



OpenShift On Azure

Make your deployment Dynamic Again
Mario Cavaldesi
Cloud Solution Architect



#RedHatOSD

-
- 01. Red Hat + Microsoft - “Stronger together”**
 - 02. Openshift on Azure – A Dynamic Deployment**



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01. Red Hat + Microsoft

Stronger together



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01. Red Hat + Microsoft Stronger together



Freedom



Development



Management



Support



01. Red Hat + Microsoft Stronger together



Freedom

54 regions worldwide 140 available in 140 countries

Consistent Storage Across Hybrid Cloud



RED HAT OPENSIFT CONTAINER STORAGE

BARE METAL

VIRTUAL

PRIVATE CLOUD

PUBLIC CLOUD

RED HAT
ENTERPRISE
LINUX



vm



AZURE STACK



AZURE



01. Red Hat + Microsoft Stronger together



vm.yml - ansible-testapp - Visual Studio Code

```
1 ---
2 - name: Create Azure VM
3   hosts: localhost
4   connection: local
```

redhat. CUSTOMER PORTAL Products & Services Tools Security

Red Hat and Microsoft co-develop the first Red Hat OpenShift jointly managed service on a public cloud

Explo

mssql/
SQL
by Micr

by Micr

f t in

Microsoft and Red Hat expand partnership around hybrid cloud, container management and developer productivity

master 1:01 0 0 Azure: yungez@microsoft.com Ln 18, Col 38 Spaces: 2 UTF-8 CRLF YAML

01. Red Hat + Microsoft Stronger together



Report a bug | policy

Home > Policy

Policy

Search (Ctrl+/)

Scope: Microsoft Azure ...

Overview | Getting started | Compliance | Remediation

Authoring: Assignments | Definitions

Blueprints: Blueprints (preview)

Resources: Resource Graph (preview)

Privacy: User privacy

Overall resource compliance **100%**

Non-compliant initiatives **0** out of 0

Non-compliant policies **0** out of 0

Non-compliant resources **0** out of 0

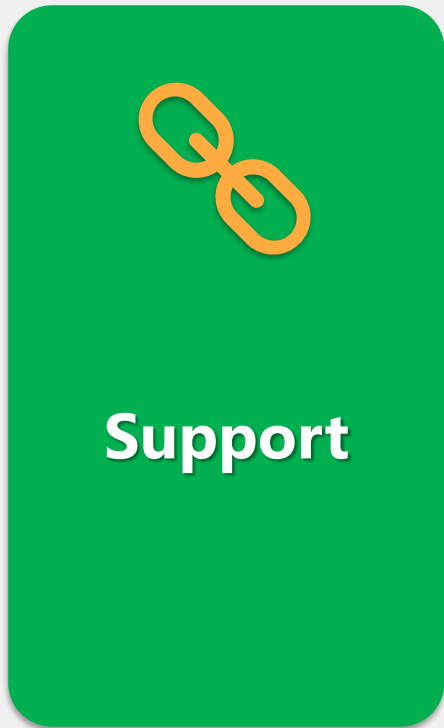
LEARN MORE
[Learn about Policy](#)
[Onboarding tutorial](#)

NAME	SCOPE	COMPLIANCE STATE	COMPLIA...	NON-COMPLIANT R...	NON-COMPLIANT P...
No assignments to display within the given scope					

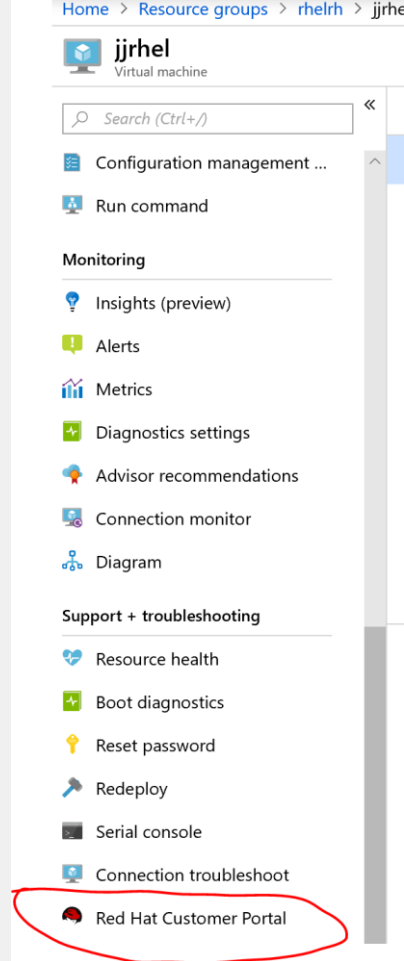
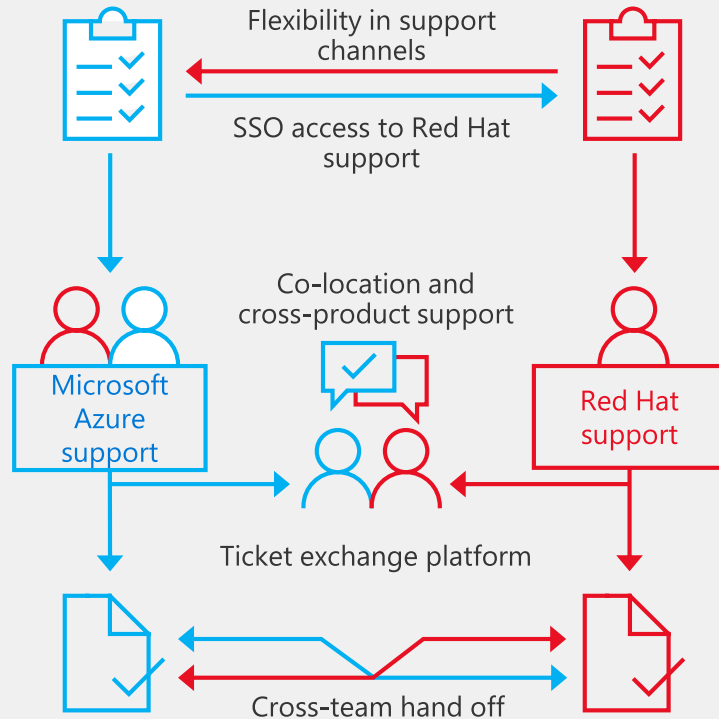
[View all](#)

ASSIGNMENTS BY COMPLIANCE (LAST 7 DAYS)

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Microsoft Help
+ Support



01. Red Hat + Microsoft Stronger together



01. Red Hat + Microsoft Stronger together

More customer stories @ customers.microsoft.com



01. Red Hat + Microsoft Stronger together

"Azure and OpenShift automate a significant amount of work, which allows development teams to achieve consistent results every time"

Yuji Hirose

Head of Service Supervisory Unit,
Service Solutions Control Unit, and
ICT Business Supervisory Control Unit
Hitachi



02. Openshift on Azure

Dynamic Deployment



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Visibility



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02. Openshift on Azure Dynamic Deployment

Info Potentially insecure URL access detected (preview)

When: 4/20 2:00 AM - 4/21 1:59 AM

What: 29 URLs were accessed by both HTTP and HTTPS protocols

Note: 4536 users accessed multiple URLs using HTTP instead of HTTPS

Info Degradation in Server response time for "GET Home/Index"

When: 4/20 2:00 AM - 4/21 1:59 AM

What: 6.09 sec Server response time vs 0.654 sec in the previous 7 days

Note: 242 users and 44.0% of all requests were affected

Info Degradation in Server response time for "GET /Scripts/jquery-1.5.1.min.js" New

When: 4/18 2:00 AM - 4/19 1:59 AM

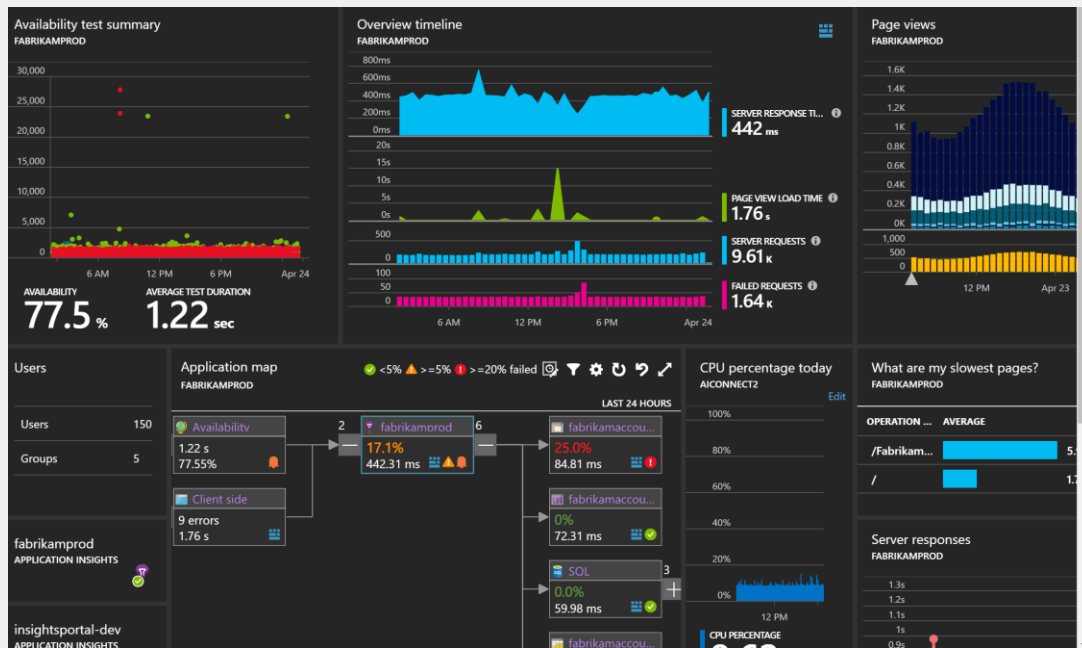
What: 8.72 sec Server response time vs 18.2 ms in the previous 7 days

Note: 30 users and 3.1% of all requests were affected

Info Degradation in Server response time for "GET /Scripts/knockout.mapping-latest.js" New

When: 4/18 2:00 AM - 4/19 1:59 AM

What: 8.21 sec Server response time vs 17.9 ms in the previous 7 days



Agility



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02. Openshift on Azure Dynamic Deployment

Home > Resource groups > rhelrh > jjrhel > Choose a size

Choose a size

Browse the available sizes and their features

Search Compute type: Current generation Disk type: All disk types vCPUs: 1

RECOMME...	SKU	TYPE	COMPUTE ...	VCPUS	GB RAM	DATA DISKS	MAX IOPS	LOCAL SSD	PREMIUM ...	ADDITION...	EUR
	M128-64ms	Standard	Memory optimi	64	3892	64	80000	4096 GiB	Yes		€23
	M128-32ms	Standard	Memory optimi	32	3892	64	80000	4096 GiB	Yes		€23
	NC6s_v3	Standard	GPU	6	112	12	20000		Yes	1 V100 (PCIe)	€2,4
	NC12s_v3	Standard	GPU	12	224	24	40000		Yes	2 V100 (PCIe)	€4,5
	NC24s_v3	Standard	GPU	24	448	32	80000		Yes	4 V100 (PCIe)	€9,5
	NC24rs_v3	Standard	GPU	24	448	32	80000		Yes	4 V100 (PCIe)	Una
	ND6s	Standard	GPU	6	112	12	20000		Yes	1 P40	€1,6
	ND12s	Standard	GPU	12	224	24	40000		Yes	2 P40	€3,3
	ND24s	Standard	GPU	24	448	32	80000		Yes	4 P40	€6,7
	ND24rs	Standard	GPU	24	448	32	80000		Yes	4 P40	€7,4
	NC6s_v2	Standard	GPU	6	112	12	20000		Yes	1 P100 (PCIe)	€1,6
	NC12s_v2	Standard	GPU	12	224	24	40000		Yes	2 P100 (PCIe)	€3,3

Prices presented are estimates in your local currency that include only Azure infrastructure costs and any discounts for the subscription and location. The prices don't include any applicable software licenses. The virtual machine is currently running, changing its size will cause it to be restarted.

Select

02. Openshift on Azure Dynamic Deployment

OPENSIFT CONTAINER PLATFORM

Search Catalog

.NET Core + PostgreSQL (Persistent)	.NET Core Example	.NET Core Runtime Example	Apache HTTP Server	Apache HTTP Server (httpd)
Azure Container Instances	Azure Cosmos DB	Azure Cosmos DB (Graph API)	Azure Cosmos DB (MongoDB)	Azure Cosmos DB (MongoDB)
Azure Database for MySQL	Azure Database for MySQL-- Database Only	Azure Database for MySQL-- DBMS Only	Azure Database for PostgreSQL	Azure Database for PostgreSQL-- Database Only
Azure Database for PostgreSQL-- DBMS Only	Azure Event Hubs	Azure Key Vault	Azure Redis Cache	Azure Search
Azure Service Bus	Azure SQL Database	Azure SQL Server (Database Only)	Azure SQL Server (DBMS Only)	Azure Storage

My Projects [+ Create Project](#)

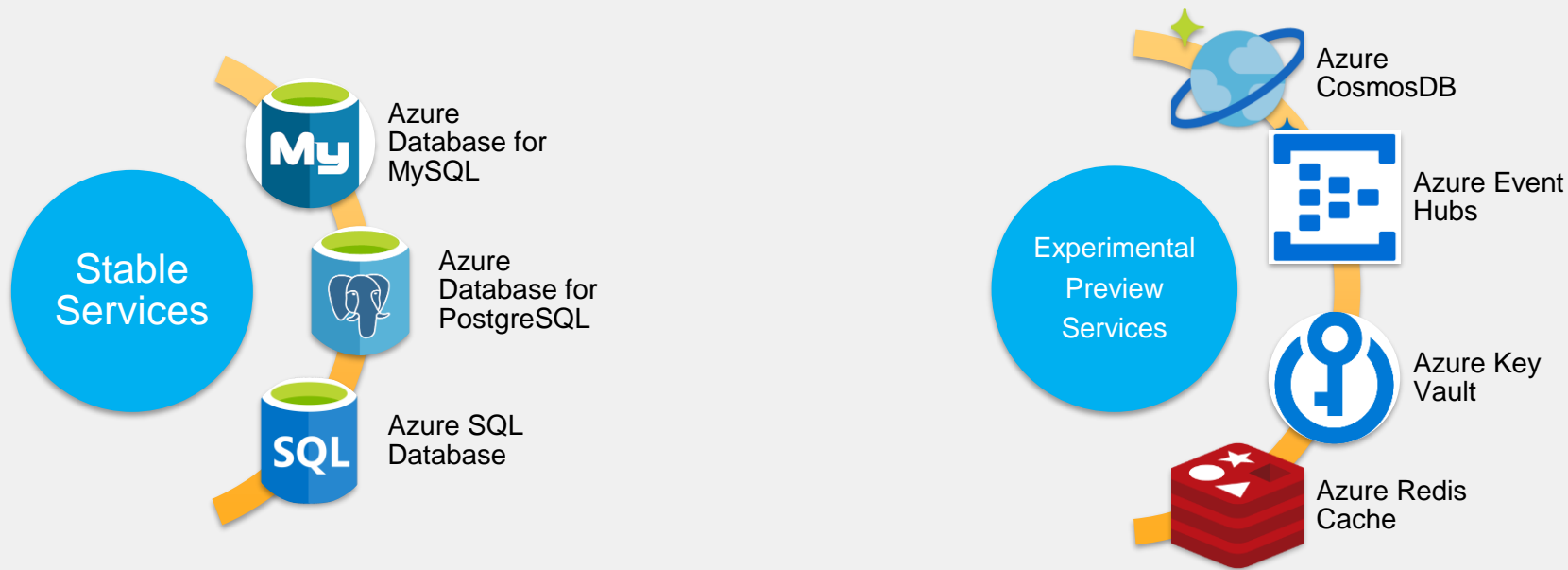
5 of 13 Projects [View All](#)

- [jzcosmosdb-test](#)
jzcosmosdb - created by demo 5 days ago
- [osba](#)
created by demo 13 days ago
- [default](#)
created 13 days ago
- [kube-service-catalog](#)
created 13 days ago
- [jzpostgres](#)
created by demo 13 days ago

Recently Viewed

- Azure Database for MySQL
- Azure Cosmos DB (MongoDB)
- Azure Key Vault

02. Openshift on Azure Dynamic Deployment

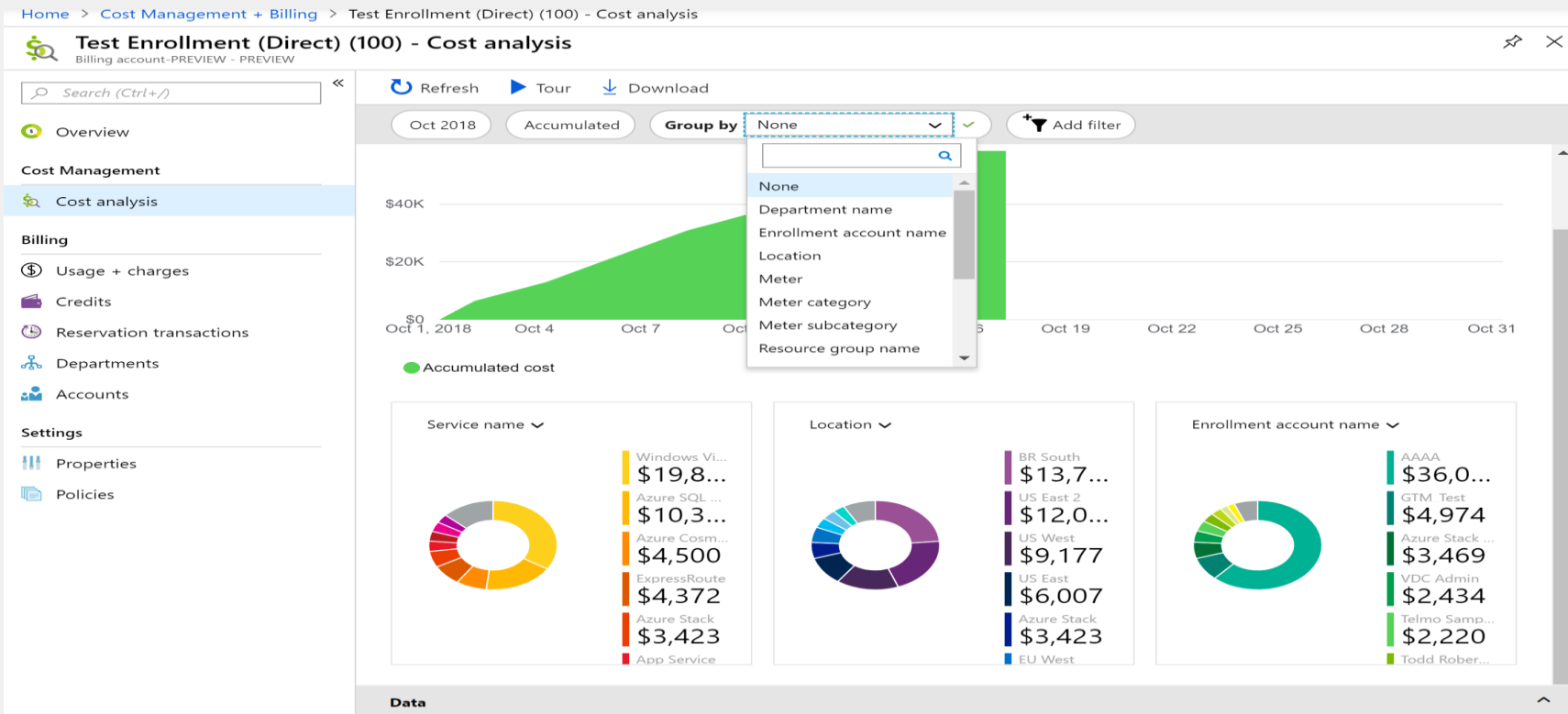


CONTROL



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02. Openshift on Azure Dynamic Deployment



CI/CD INTEGRATION



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02. Openshift on Azure Dynamic Deployment

The screenshot displays the Azure DevOps interface for a pipeline named 'devopsproj - CD'. The left sidebar shows navigation options like Overview, Boards, Repos, Pipelines, Builds, Releases, Library, Task groups, Deployment groups, Test Plans, and Artifacts. The main area shows the pipeline configuration with tabs for Pipeline, Tasks, Variables, Retention, Options, and History. The 'Deploy to Openshift' stage is selected, showing an 'Agent phase' with tasks 'oc tag on' and 'oc build on sdsdsdsd'. A 'Drop' artifact is also visible. The 'Stage name' field is set to 'Deploy to Openshift'.

02. Openshift on Azure Dynamic Deployment

Microsoft + Open Source

Microsoft Open Source Page - <https://open.microsoft.com/>

Microsoft on GitHub - /azure and /microsoft

Microsoft and Red Hat - <https://azure.microsoft.com/en-us/campaigns/redhat/>

Azure & Ansible:

Ansible for Azure – <https://docs.microsoft.com/en-us/azure/virtual-machines/linux/ansible-install-configure#file-credentials>

Provision using Ansible onto Azure - <https://docs.microsoft.com/en-us/azure/virtual-machines/linux/ansible-create-vm>

mssql-server role from <https://github.com/Microsoft/sql-server-samples/tree/master/samples/features/high%20availability/Linux/Ansible%20Playbook>

Helm & Openshift:

Helm - <https://helm.sh/>

Helm on OpenShift - <https://blog.openshift.com/getting-started-helm-openshift/>

Open Service Broker for Azure:

Open Service Broker for Azure - <https://osba.sh/>



GRAZIE PER L'ATTENZIONE

Mario Cavaldesi
Cloud Solution Architect



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