

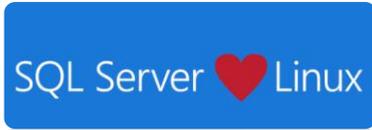
Microsoft+

# Empowering Your Digital Transformation Microsoft, Cloud and Open Source

Open Source Software 전략 총괄

한국마이크로소프트  
최주열 이사

# Microsoft + Open Source Momentum



SQL Server on Linux  
(Preview today, GA in mid-2017)



Red Hat - Microsoft Partnership  
(Nov 2015)



HD Insight PaaS on Linux GA (Sep 2015)



Microsoft joins Eclipse Foundation (Mar 2016).

Windows Subsystem for Linux

Run Linux on Windows natively  
(March 2016)

```
C: \Users\markhi | | > bash  
root@l ocal host: #
```

**Microsoft**  
**CERTIFIED**  
Solutions Associate  
Linux® on Azure



Microsoft Employees

In partnership with the Linux Foundation, Microsoft releases the Microsoft Certified Solutions Associate (MCSA) Linux on Azure certification.

Ross Gardler: President Apache Software Foundation  
Wim Coekaerts: Oracle's Mr Linux

**Azure Marketplace**



60% of all images in Azure Marketplace are based on Linux/OSS

**1 out of 4/3**

1 out of 4 VMs on Azure runs Linux, and getting larger every day

- 28.9% of All VMs are Linux
- >50% of new VMs

**493,141,677**

?????? [Microsoft Open Source Hub](#)

# Our Open Source Strategy

1. Meet where customers are
2. Deliver the most productive and trustworthy cloud services platform that enables developers using *any framework* on *any device* or *OS* to create and power the world's apps and services that run *anywhere*
3. Best cloud platform for partners to succeed

# Any app, language, device or OS works with Azure



# Any app, language, device or OS works with Azure

DevOps



Management



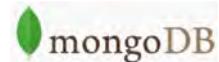
Applications



App Frameworks & Tools



Databases & Middleware



Infrastructure



*One in Four VMs on Azure  
Run Linux Today!  
(>50% of new VMs)*

# Microsoft-Red Hat Partnership



## Cloud Innovation Presents Challenges



- Integration with existing IT investments
- Heterogeneous, complex landscape
- Changing application architectures



## Why the Partnership Now?

Because that's what our Customers want...

Support and service for hybrid clouds, spanning heterogeneous technologies and architectures	New generation of application development capabilities from Microsoft and Red Hat	Flexible, hybrid deployment and technology options	Portability and manageability	Confidence and choice in the enterprise cloud
--	---	--	-------------------------------	---



## 1. Red Hat solutions available natively to Microsoft Azure customers

- Through Red Hat Cloud Access subscription mobility or
- Red Hat Enterprise Linux images On-Demand (pay-as-you-go) available in the Azure Marketplace
- Red Hat Enterprise Linux Virtual Machines, *and*
- Red Hat JBoss Enterprise Application Platform; Red Hat JBoss Web Server; Red Hat Gluster Storage; OpenShift (Red Hat PaaS)

## 2. Management tooling integration across hybrid cloud deployments

## 3. Microsoft Windows supported on Red Hat Enterprise Linux OpenStack Platform and Red Hat Enterprise Virtualization

## 4. Microsoft .NET integration and availability with Red Hat Enterprise Linux

## 5. Integrated enterprise-grade support: *Co-location of support teams (unique to MS)*

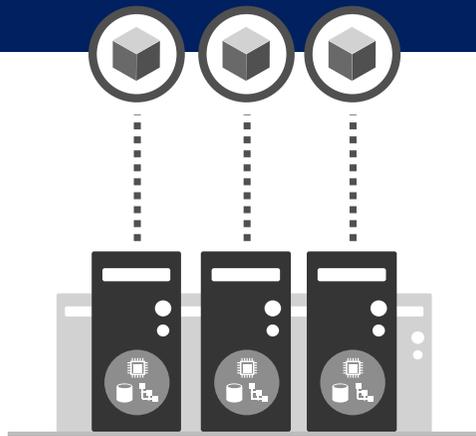
# Cloud is a new way to think about your datacenter

## Traditional model

- Dedicated infrastructure for each application
- Purpose-built hardware
- Distinct infrastructure and operations teams
- Customized processes and configurations

## Cloud model

- Loosely coupled apps and micro-services
- Industry-standard hardware
- Service-focused DevOps teams
- Standardized processes and configurations

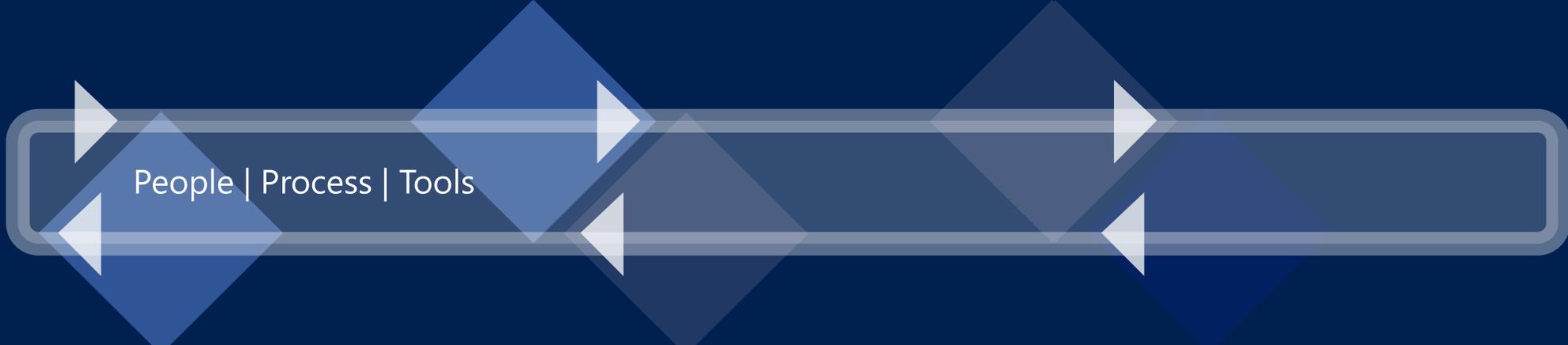


**Servers**



**Services**

# Azure OSS Dev Ops Ecosystem



People | Process | Tools

## 01

Workstations - On-Premises | Hybrid | Cloud

Develop

Developer Workstation



Team Collaboration

GitHub  
CodePlex

## 02

Services - On-Premises | Hybrid | Cloud

Build & Test

Build/CI

gradle

GRUNT

Jenkins

Hudson

Test

gradle

GRUNT

## 03

Environments - On-Premises | Hybrid | Cloud

Deploy

Configuration

puppet labs

CHEF

Release

gradle

GRUNT

Jenkins

Hudson

VAGRANT

## 04

Monitoring - On-Premises | Hybrid | Cloud

Monitor & Learn

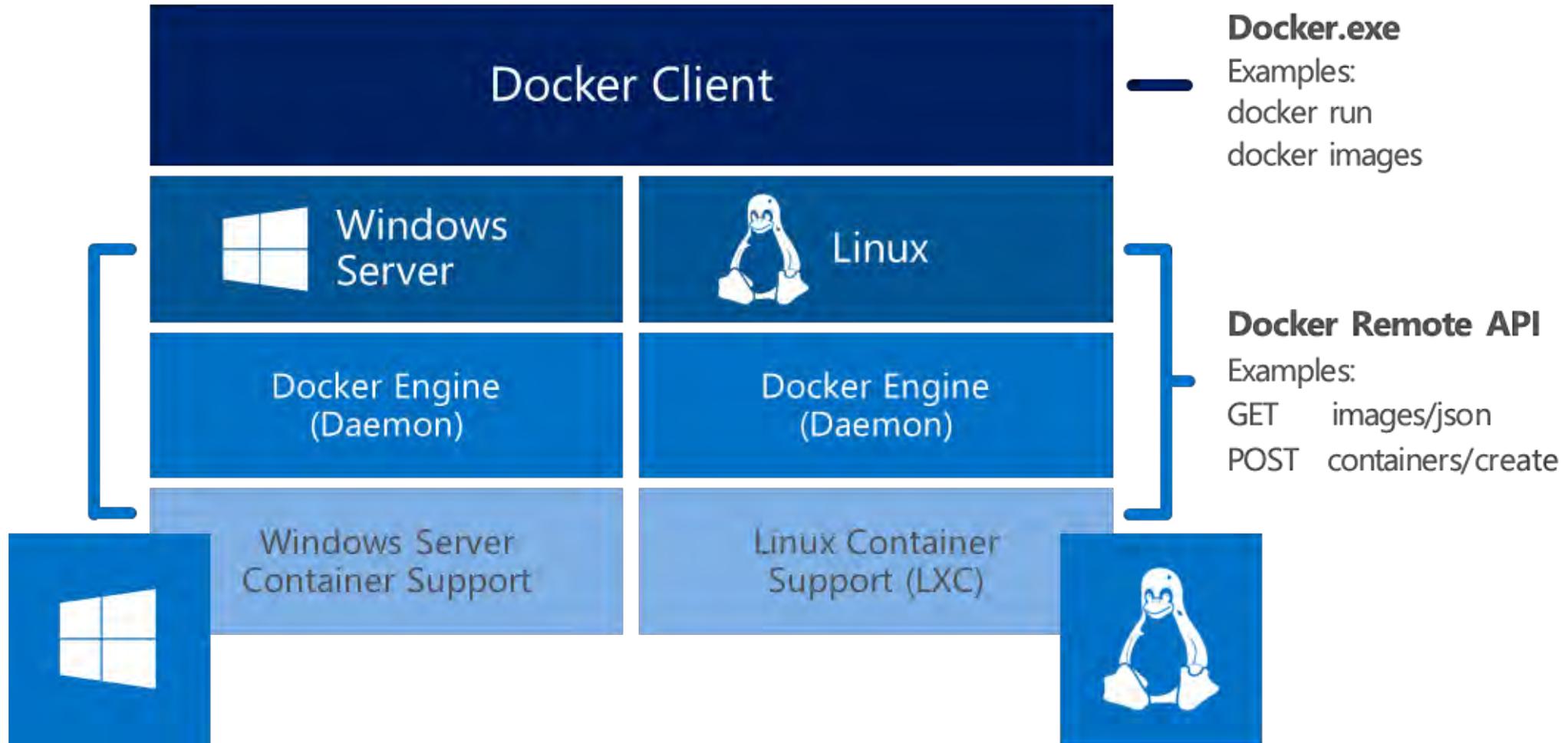
Monitor

Nagios

ZABBIX

# Docker Integration

Joint strategic investments to drive containers forward



# Azure Container Service



- Streamlined provisioning of Apache Mesos Clusters
- Layered support of Swarm, Marathon, and Chronos
- Docker tooling and API support
- Integrated app management and scaling
- Linux and Windows Server containers
- Public and Private cloud

# Write once, deploy any Microsoft Cloud

Virtual machines



Containers



Azure Service Fabric



 Windows Server



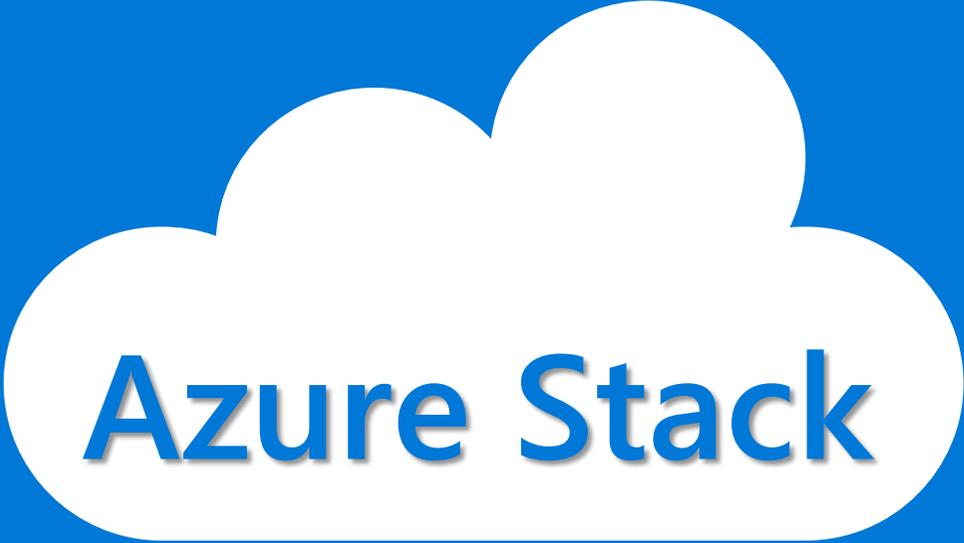
Linux

Azure Resource Manager

Microsoft Azure Stack

Microsoft Azure



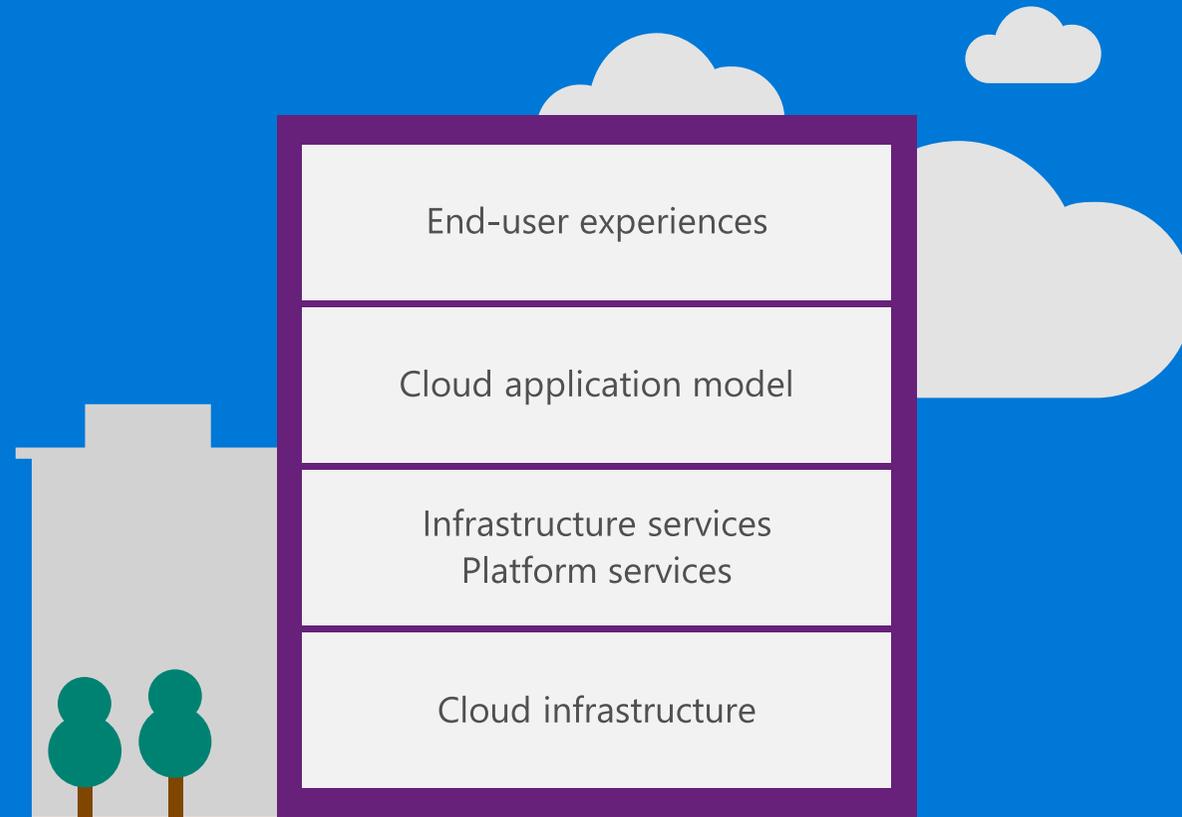
A white, stylized cloud graphic with three rounded peaks, serving as a background for the 'Azure Stack' text.

# Azure Stack

**The Power of Azure  
in Your Datacenter**

Microsoft Azure Stack is a new hybrid cloud platform product that enables organizations to deliver Azure services from their own datacenter thereby helping them achieve more.

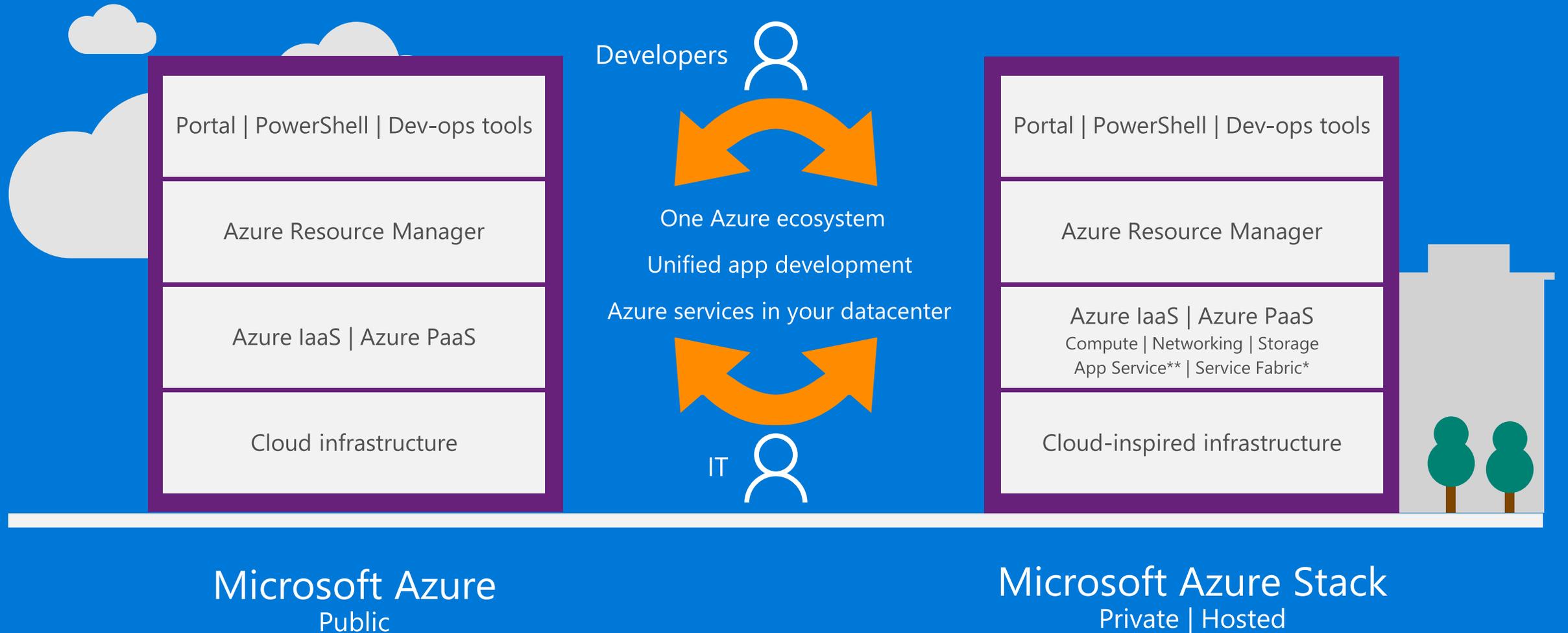
# What does a hybrid cloud platform look like?



Private | Hosted | Public

# Microsoft's hybrid cloud platform

## Power of Azure in your datacenter

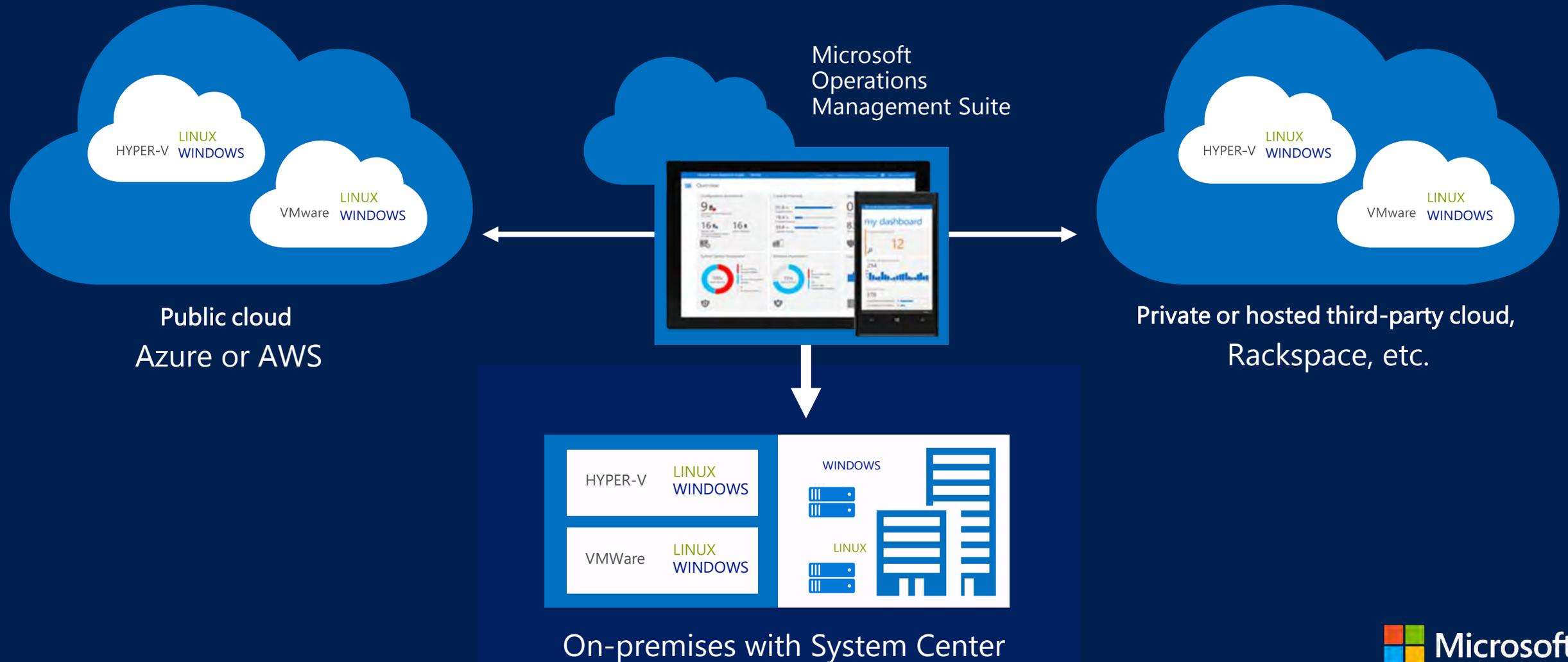


TP1 = Technical Preview 1

\*\* - Only Web Apps is in TP1, \* - not in TP1

# Microsoft hybrid IT management

Simplified guest and workload management, both on-premises and in the cloud



# One Azure ecosystem

Jump-start your Azure Stack efforts with the rich Azure ecosystem

Azure Resource Manager templates

Windows Server and Linux VM images

Third-party services and extensions

GitHub to store and share above application components



