



Cloud Native API Management on Kubernetes

Workshop - 5/5/2020

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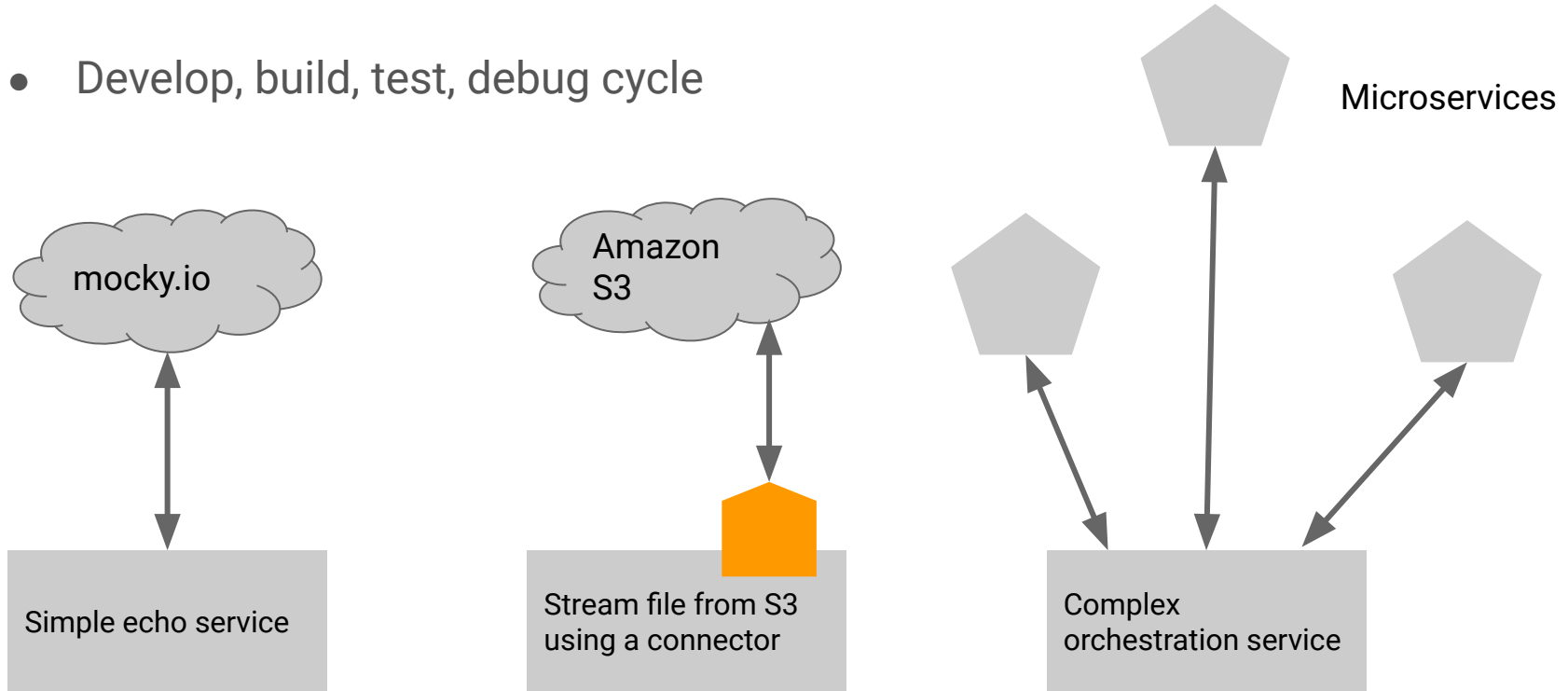
Director Solutions Architecture

Agenda

- Part 1 - Development cycle - backend services, integration services (dev, build, debug test cycle)
- Part 2 - Deploying services to kubernetes (dependent backend services)
- Part 3 - Creating a managed API for services - Publishing, token generation and accessing. CLI or through developer portal
- Part 4 - CI/CD pipeline integration and planning
- Part 5 - Kubernetes best practices

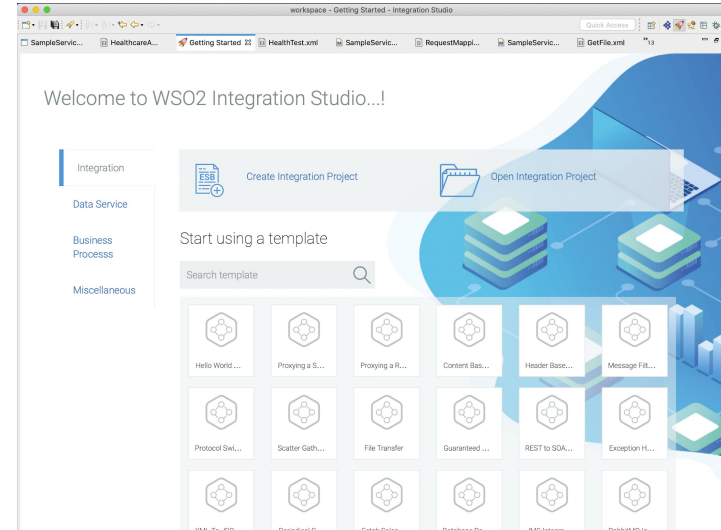
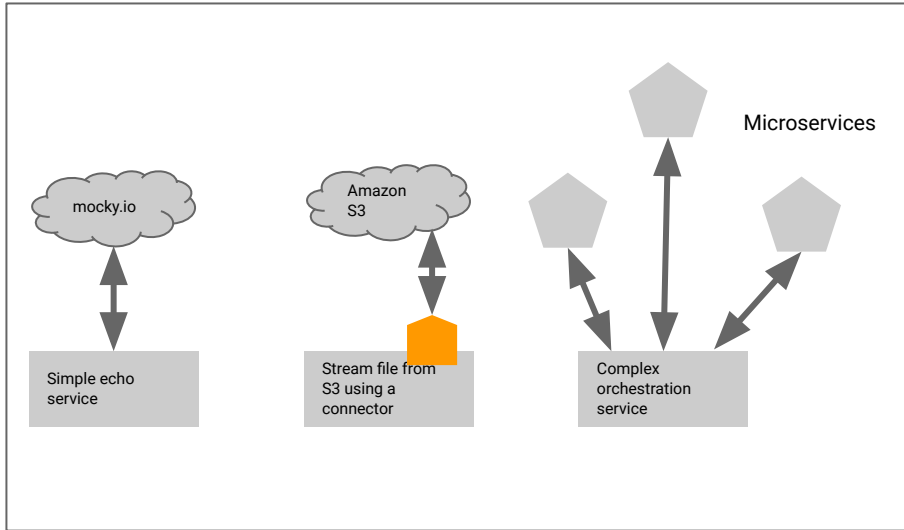
Part 1- Developing backend services

- Develop, build, test, debug cycle



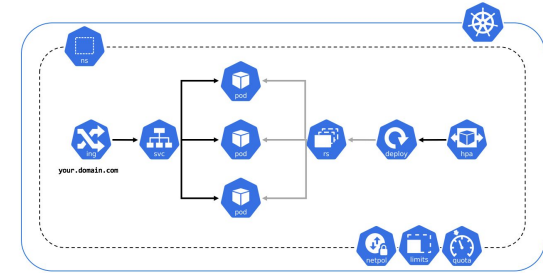
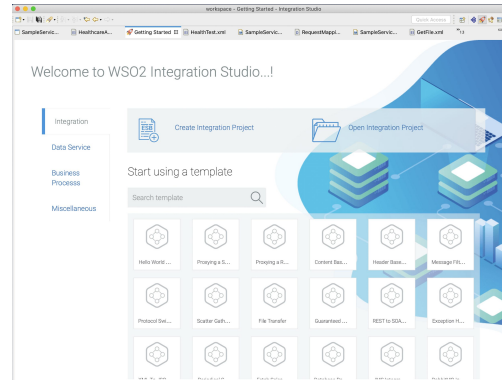
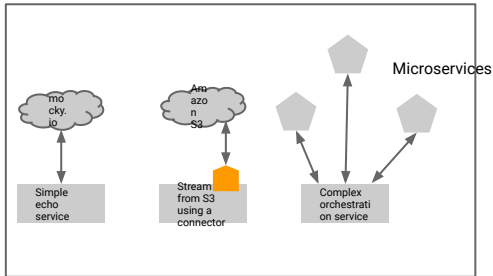
Part 1- Developing backend services

- Develop, build, test, debug cycle



Part 1- Developing backend services

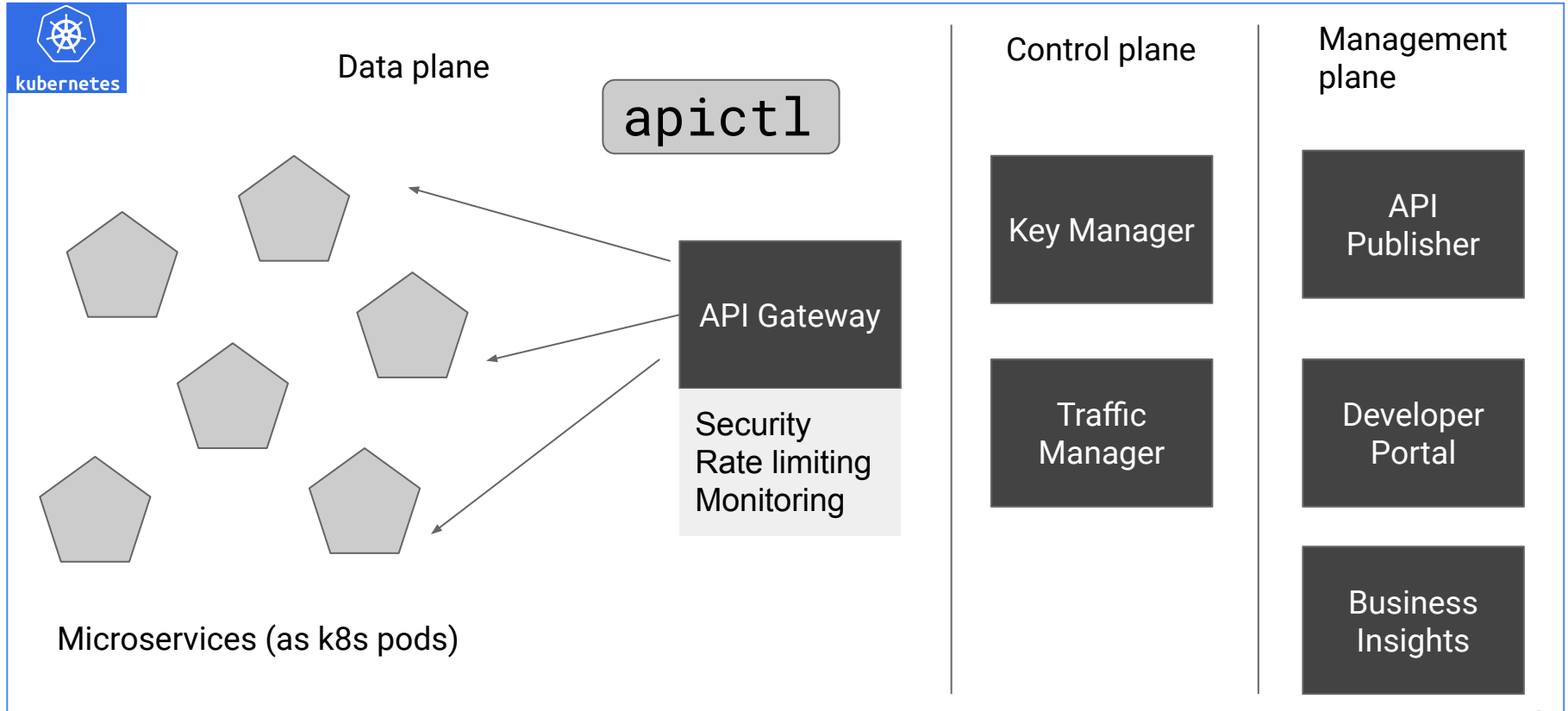
- Develop, build, test, debug cycle



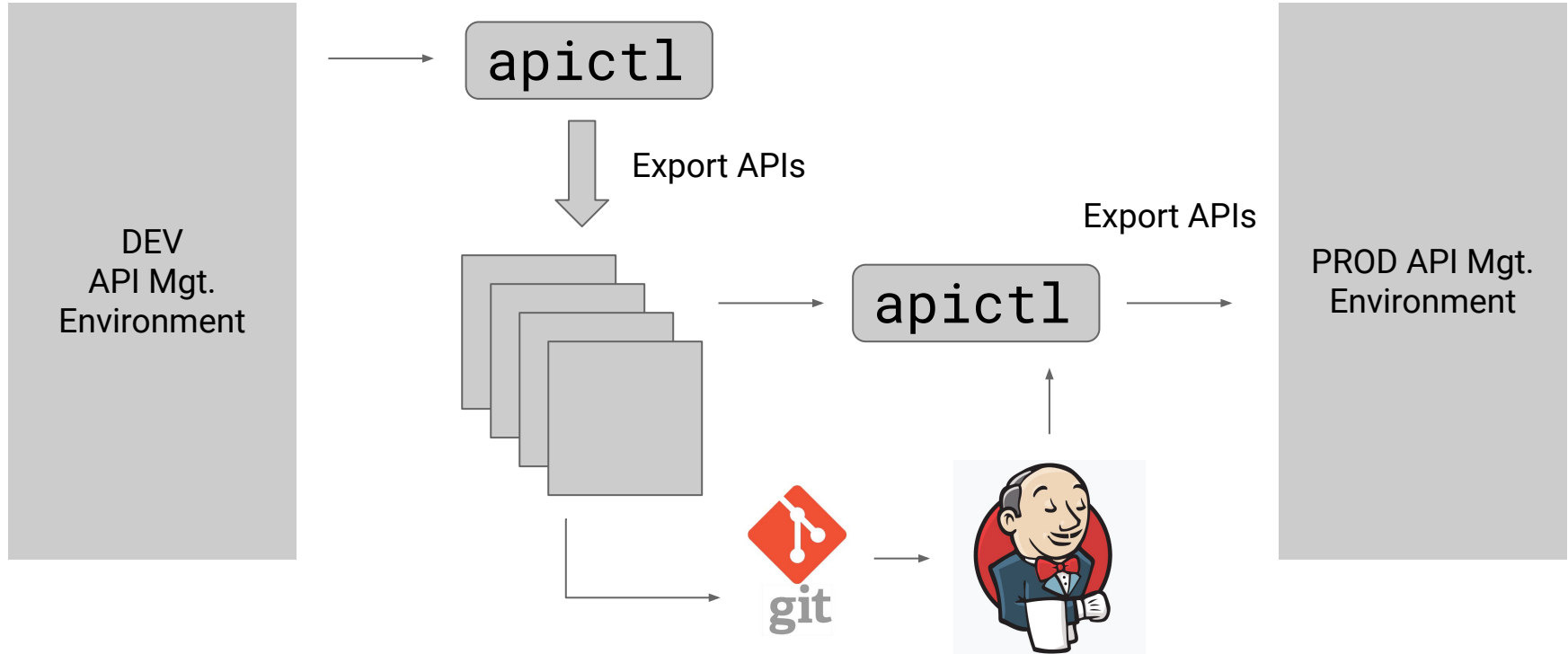
Part 2 - Deploying services to Kubernetes

- For dependent backend services - kubectl apply (we're assuming they're already available in a shared environment in real life)
- Containerizing and deploying integration services
(Integration Studio + EI K8S Operator)
- Testing services (port numbers / URLs may vary depending on the setup)

Part 3 - Creating managed APIs for services



Part 4 - CI/CD considerations / planning



Part 5 - Kubernetes best practices (some highlights)

- Use WSO2 official docker images (patched and production hardened) to build on top of it for packaging your binaries
- Maintain a private image registry
- Avoid NakedPods in production (not bound to a RS)
- Use officially released helm charts for production deployments
- Centralized log monitoring using a tool like ELK

THANK YOU

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