#### Repeat sessions

CON417-R Live debug microservice running on Kubernetes cluster December 2, 2019 (Monday) 2:30 p.m. – Aria, Level 1 West, Bristlecone 2 – Table 2

CON417-R1 Live debug microservice running on Kubernetes cluster December 3, 2019 (Tuesday) 11:30 a.m. – Mirage, Events Center C1 – Table 1

CON417-R2 Live debug microservice running on Kubernetes cluster December 4, 2019 (Wednesday) 4:00 p.m. – Mirage, Events Center C1 – Table 1

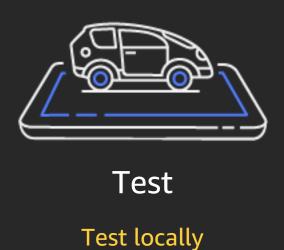
CON417-R3 Live debug microservice running on Kubernetes cluster December 5, 2019 (Thursday) 11:30 a.m. – Mirage, Events Center C1 – Table 2

#### Agenda

- 1. Traditional development workflow
- 2. Painful development workflow in Kubernetes
- 3. Reasons for painful process
- 4. Dev-friendly development workflow in Kubernetes
- 5. Tools to rescue
- 6. Demo

### Traditional monolithic development workflow







Deploy to remote server

#### Painful development workflow in Kubernetes



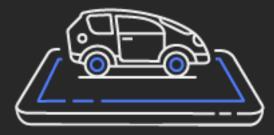
Develop locally



Build and push Docker image



Deploy to remote server



Test

Test with remote services



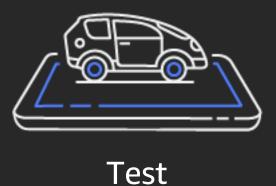
#### Reasons for painful process

- 1. Multiple dependent microservices
- 2. Local setup challenges for various services
- 3. Separate IP range for remote cluster
- 4. Databases in the mix

#### Dev-friendly development workflow in Kubernetes



**Develop locally** 



Test locally with remote services



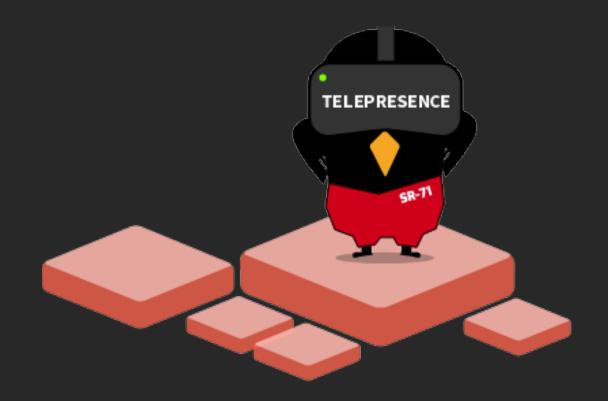
Build and push Docker image



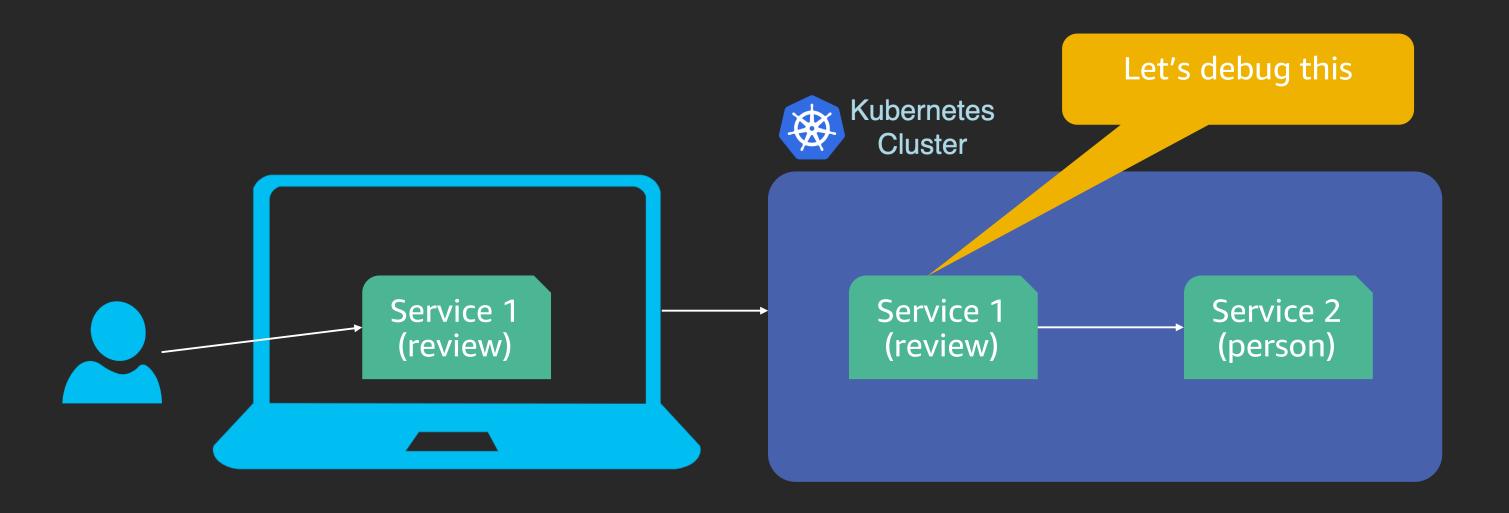
Deploy to remote server

#### Tools to rescue

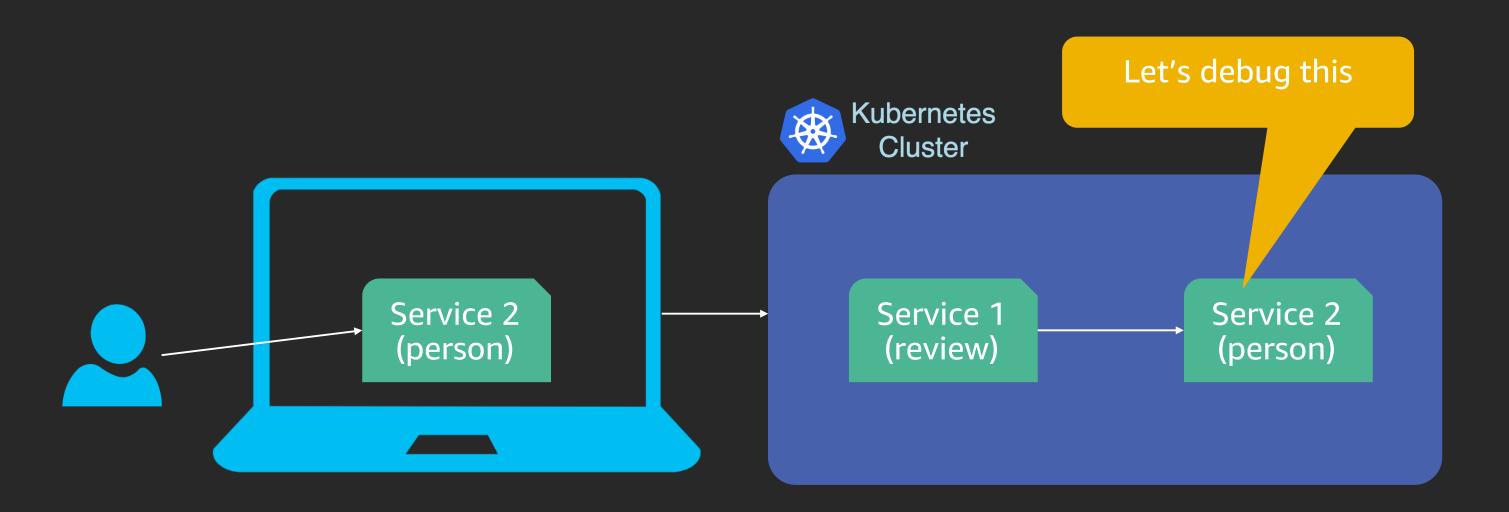




#### Scenario 1 – Live debug service 1 – VPN



#### Scenario 2 – Live debug service 2 – VPN + pod swap



### Demo





# Thank you!

**Prabhat Sharma** 

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