



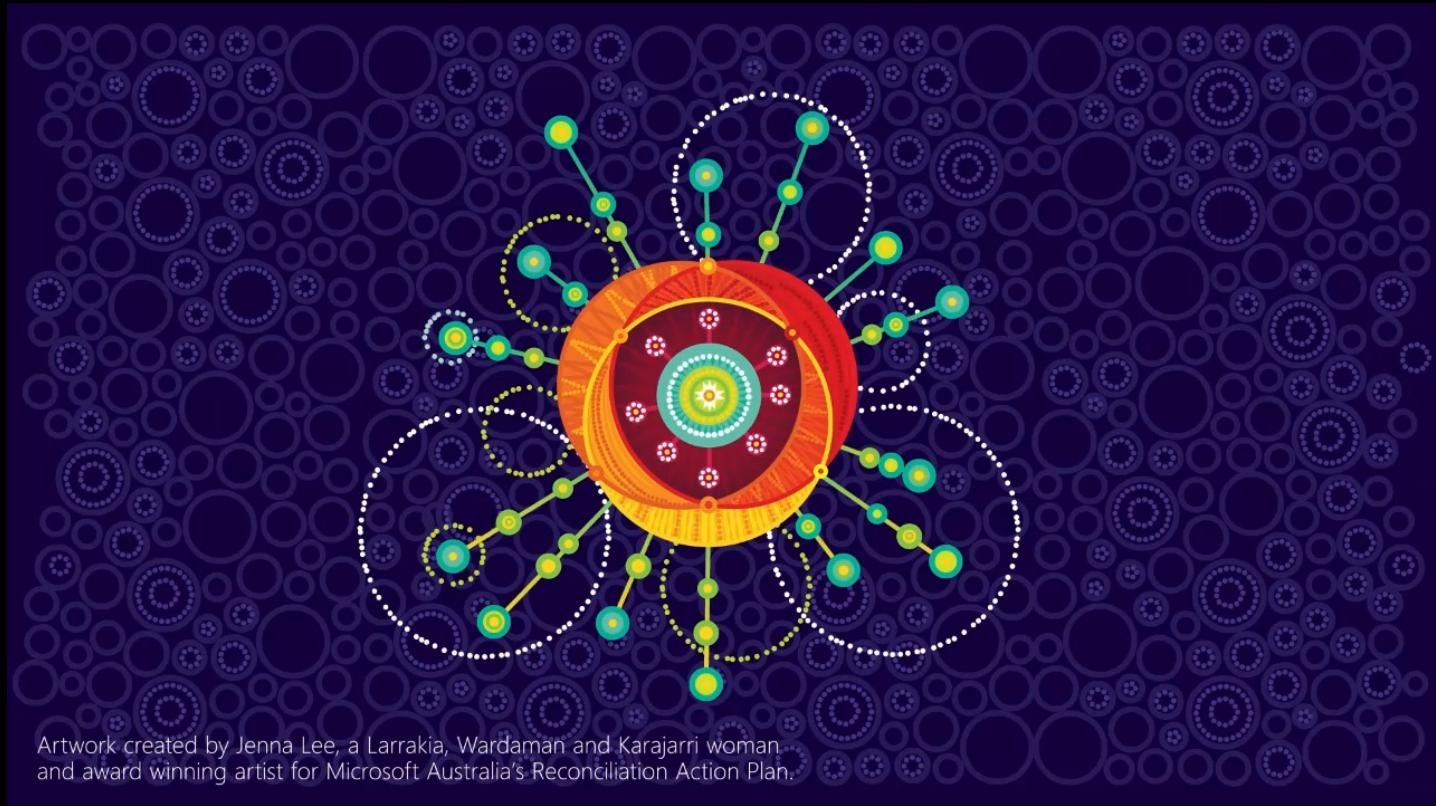
Microsoft Build



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Cloud Solution Architect – ISV at Microsoft



Acknowledgement of Country



Agenda

- Azure K8s highlights from Build
- Kubernetes Apps Marketplace
 - Automated Deployments on AKS



Quiz

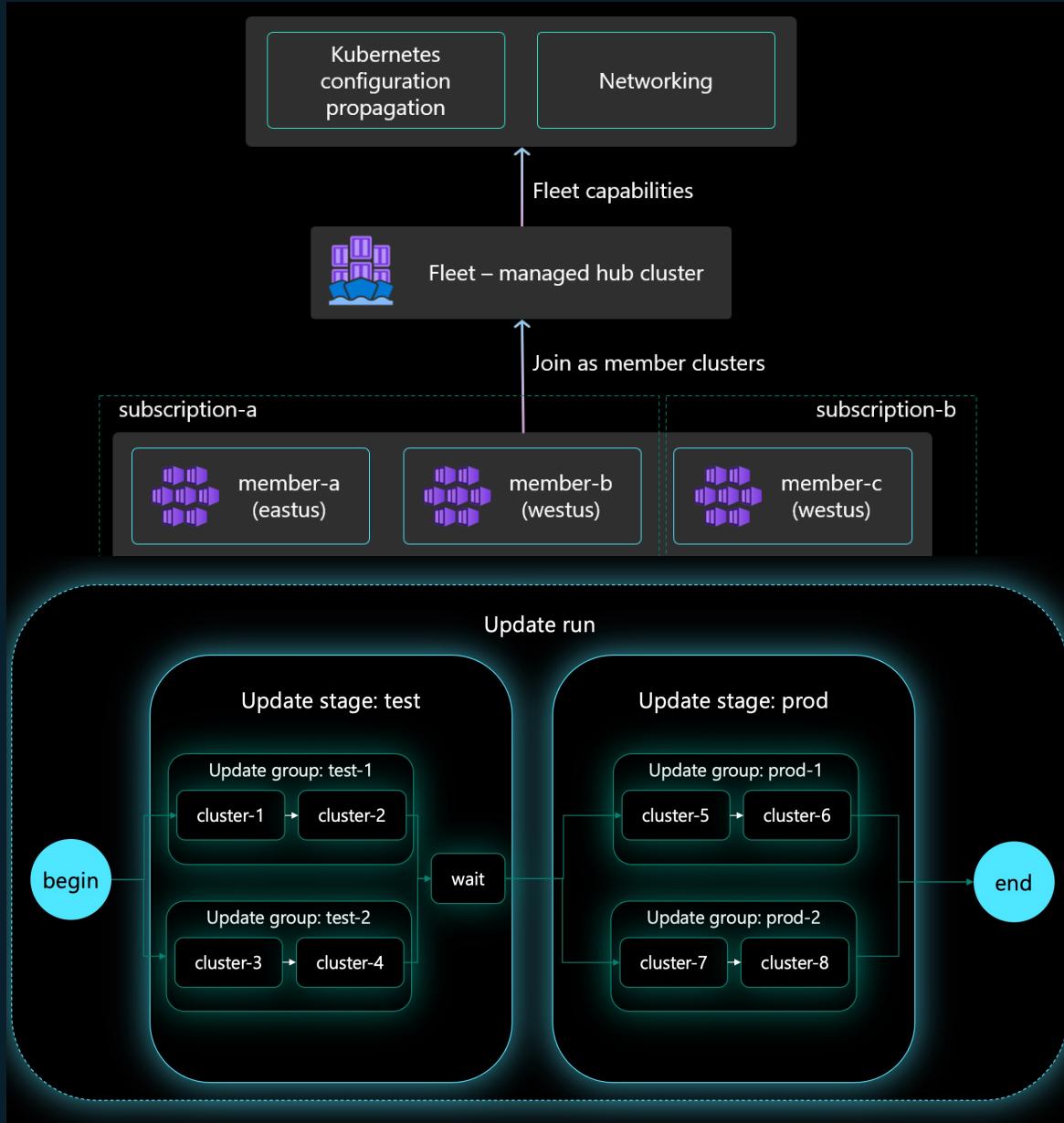
MS Build 2023

K8s highlights from Build

- AKS Fleet Manager
- Long Term Support – starting with 1.27 → GA ★
- Kubernetes Apps → GA ★
- Windows Updates
- Azure Linux! → GA ★
- Workload Identity → GA ★
- AzMon Managed Prometheus and Grafana → GA ★
- Overlay Networking → GA ★



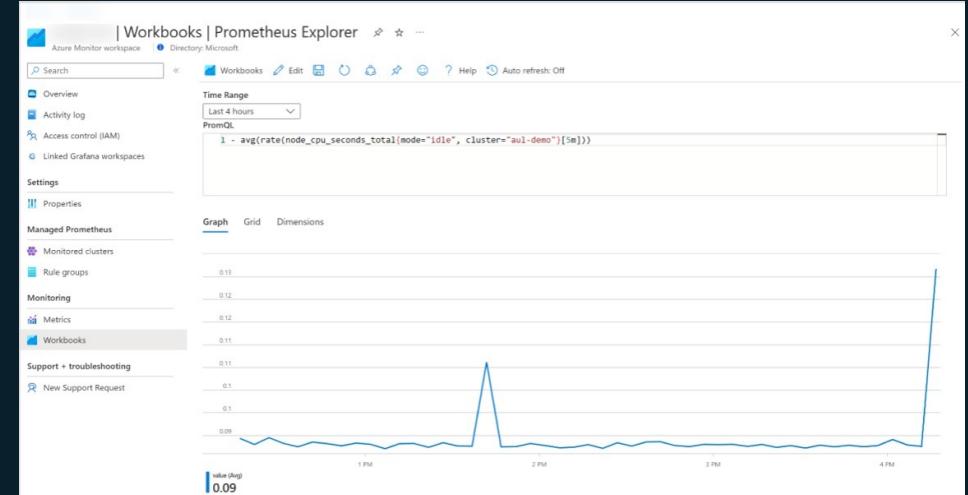
AKS Fleet Manager



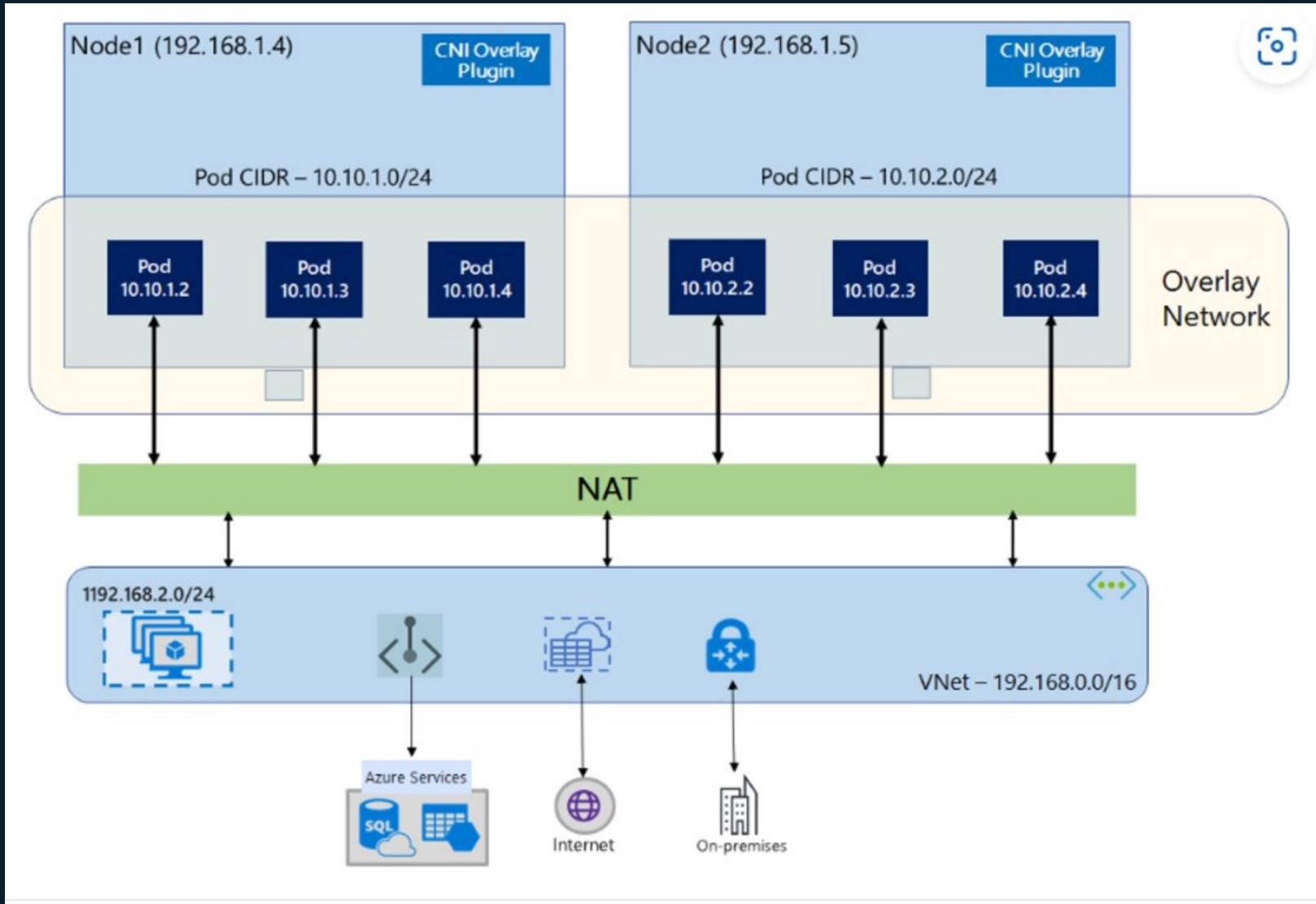
AzMon Managed Prometheus + Grafana



Grafana



Overlay Networking



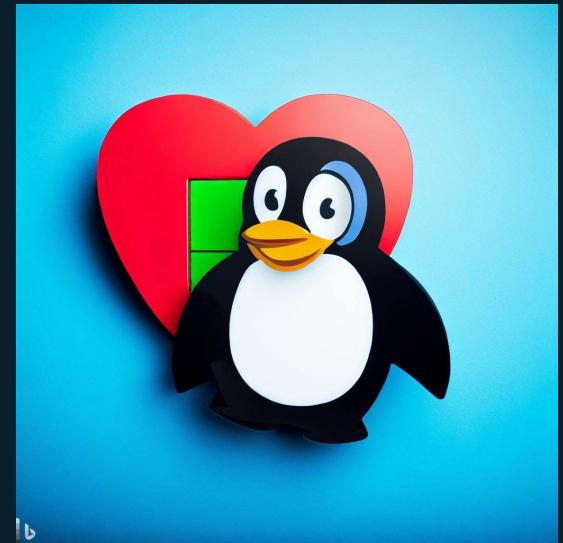
Azure Linux Container Host

aka.ms/azure-linux-docs

Based on CBL-Mariner (lightweight characteristics)

Designed for container OS workload

Streamlined supply chain for support & CVE patching





Kubernetes Apps on Marketplace

Deploy & Market your app

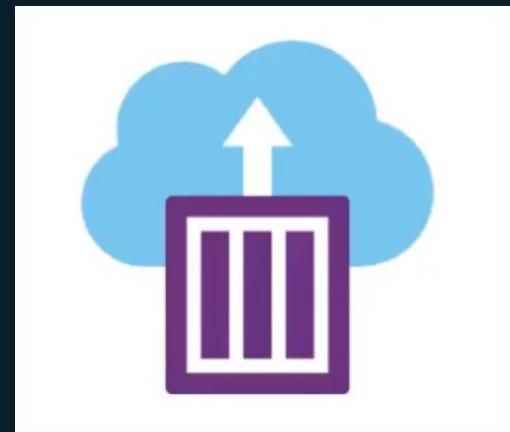


Agriculture	Financial Services	Government	Healthcare	Hospitality & Travel	Manufacturing	Nonprofit & Public Sector	Sustainability
Agworld	cloudneeti	AvePoint®	CentralLogic™	GeoVictoria	datanomix®	CEM Business Solutions	AXONIZE
folio3	HAMILTON CORE	avtex	hyro+	Dynamic Objects	TWINTHREAD	qaddress® Data Quality	OrxaGrid
agrivi	codat	XEELO	Questica	ÜNCROWD	SOFTOOLS	the good exchange	Vigyanlabs
agtools	Mifos	RedMane Technologies	theatror	PROS.	toolsgroup	Apptivo	KONsys
smag SMART AGRICULTURE	DATAVISOR	iGlobe	innovaccer	GimmOnix	Wippit	LiveWare	evalue8
ABB	MATILLION	vlex	mazikcare	bizagi	SUPPLY CHAIN WIZARD	H Consulting Tunisie	ecovadis
moptaskr	eBaoTech	officeatwork	spanPDP Personal Data Protector	LAZARILLO	THROUGHPUT INC	QUADRANT RESOURCE	ESGE
annata	xero	beyondkey™	mozzaz care everywhere	CETERIS	MAJK Solutions	Precedent HR Setting the standard	Cogneum
Hitachi Vantara	zscaler	High-Five	zegami	bismart	INTRASTAGE	everteam	Stratsys

Kubernetes Apps



- An offer type in the Azure Marketplace
- Allows running your containerized solution on Azure Kubernetes Services (AKS)
- Run your solution on the customer's tenant
- Billed through Microsoft (transactable)



Why publish an Azure Container offer

- Deploy your containerized solutions via the Microsoft commercial marketplace
- Take advantage of AKS for management and scale
- Control the customer installation experience
- Deploy multiple containers as part of a single solution

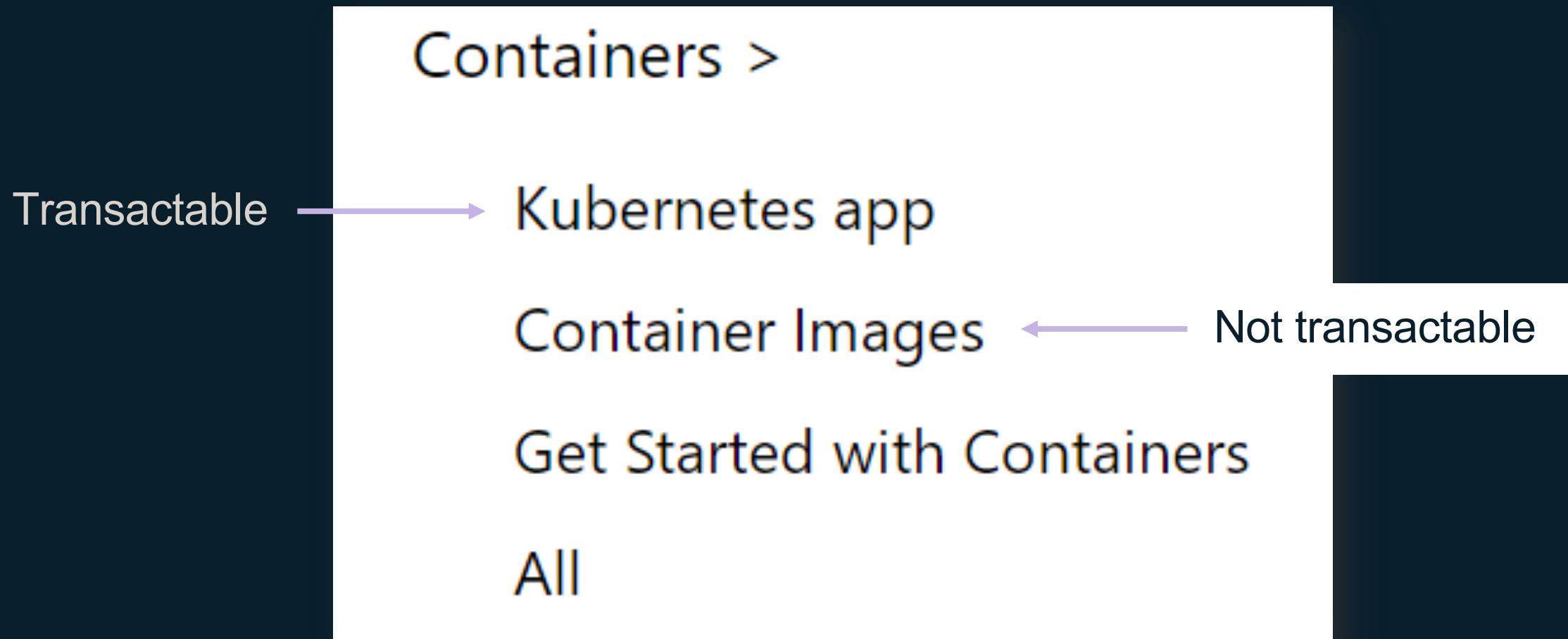


Advantages of Azure Container offers

- Runtime costs of Kubernetes (K8s) and other services are paid by the customer
- Take advantage of Microsoft go-to-market benefits
- Different deployments for different plans
 - i.e., Bronze, Silver, Gold



Browsing the Azure marketplace

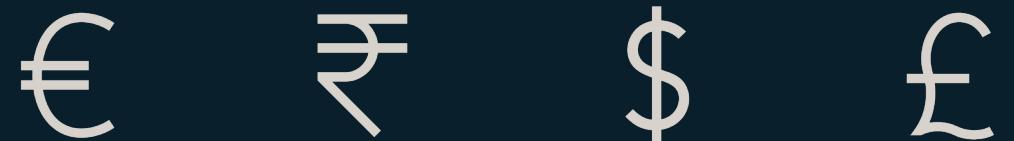


Billing Model

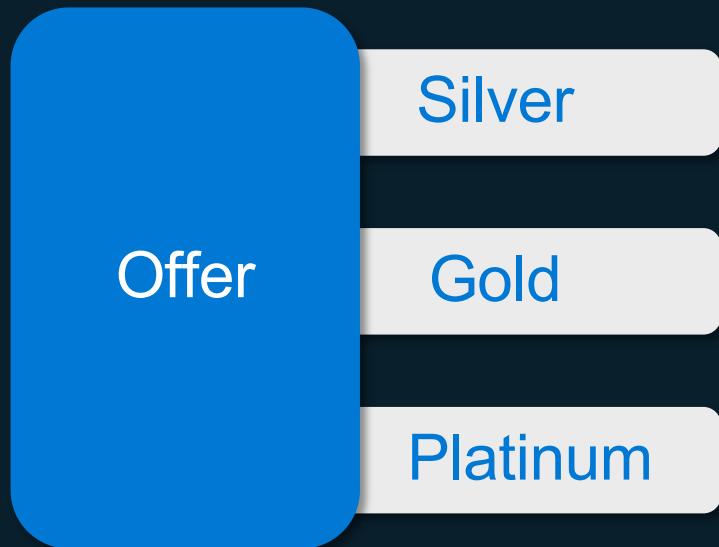
Plan pricing models

- Per core hour
- Per every core in cluster
- Per every node in cluster
- Per node
- Per pod
- Custom

Pricing may be set per currency and in different markets



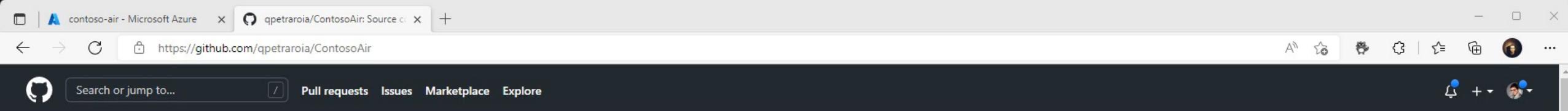
About Container offers and plans



- Offers have one or more plans
- Each plan has its own pricing
- Plans may each have their own deployments.
e.g., Containers
- Plans may be private, targeting individual customers
- Plans appear as different purchase options for offers in the Azure marketplace

Let's build!





qpetrario / ContosoAir

Public

forked from jahabibi/ContosoAir

<> Code Pull requests Actions Projects Wiki Security Insights Settings

main ▾ 5 branches 0 tags

Go to file

Add file ▾

<> Code ▾

This branch is up to date with jahabibi/ContosoAir:main.

Contribute ▾ Fetch upstream ▾

 qpetrario Contoso Air ready for migration!

904ae05 4 hours ago 27 commits

 locales Contoso Air ready for migration! 8 days ago

 public Contoso Air ready for migration! 8 days ago

 scss Contoso Air ready for migration! 8 days ago

 src Contoso Air ready for migration! 4 hours ago

 views preparing Contoso Air for AKS 11 days ago

 .gitignore Contoso Air ready for migration! 8 days ago

 LICENSE preparing Contoso Air for AKS 11 days ago

 README.md preparing Contoso Air for AKS 11 days ago

 app.js preparing Contoso Air for AKS 11 days ago

 front.js preparing Contoso Air for AKS 11 days ago

 package-lock.json preparing Contoso Air for AKS 11 days ago

 package.json preparing Contoso Air for AKS 11 days ago

 server.js preparing Contoso Air for AKS 11 days ago

 web.config preparing Contoso Air for AKS 11 days ago

 webpack.config.js preparing Contoso Air for AKS 11 days ago

About

Source code repository for ContosoAir application

 Readme

 MIT License

 0 stars

 0 watching

 1.5k forks

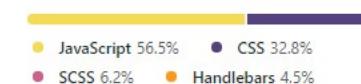
Releases

No releases published
[Create a new release](#)

Packages

No packages published
[Publish your first package](#)

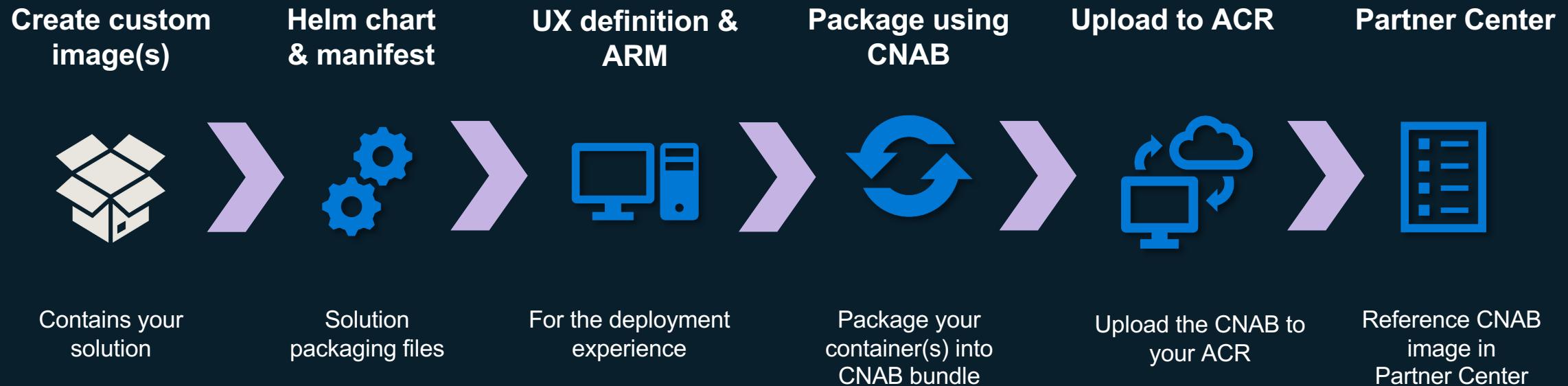
Languages



Another way...



Container offer development lifecycle



Package artifacts

Docker image(s)

cluster-deployment.json

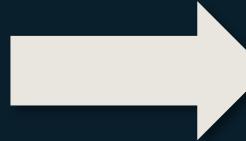
createUIDefinition.json

manifest.yaml

Helm chart folder



Microsoft CNAB bundler
container



CNAB bundle (image)

[mcr.microsoft.com/
container-package-app](https://mcr.microsoft.com/container-package-app)

Package artifacts



Docker image(s)

cluster-deployment.json

createUIDefinition.json

manifest.yaml



Helm chart folder

Docker images

- One or more images for your solution
- Holds your proprietary application code
- Uploaded to your own ACR

Package artifacts



Docker image(s)

cluster-deployment.json

createUIDefinition.json

manifest.yaml



Helm chart folder

cluster-deployment.json

- An ARM template
- Infrastructure as code

Package artifacts



Docker image(s)

cluster-deployment.json

createUIDefinition.json

manifest.yaml

📁 Helm chart folder

createUIDefinition.json

- Defines the installation experience for the customer
- Similar to a “wizard” for installing the offer
- Choose from many components to build the experience
- Provides parameters to cluster-deployment.json

Package artifacts



Docker image(s)

cluster-deployment.json

createUIDefinition.json

manifest.yaml



Helm chart folder

manifest.yaml

- Describes the package
- Points to other artifact locations
- Required by the CNAB bundling tool
- Uses semantic versioning to version the CNAB

Package artifacts



Docker image(s)

cluster-deployment.json

createUIDefinition.json

manifest.yaml



Helm chart folder

Helm chart

- Deployment package for Kubernetes
- Helm chart consists of the following
 - Chart.yaml
 - values.yaml
 - templates folder *
- * Templates folder contains K8s deployment files

An example solution

✓ container-package

 ✓ AzureTodo

 ✓ templates

 ! deployments.yaml

 ! Ingress.yaml

 ! services.yaml

 ≡ .helmignore

 ! Chart.yaml

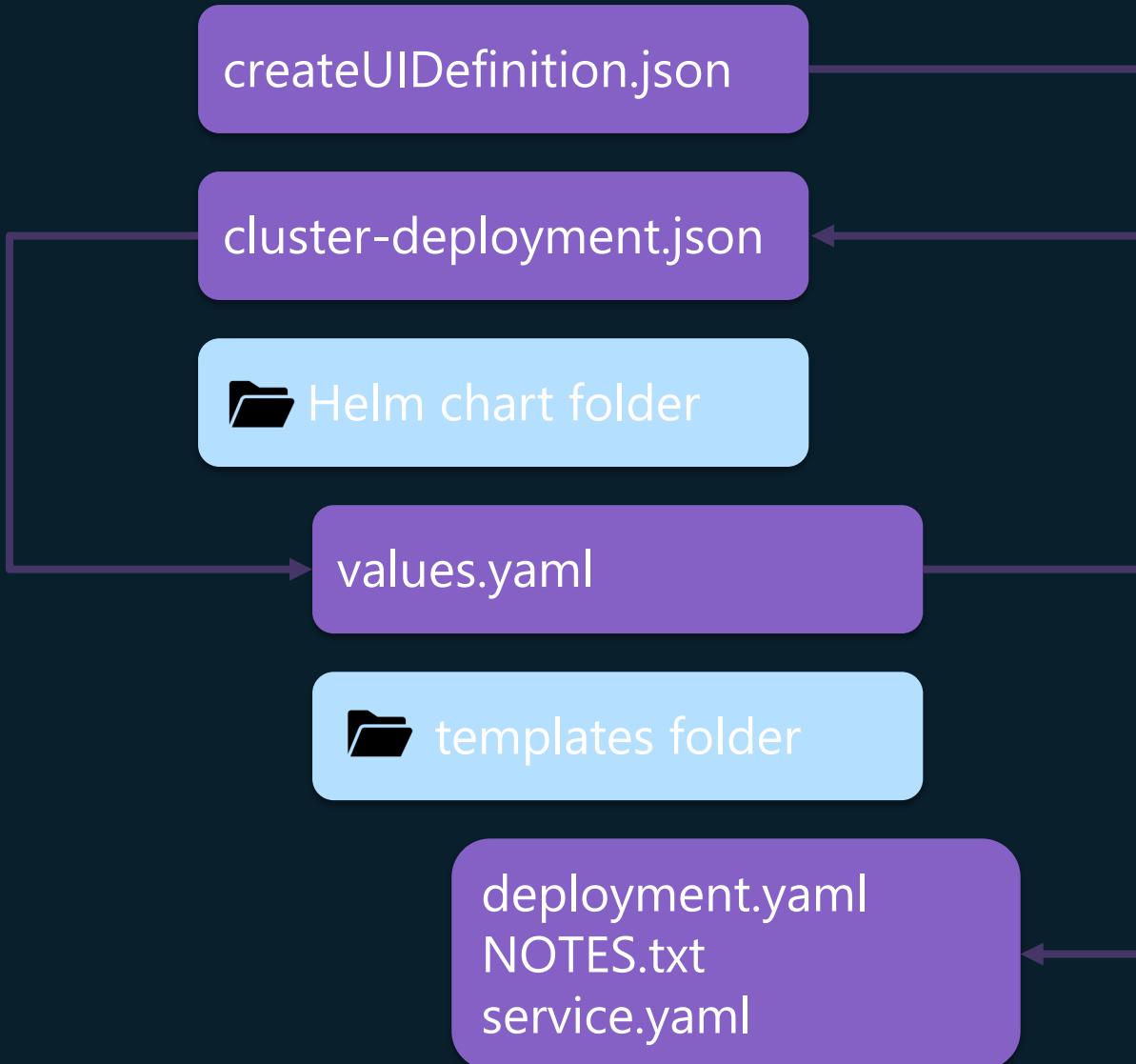
 ! values.yaml

 {} cluster-deployment.json

 {} createUIDefinition.json

 ! manifest.yaml

Collecting and passing values



Package artifacts

Docker image(s)

cluster-deployment.json

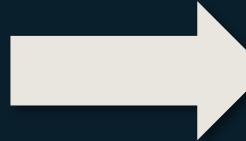
createUIDefinition.json

manifest.yaml

Helm chart folder



Microsoft CNAB bundler
container



CNAB bundle (image)

[mcr.microsoft.com/
container-package-app](https://mcr.microsoft.com/container-package-app)

Publish the app!



Further details
& please connect!



Publish Container Offer

<https://learn.microsoft.com/en-us/partner-center/marketplace/marketplace-containers>

AKS Blog

<https://cloudblogs.microsoft.com/opensource/tag/azure-kubernetes-service/>

AKS Updates

Roadmap: <https://github.com/Azure/AKS/projects/1>

Build Updates:

<https://techcommunity.microsoft.com/t5/apps-on-azure-blog/azure-kubernetes-service-build-2023-announcements/ba-p/3828634>

Book of News

<https://news.microsoft.com/build-2023-book-of-news/>