kubernetes

Kubernetes: Serverless on Kubernetes

- **Public Cloud Providers** provide **server less** capabilities in which user can deploy functions.
- **Serverless** capabilities doesn't require to deploy containers or instances for containers.
- AWS Lambda
- Google Cloud Functions
- Azure Functions
- **Serverless** function doesn't need Infrastructure to Run on.
- Functions can be schedule and only invoke when required.

- **Serverless** movement and the Container movement share the same vision of simplifying deploying and managing your application.
- **Serverless** functions are already running on containers behind the scenes.
- There is an orchestrator behind the scenes that's usually running your **serverless** functions.
- **Serverless** allow you to build applications at a high abstraction level so you can focus more on developing your applications and less on the infrastructure underneath.

- **Serverless** on public cloud reduce the Complexity, Operational Cost, Infrastructure Setup effort.
- User don't need to manage the **OS distribution**.
- User don't need to build the C**ontainers**.
- User have to pay less, only for the time the function is running.
- Developers just need to push the code without knowing the Infra.
- But developer needs to manage the **Operational Issues** with the code.

- Most Popular **Serverless Frameworks** and Projects:
- Fission
- Kubeless
- OpenWhisk
- OpenFaas
- User needs to install these Projects on Kubernetes Cluster to use the **Serverless Functions**.
- **Administrator** still needs to manage the Kubernetes **Infrastructure**.

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Why Serverless on Kubernetes

- **Accelerate time to value with Kubernetes**: Allows you to quickly develop Kubernetes-based apps with no need for Kubernetes expertise.
- **Focus on Code, Not Infra**: Allow developers to move fast while improving the quality of your code from the start.
- **Simple, Inexpensive, Low Maintenance**: You can configure specific CPU and memory resource usage limits, set up rules for autoscaling, and set min/max parameters for your serverless functions.

Will see you in Next Lecture…

See you in next lecture …