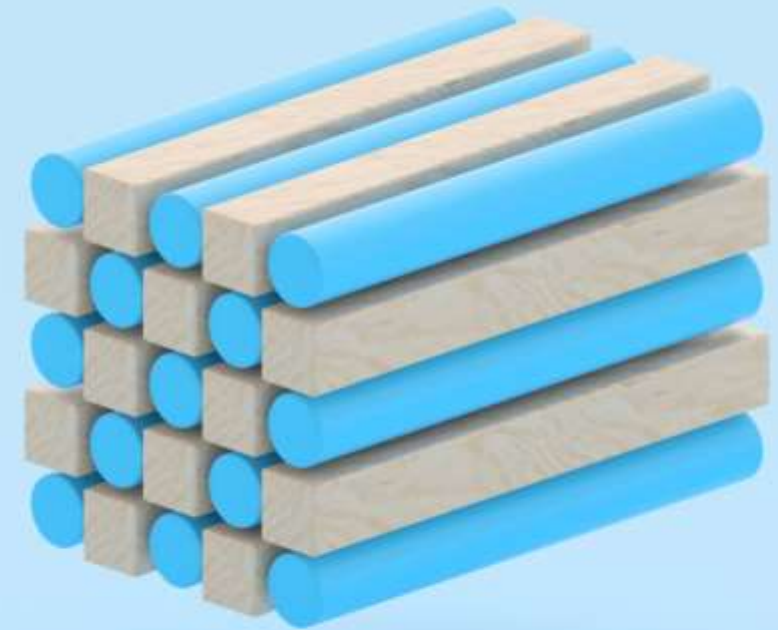


NetApp Cloud Ops for Containerized Application

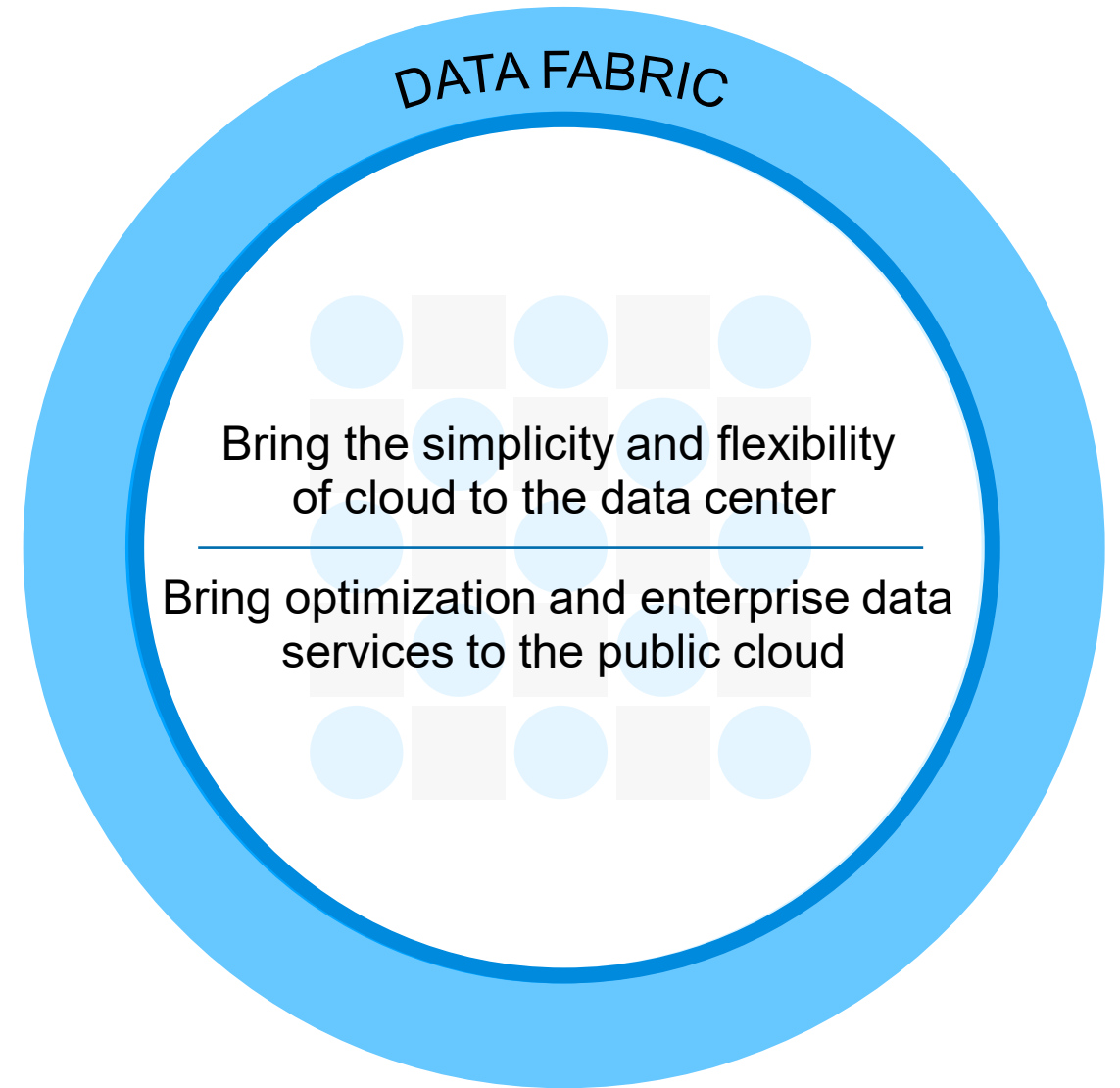
AWS Fintech Solution Day

Anson Ngan
Solution Architect, APAC
2022



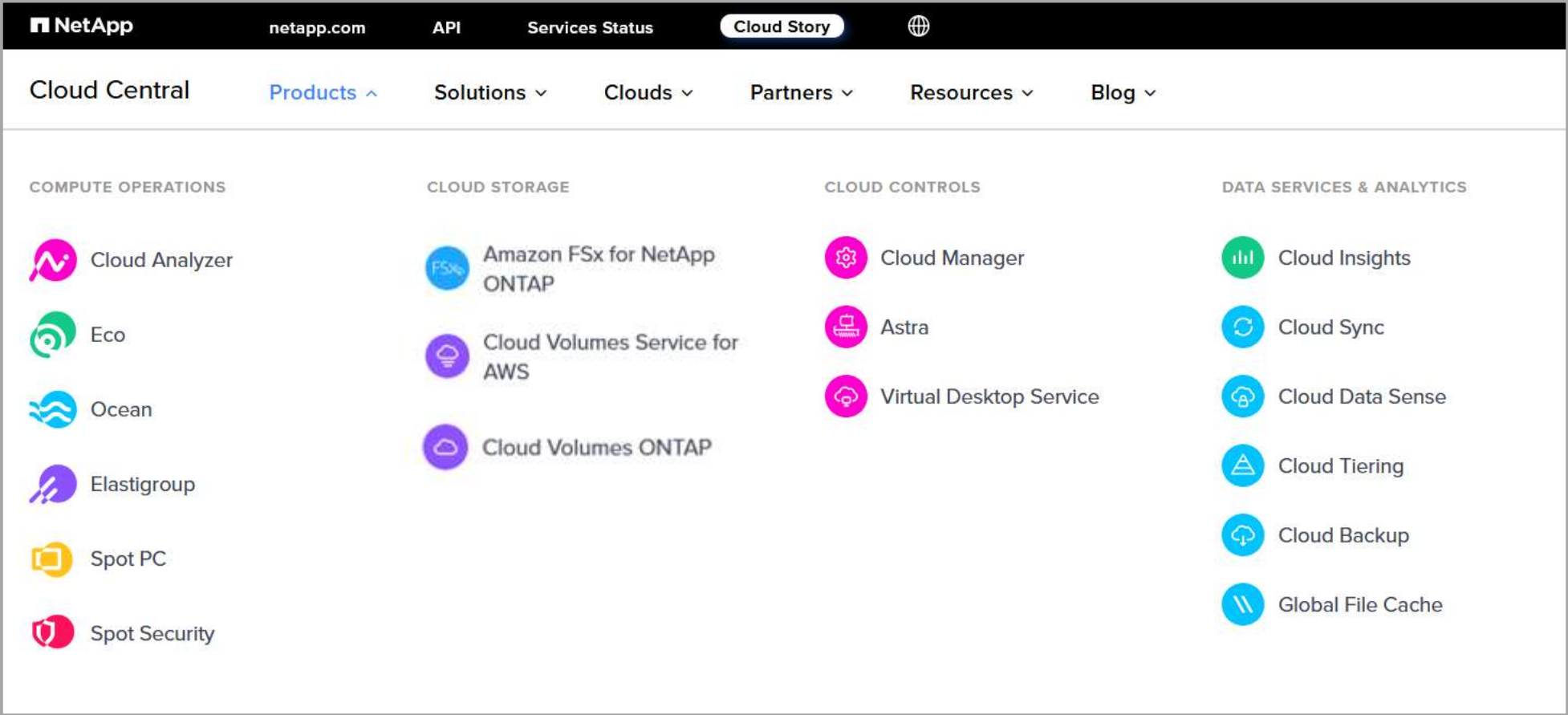
NetApp, a cloud-led data centric software company, unlocks the best of cloud and enterprise IT

- Cloud-enable your data center
- Get more cloud for less cost



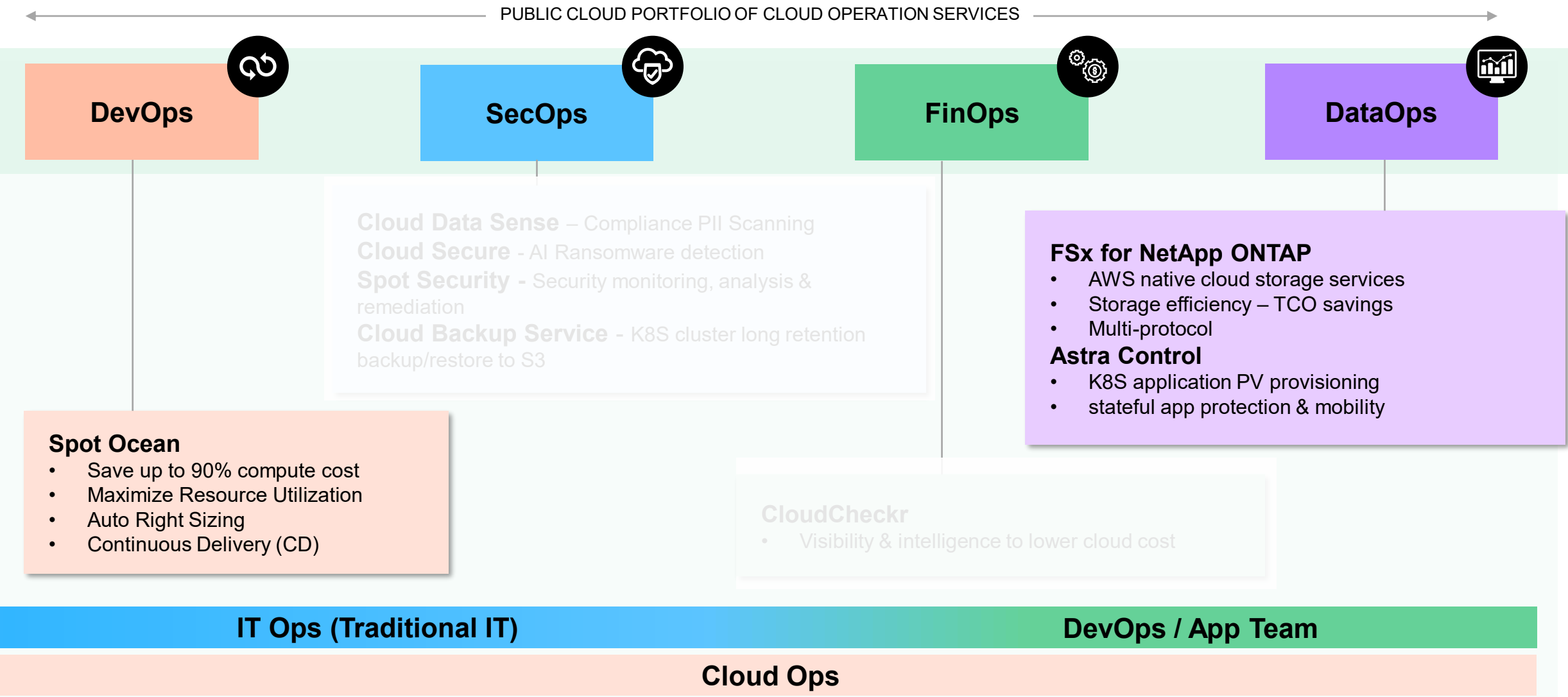
Cloud Central

cloud.netapp.com



Integrated portfolio for Cloud Ops

NetApp Public Cloud Services for containerized applications

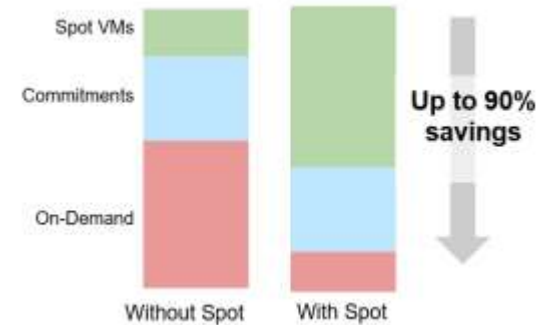


DevOps

SPOT by NetApp



Up to 90% compute reduction with SLAs

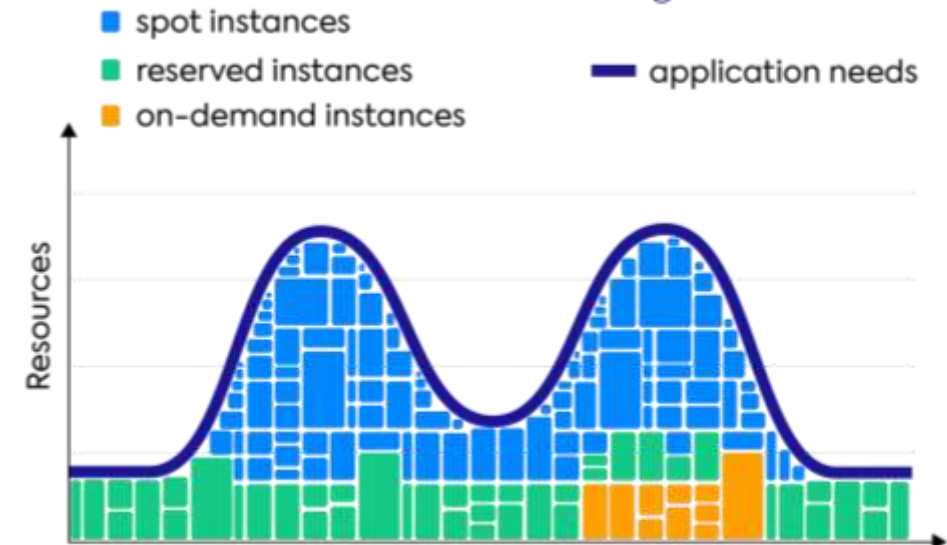
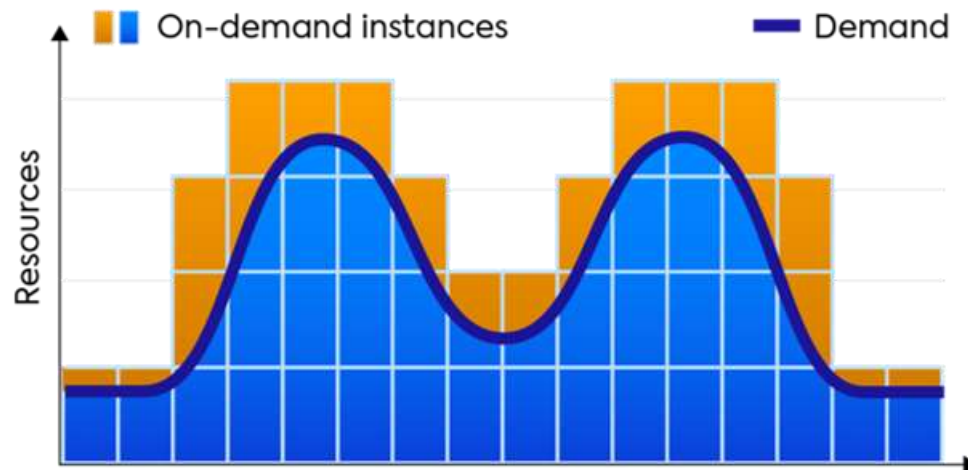


With Spot

- App driven provisioning
- Spot & reserved instances pricing
- Heterogeneous

Without Spot

- Overprovisioning
- On demand
- Homogeneous



Ocean | Serverless compute for Kubernetes

Run containers without managing servers

Container-Driven Infrastructure Provisioning

Ensures that all Pods have resources to run on, and systematically selects the most suitable instance type/commercial model that will facilitate the containers' requirements

Maximize Resource Utilization

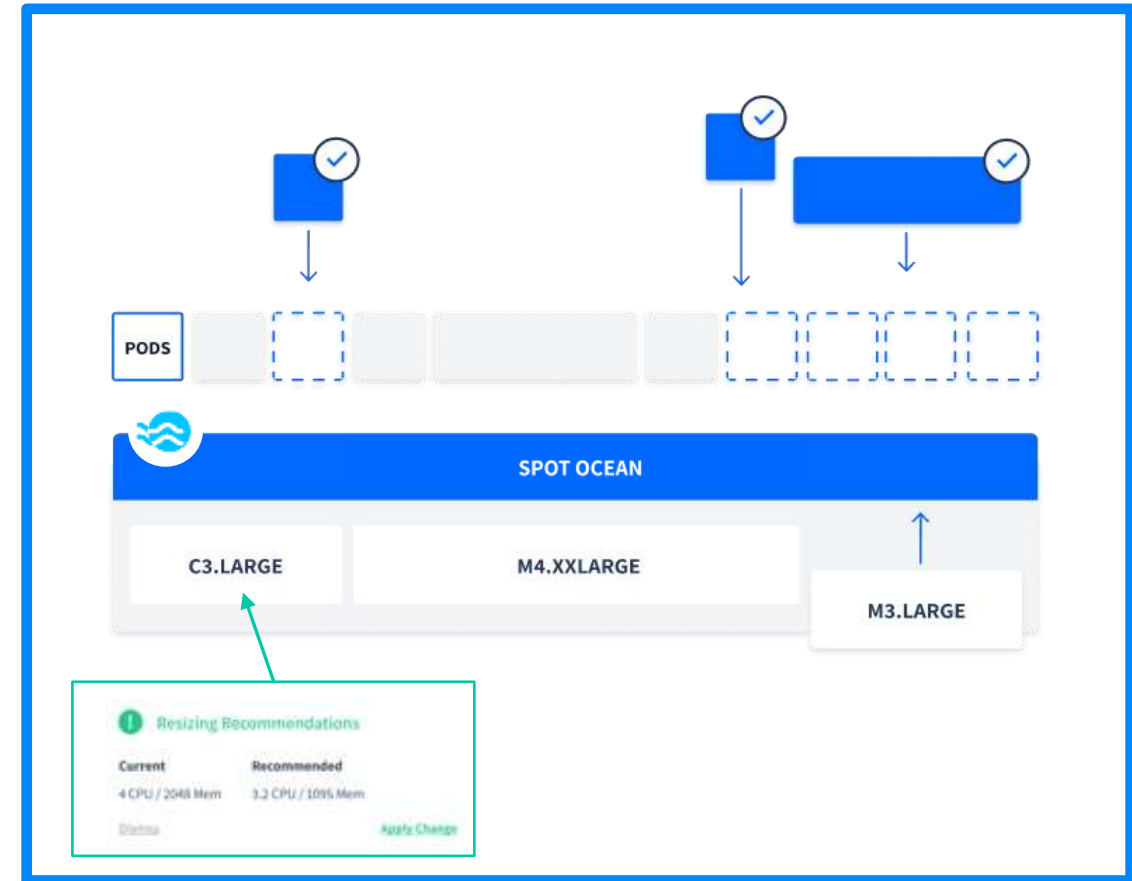
Validates that your instances are fully utilized before spinning up new ones, thus enabling an additional layer of cost-efficiency by e.g. bin packing and auto scaling

Automatic Right-Sizing

Measures in real-time the CPU/Memory of Pods and provides actionable suggestions based on the consumption in the cluster

Ocean Managed Clusters

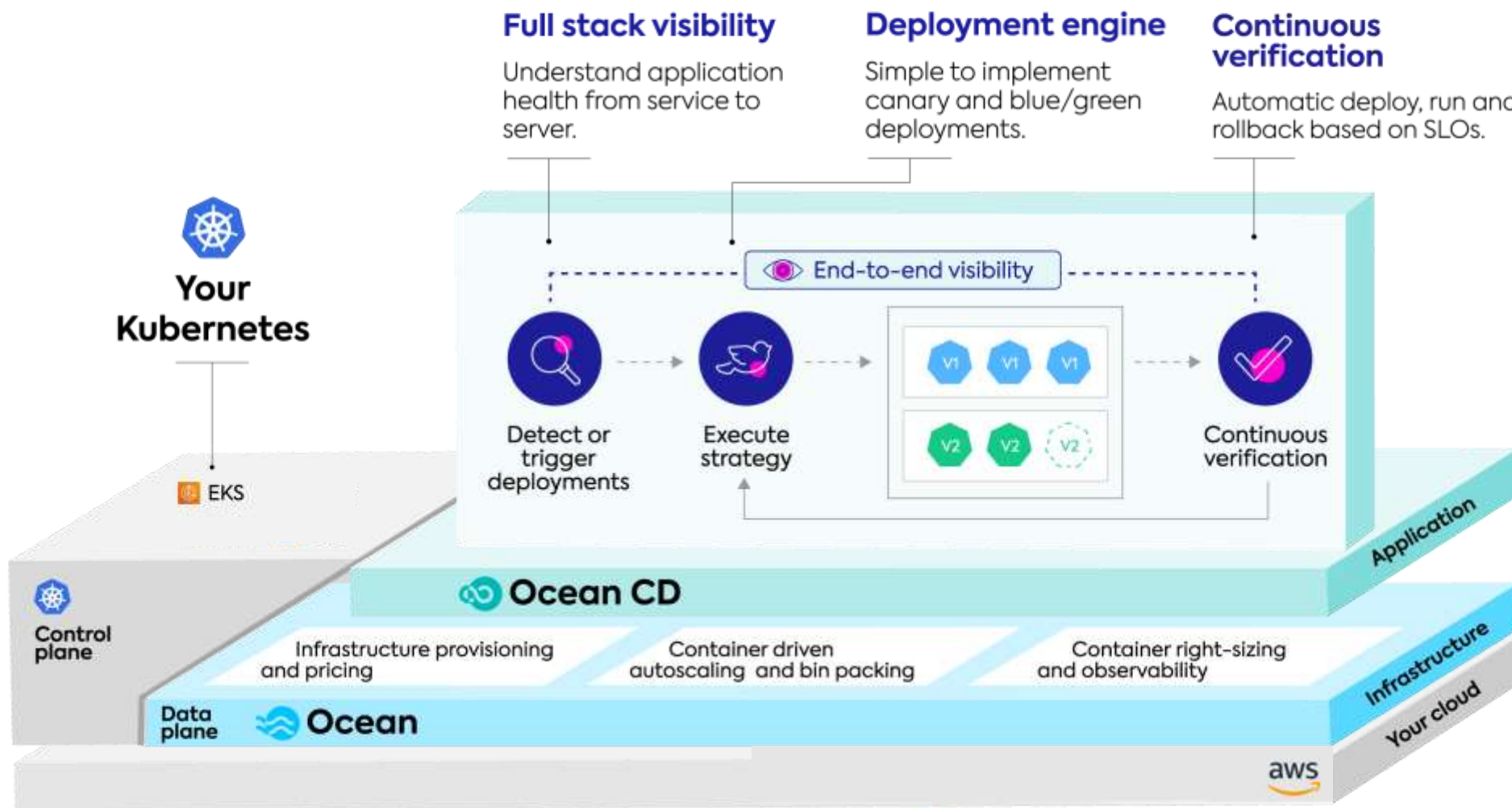
EKS, KOPs, ECS, OpenShift/ROSA and etc.





Ocean CD Introduction

Continuous deliver K8S app 10x faster with confidence



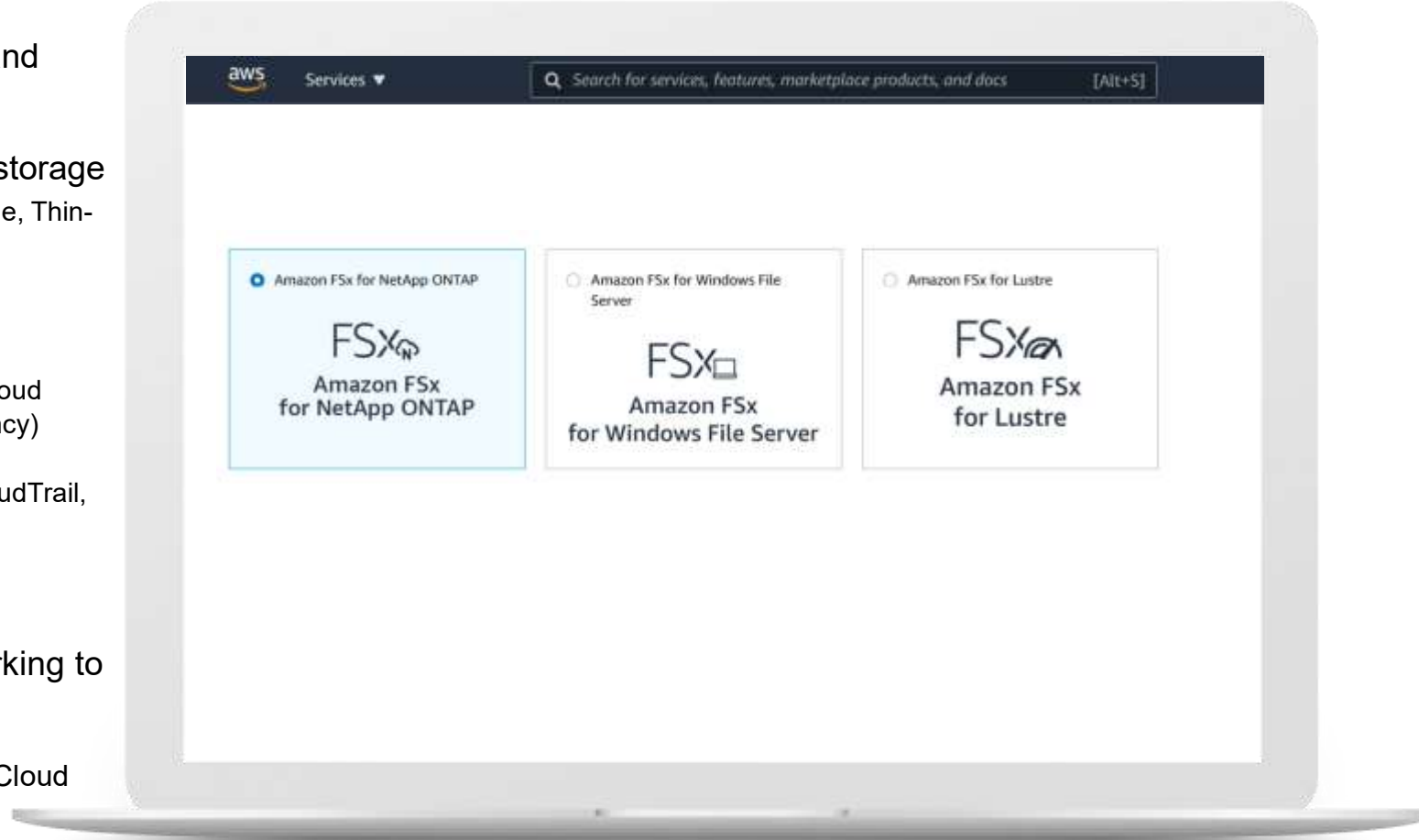
DataOps

FSx for NetApp ONTAP + Astra Control

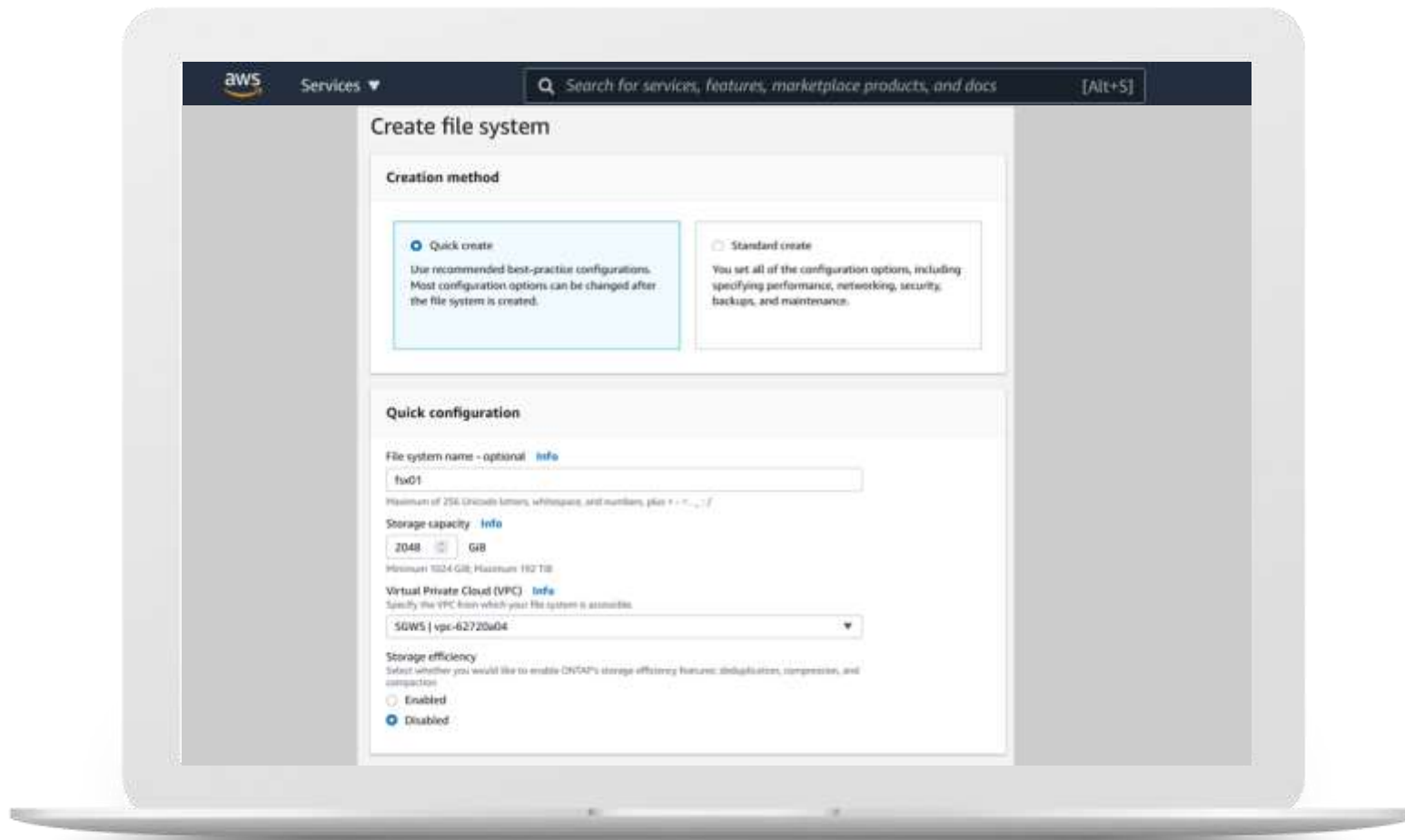
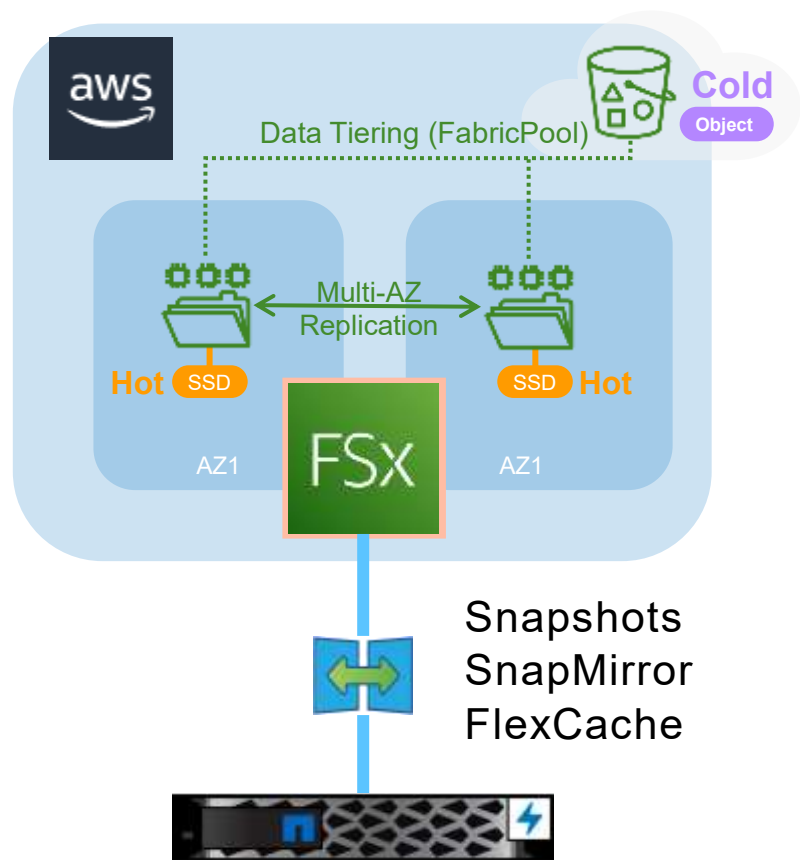


FSX for NetApp ONTAP

- **A native AWS managed service** - fully managed and supported by AWS, powered by NetApp
- **>60% Lower TCO comparing to FSxW/EFS** with storage efficiency (Inline Compression, Inline Dedup, Tiering, FlexClone, Thin-Provisioning)
- **Multiprotocol** (NFS,CIF/SMB,iSCSI)
- Full-featured NetApp ONTAP (Snapshots, SnapMirror, Cloud Backup, Mult-AZ, Cross Region Replication, SVM for Multi-tenancy)
- Tightly integrated with AWS services (CloudWatch, CloudTrail, CloudFormation, AWS Directory, KMS, AWS Backup)
- Access to the full NetApp cloud portfolio
- Built with the latest AWS compute, disk, and networking to provide maximum performance
- Easily managed by AWS Console, CLI, SDK or NetApp Cloud Manager



FSX for NetApp ONTAP



Lift-and-shift



DRP



Burst



Backup / Compliance

FSx for NetApp ONTAP service integrations

Integrated with



Amazon
CloudWatch



AWS
CloudTrail



AWS
CloudFormation



AWS
Directory
Service



AWS
KMS



AWS
Backup

Accessible from



Amazon
EC2



Amazon
EKS



Red Hat
OpenShift
on AWS



VMware
Cloud on
AWS



Amazon
WorkSpaces



Amazon
AppStream
2.0



AWS
DataSync



AWS Snowball



SQL Server Always On
Failover Cluster Instances

Astra Trident Solves Persistence for Stateful Applications

Open-source dynamic storage orchestrator for Kubernetes



Open Source

Maintained and supported by NetApp

Designed for Kubernetes and NetApp

Deploys in Kubernetes clusters as pods and managed with Kubernetes

CSI Compliant Storage Orchestrator

Quickly and easily consume persistent storage

Broad support

Dynamic PV provisioner for entire NetApp portfolio including FSxN



EKS



ROSA



Kubernetes



Red Hat
OpenShift



Docker
Enterprise



Container Storage Interface (CSI)



ONTAP



ONTAP



Element

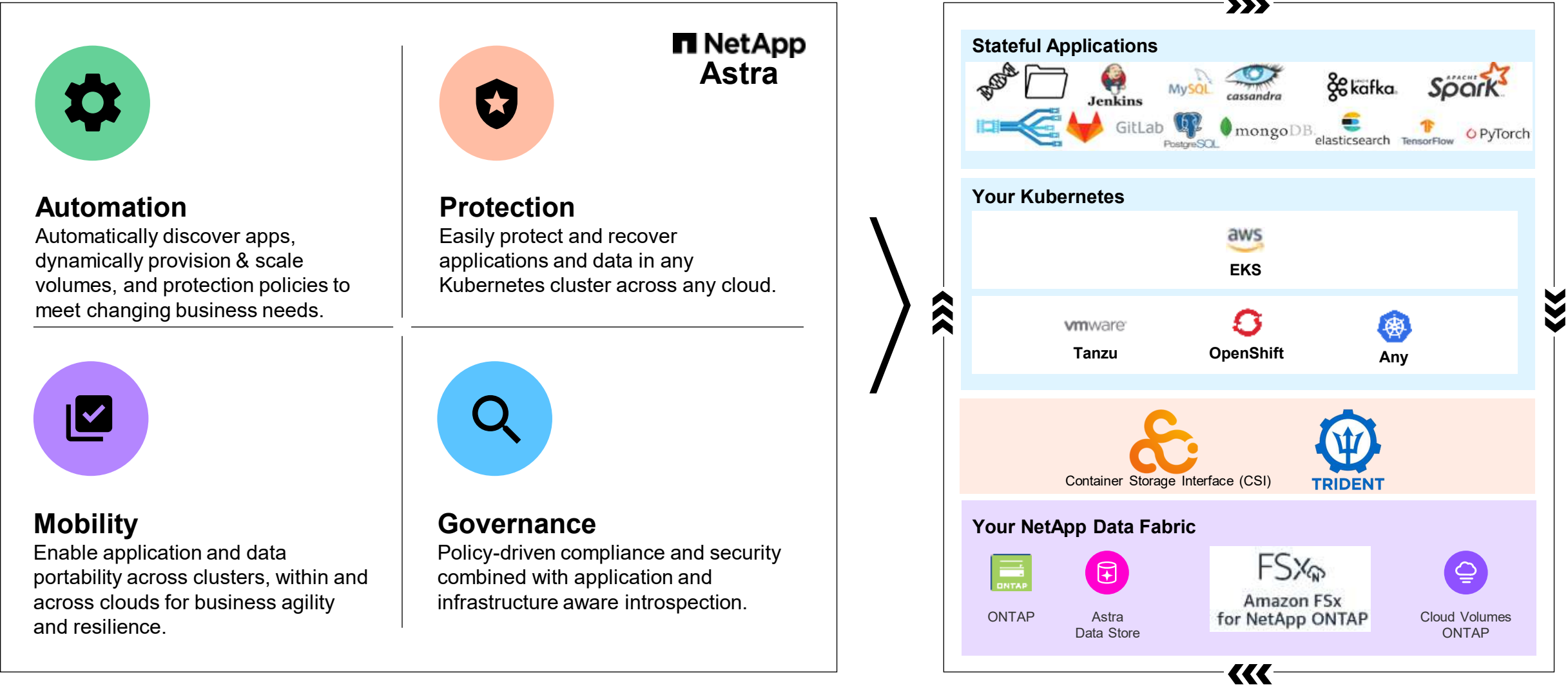


SANtricity



NetApp Astra Is Application And Data Management For Kubernetes

Manage your entire Kubernetes environment from a single cloud service or self-managed software



**NetApp unlocks
the best of cloud**

