



Openshift en Azure

Dinamiza tu despliegue

Jorge Valenzuela Jiménez

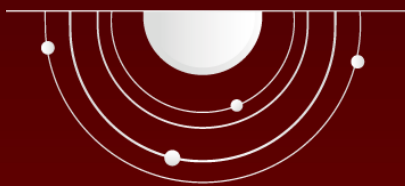
Open Source and DevOps Technical Sales Lead
Microsoft

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- 01. Red Hat + Microsoft - “Stronger together”**
- 02. Openshift en Azure – Dinamiza tu despliegue**

01. Red Hat + Microsoft

Stronger together



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54 regions worldwide 140 available in 140 countries

Marketplace

Everything

Filter

redhat

Red Hat Enterprise Linux 7.3	Red Hat	Compute
Red Hat Enterprise Linux 6.9	Red Hat	Compute
Red Hat Enterprise Linux 7.4	Red Hat	Compute
Red Hat Enterprise Linux 7.2 for SAP HANA	Red Hat	Compute
Red Hat Enterprise Linux 7.2	Red Hat	Compute
Red Hat Enterprise Linux 6.7 for SAP HANA	Red Hat	Compute
Red Hat Enterprise Linux 6.8	Red Hat	Compute
Red Hat Enterprise Linux 7.3 for SAP Business Apps	Red Hat	Compute
Red Hat Enterprise Linux 6.8 for SAP Business Apps	Red Hat	Compute
Red Hat Enterprise Linux 6.7	Red Hat	Compute
SQL Server 2017 Enterprise on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Compute
SQL Server 2017 Standard on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Compute
Free SQL Server License: SQL Server 2017 Developer on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Compute

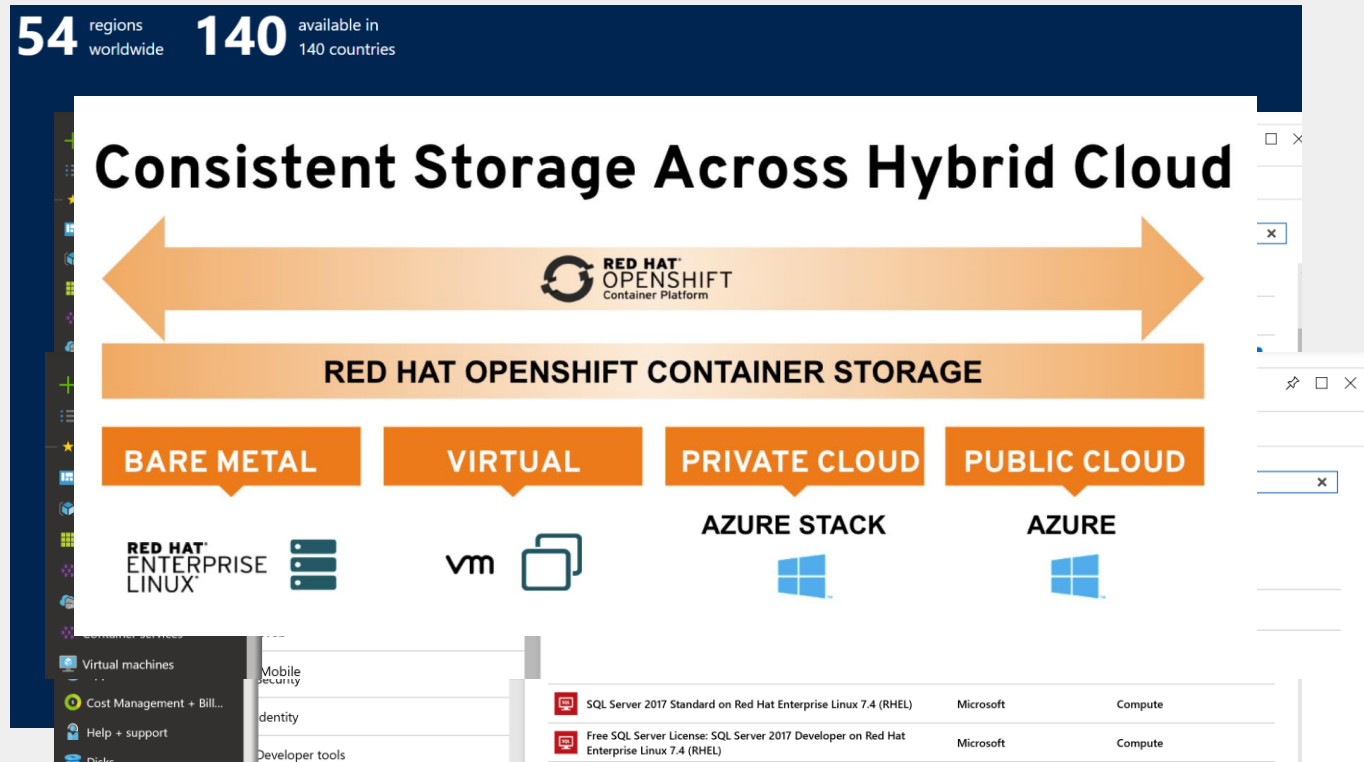
01. Red Hat + Microsoft

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54 regions worldwide 140 available in 140 countries

Consistent Storage Across Hybrid Cloud

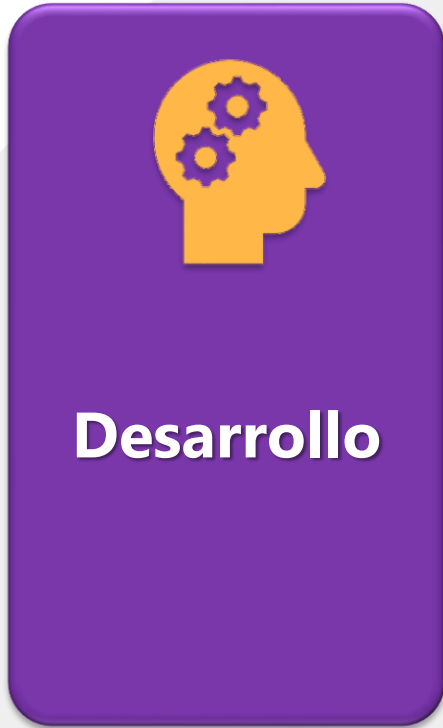


The diagram illustrates a consistent storage architecture for Red Hat OpenShift Container Platform. A large double-headed arrow at the top, labeled 'RED HAT OPENSIFT Container Platform', spans across four deployment environments: BARE METAL, VIRTUAL, PRIVATE CLOUD, and PUBLIC CLOUD. Below these environments, specific cloud solutions are identified: RED HAT ENTERPRISE LINUX for Bare Metal, vm for Virtual, AZURE STACK for Private Cloud, and AZURE for Public Cloud. At the bottom, a table lists Microsoft SQL Server products available on Red Hat Enterprise Linux 7.4 (RHEL).

RED HAT ENTERPRISE LINUX	vm	AZURE STACK	AZURE
SQL Server 2017 Standard on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Compute	
Free SQL Server License: SQL Server 2017 Developer on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Compute	

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vm.yml - ansible-testapp - Visual Studio Code

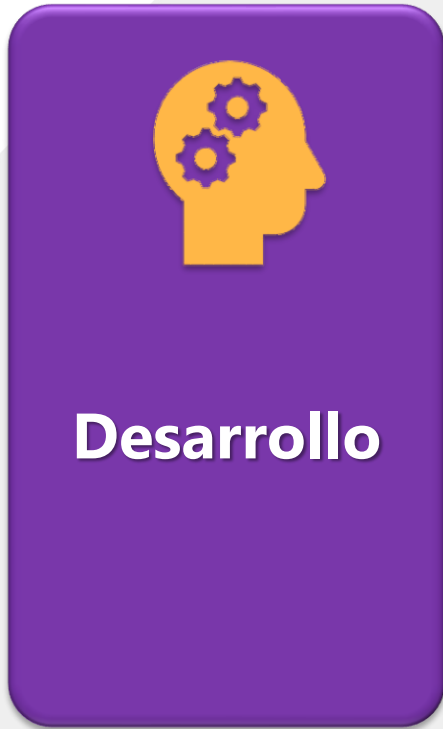
```
1 ---
2 - name: Create Azure VM
3 hosts: localhost
4 connection: local
5
6 vars:
7   resource_group: demo-451
8   vm_name: testvm
9   location: eastus
10 tasks:
11 - name: Create a resource group
12   azure_rm_resourcegroup:
13     name: "{{ resource_group }}"
14     location: "{{ location }}"
15 - name: Create virtual network
16   azure_rm_virtualnetwork:
17     resource_group: "{{ resource_group }}"
18     name: "{{ vm_name }}"
19     address_prefixes: "10.0.0/16"
20     add_subnet:
21       name: "{{ resource_group }}"
22       address_prefix: "10.0.1.0/24"
23     virtual_network: "{{ vm_name }}"
24 - name: Create public IP address
25   azure_rm_publicipaddress:
26     resource_group: "{{ resource_group }}"
27     name: "{{ vm_name }}"
28     allocation_method: Static
29 - name: Create Network Security Group that allows SSH
30   azure_rm_securitygroup:
31     resource_group: "{{ resource_group }}"
32     name: "{{ vm_name }}"
33     rules:
```

- Open to the Side (Ctrl+Enter)
- Reveal in Explorer (Alt+Shift+R)
- Open in Terminal
- Select for Compare
- Copy (Ctrl+C)
- Copy Path (Alt+Shift+C)
- Rename (F2)
- Delete (Del)
- Run Ansible Playbook in Docker
- Run Ansible Playbook in Local Ansible
- Run Ansible Playbook in Cloud Shell

master 11:01 0 0 Azure: yungez@microsoft.com Ln 18, Col 38 Spaces: 2 UTF-8 CRLF YAML

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vm.yml - ansible-testapp - Visual Studio Code

File Edit Selection View Go Debug Tasks Help

EXPLORER

! vm.yml

redhat CUSTOMER PORTAL

Products & Services Tools Security

Red Hat Container Catalog Search The Catalog

Explore Get Started FAQ

mssql/rhel/server

SQL Server Red Hat Container Tech Preview ☆

by Microsoft Corp. | in Product SQL Server

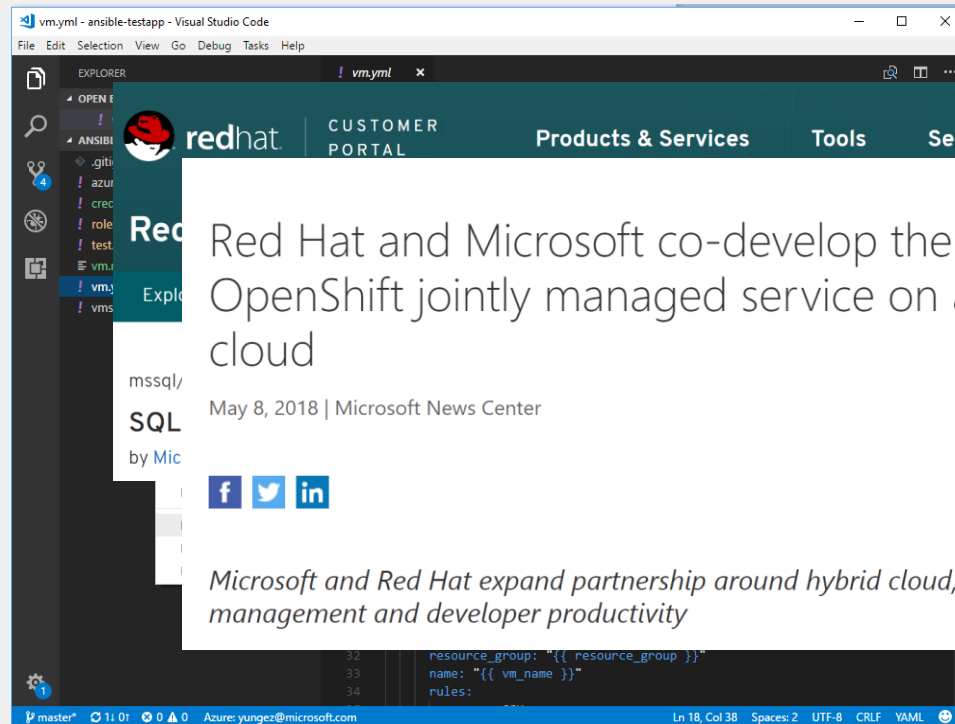
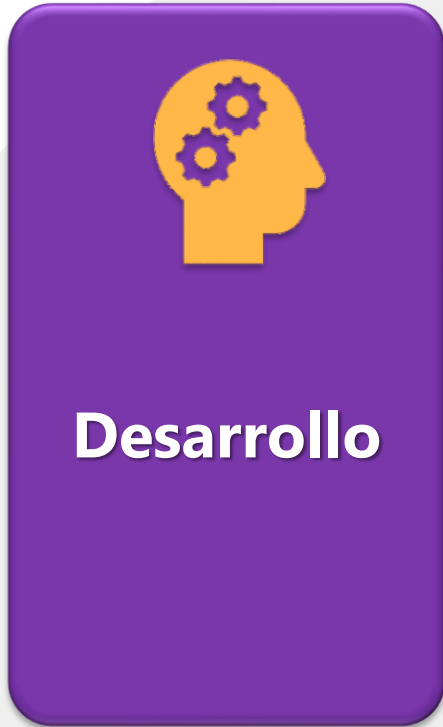
- Delete
- Run Ansible Playbook in Docker
- Run Ansible Playbook in Local Ansible
- Run Ansible Playbook in Cloud Shell

```
ss_prefix: "10.0.1.0/24"
al_network: "{{ vm_name }}"
create_public IP address
m_publicipaddress:
nce_group: "{{ resource_group }}"
sation_method: Static
name: "{{ vm_name }}"
- name: Create Network Security Group that allows SSH
  azure_rm_securitygroup:
    resource_group: "{{ resource_group }}"
    name: "{{ vm_name }}"
  rules:
```

master 11:01 0 0 Azure: yungez@microsoft.com Ln 18, Col 38 Spaces: 2 UTF-8 CRLF YAML

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vm.yml - ansible-testapp - Visual Studio Code

File Edit Selection View Go Debug Tasks Help

EXPLORER

! vm.yml x

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

May 8, 2018 | Microsoft News Center

by Mic

[f](#) [t](#) [in](#)

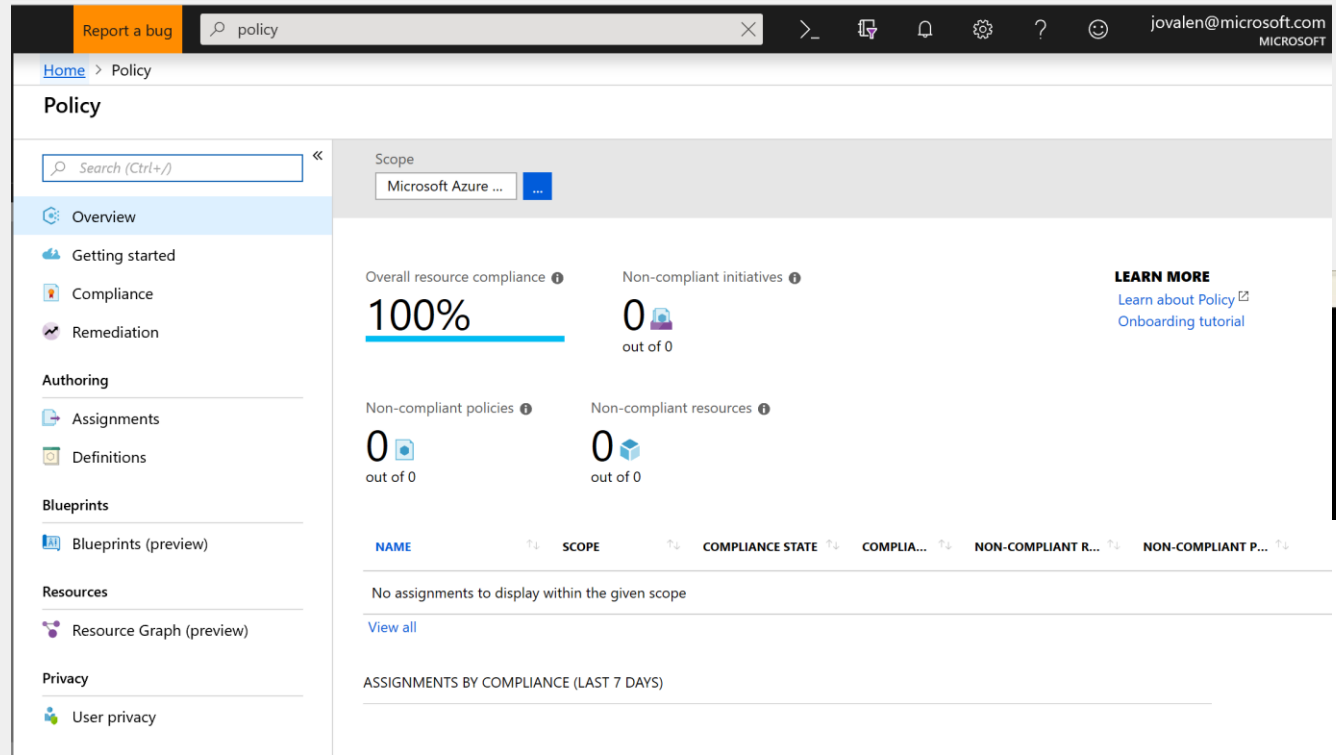
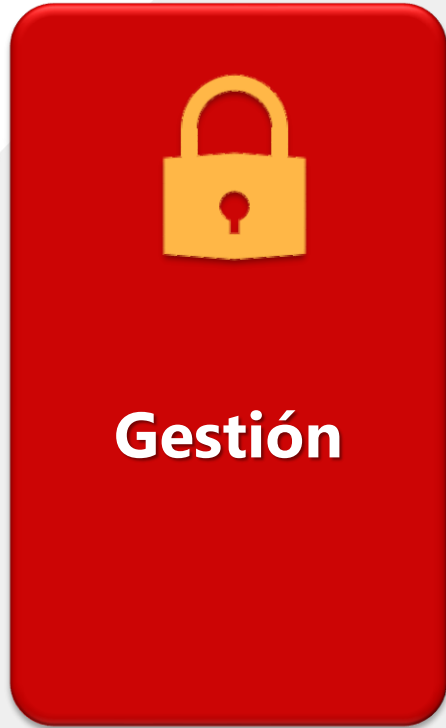
Microsoft and Red Hat expand partnership around hybrid cloud, container management and developer productivity

```
32 resource_group: "{{ resource_group }}"
33 name: "{{ vm_name }}"
34 rules:
```

master 11:01 0 0 Azure: yungez@microsoft.com Ln 18, Col 38 Spaces: 2 UTF-8 CRLF YAML

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Report a bug | policy

Home > Policy

Policy

Search (Ctrl+*f*)

- Overview
- Getting started
- Compliance
- Remediation

Authoring

- Assignments
- Definitions

Blueprints

- Blueprints (preview)

Resources

- Resource Graph (preview)

Privacy

- User privacy

Scope: Microsoft Azure ...

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](#)

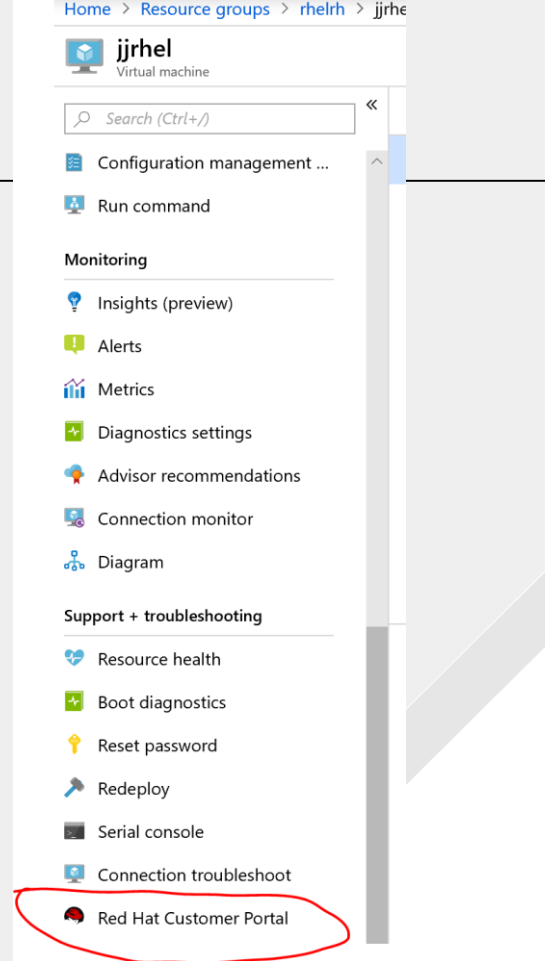
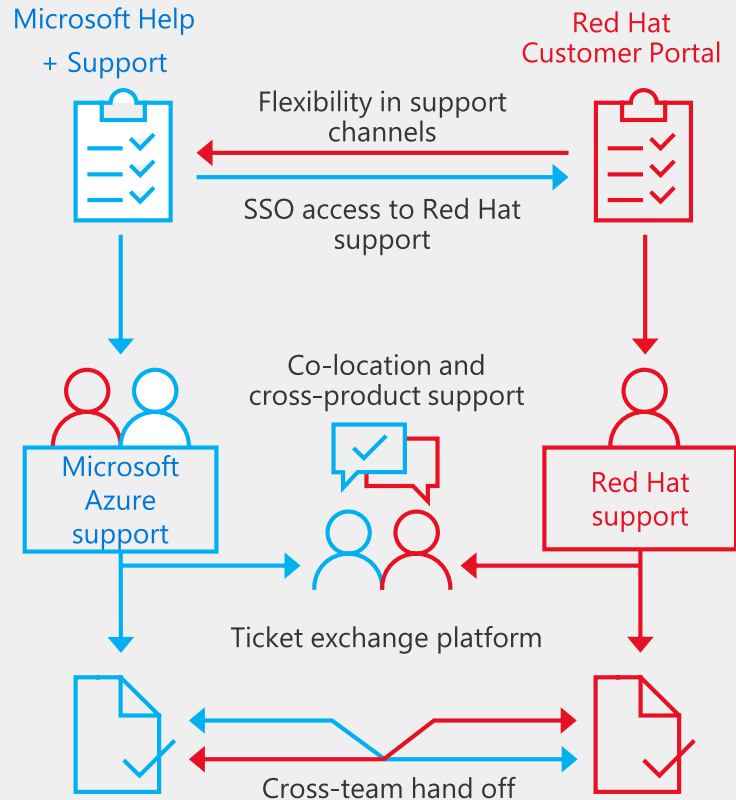
NAME	SCOPE	COMPLIANCE STATE	COMPLIA...	NON-COMPLIANT R...	NON-COMPLIANT P...
No assignments to display within the given scope					

[View all](#)

ASSIGNMENTS BY COMPLIANCE (LAST 7 DAYS)

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More customer stories @ customers.microsoft.com



l2labs

software defined mainframe*



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TATA CONSULTANCY SERVICES



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اتحاد الاداعة والتليفزيون المصرى



01. Red Hat + Microsoft

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Una solución estratégica para la evolucionar su Arquitectura de Aplicaciones



Sobre **560** Servidores de Aplicaciones en **80** HOSTS

Plataforma para DevOps y Microservicios



Ejecución de OpenShift en Azure, aprovisionamiento automático con Ansible

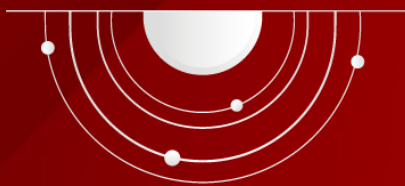
OpenShift proporciona entorno de compilación, distribución y run times.

785
Aplicaciones Modernas



02. Openshift en Azure

Dinamiza tu despliegue



VISIBILIDAD

02. Openshift en Azure

Dinamiza tu despliegue

i 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

i 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

i 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

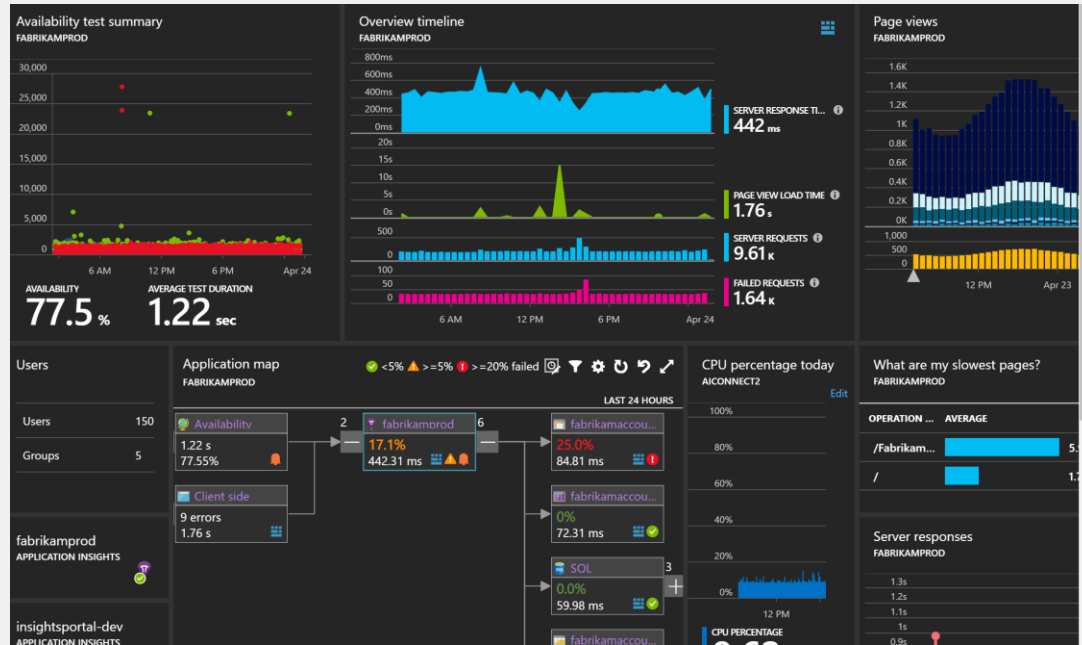
What: 8.72 sec Server response time vs 18.2 ms in the previous 7 days

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

i 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



AGILIDAD

02. Openshift en Azure

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Home > Resource groups > rhelrh > jirhel > 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

RECOMMEN...	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
blems	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	€3,2
view)	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)	€3,2

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 the virtual machine is currently running, changing its size will cause it to be restarted.

Select

02. Openshift en Azure

Dinamiza tu despliegue

The screenshot displays the OpenShift Container Platform interface. At the top, it says "OPENSHIFT CONTAINER PLATFORM" and "demo". A search bar labeled "Search Catalog" is present. The main area shows a grid of service tiles, each with an icon and a title. The tiles include:

- .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

On the right side, there is a "My Projects" section with a "+ Create Project" button. It lists 5 of 13 projects:

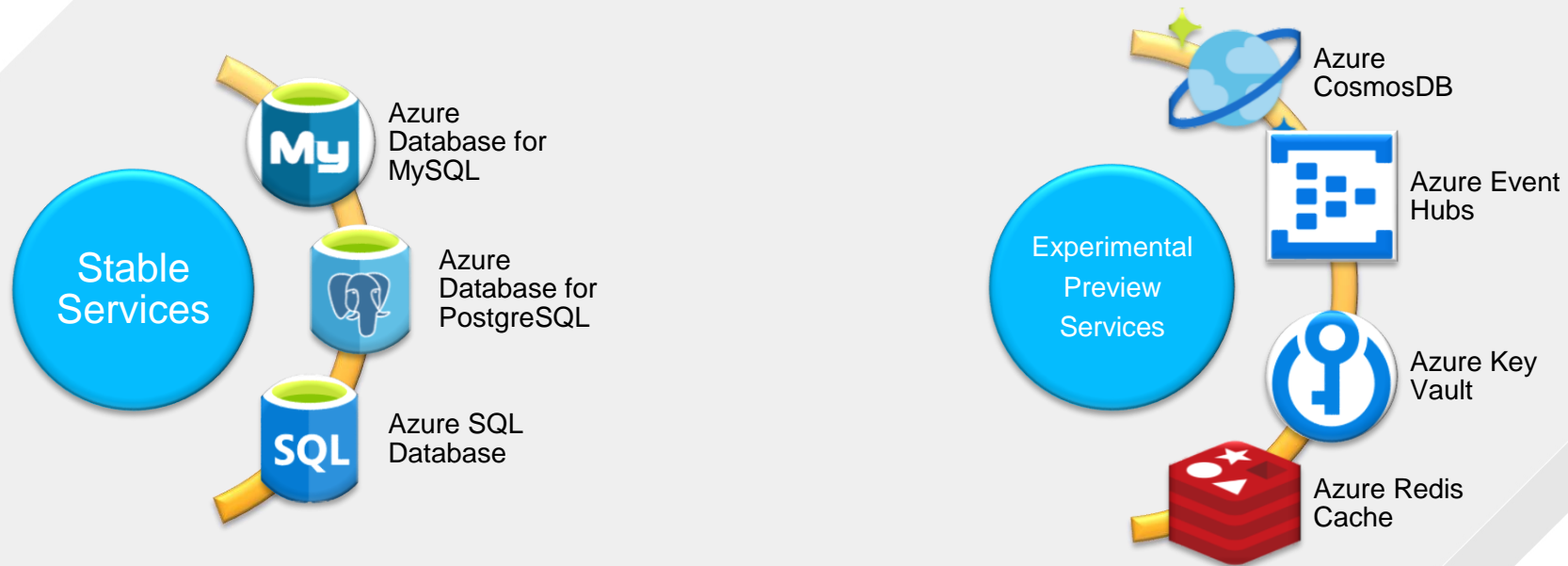
- jzcosmosdb-test (created by demo 5 days ago)
- osba (created by demo 13 days ago)
- default (created 13 days ago)
- kube-service-catalog (created 13 days ago)
- jzpostgres (created by demo 13 days ago)

Below this, there is a "Recently Viewed" section with three items:

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

02. Openshift en Azure

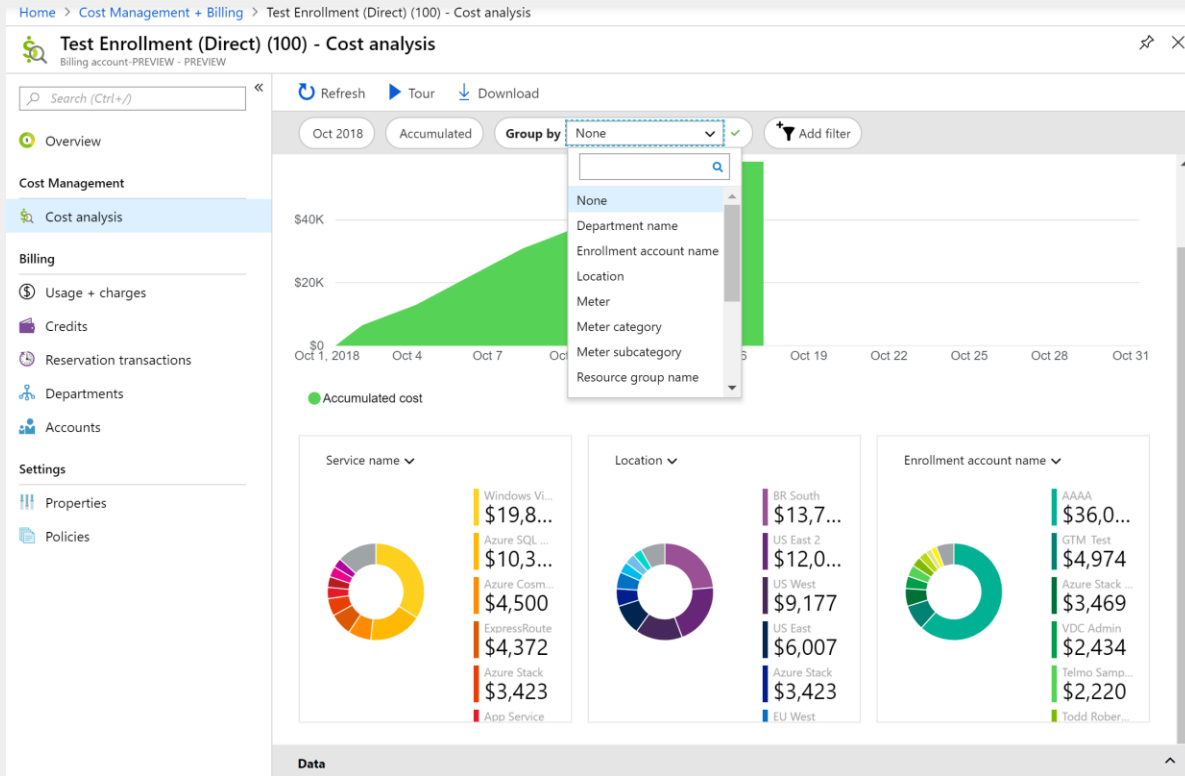
Dinamiza tu despliegue



CONTROL

02. Openshift en Azure

Dinamiza tu despliegue



INTEGRACIÓN CI/CD

02. Openshift en Azure

Dinamiza tu despliegue

The screenshot displays the Azure DevOps web interface. On the left is a navigation sidebar with options like Overview, Boards, Repos, Pipelines, Builds, Releases, Library, Task groups, Deployment groups, Test Plans, and Artifacts. The main area shows a pipeline named 'devopsproj - CD'. The 'Tasks' tab is active, displaying an 'Agent phase' with two tasks: 'oc tag on' (Openshift tag) and 'oc build on sdsdsdsd' (Openshift build starter). On the right, a configuration panel for the 'Deploy to Openshift' stage is visible, with a 'Stage name' field containing the text 'Deploy to Openshift'.

02. Openshift en Azure

Dinamiza tu despliegue

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 Brokver for Azure:

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



Muchas gracias

Jorge Valenzuela Jiménez

Open Source and DevOps Technical Sales Lead
Microsoft