



**Microsoft Azure
24 Hrs en Español**

**SQL Server containers
en Microsoft Azure**



Carlos Robles

Principal Consultant, DBA Mastery



/croblesdba



@dbamastery



crobles@dbamastery.com

Experience

Microsoft Data Platform MVP

Friend of Redgate

+10 years of experience multi-platform
Solutions architect

Community

GTSSUG – Community Leader

Speaker, author, blogger, mentor

Simple Talk, SQL Server Central & MSSQL Tips

DBA Mastery

Tips, scripts, best practices & more



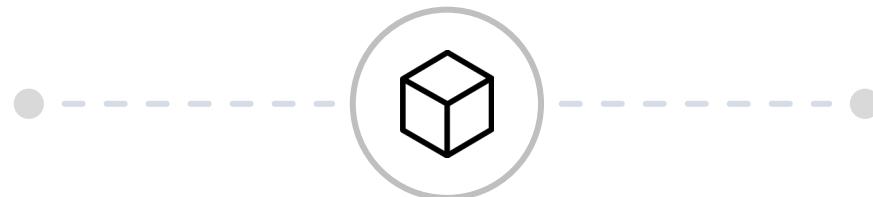
MAXDOP Calculator

Azure Data Studio wait stats widget

Azure Data Studio notebooks

PerfMon for DBAs - PowerShell

Industry analysts agree

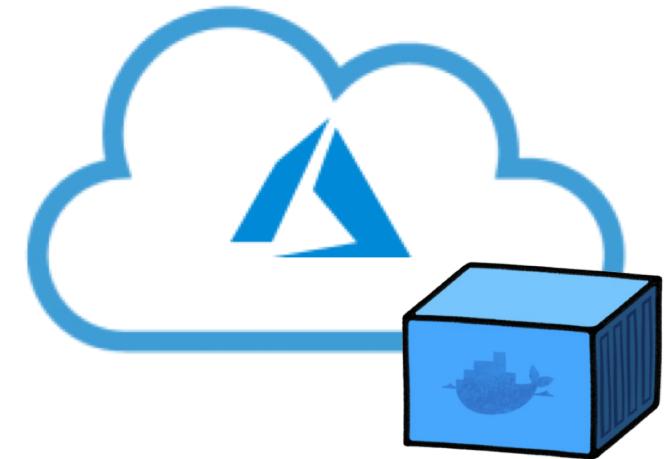


"By 2023, more than 75% of global organizations will run mission-critical, containerized cloud-native applications in production, up from less than 30% today."

Gartner[®]

AGENDA

- Containers, que y porqué ?
- SQL Server containers
- Containers en Azure
 - Azure Container Registry (ACR)
 - Azure Container Instances (ACI)
 - Azure Kubernetes Services (AKS)



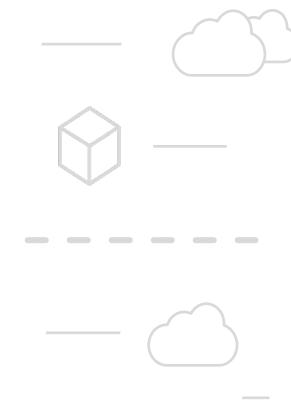
Containers, que y porqué?



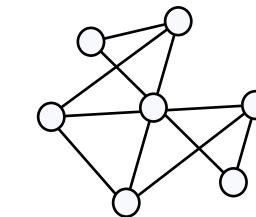
QUE ES UN CONTAINER?



Estandar



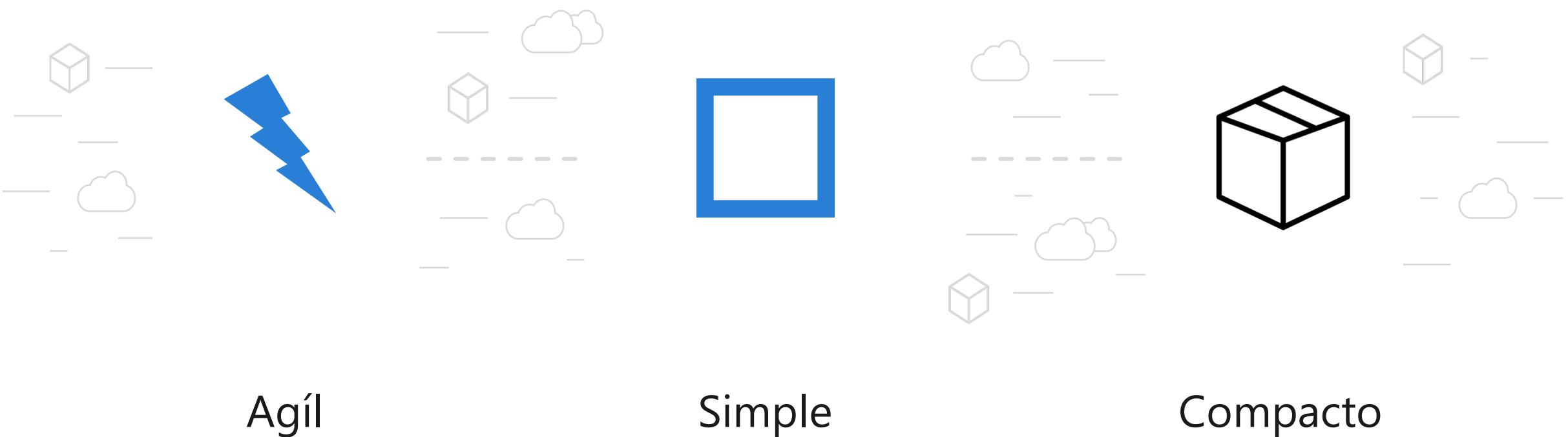
Ligero



Multi
plataforma



PORQUE CONTAINERS?



Agil

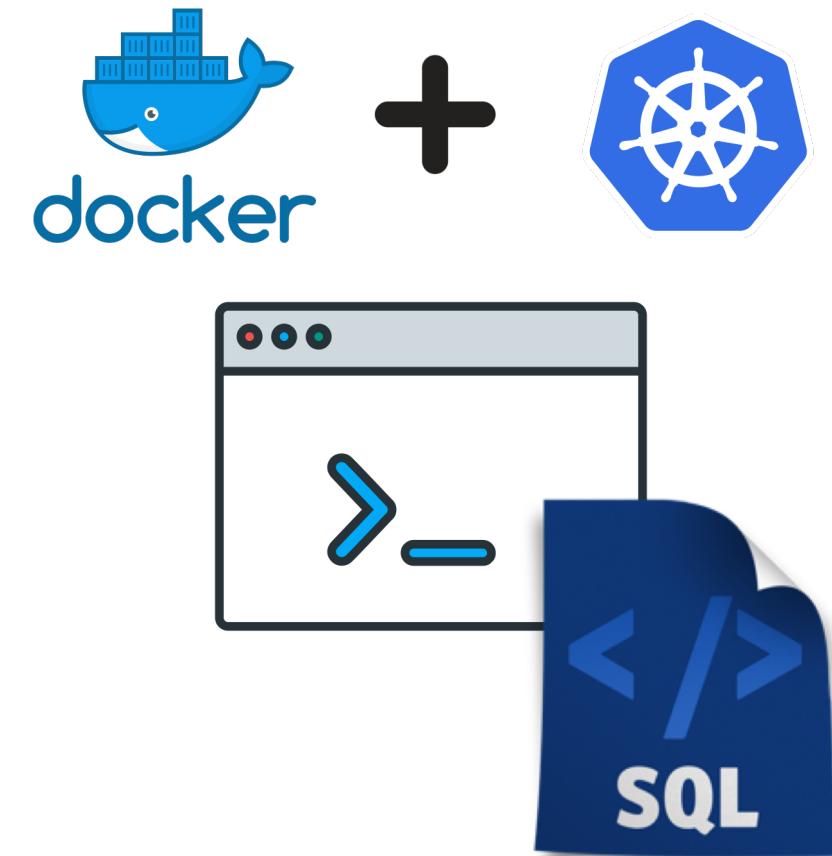
Simple

Compacto



SQL SERVER CONTAINERS?

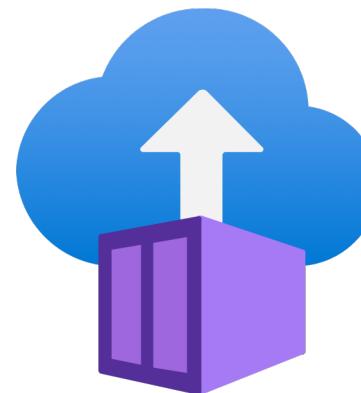
- Fácil, simple y agil
- Estandar
- DevOps
- Compute | Storage
- Docker & Kubernetes



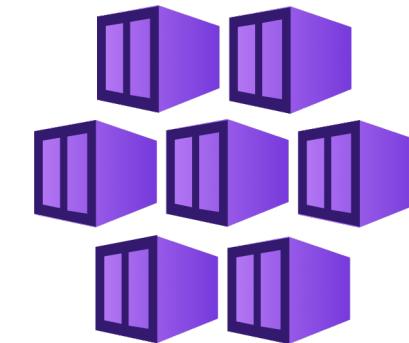
CONTAINERS EN AZURE?



Azure Container
Registry



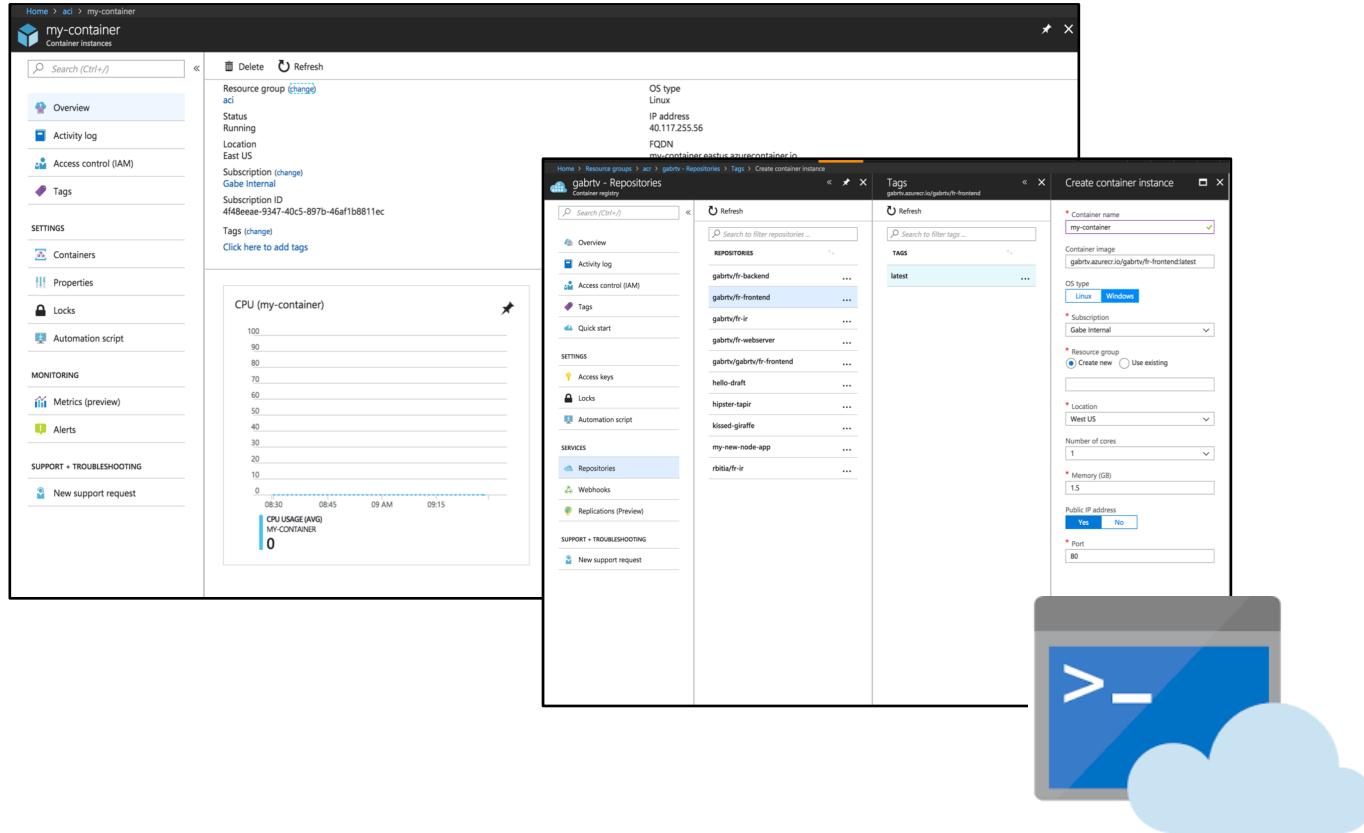
Azure Container
Instances



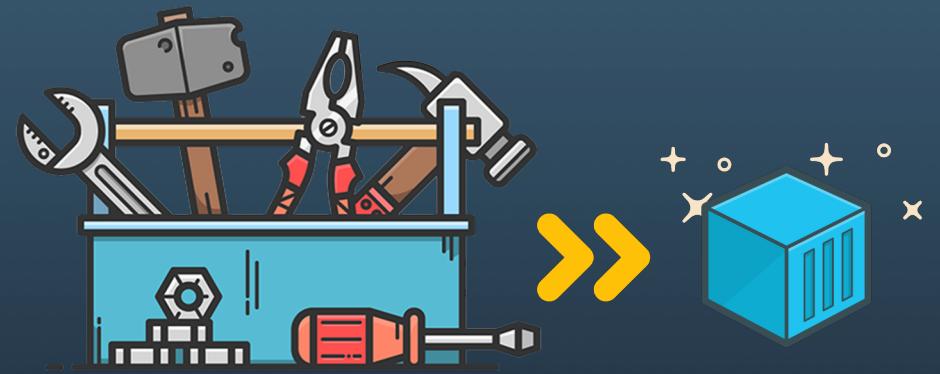
Azure Kubernetes
Services



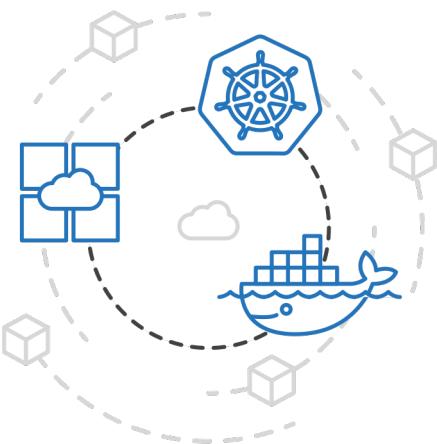
PORTAL & AZURE CLI



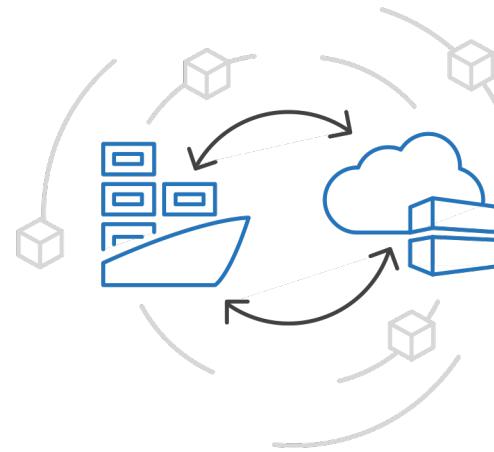
Azure Container Registry (ACR)



AZURE CONTAINER REGISTRY (ACR)



Administrar imágenes de todo tipo de containers



Herramientas open-source como Docker CLI



Azure Container Registry geo-replication



DEMO

ACR build, tag, push



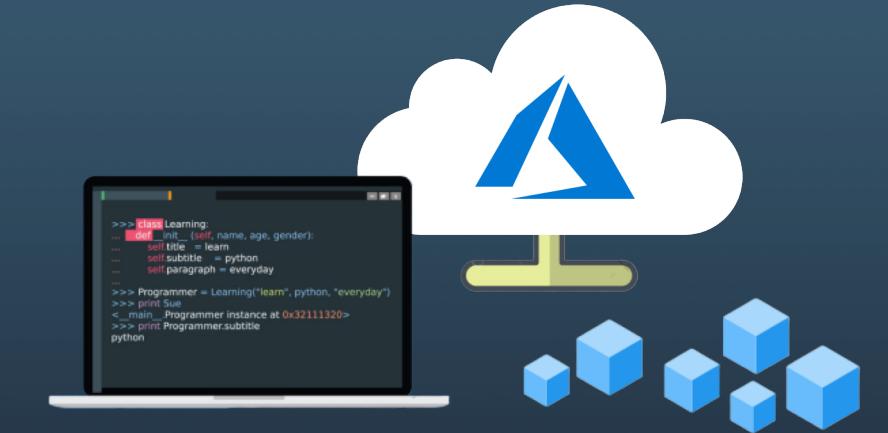
ACR - DEMO RECAP



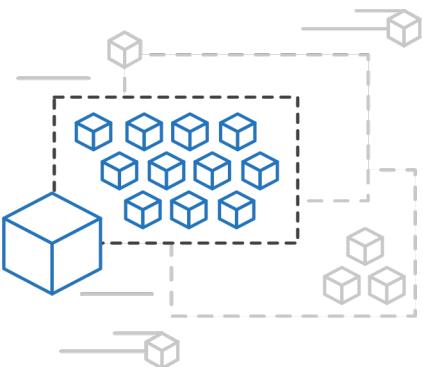
- Build, tag y push hacia ACR
- Visual Studio Code extension 🌐
- No Docker, no problem ! 👍
- Azure Cloud shell, build, tag y push hacia ACR 🚀



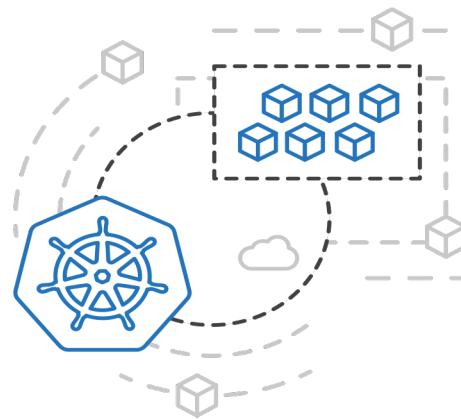
Azure Container Instances (ACI)



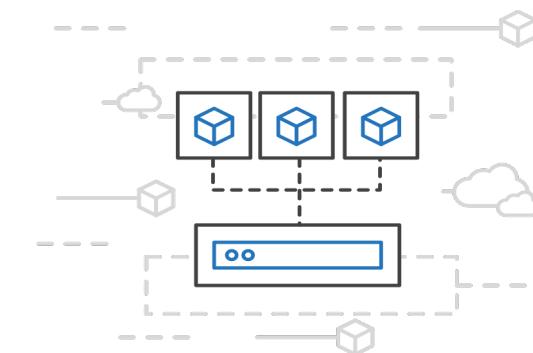
AZURE CONTAINER INSTANCES (ACI)



Ejecuta containers sin administrar servers



Facturación por segundo



Aplicaciones seguras con aislamiento de hipervisor

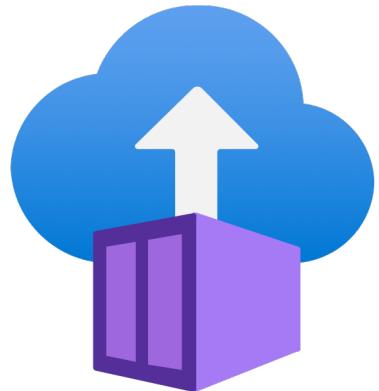


DEMO

ACI run, integrate



ACR - DEMO RECAP



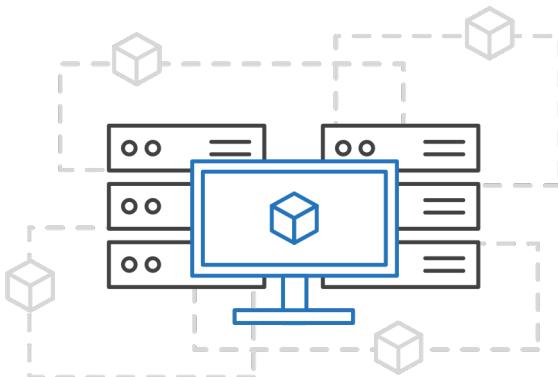
- Azure CLI & portal 
- Azure container instances + Azure file share
- Azure file explorer 
- Multi-container deployment (YAML) 



Azure Kubernetes Services (AKS)



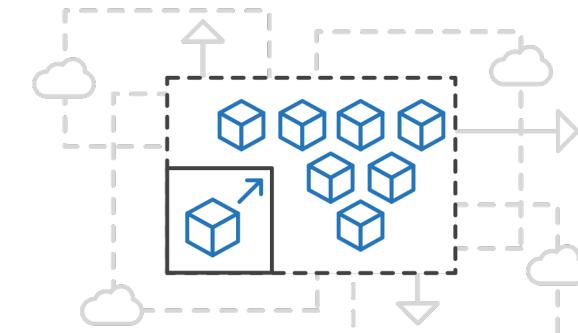
AZURE KUBERNETES SERVICES (AKS)



Enfóquese en sus
containers, no en la
infraestructura



Trabaja como quieras
con APIs open-
source



Escale y ejecute
aplicaciones con
confianza



PORQUE AKS?



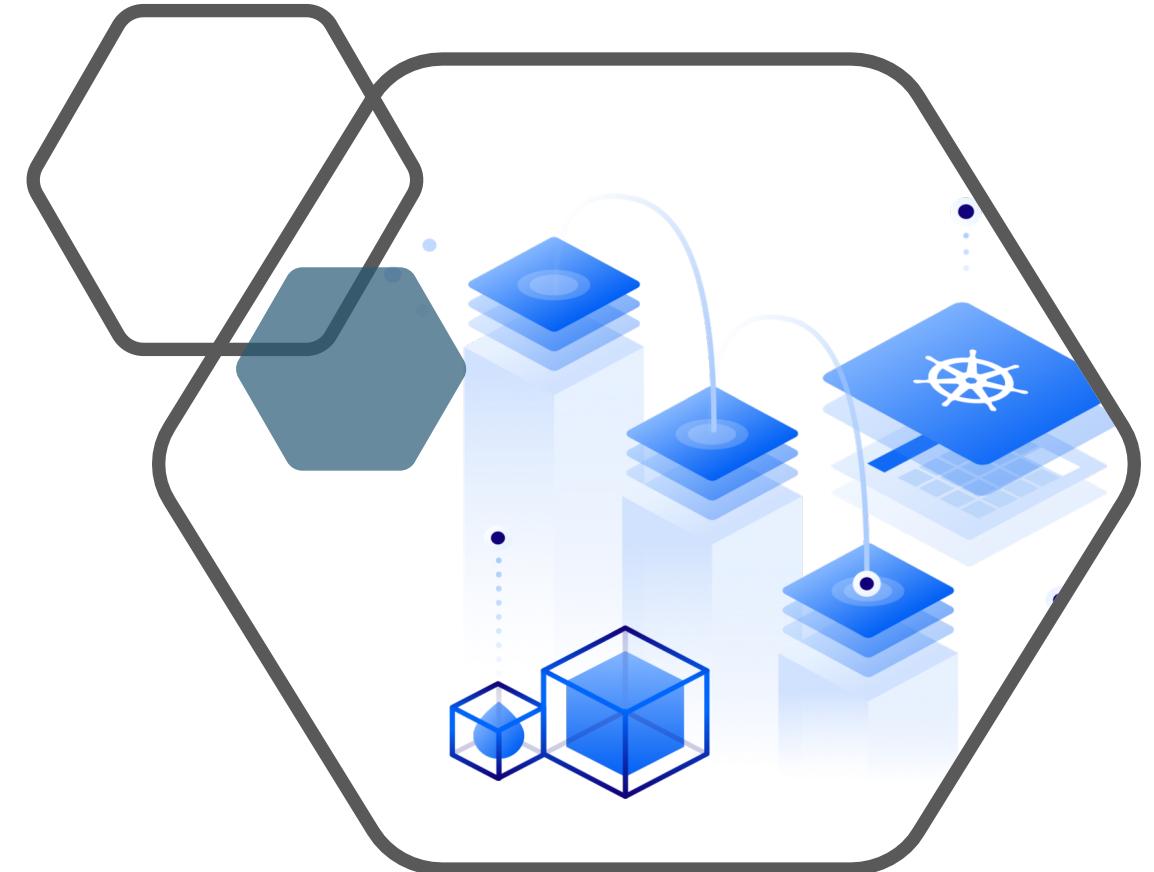
Escale su
cluster fácil

Panel de control
gestionado

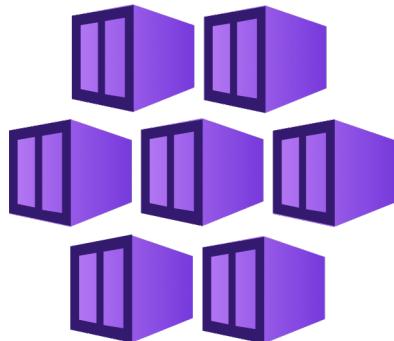
Actualizaciones
automatizadas

DEMO

AKS deploy, orchestrate



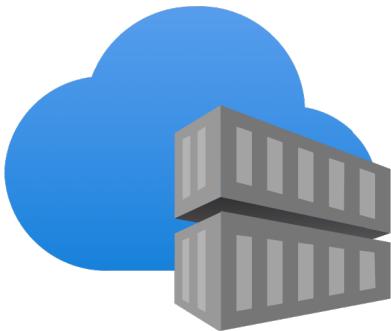
AKS - DEMO RECAP



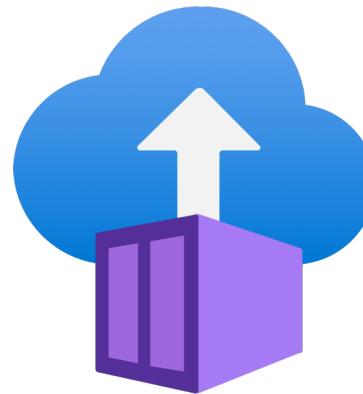
- Compute / storage por separado
- Gestión declarativa 
- HA listo para usar! 
- Panel de control sencillo 



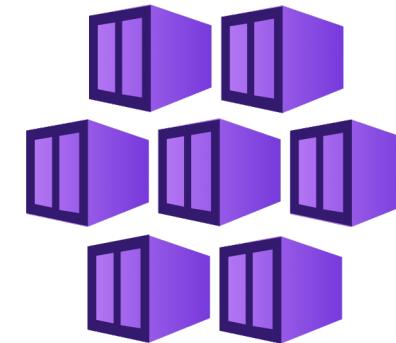
REVIEW



Azure Container
Registry



Azure Container
Instances



Azure Kubernetes
Services



Build, tag, push

Run, integrate,
test

Deploy, orchestrate,
scale

Q&A



REFERENCIAS

- Documentacion oficial
 - [Docker Docs](#)
 - [Kubernetes Docs](#)
- SQL Server
 - [SQL Server workshops](#)
 - [SQL Server in Docker](#)
- Libros
 - [The Phoenix / Unicorn Project](#)
 - [The DevOps Handbook](#)
 - [Kubernetes: Up and Running](#)
 - [Designing Distributed Systems](#)
 - [Pro SQL Server On Linux by Bob Ward](#)
- Cursos Pluralsight
 - [Getting Started with Docker](#)
 - [Docker Deep Dive](#)
 - [Docker and Kubernetes: The big picture](#)
 - [Kubernetes Installation and Configuration fundamentals](#)
- Cursos Microsoft Learning
 - [Kubernetes Learning Path](#)
 - [SQL Workshops](#)
- Katacoda
 - [Docker](#)
 - [Kubernetes](#)



ARTICULOS Y MAS

- **YouTube**
 - [SQL Containers on Docker & Kubernetes \(English\)](#)
 - [Todo sobre SQL Server Containers en Docker y K8s](#)
 - [Database DevOps con SQL Server](#)
 - [SQL Server containers in Microsoft Azure](#)
- [Redgate - Simple Talk](#)
- [SQL Server Central](#)
- [MSQL Tips](#)



redgate

SQL 
ServerCentral.com



The logo for MSSQLTips.com features a stylized blue swoosh graphic above the text "MSSQLTips.com".





@dbamastery



@dbamaster



crobles@dbamastery.com



croblesdba

Gracias!

