Deploy on Kubernetes for Pennies on a Dollar

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Given that multi-application Kubernetes cloud deployments are typically metered and billed to a single account.

- How do you provide transparency into the consumption of IT resources by business units and their associated costs?
- How do you make efficient and cost aware choices?
- How do you forecast your application computing needs?
Hey Bob, We’ve got a deal for our new SaaS product “stargate”.
Can you find out the estimated operational costs for the product?

Hey Amy, Give me a second, I’ll check that for you in Purser.

Here, As you can see, a single instance of “stargate” with 3 pods deployed on AWS costs approximately $100 per month.
Hey Bob, the price for the product “Li” too high.
Do know why the costs are so high?

Hey Amy, as I can see it in Purser, the storage requirement is very high for the product, resulting in high overall cost.

Thanks Bob, I'll check with the team if such high storage requirements are necessary and if there is a possibility to reduce it.
Hey Bob, can Purser help me estimate and allocate budget for the business units for the next quarter?

Yes Amy, Purser can help you track your previous month’s expenditure and also show projected costs for the upcoming months.

Thanks Bob, that’s awesome.
What is Purser?

A ship's purser is the person on a ship principally responsible for the handling of money and provisions on board.

- Open source tool for K8s cloud native application resource and cost visibility
- Showback/Chargeback implementation for K8s
High Level Purser Architecture
Deep Dive Into Purser Controller

- Kubernetes Custom Controller
- Listens for K8s resources in the cluster
- Computes resource cost based on `limits` and `requests` defined in resource spec and the corresponding price from the given rate card.
Deep Dive Into Purser Teams

- Implementation of K8s custom resource definitions (CRDs)
- Aggregation of K8s workloads based on the `labels` defined in the workload specification for an application.
Demo

Let’s see it in action!
Next Steps

- Multi cloud comparison support
- Utilization based costing
- Extend support for HA
Collaborating

GitHub: https://github.com/vmware/purser
Purser Blogs: https://blogs.vmware.com/opensource

For further questions reach out to me at - VMware Booth #31