



#GlobalAzure
April, 21st 2018

OSS & Microsoft Azure

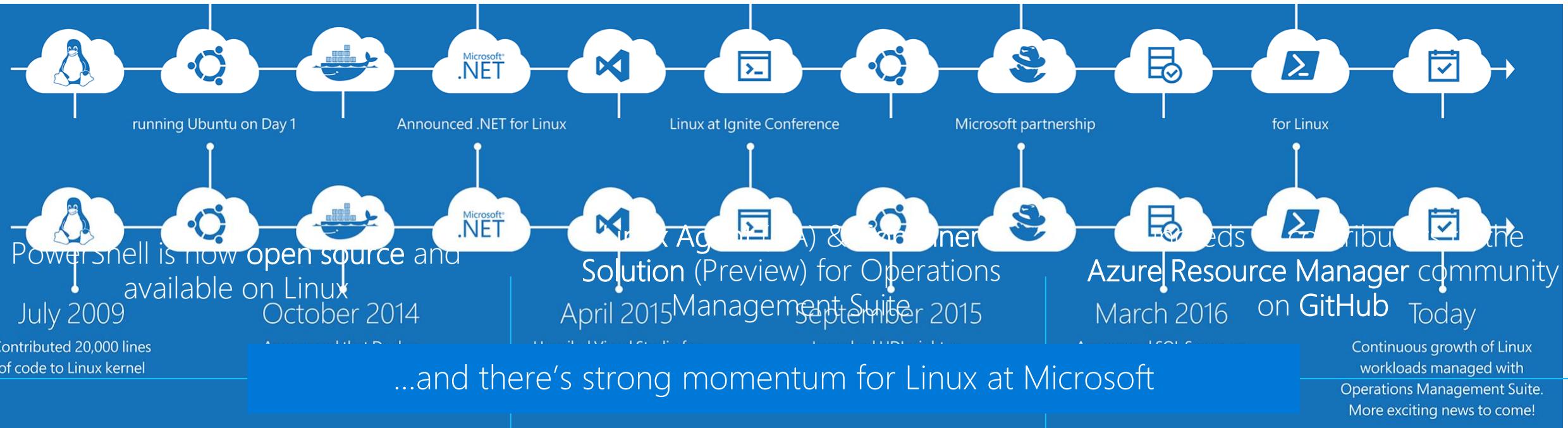
Adrian Todorov - CloudOps

Mathieu Benoit - Microsoft

Microsoft ❤️ Linux



Microsoft + Linux: It's been a journey



4x growth in container customers in Azure since January, all with Docker on Linux!

1 in 3 VMs in Azure run Linux today

60% of Azure Marketplace Images are Linux based!

Azure is an open cloud

DevOps



Clients



Management



Applications



PaaS &
DevOps



App Frameworks
& Tools



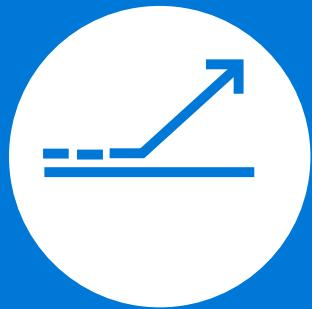
Databases &
Middleware



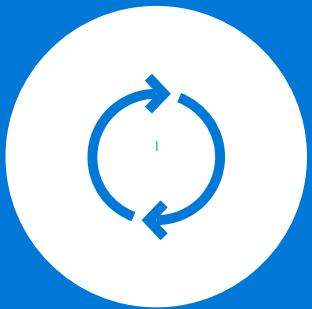
Infrastructure



Enabling is
one thing,
but there is
more!



Enable



Integrate

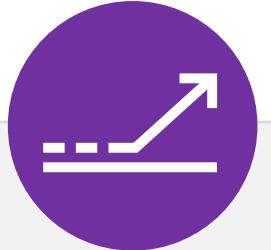


Release



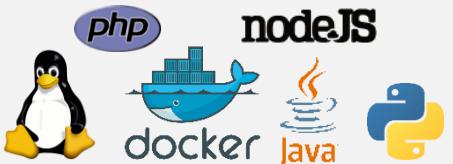
Contribute

The Approach to Open Source in the Cloud



Enable

Enable Linux and Open Source technology to be first class citizens on Microsoft Platforms



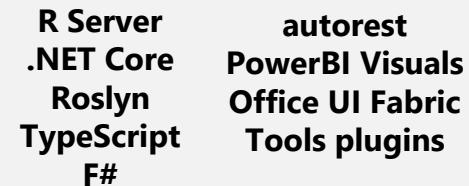
Integrate

Embrace leading Open Source ecosystems and integrate Microsoft products with agility and consistency



Release

Release key Microsoft technologies into the Open Source domain to build a strong ecosystem



Contribute

Microsoft engineers to participate in communities and contribute to key Open Source projects



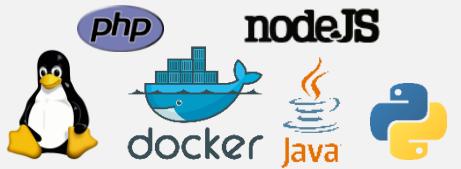
Open Source Partners & Ecosystem

Enable



Enable

Enable Linux and Open
Source technology to be first
class citizens on Microsoft
Platforms



Choice + Flexibility

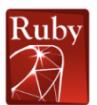
DevOps



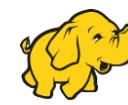
Applications



App Frameworks



Databases & Middleware



Infrastructure



Windows Server



redhat



CANONICAL



Azure Open Source Data Platform on IaaS

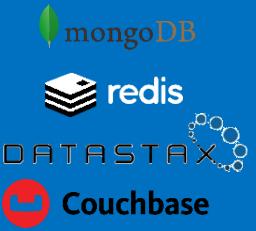
Relational



MariaDB PostgreSQL
bitnami

Collective set of multiple data sets organized by tables, records and columns

NoSQL & Cache



mongoDB redis
DATASTAX
Couchbase

Non-relational DBs where data is modelled in means other than the tabular relations used in relational databases

Big Data



cloudera
Hortonworks
MAPR

Accept data at a very high velocity, and store structured and unstructured data in an efficient and scalable way across nodes

Infrastructure-as-a-Service (IaaS)



Azure Open Source Application Platform

Adding value to your existing investments

Developers



Operations



Data analysts



Business



Virtual
Machines

Stateful and
stateless one-
off solutions

VM Scale
Sets

Scalable
solutions

Container
Service

Scalable,
orchestrated
Docker
images
deployed into
containers

Batch

Custom High
Performance
Computing
solutions

Open
Source
PaaS

OpenShift,
Cloud
Foundry &
others

Service
Fabric

Custom
Microservice-
based stateless
and stateful
solutions

Environments

All the
goodness of
App Service in
a dedicated
environment

App Service

Web, Mobile & API

Template
based rapid
development
web, mobile
and API
solutions

Logic

Orchestrat
workflow
based
integratio
solutions

Functions

On-demand
serverless
architecture

Infrastructure-as-a-Service (IaaS)



Platform-as-a-Service (PaaS)



Microsoft Azure

Azure Open Source Container Platform

Enabling agility with containers in the cloud

Developers



Operations



Data analysts



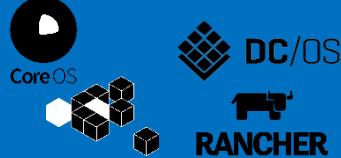
Docker VM Extension for Azure

Easy and programmatic way to add Docker capabilities to your VMs



Azure Marketplace container partners

Partner solutions that address management challenges of containers



Open source container-based PaaS platforms in Azure

Container-ready application platforms that benefit from Azure's native partitioning, capacity management and high availability



Infrastructure-as-a-Service (IaaS)

Platform-as-a-Service (PaaS)

Developer Hubs for Azure for Terraform, Jenkins and Ansible

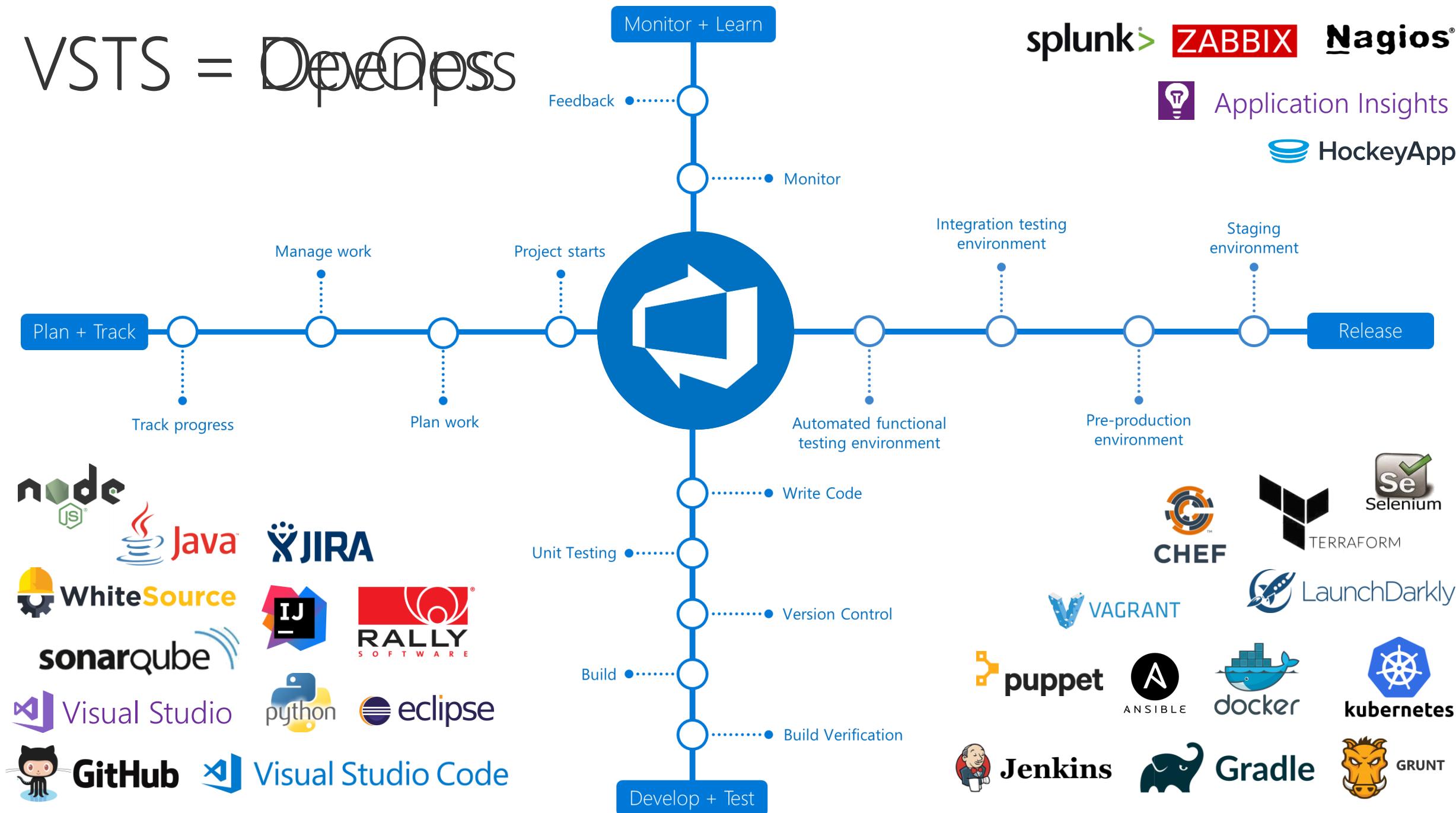
→ <http://aka.ms/tfhub>

→ Jenkins and Ansible Developer Hubs also launched



The screenshot shows a Microsoft Edge browser window displaying the 'Terraform on Azure Documentation' page from the Microsoft Azure website. The URL in the address bar is <https://docs.microsoft.com/en-us/azure/terraform/>. The page features a navigation bar with links like 'Why Azure', 'Solutions', 'Products', 'Documentation', 'Pricing', 'Training', 'Marketplace', 'Partners', 'Support', 'Blog', 'Resources', and 'More'. On the left, there's a sidebar with sections for 'Overview', 'Quickstarts' (which includes a link to 'Install and configure Terraform' and 'Create a Linux VM'), 'Tutorials', 'Concepts', 'Samples', and 'Reference'. The main content area has a heading 'Terraform on Azure Documentation' with a subtext: 'Use Terraform to reliably version and create infrastructure on Azure. Learn how to create resources, use Azure Terraform modules, and maintain your infrastructure with code using our Quickstarts and tutorials.' Below this is a 'Quickstarts' section with a link to 'Configure Terraform and use it to create a Linux VM in Azure.', accompanied by two icons: one for 'Install and configure Terraform' (a wrench and cloud) and one for 'Create a Linux VM' (a monitor with a cloud). To the right, there's a large HashiCorp Terraform logo with the text 'HashiCorp Terraform' and 'Terraform on Azure Documentation' below it. At the bottom, there's a 'Step-by-Step Tutorials' section with a bullet-point list: 'Create a load balanced VM cluster using Azure Terraform modules.', 'Create a load balanced VM cluster in the Azure Cloud Shell.', 'Configure a VM scale set with networking and storage.', and 'Provision VM scale set from a Packer custom image.'

VSTS = Deepness

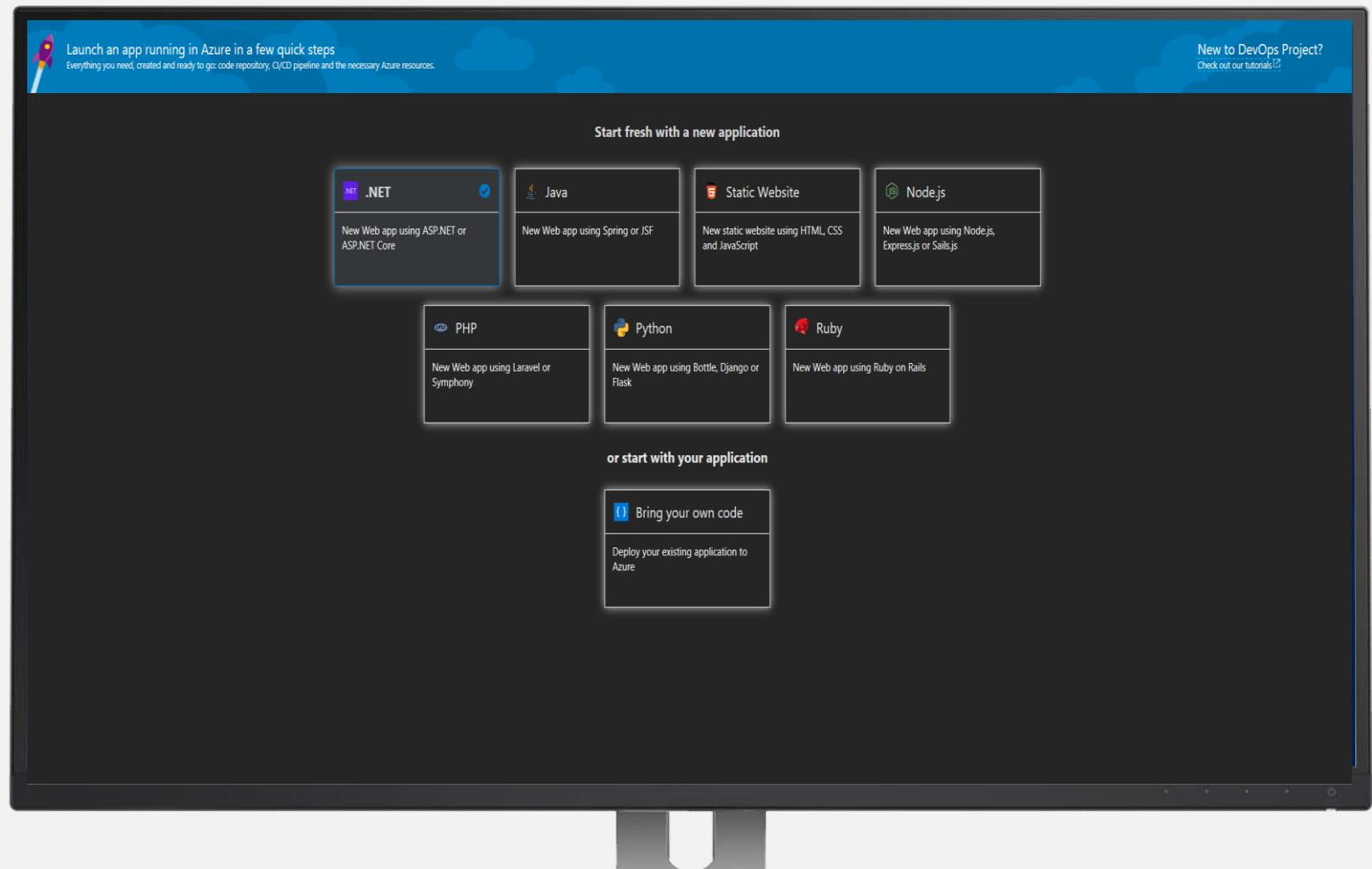


Demo

Azure DevOps Projects

Build any Azure application, on any Azure service, in less than five minutes

- Create a full CI / CD pipeline with 3 easy steps from the Azure Portal
- Start with a Git repo and any source language
- Target any Azure service. Currently web apps, or VMs and soon, Kubernetes cluster, etc.
- Powered by VSTS - Customize, extend and scale when needed.



Integrate



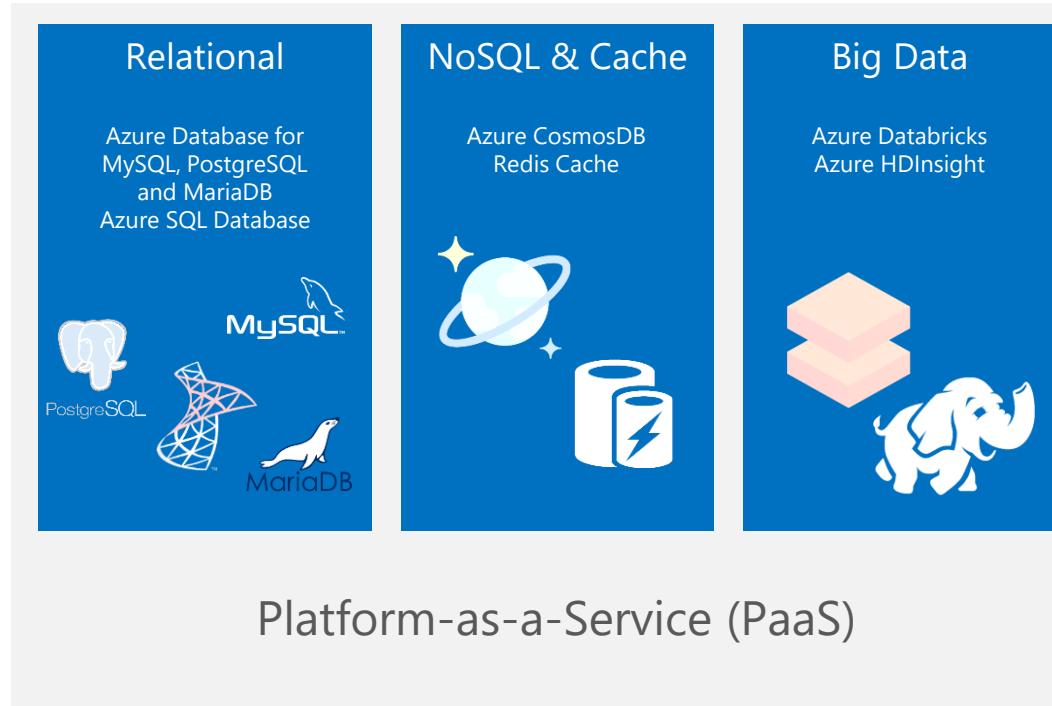
Integrate

Embrace leading Open Source ecosystems and integrate Microsoft products with agility and consistency

 hadoop  mongoDB

   redis

Azure Open Source Data Platform on PaaS





Azure Cosmos DB

A globally distributed, massively scalable, multi-model database service

SQL



MongoDB



Table API



Gremlin
 $G = (V, E)$



cassandra



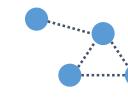
Key-value



Column-family



Document



Graph

Elastic scale out
of storage & throughput

Guaranteed low latency at the 99th percentile

Five well-defined consistency models

Turnkey global distribution

Comprehensive SLAs



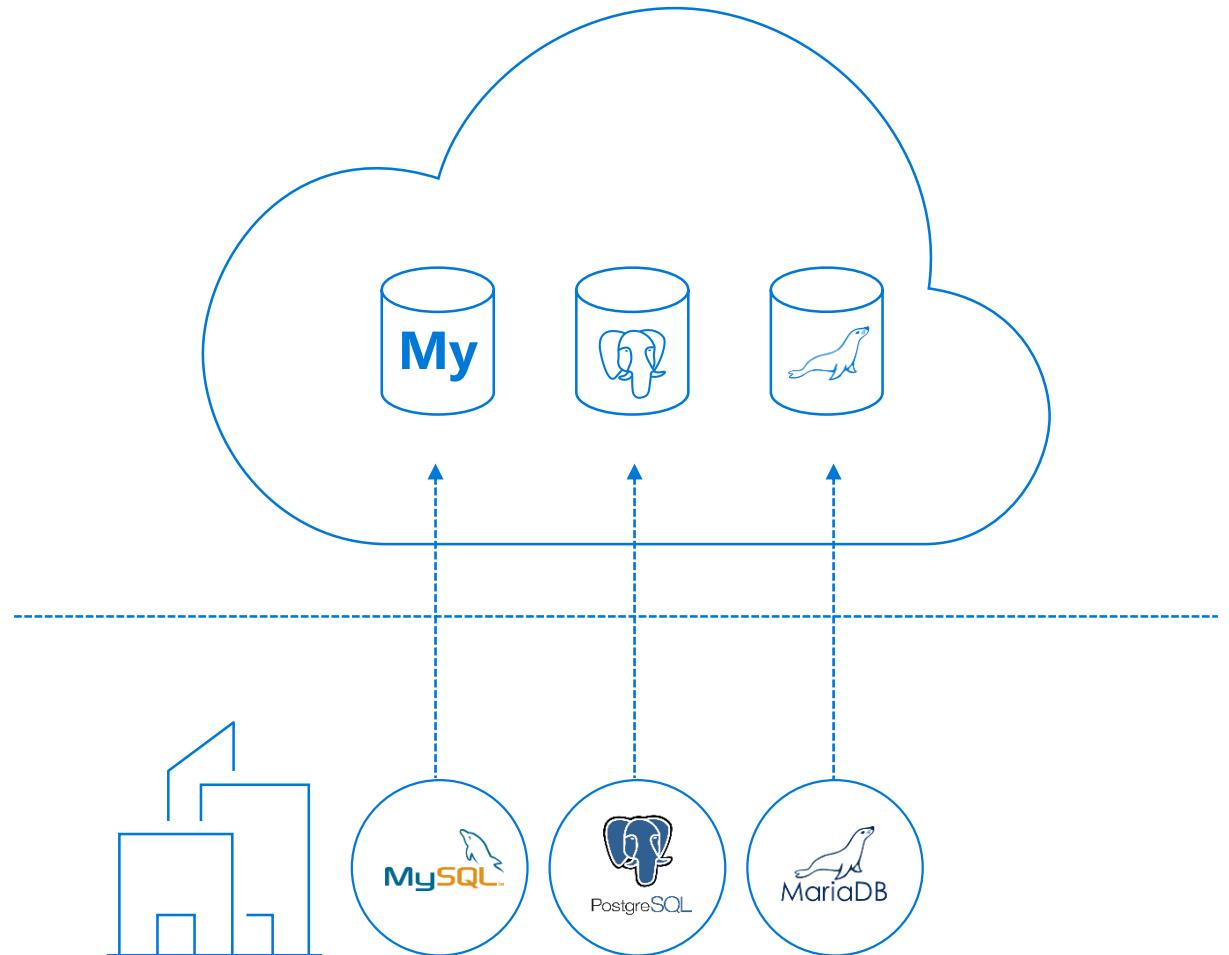
MANAGED COMMUNITY MYSQL, POSTGRESQL, AND MARIADB

Focus on your apps by leaving the management and patching of your infrastructure and database to an enterprise-ready cloud service

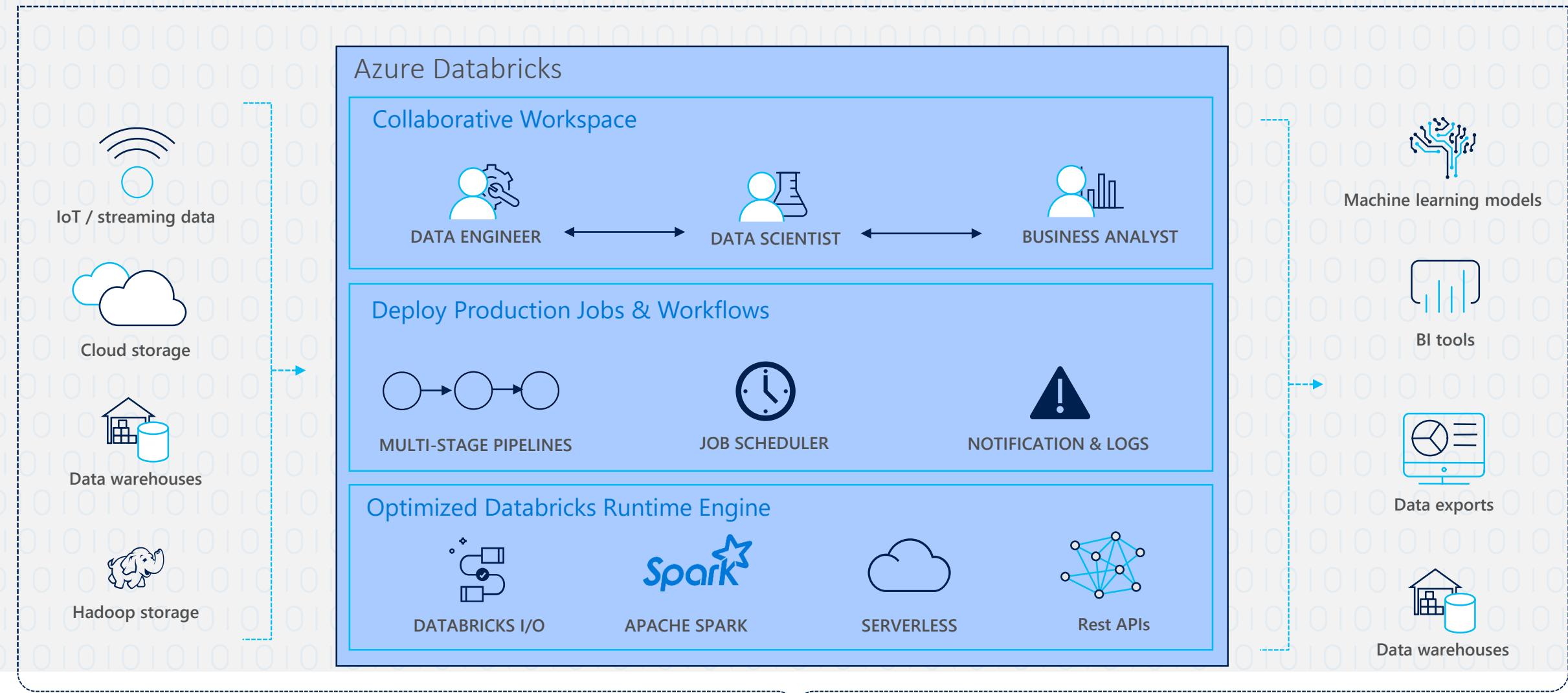
Automatic updates

Automatic security fixes

Automatic new feature updates



AZURE DATABRICKS

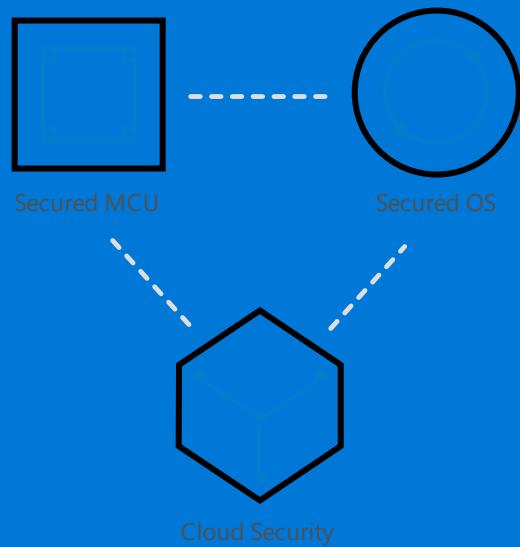


Enhance Productivity

Build on secure & trusted cloud

Scale without limits

Azure Sphere



For the first time ever, Microsoft will distribute its own version of Linux



Matt Weinberger

11 uur 573

TWITTER

FACEBOOK

LINKEDIN

EMAIL

PRINT

- Microsoft on Monday announced Azure Sphere, a new technology to protect the processors that power smart appliances, connected toys, and other gadgets.
- Azure Sphere is powered in large part by Linux, a free operating system that Microsoft once viewed as a major threat.
- It's the first time ever that Microsoft has made Linux part of a product offering.



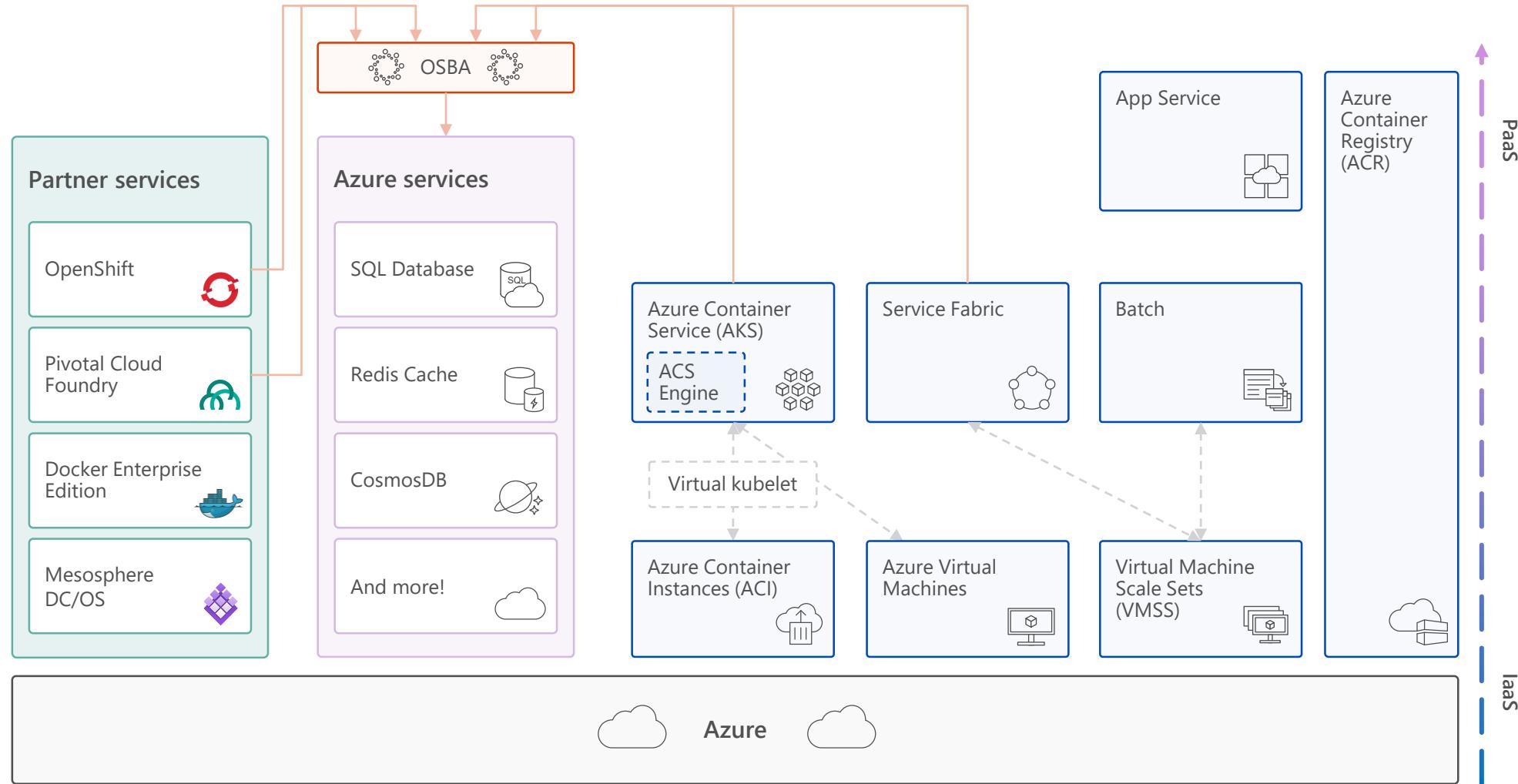
Foto: Microsoft Microsoft President Brad Smith

Microsoft announced on Monday a new technology called Azure Sphere, a new system for securing the tiny processors that power smart appliances, connected toys, and other gadgets.

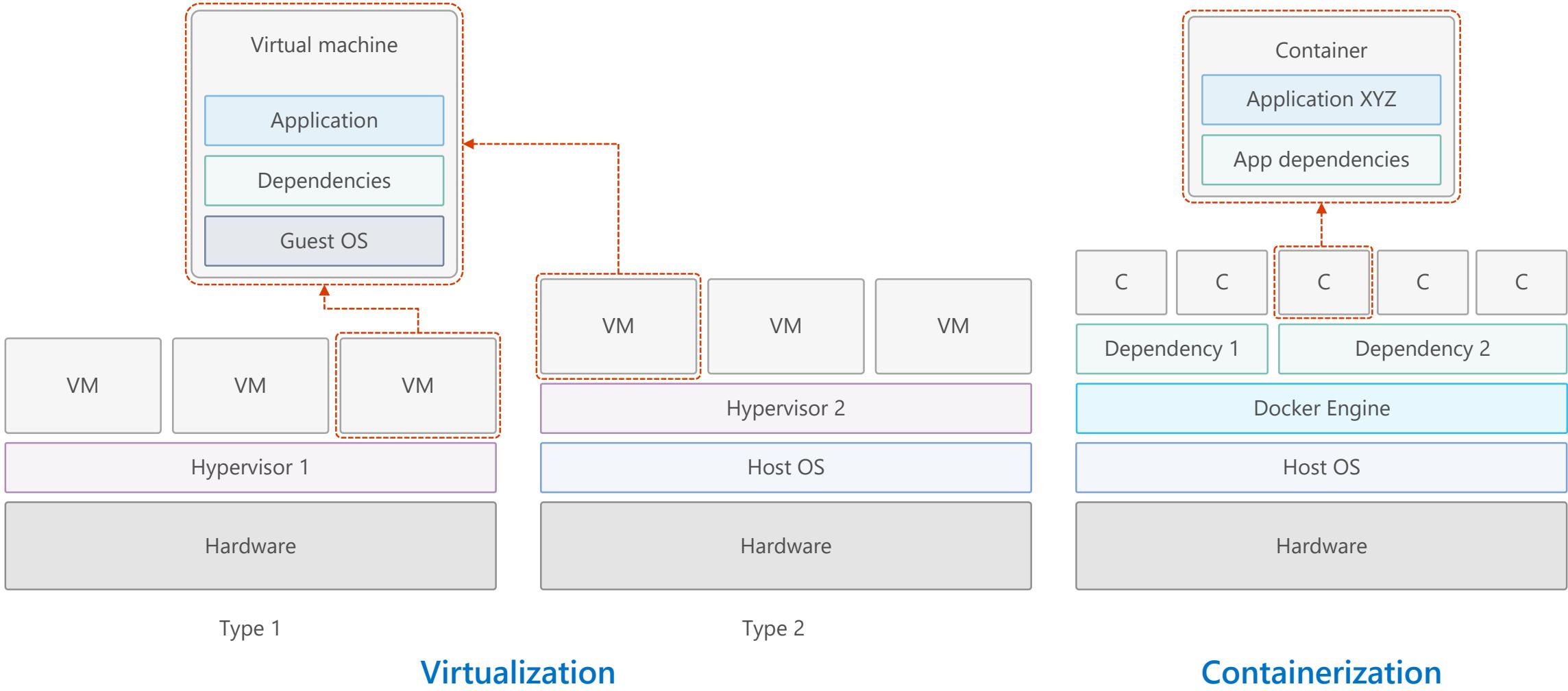
We'll get to the specifics in a moment, but here's the really notable part: To power Azure Sphere, Microsoft has developed its own, custom version of Linux – the free, open source operating system that Microsoft once considered the single biggest threat to the supremacy of its Windows software.

"After 43 years, this is the first day that we are announcing, and will be distributing, a custom Linux kernel," Microsoft President Brad Smith said on stage at an event in San Francisco.

Azure container ecosystem



Virtualization versus **containerization**



Kubernetes: the de-facto orchestrator



Portable

Public, private, hybrid,
multi-cloud

Extensible

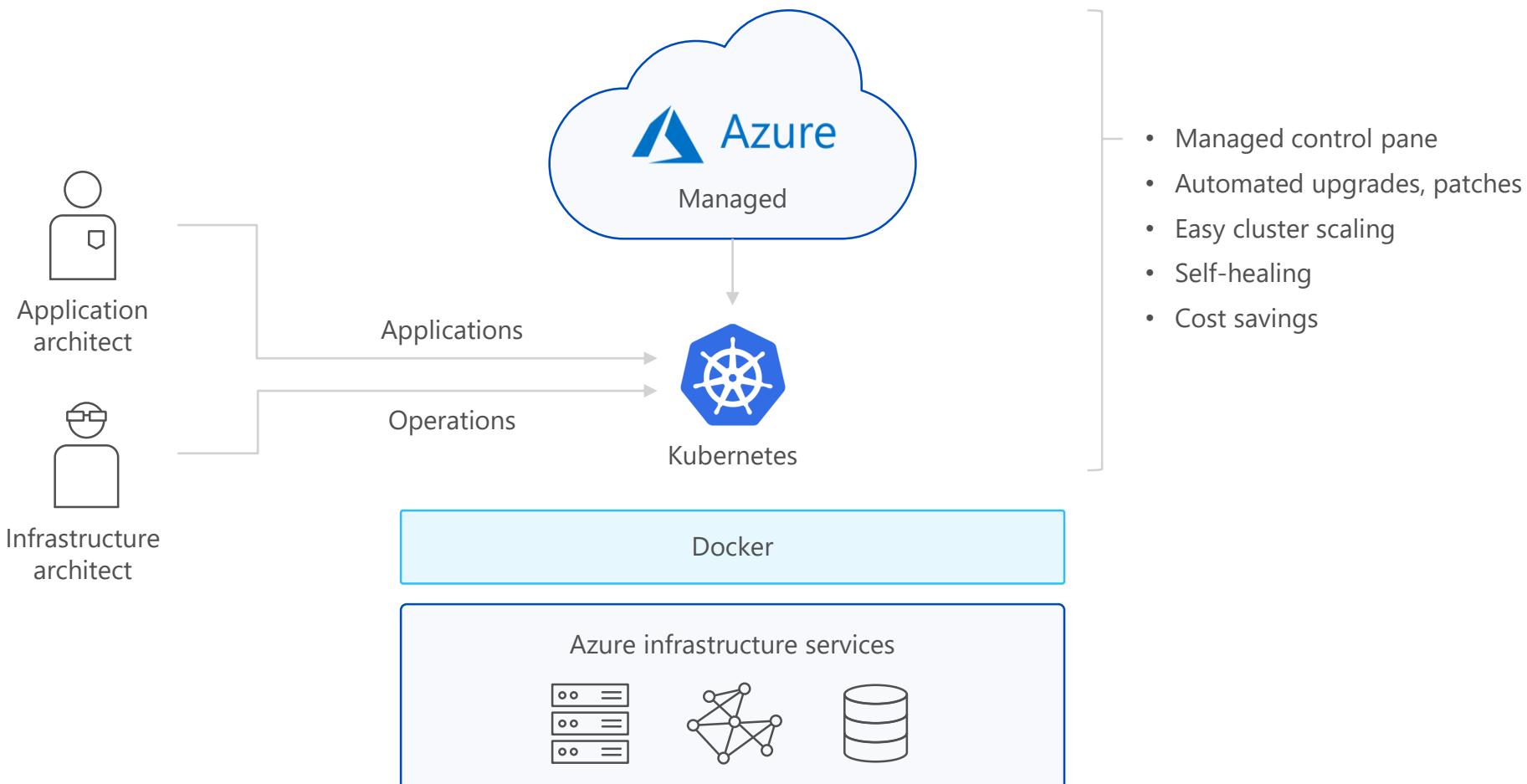
Modular, pluggable,
hookable, composable

Self-healing

Auto-placement, auto-restart,
auto-replication, auto-scaling

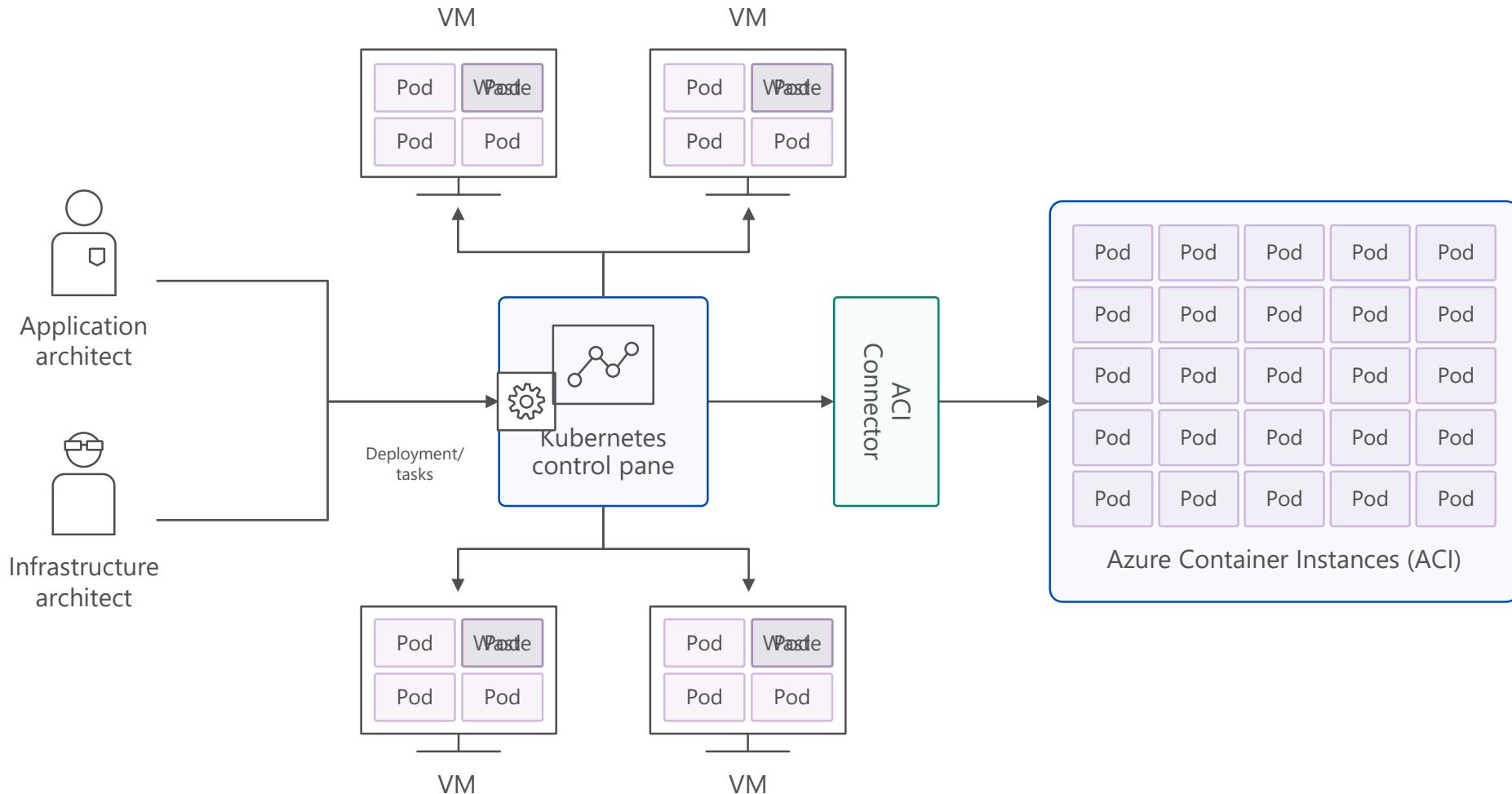
Azure Container Service (AKS)

A fully managed Kubernetes cluster - Focus on
your containers not the infrastructure



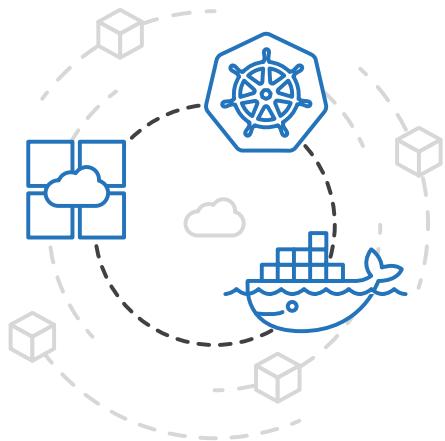
Azure Container Instances (ACI) PREVIEW

Bursting with the ACI Connector

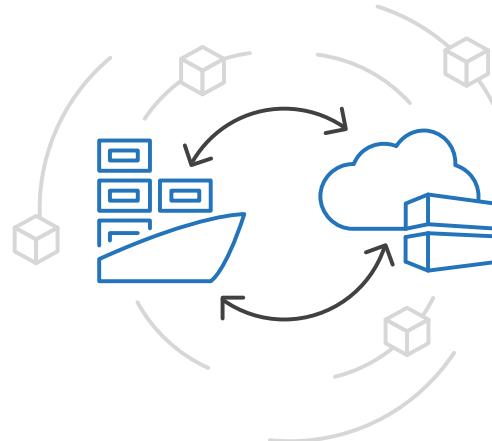


Azure Container Registry

Manage a Docker private registry as a first-class Azure resource



Manage images for all
types of containers



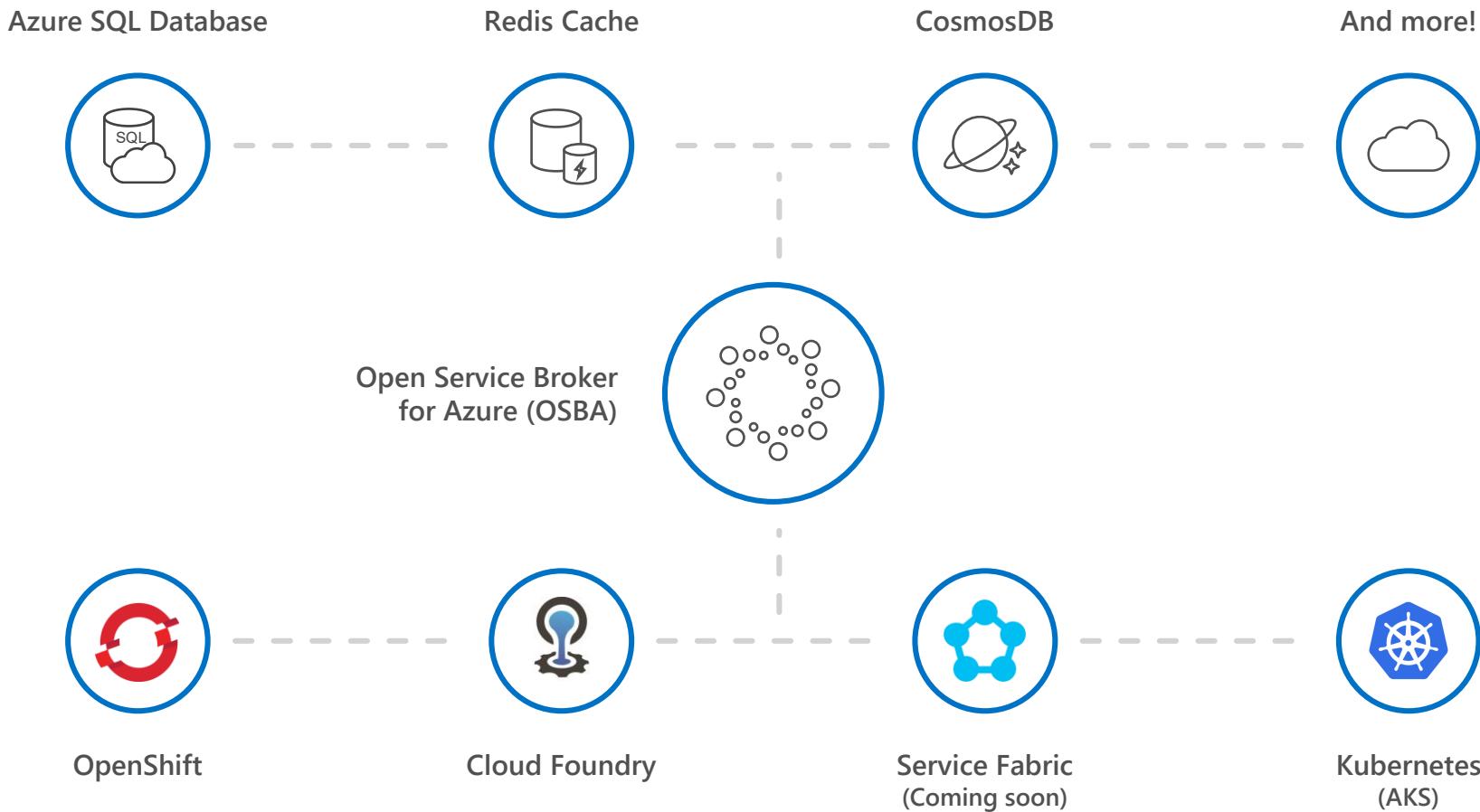
Use familiar, open-
source Docker CLI tools



Azure Container Registry
geo-replication

Open Service Broker for Azure (OSBA)

An implementation of the Open Service Broker API



Release automation tools

Simplifying the Kubernetes experience



Streamlined
Kubernetes
development



The package
manager for
Kubernetes



Event-driven
scripting for
Kubernetes

Visualization
dashboard for
Brigade

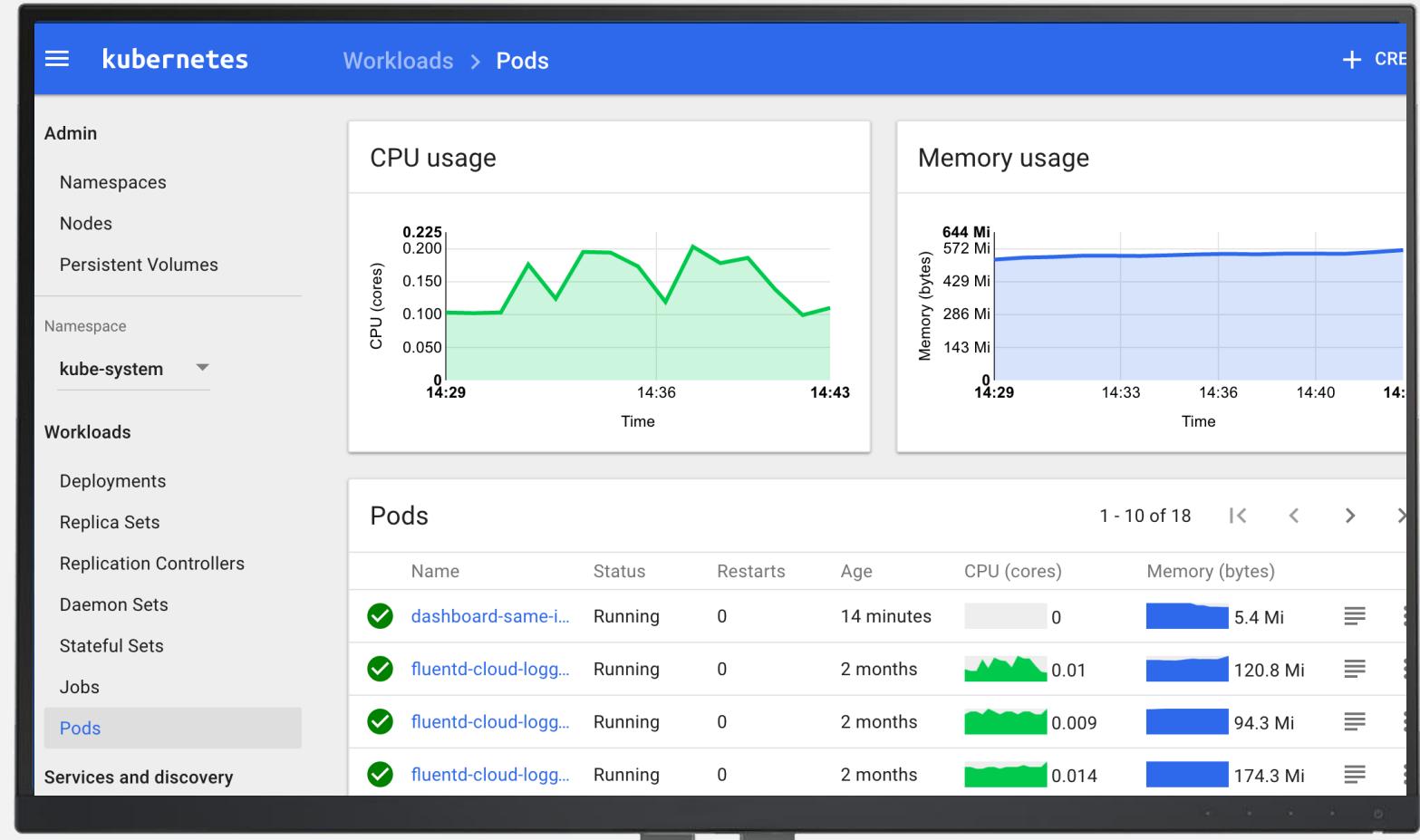


AKS - Managed Kubernetes

Simplified deployment, scaling, and operations

Demo

- Quickly deploy a production ready Kubernetes cluster
- Automated Kubernetes version upgrades and patching
- Self-healing hosted control plane
- Pay only for running agent pool nodes
- Use all of the Kubernetes tools you like



Release



Release

Release key Microsoft technologies into the Open Source domain to build a strong ecosystem

R Server

.NET Core

Roslyn

TypeScript

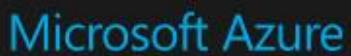
F#

autorest

PowerBI Visuals

Office UI Fabric

Tools plugins



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Open source software on Azure

From Node.js to Ubuntu, bring your favorite open source software tools and technologies to Azure and open up the possibilities.

We're open on GitHub

Documentation, SDKs, and code samples are open source.

Pull, push, and commit to contribute on [GitHub](#).

1,799

repos

9,025

contributors

291,471

forks

149,454

stars

65,357

watchers

Open Source at Microsoft

A word cloud centered around PowerShell and Java Script, with various Microsoft technologies and developer tools surrounding the main words.

Azure Service Fabric Team Blog

Service Fabric is going open source

Rate this article 

 Service Fabric Team March 14, 2018

 Share 642

 790

 0

 2

Happy Pi Day everyone! We have some exciting news to share today.

We're happy to announce that **Service Fabric is going open source under the MIT license** and over the coming months we will be transitioning to a completely open development process on GitHub.

We've heard from many of you about the importance of being able to participate in the development and direction of the platform that you depend on to run your mission-critical applications. We stay active on GitHub and Stack Overflow for that reason, and open sourcing the platform is the natural evolution to make that collaboration even better. That's why we're committed to making Service Fabric a successful open source project by moving our entire development and planning process onto GitHub, where we can openly collaborate with the community to make Service Fabric better for everyone.



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Microsoft Azure

Visual Studio

Office

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Rewarding Our Community & Fans

Help shape the future of docs.microsoft.com!

Announcing New International Features

Announcing PowerShell Module Browser

A New Feedback System Is Coming to docs.microsoft.com

02/07/2018 • 3 minutes to read • Contributors



This post was written by [Rob Eisenberg](#), Senior Program Manager on the docs.microsoft.com team.

Microsoft's mission is to empower every person and every organization on the planet to achieve more. This was one of our considerations as we [built docs.microsoft.com on top of the open GitHub platform](#). Today, we are taking it to the next level with the move to a new GitHub-based documentation feedback system.

Content Feedback on GitHub

While our documentation has been on GitHub since the beginning, our content feedback mechanism has been using Livefyre for comments on articles. While Livefyre is a great commenting solution, it turned out to be insufficient for our specific needs, which is to track, assign owners, and maintain the state of content issues raised by customers.

Contribute



Contribute

Microsoft engineers to participate in communities and contribute to key Open Source projects



Contribute

Microsoft – #1 Organization with the most OSS contributors

Organizations with the most open source contributors

	Microsoft	16,419
	facebook	15,682
	docker	14,059
	angular	12,841
	google	12,140
	atom	9,698
	FontAwesome	9,617
	elastic	7,220
	Apache	6,999
	npm	6,815



Join the .NET Community

- › Over 1200 worldwide meetups.
- › Built by community and industry leaders.
- › Strong open source ecosystem.

Join a community of millions of developers. Leverage the large ecosystem of components, Open Source software, and online communities support.

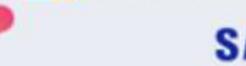
[Get involved](#)



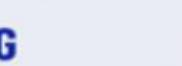
unity



Microsoft



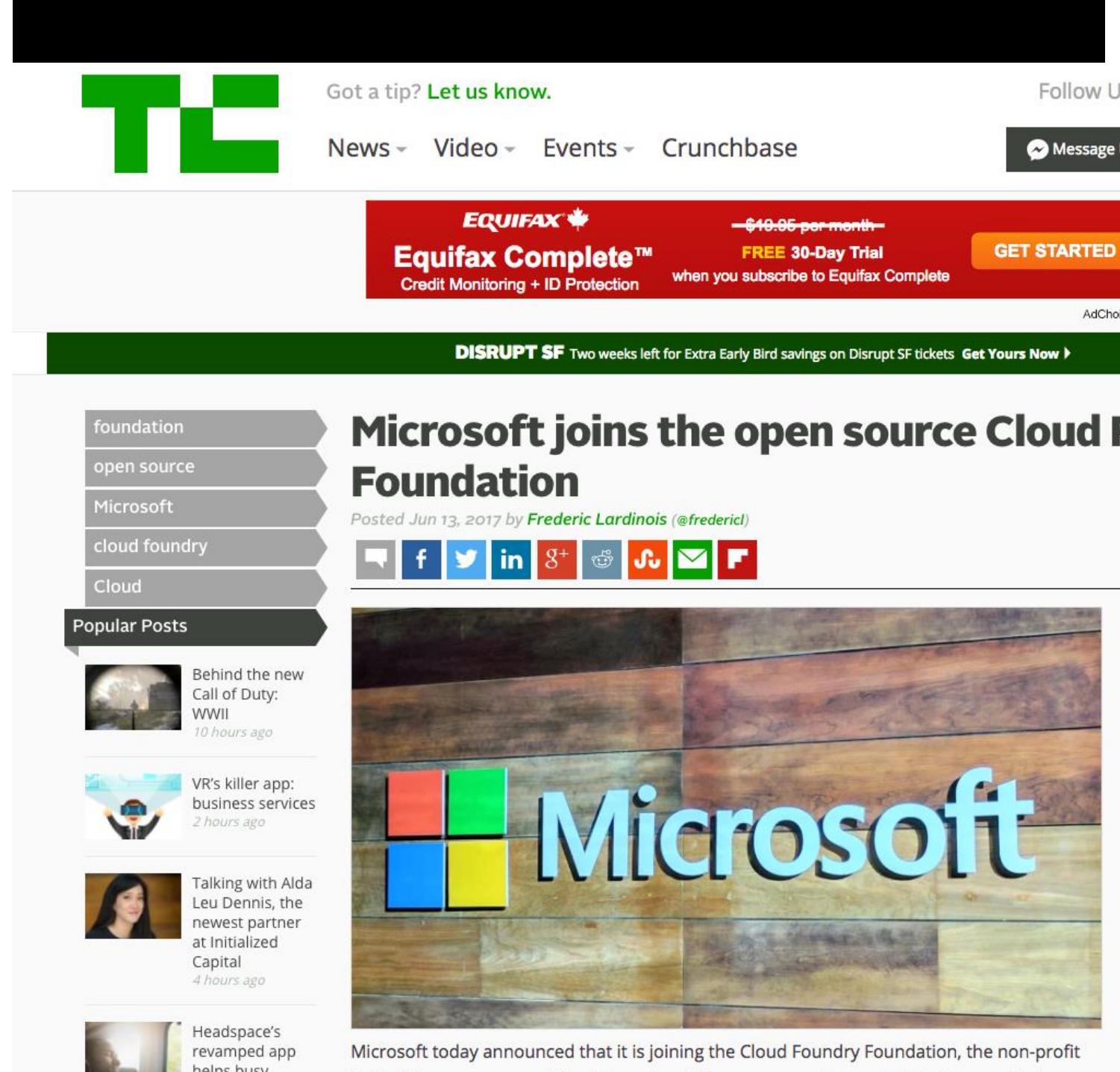
redhat.



Microsoft Joins Linux Foundation



Microsoft Joins Cloud Foundry Foundation



Microsoft DevOps Blog

Latest

CI/CD

Git & Version Control

Agile

Azure & Cloud

Test

Microsoft's Performance Contributions to Git in 2017



Derrick Stolee

January 11, 2018

Visual Studio Team Services (VSTS) hosts the largest Git repository in the world: the Windows source code. Keeping a primary copy of the code available in the cloud and having it be performant while being updated by over 4000 users at the same time is a monumental achievement, but it is only useful if engineers can use the core Git client on their machines. We made this possible by building GVFS.

The Windows repository is larger than any other Git repository by orders of magnitude, and that exposed a few performance issues in core Git that we needed to fix to make it work with the large repositories we see at Microsoft. Thanks to Git being open source, we are improving Git for all users, on all platforms by contributing these modifications back.

Microsoft ❤️ Git

Open Source @ Microsoft



Ross Gardler

Apache Foundation
Principal Program Manager



Jessie Frazelle

Docker / Linux
Principal Cloud Developer Advocate



Brendan Burns

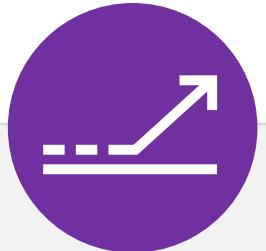
Kubernetes
Distinguished Engineer



Gabe Monroy

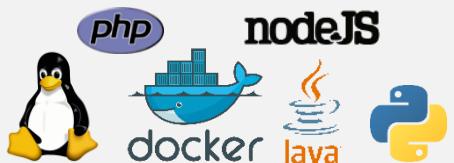
Deis / CNCF
Principal Program Manager

Wrap-up: The Approach to Open Source



Enable

Enable Linux and Open Source technology to be first class citizens on Microsoft Platforms



Integrate

Embrace leading Open Source ecosystems and integrate Microsoft products with agility and consistency



Release

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Contribute

Microsoft engineers to participate in communities and contribute to key Open Source projects



Open Source Partners & Ecosystem

For:
DEV,
IT PRO,
DBA,
DATASCIENTISTS,
etc.

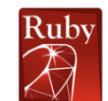
DevOps



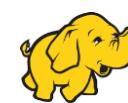
Applications



App Frameworks



Databases & Middleware



Infrastructure



Windows Server



redhat



CANONICAL



Microsoft

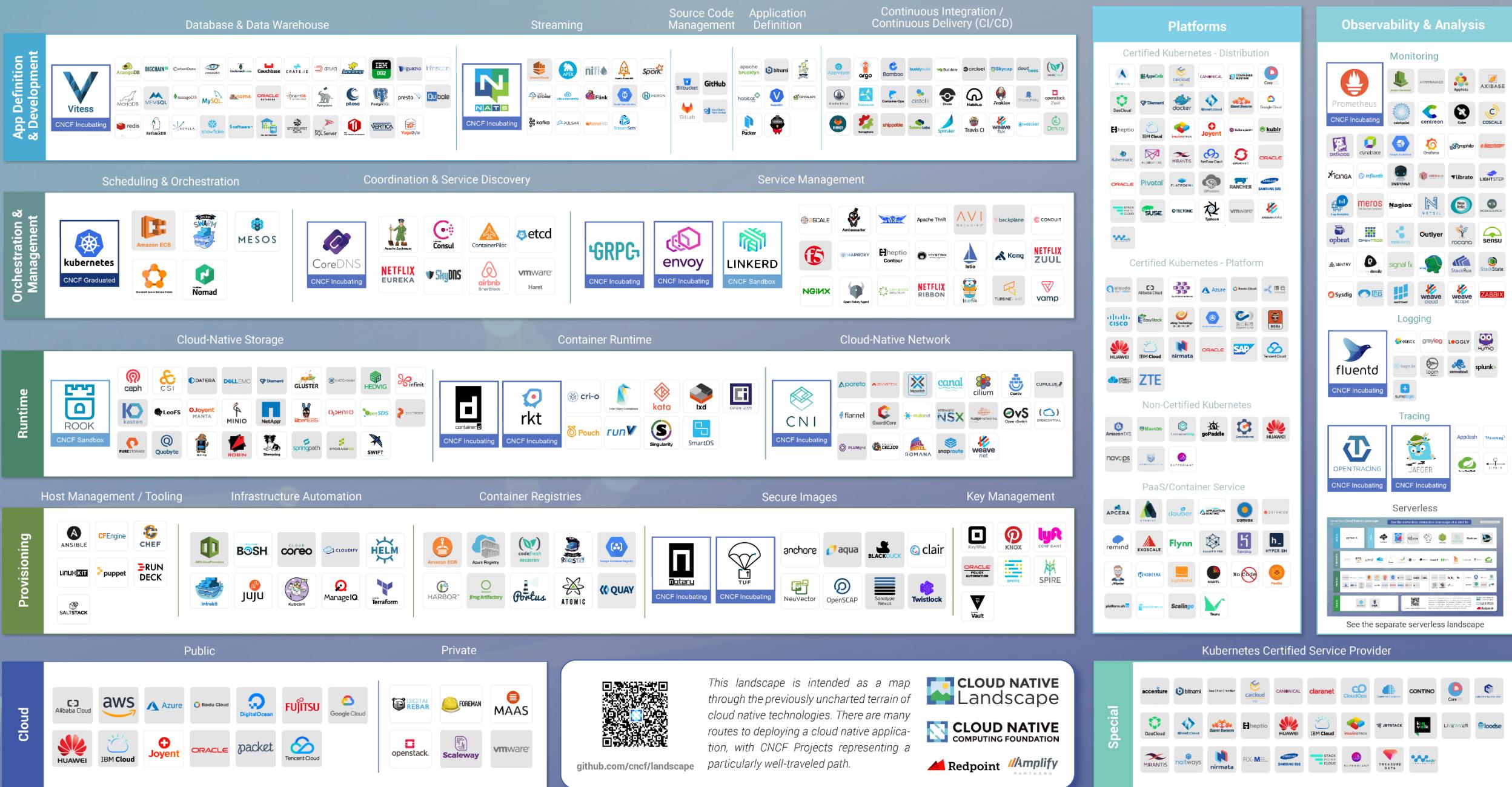


OSS

OSS

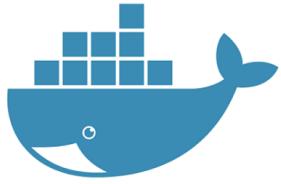


Microsoft



Get locally involved!

There is Meetups around you.



[DockerQC](#)



[K8S QC](#)



[HashiCorp QC](#)



[AzureQC](#)



[DotNetQC](#)

Canadian Open Source Doc-a-thon

#OSSDevsCA



Take the time to hack on what matters to you.

- Pursue a technology you believe in
- Make improvements that impact everyone
- Team up with people in your community
- Build your reputation as an expert
- Try something new
- ✓ or do all the above

Join Today: <https://aka.ms/DocathonWiki>



Solutions Red Hat sur Azure - Québec

Quand : 14 Juin, 2018 | 09:00 AM-3:30 PM

Où :

ENAP - École nationale d'administration publique, Auditorium
555 Boulevard Charest E
Québec, QC G1K 9E5

Description

Déployez rapidement un environnement infonuagique hybride sécurisé, fiable et flexible avec les solutions Red Hat sur Azure, qui est l'architecture open source infonuagique adoptée par 90 % des sociétés du classement Fortune 500. Êtes-vous intéressé à en apprendre davantage sur SQL sur Linux, OpenShift, Ansible, et la plate-forme infonuagique Azure?

En assistant à cet atelier, vous découvrirez:

- SQL Server 2017 sur Linux - découvrez ce que cela signifie
- Red Hat OpenShift Container Platform - construction, déploiement et gestion de services et applications en conteneurs sur Azure
- Ansible - les outils pour créer et orchestrer facilement des infrastructures sur Azure

Qui devrait participer:

- directeurs IT
- administrateurs de systèmes
- informaticiens/architectes/analystes
- administrateurs de bases de données

Événement en collaboration avec Red Hat

<https://www.microsoft.com/en-ca/sites/canada-events/>



Global
DevOps
Bootcamp –
June, 16 2018



**Are you interested in the latest DevOps trends
and insights in modern technologies?**

Find a venue near you

CloudOps Managed Application Platform



Application Code + Data (customer)		Applications						
CloudOps Application Platform	Code	C	Node.js	Java	.NET	PHP	Python	Ruby
	Data							
	Runtime	APACHE HTTP SERVER	Apache Tomcat	CentOS	Docker			
	Middleware	elasticsearch	JBoss by Red Hat					
	O/S	Microsoft IIS	Microsoft SQL Server	MySQL	redis			
	Visualization							
	Servers	amazon web services	cloud.ca	Microsoft Azure				
	Storage	Google Cloud Platform	openstack.					
	Networking							
	Physical Access	4° DATA CENTERS	cogeco PEER 1	COLO-D				
Physical Environment	Power							
	HVAC	Struxture DATA CENTERS	ROOT					

- Multi-cloud capable application platform
- Securely monitored, managed, and automated
- Customized to customer's code, development process and cloud provider.

info@cloudops.com

Where CloudOps Helps?



1) **Consuming** cloud (**Application Platform Services**)

We help software companies run on multi-platforms such as Azure, OpenStack, regional clouds (cloud.ca), and bare-metal

2) **Delivering** cloud (**Infrastructure Platform Services**)

We build for regional players, such as telcos and enterprise shared services, to enable them to deliver cloud services internally or externally



CLOUD NATIVE
COMPUTING FOUNDATION



Microsoft



Merci !
Thank You!