

A photograph of the Space Shuttle Columbia in orbit above Earth. The shuttle is positioned diagonally across the frame, with its large solar panel arrays extended. The Earth's blue and white cloud-covered surface is visible at the bottom. The shuttle's complex structure, including the orbiter and external tank, is clearly visible against the black background of space.

**EVENT DRIVEN INFRASTRUCTURE**

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**CONTINUOUS DELIVERY ON KUBERNETES AND  
ECS**

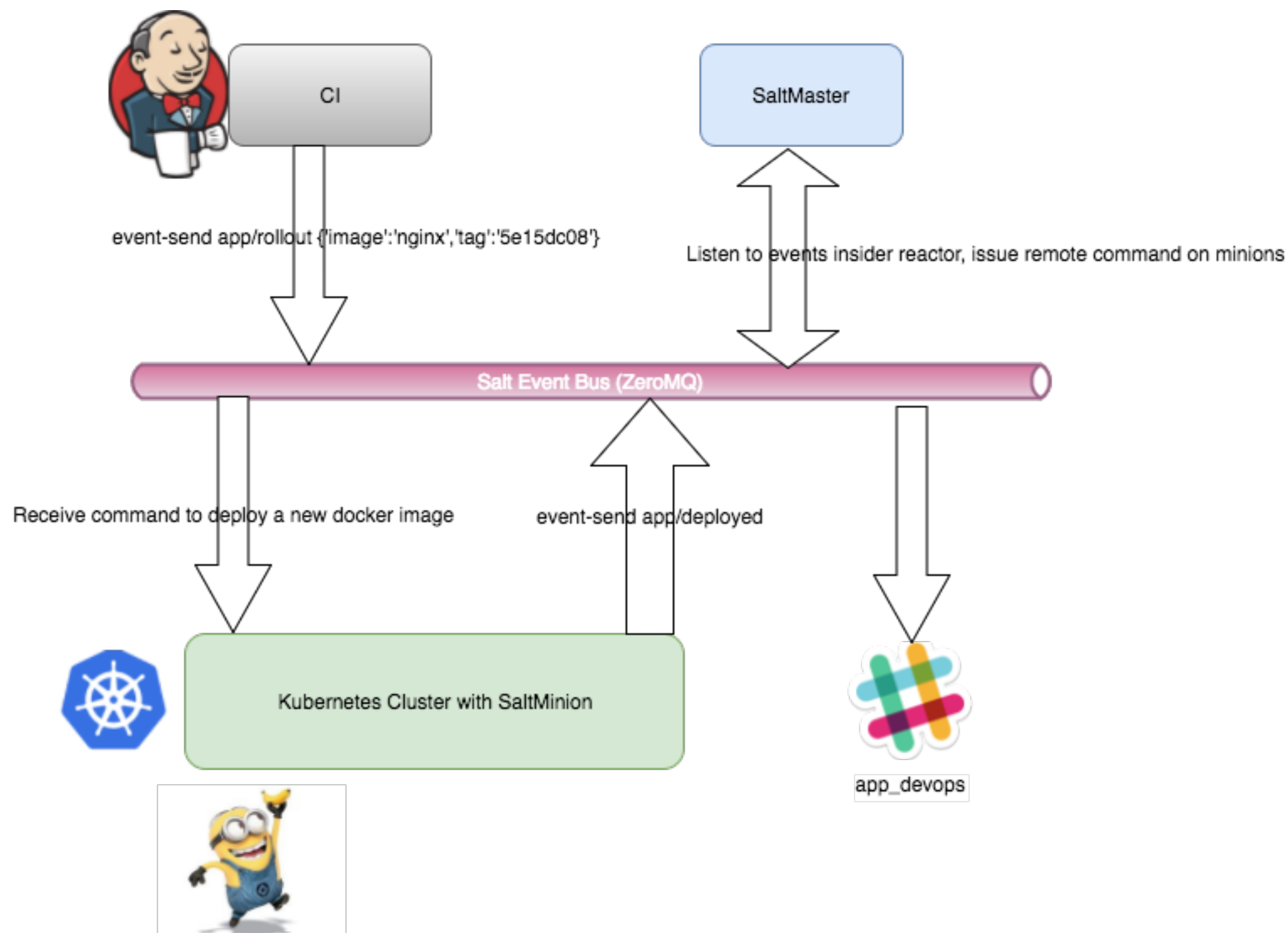
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# AGENDA

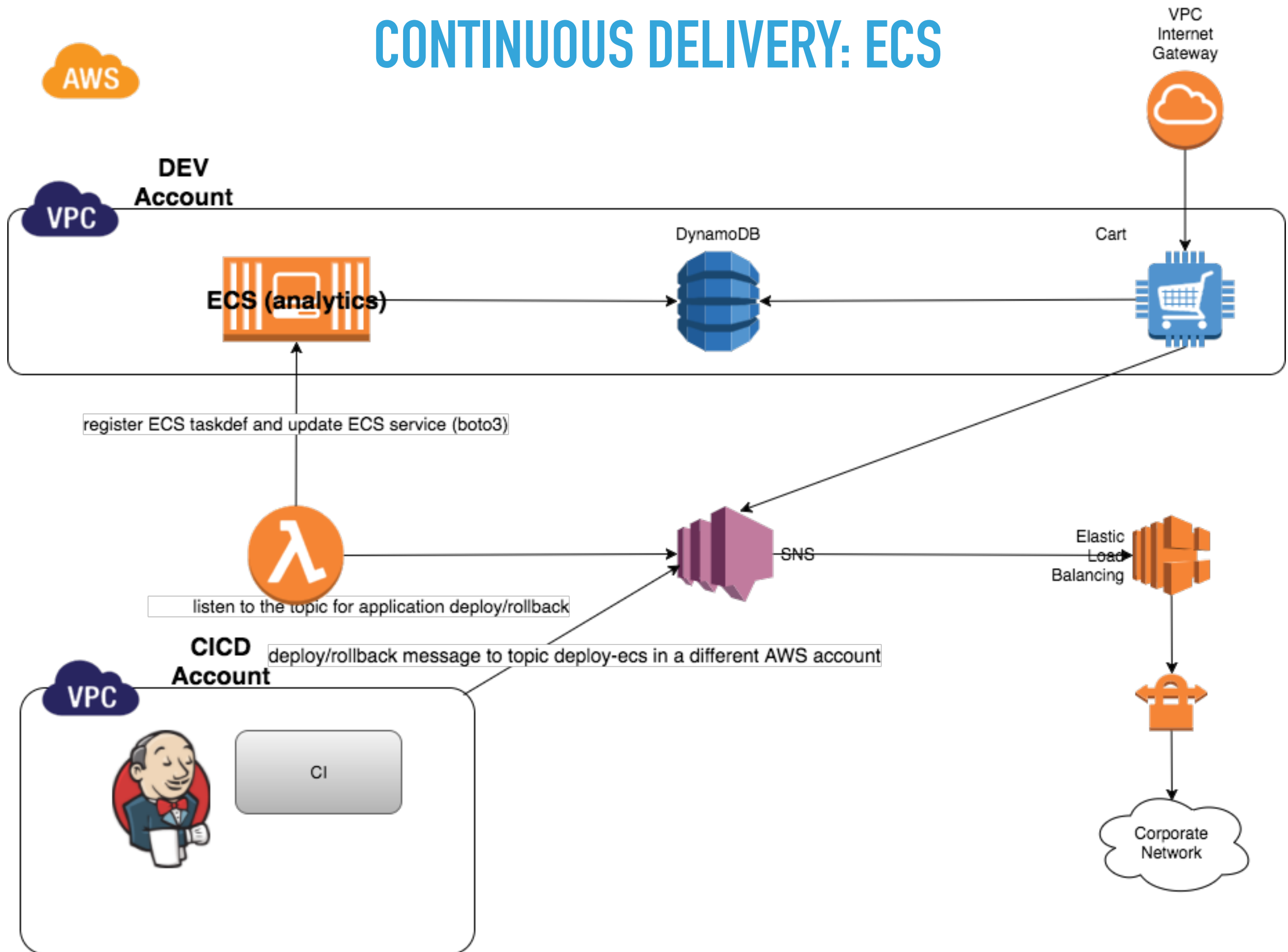
- ▶ Victor Yang @pydevops
- ▶ Kubernetes example with CD
- ▶ ECS example with CD
- ▶ Benefits
- ▶ Downside



# CONTINUOUS DELIVERY: KUBERNETES



# CONTINUOUS DELIVERY: ECS



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## BENEFITS

- ▶ For system that is asynchronous and reactive, feel more **natural** and **intuitive** by decoupling deploy logic (event subscriber) from CI (event publisher).
- ▶ Can be extended to treat PaaS (platform as service) 's application life cycle such as rollback, creation and destroy as events too.
- ▶ The architecture pattern can be applied in the cloud, on premise, Kubernetes or ECS.
- ▶ Minimize the IAM policies between CI and application deployer. For example, only pushing message to SNS topic IAM role is granted across the accounts.

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## DOWNSIDE?

- ▶ More complex to troubleshoot. Best practice is to integrate with a centralized logging and monitoring such as CloudWatch(aws), Xray(aws) ,Stack Driver(google cloud), OpenTracing.

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## SAMPLE CODE

- ▶ <https://github.com/pydevops/eventdriven-cd>