## Deep dive into Kubernetes on Azure

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#### whoami



- Open Source Consultant at Microsoft
- DevOps, Open Source, Cloud developer/architect, integration and tech pre-sales
- Working with Azure, Kubernetes, microservices and API management
- Speaker Microsoft Ignite, Container Camp, API Days, GAB, GIB, NDC, Meetups, ....
- Former Azure MVP Microsoft Most Valuable Professional
- Container and DevOps community member
- Developed for Linux in early 2000s



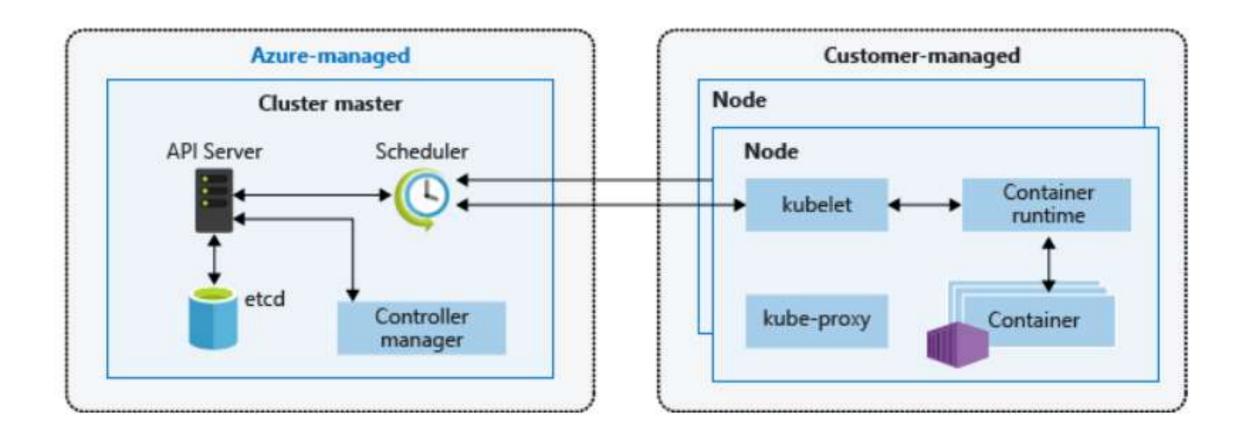
## Agenda

EK A

- AKS Architecture
- AKS Node Pools
- Helm
- Demos / Use case discussions

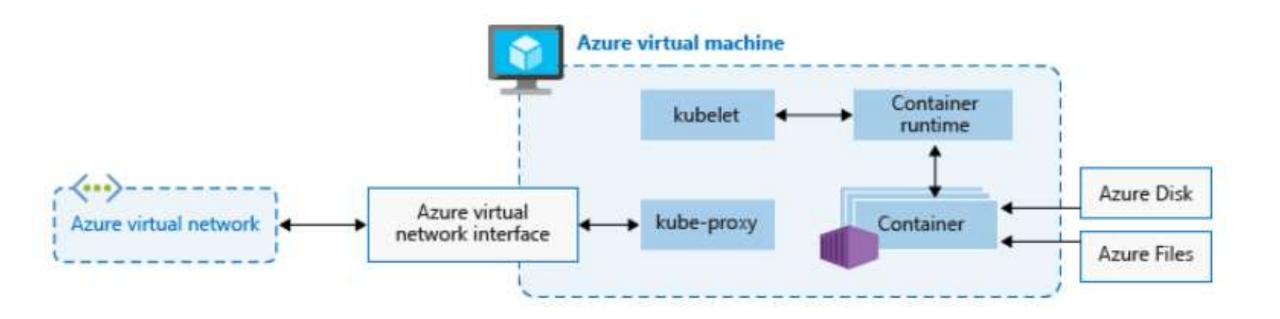


#### **AKS Cluster Archicteture**





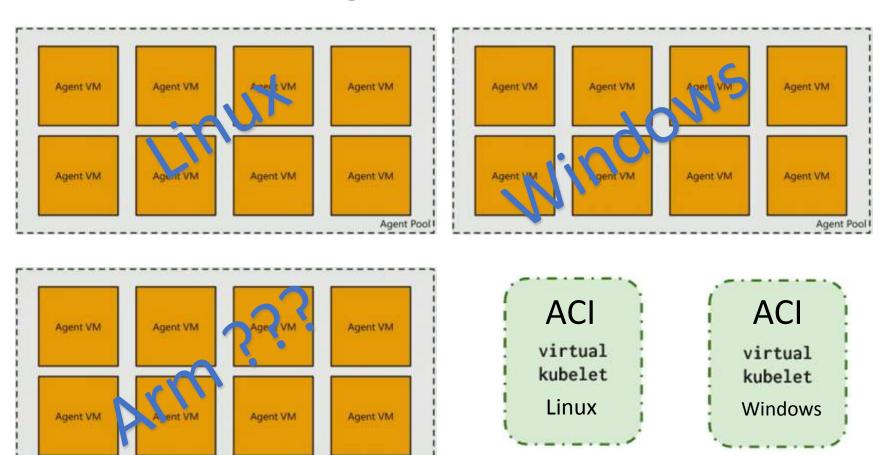
## AKS Azure VNet integration





## AKS new Node Pool using Azure VM Scale Sets

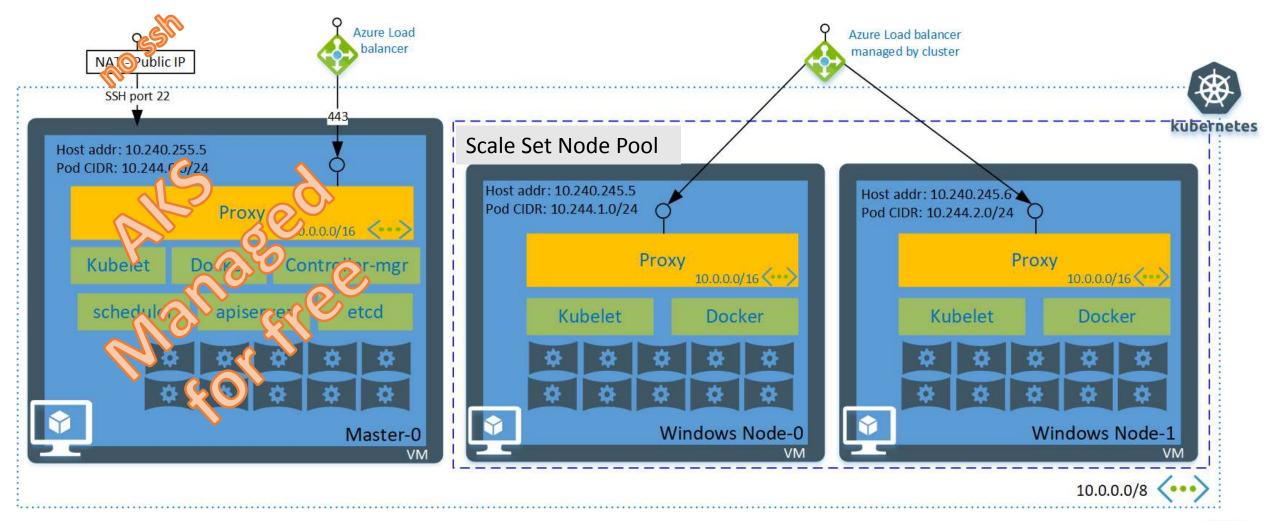




Agent Pool I



## AKS Windows pool – Coming soon



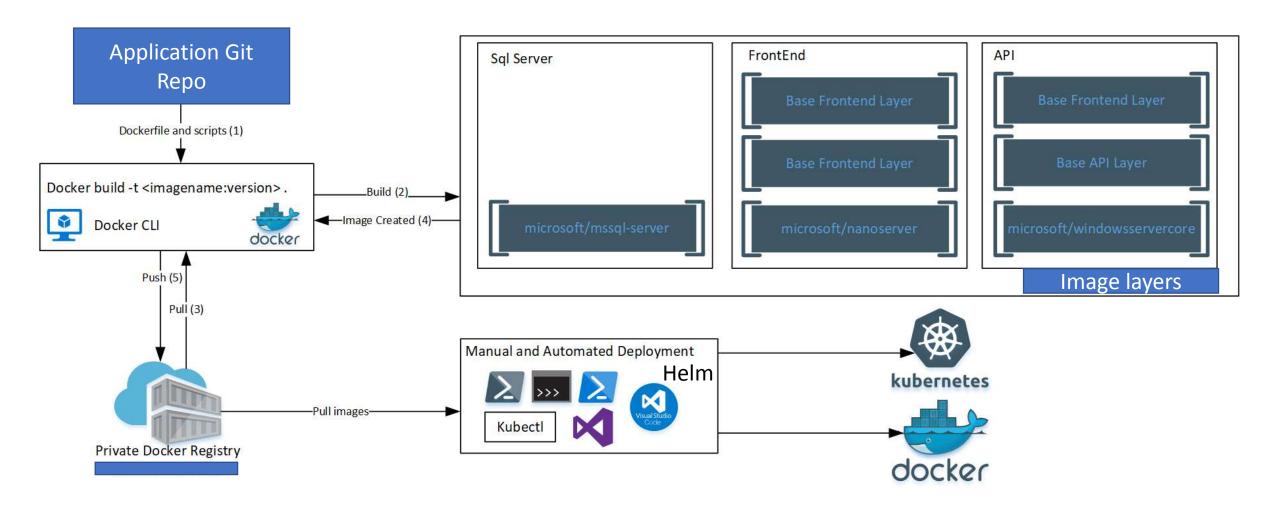


#### **Install Client Tools**

- Docker for Windows (Including local single node Kubernetes
- Docker Hub Account <a href="https://hub.docker.com/">https://hub.docker.com/</a>
- Visual Studio Code
- Visual Studio 2019
- Use Azure Cloud Shell <a href="https://shell.azure.com/">https://shell.azure.com/</a>
- WSL Windows Subsystem for Linux
- Azure CLI
- Helm <a href="https://helm.sh/">https://helm.sh/</a>



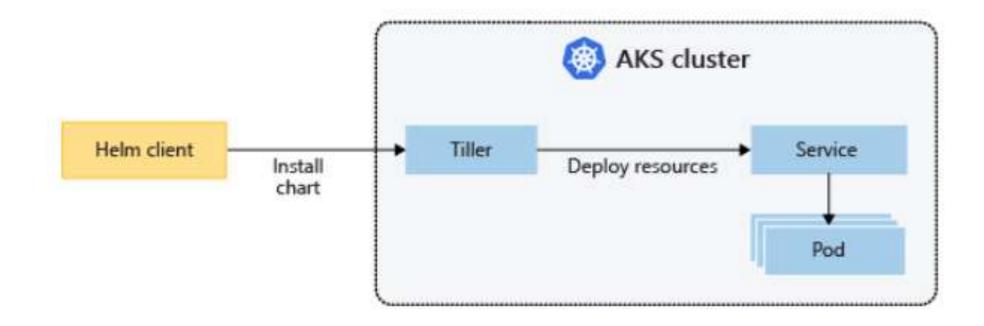
#### From Source code to Kubernetes



### Helm as your Package Management



## Helm as your Package Management





# Let's Demo



#### Thanks!

https://aksworkshop.io/

https://azure.microsoft.com/mediahandler/files/resourcefiles/kubernetes-learning-path/Kubernetes%20Learning%20Path%20v4.pdf

https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/microservices/aks

https://docs.microsoft.com/en-us/azure/container-registry/container-registry-helm-repos

https://github.com/Azure/AKS/blob/master/previews.md#virtual-machine-scale-sets-vmss--cluster-autoscaler

https://github.com/scotty-c/kubernetes-on-azure-workshop

https://github.com/mspnp/microservices-reference-implementation

