



**Microsoft Azure  
24 Hrs en Español**

**SQL Server containers  
en Microsoft Azure**



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## 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



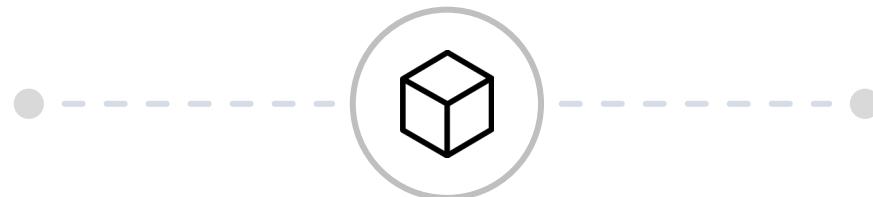
MAXDOP Calculator

Azure Data Studio wait stats widget

Azure Data Studio notebooks

PerfMon for DBAs - PowerShell

# Industry analysts agree

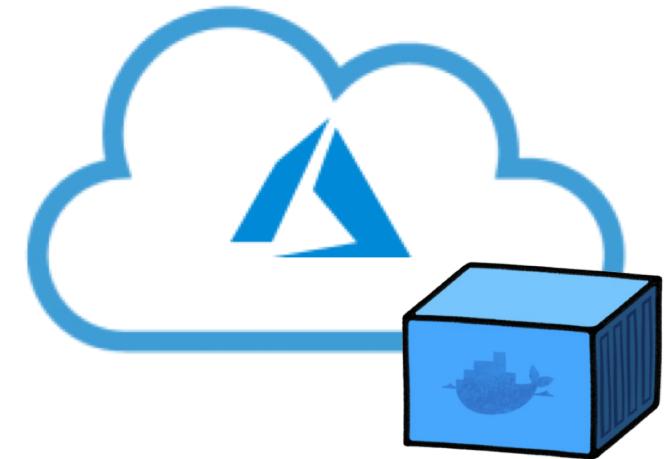


"By 2023, more than 75% of global organizations will run mission-critical, containerized cloud-native applications in production, up from less than 30% today."

**Gartner**<sup>®</sup>

# AGENDA

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



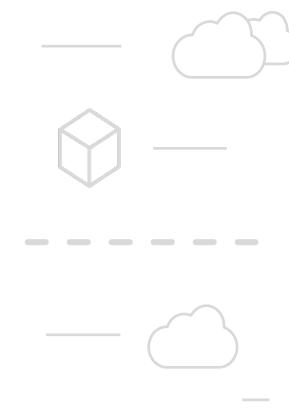
# Containers, que y porqué?



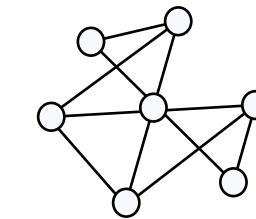
# QUE ES UN CONTAINER?



Estandar



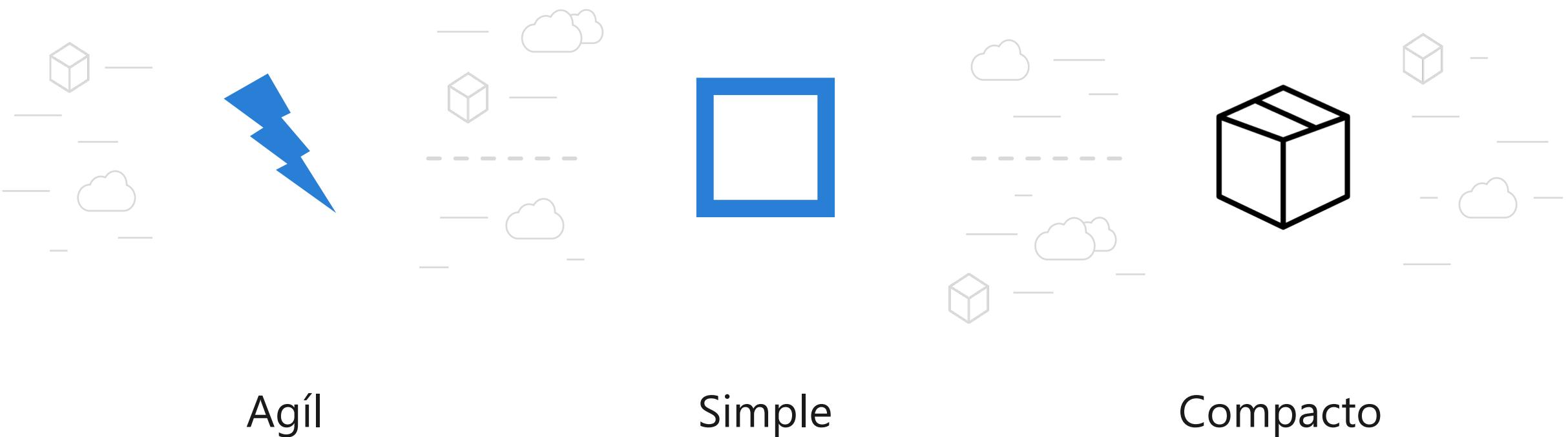
Ligero



Multi  
plataforma



# PORQUE CONTAINERS?



Agil

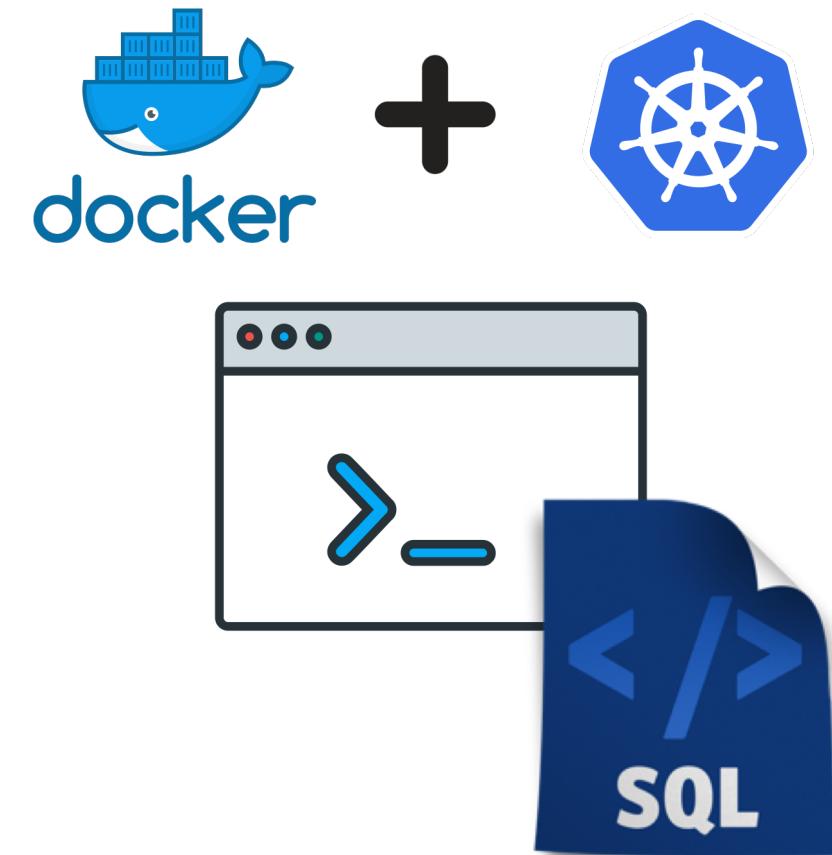
Simple

Compacto



# SQL SERVER CONTAINERS?

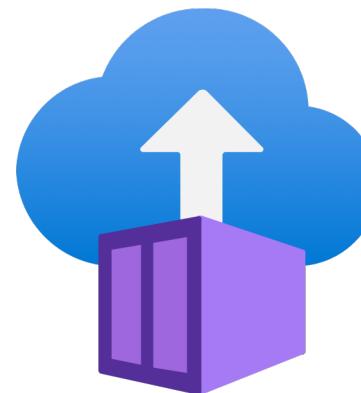
- Fácil, simple y agil
- Estandar
- DevOps
- Compute | Storage
- Docker & Kubernetes



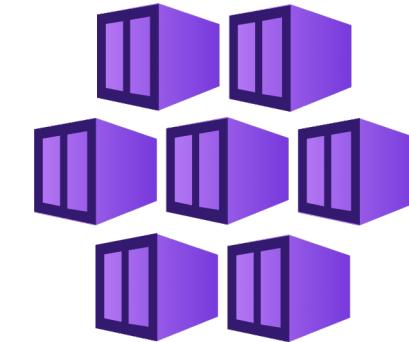
# CONTAINERS EN AZURE?



Azure Container  
Registry



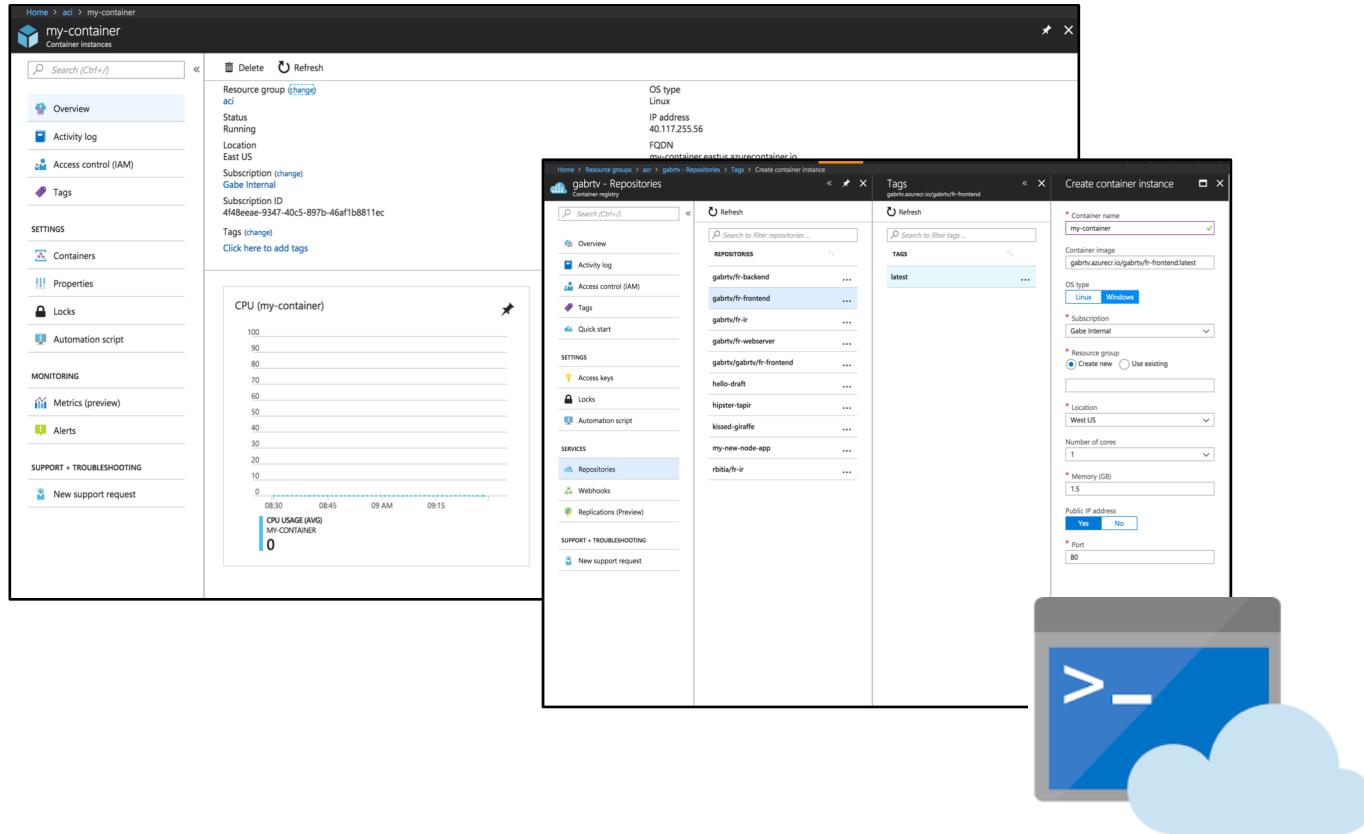
Azure Container  
Instances



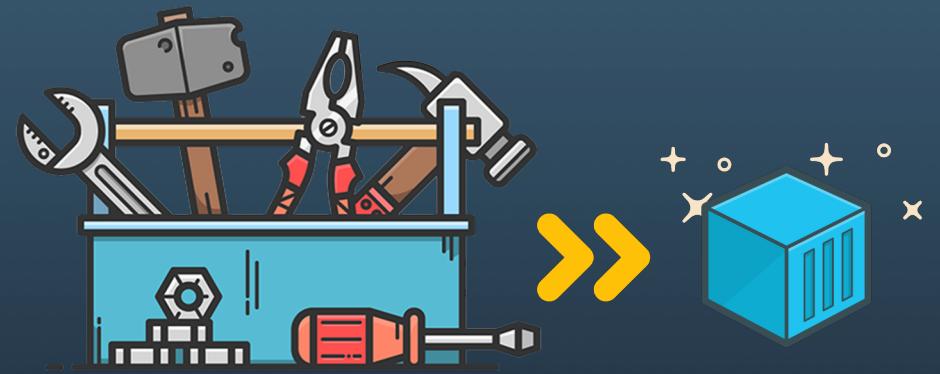
Azure Kubernetes  
Services



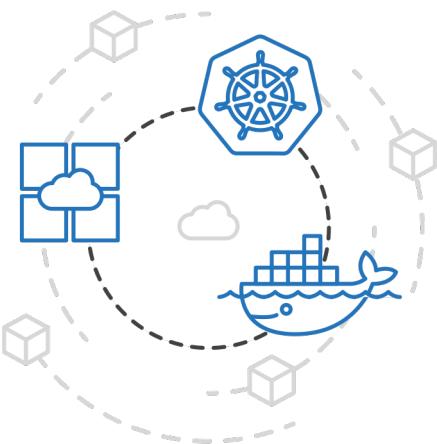
# PORTAL & AZURE CLI



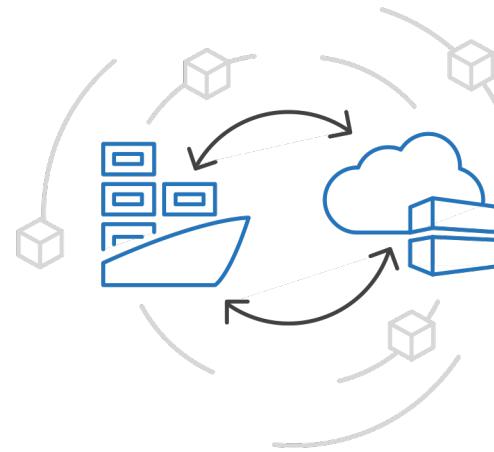
# Azure Container Registry (ACR)



# 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



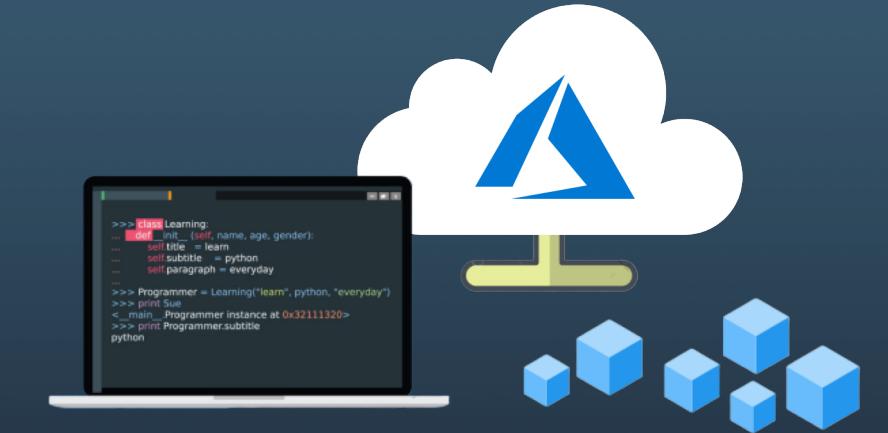
# ACR - DEMO RECAP



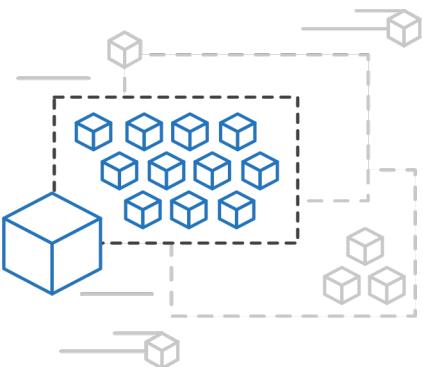
- Build, tag y push hacia ACR
- Visual Studio Code extension 🌐
- No Docker, no problem ! 👍
- Azure Cloud shell, build, tag y push hacia ACR 🚀



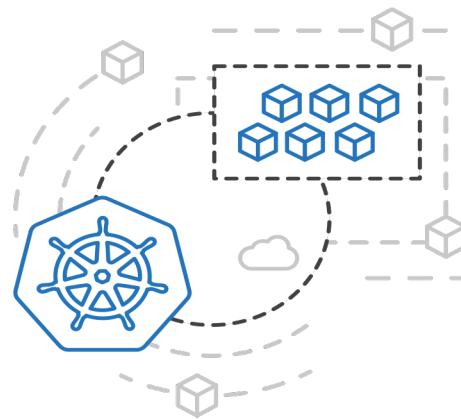
# Azure Container Instances (ACI)



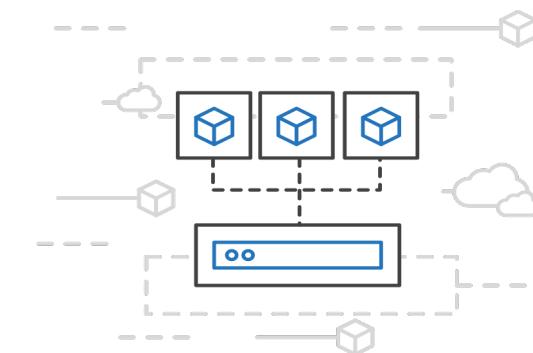
# AZURE CONTAINER INSTANCES (ACI)



Ejecuta containers sin administrar servers



Facturación por segundo



Aplicaciones seguras con aislamiento de hipervisor



# PORQUE ACI?



Infraestructura  
invisible

Micro-  
facturación

Modularidad

# DEMO

ACI run, integrate



# ACR - DEMO RECAP



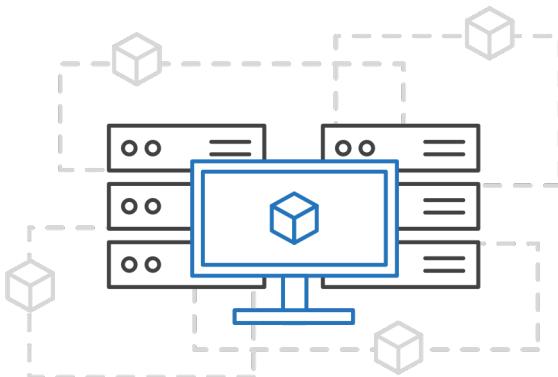
- Azure CLI & portal 
- Azure container instances + Azure file share
- Azure file explorer 
- Multi-container deployment (YAML) 



# Azure Kubernetes Services (AKS)



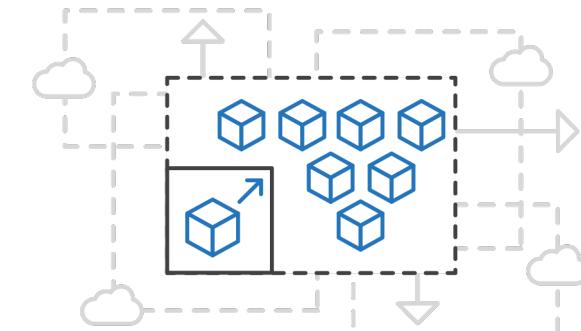
# AZURE KUBERNETES SERVICES (AKS)



Enfóquese en sus  
containers, no en la  
infraestructura



Trabaja como quieras  
con APIs open-  
source



Escale y ejecute  
aplicaciones con  
confianza



# PORQUE AKS?



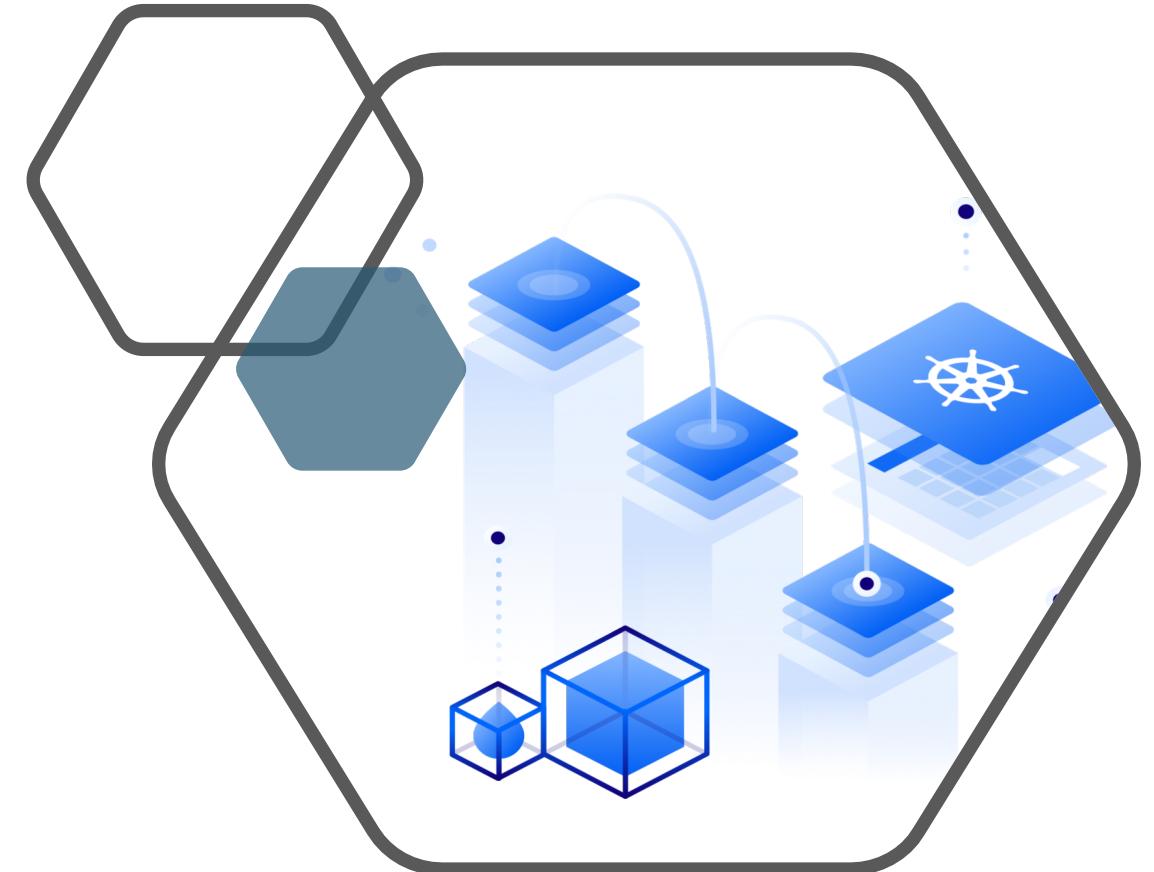
Escale su  
cluster fácil

Panel de control  
gestionado

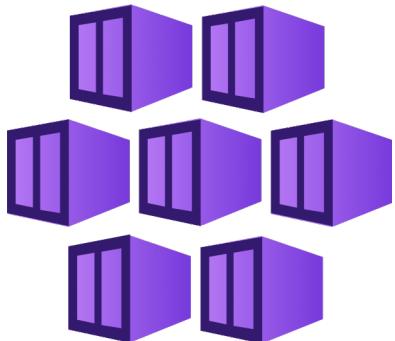
Actualizaciones  
automatizadas

# DEMO

AKS deploy, orchestrate



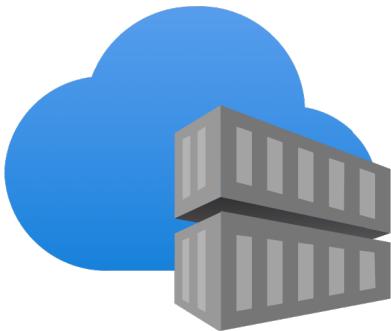
# AKS - DEMO RECAP



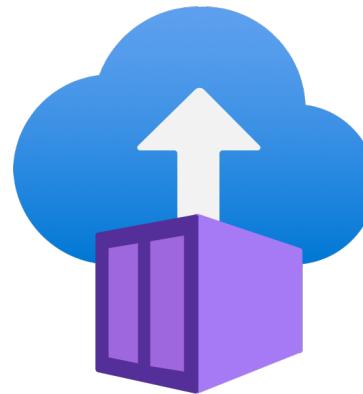
- Compute / storage por separado
- Gestión declarativa 
- HA listo para usar! 
- Panel de control sencillo 



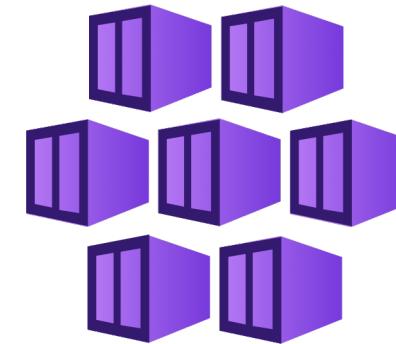
# REVIEW



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".





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# Gracias!

