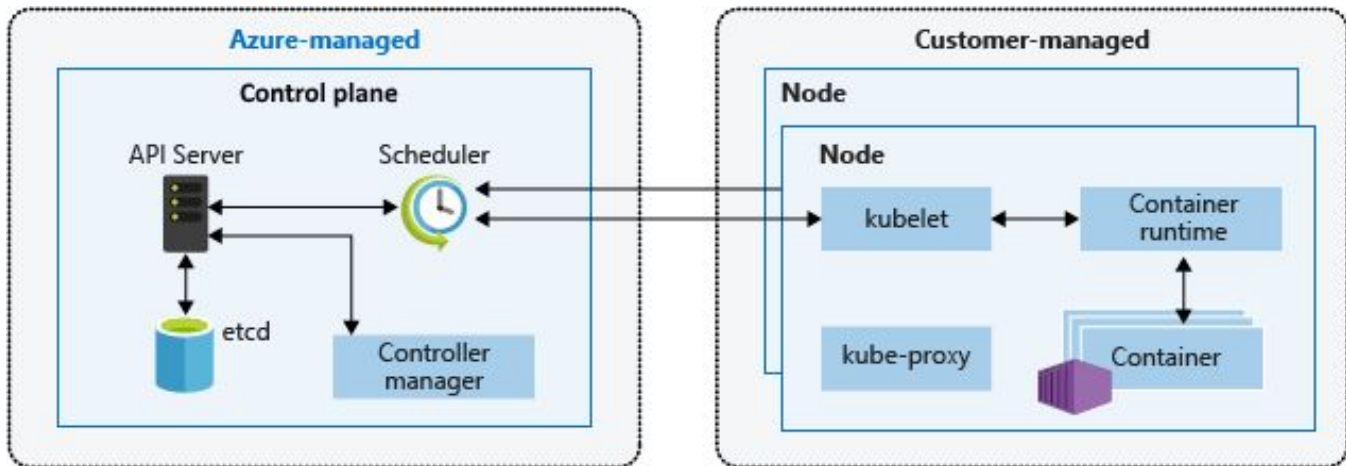# Azure Red Hat OpenShift vs Azure Kubernetes Service
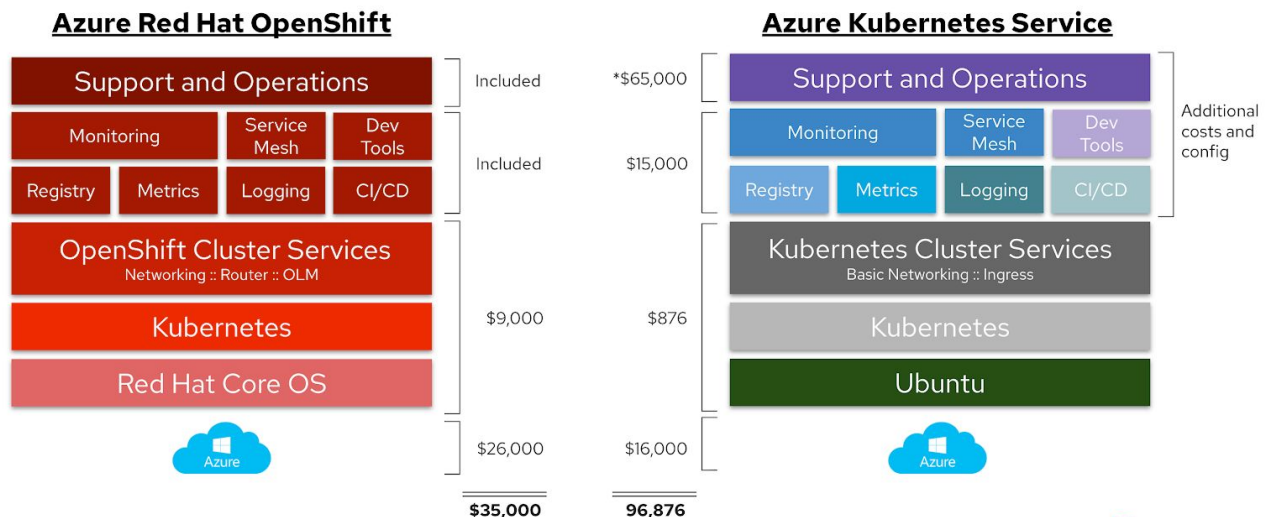
Azure AKS is not a fully managed service

Customers are responsible for the infrastructure that runs their workloads: network customizations, patching, reboots, security, upgrades and all third party software used.
https://docs.microsoft.com/en-us/azure/aks/support-policies

Simple example TCO for a multi-AZ cluster with nine worker nodes – one year

*Operations: Conservative estimate of 0.5 FTE

The cost of managing Kubernetes on the public cloud exceeds the basic AKS price.
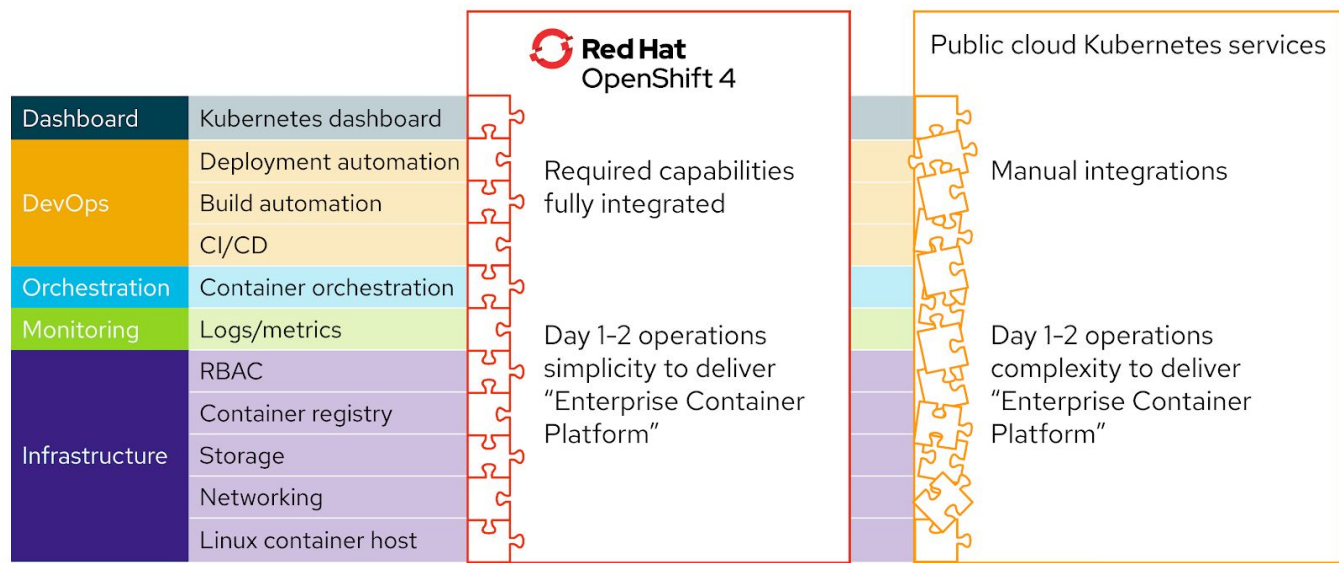
Some questions to consider:
1. Are you in the business of maintaining Kubernetes and cloud-native software or is your staff better dedicated to the core revenue generating activities of your business?
2. In the above example, is a conservative estimate of ½ FTE. Can you estimate the true cost to support Kubernetes and cloud-native 24x7 in production?

Disparate and separate services required to implement Azure Kubernetes vs Azure Red Hat OpenShift which is fully integrated and managed

Using public cloud Kubernetes Services, a customer must integrate various logging, monitoring, application development and deployment software either from the public cloud provider or using other software packages.
Customers must be ready to take on this cost, maintenance and responsibility.

		Red Hat OpenShift 4	Public cloud Kubernetes services
Dashboard	Kubernetes dashboard	Required capabilities fully integrated	Manual integrations
DevOps	Deployment automation		
	Build automation		
	CI/CD		
Orchestration	Container orchestration		
Monitoring	Logs/metrics	Day 1-2 operations simplicity to deliver "Enterprise Container Platform"	Day 1-2 operations complexity to deliver "Enterprise Container Platform"
Infrastructure	RBAC		
	Container registry		
	Storage		
	Networking		
	Linux container host		

Microsoft Azure is a shared security model.

"You are responsible for protecting the security of your data and identities, on-premises resources, and the cloud components you control (which varies by service type)....the following responsibilities are always retained by you:

- Data
- Endpoints
- Account
- Access management"

[Shared responsibility in the cloud - Microsoft Azure](#)

Using Azure Red Hat OpenShift, some of these security tasks are managed on behalf of the customer by Microsoft and Red Hat.