Microsoft

Modernisez vos applications avec Openshift dans Azure

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OUR APPROACH TO OPEN SOURCE IN THE CLOUD

ENABLE

An **open and flexible platform** that meets you where you are and adds value to your existing investments.

INTEGRATE

Embrace leading ecosystems, increase agility and provide consistent **open source offerings**.

RELEASE

Support a **strong ecosystem** to achieve more through Microsoft's own portfolio investments.

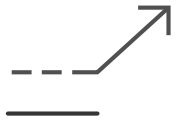
CONTRIBUTE

Extend the community, reach out to more people, and partner for first-class experiences.

OPEN SOURCE ECOSYSTEM

Stronger Together

Microsoft + Red Hat: Stronger together



Wide **availability** of Red Hat solutions whether PAYG or BYOS, across all Azure regions.

Microsoft Azure participation in Red Hat Certified Cloud & Service Provider Program (CCSP)

Developers can easily create and **deploy** apps with a .NET front-end on Windows and a MySQL database on Red Hat Enterprise Linux through Red Hat OpenShift Container Platform.

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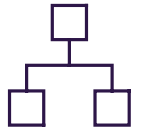
Secure, **manageable** and well-supported Red Hat solutions in the Microsoft cloud, including Red Hat Enterprise Linux, Red Hat OpenShift Container Platform, SQL, Red Hat Ansible Automation and Red Hat JBoss Middleware.



Integrated enterprise-grade support spanning hybrid cloud, including co-located support resources.

Demo

Azure Portal and Red Hat Solutions

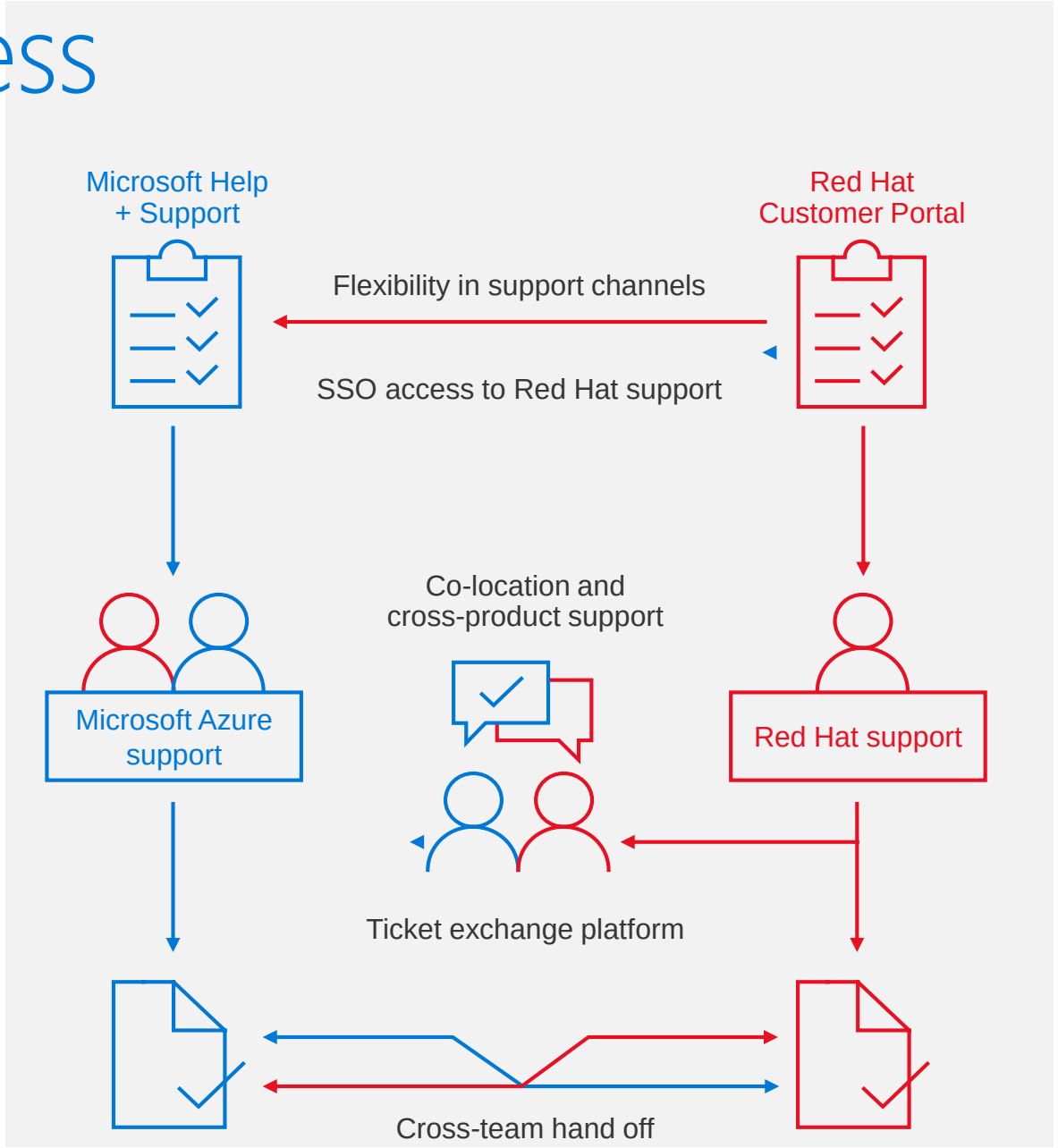
Integrated support process

In-portal customer experience for PAYG deployments

Co-located support with Red Hat on-site team

ISO 27001 compliant B2B communication channel

Integrated support is available 24x7 for **Cloud Access** (**BYOS**) as well as **On-Demand** (**PAYG**) deployments



OpenShift Container Platform on Azure

Fully supported and certified by Red Hat

https://access.redhat.com/documentation/en-us/reference_architectures/2018/html-single/deploying_and_managing

https://aka.ms/azsopenshiftcp

How does this work technically? (ref arch)

- Customer uses ARM templates to deploy Azure compute, network, storage
- Recommended deployment is 1x bastion, 3x master, 3x infra, 3x app nodes
- The ARM template kicks off the standard openshift-ansible playbooks from the Bastion, and then it’s a normal OpenShift Cluster

OpenShift Container Platform Integration points

Azure Load Balancer
Ingress Traffic

Registry storage
No native provider (use VHDs)

Azure DNS
External DNS

Azure Active Directory
User Authentication

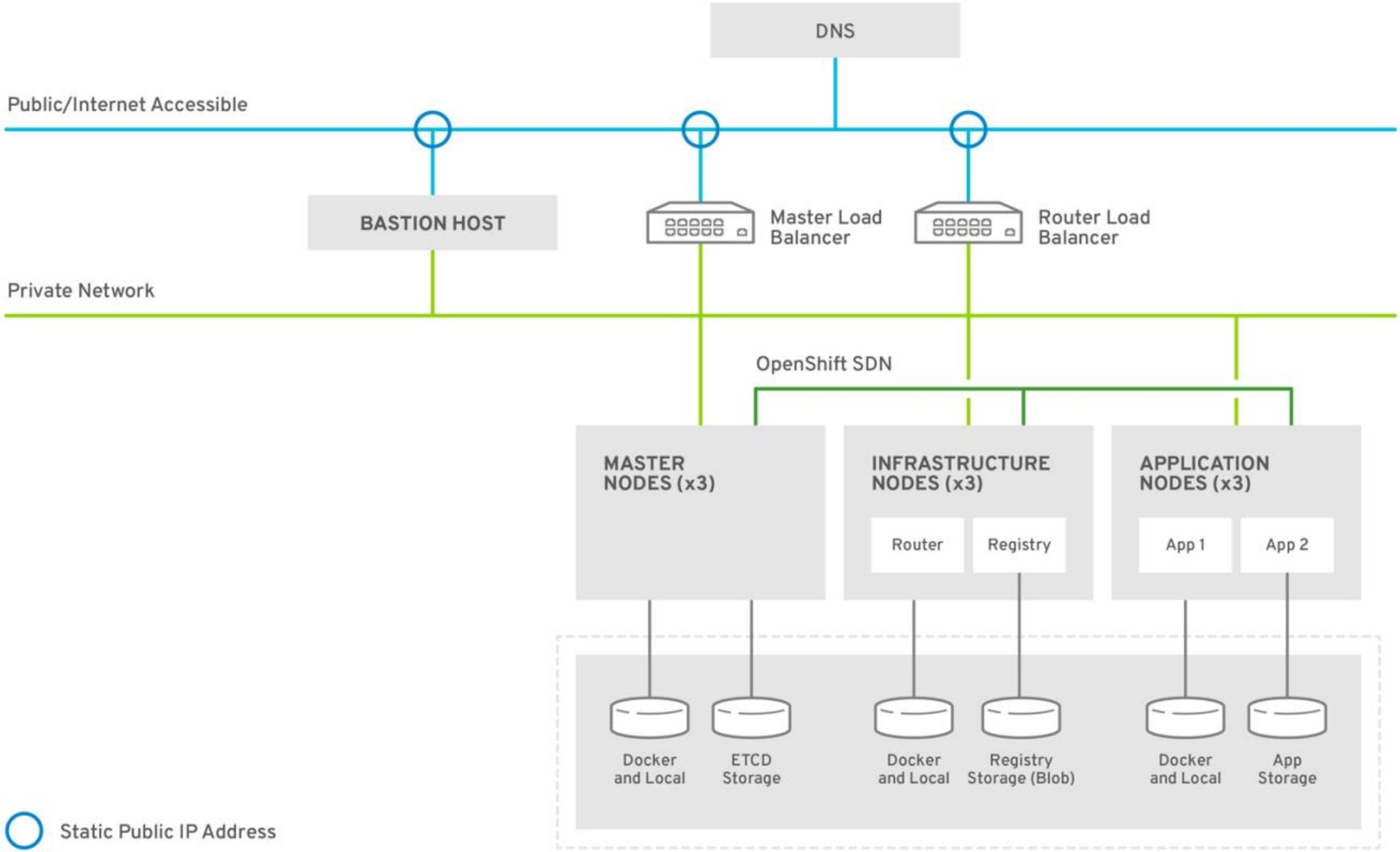
RED HAT® OPENSHIFT Container Platform

Azure Logging, Metrics, etc

Ext Services
Service Broker

Azure Virtual Machines
(10x in the Reference Architecture

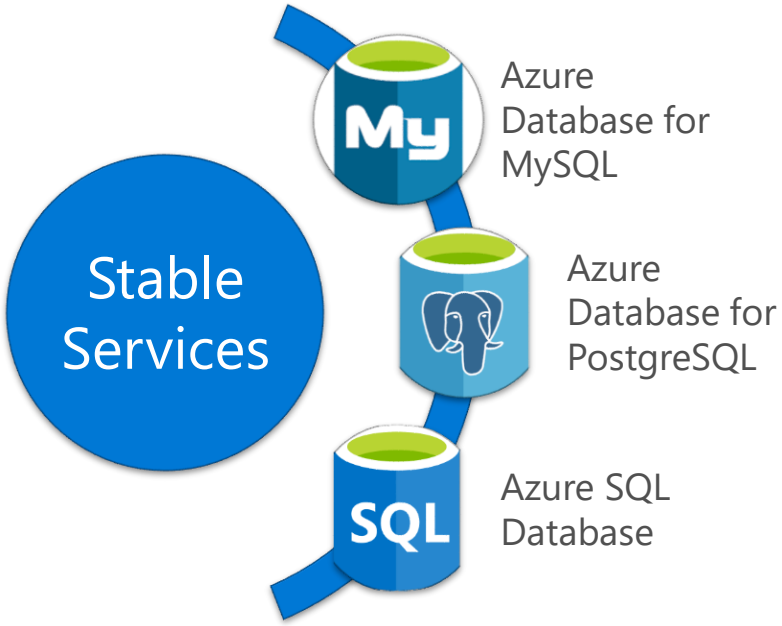
Azure Storage Account
VM storage, registry and persistent Container Storage

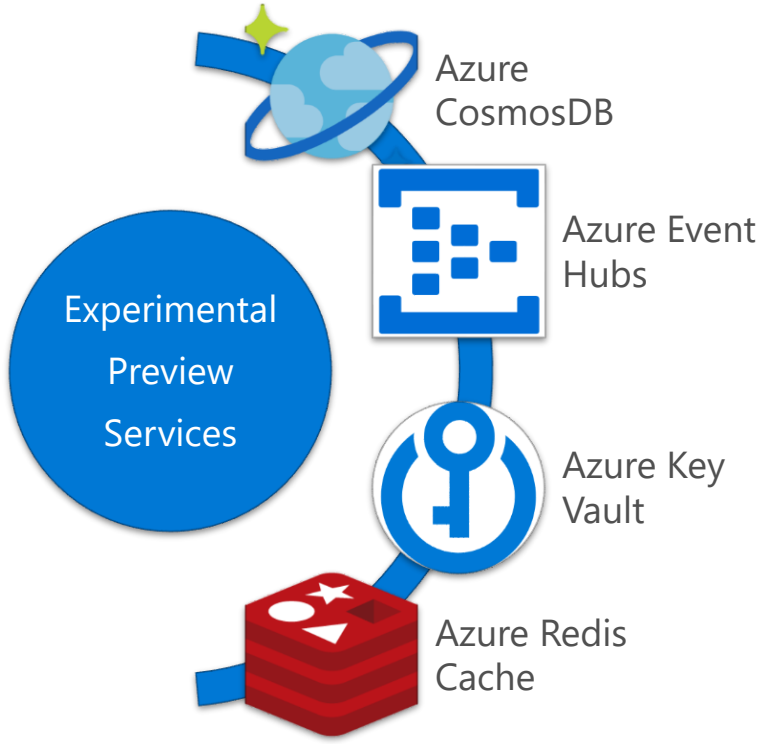

DNS
Public/Internet Accessible
BASTION HOST
Master Load Balancer
Router Load Balancer
Private Network
OpenShift SDN
MASTER NODES (x3)
INFRASTRUCTURE NODES (x3)
Router
Registry
APPLICATION NODES (x3)
App 1
App 2
Docker and Local
ETCD Storage
Docker and Local
Registry Storage (Blob)
Docker and Local
App Storage
Static Public IP Address

Demo
OpenShift deployment on Azure

Extending OpenShift Apps using Cloud Services

OPEN SERVICE BROKER API™





Demo
Deploy an application using Azures Services

Latest Annoucement @Red Hat Summit

While customers can use OpenShift in many cloud environments today, the newly announced OpenShift on Azure makes it easier to set up and use with native Azure integration and leveraging the same Kubernetes engine that powers Azure Kubernetes Service, making it easier to scale clusters.

If you want to create a new OpenShift cluster, you don't need to create a service request and wait a few hours for your nodes to appear (as you might experience on other clouds). Instead, you can use the Azure CLI to execute something like:

```
az openshift create -n oscluster -g osrg `
        –node-vm-size Standard_DS4_v3`
        --l eastus
```

Within a few minutes you'll have a new cluster, more quickly and easily than you'll get with other public cloud offerings available right now.

https://azure.microsoft.com/en-us/blog/openshift-on-azure-the-easiest-fully-managed-openshift-in-the-cloud/

54
Azure regions

2 Mil
intra-datacenter fiber

72+
Tb per second

100+
datacenters

2 Mil
of x86 servers

Thank you

Questions ?