

2018

Global Azure
BOOTCAMP
BOGOTÁ, COLOMBIA

Global Azure Bootcamp 2018 Bogotá con CloudFirst Camp

Sabado 21 de Abril a las 8 a.m. en la Universidad EAN
Calle 79 No. 11 - 45

Azure PowerShell o Azure CLI

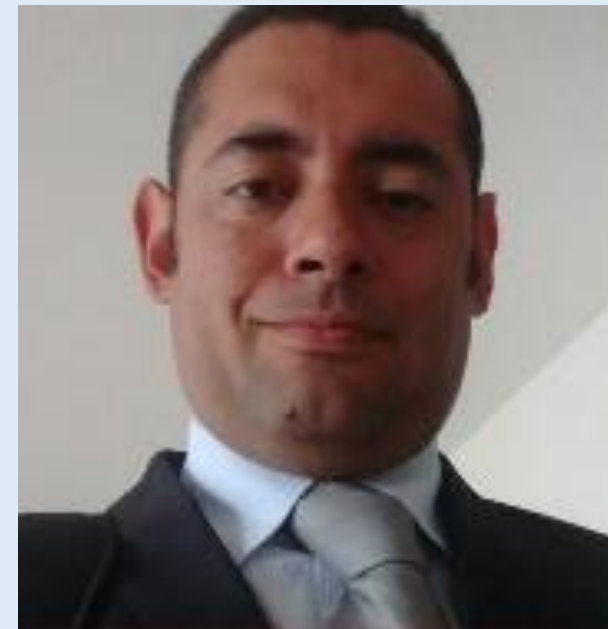
Fabián Alberto Campo H.

Azure Architect MCSD, MCSE Windows 2016 +Messaging +PrivateCloud

Aula Santa Fé -3:30 PM

Esta conferencia es su punto de partida en el multiverso de Azure, usted administrador, desarrollador, devops, arquitecto, debe conocer realmente como funciona Azure "under the Hood".

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¡Bienvenidos!

21 Abril 2018



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¡Participa y Gana!

#GlobalAzure

#CloudFirstCamp



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Este evento es sostenible, gracias a

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Azure PowerShell o Azure CLI

Fabian Alberto Campo

MCSD Azure, MCSE W2016 +messaging +privatecloud
@fcampo

Fabian Alberto Campo



<http://fcampo7463.wordpress.com>



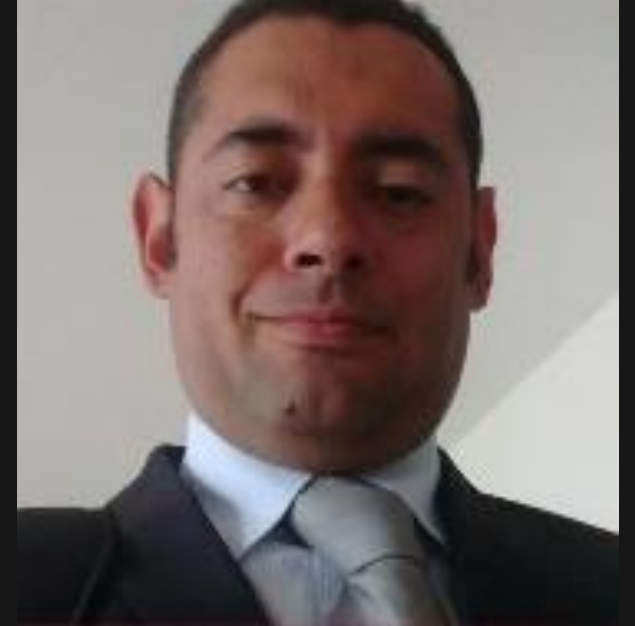
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@fcampo



fcampo@hotmail.com



<http://www.mycertprofile.com/Profile/7088698827>

Consultor - Líder CDS
GLUP Management Group



Agenda

- Bienvenida
- Azure desde otro ángulo
- Azure y la multiplataforma
- Azure visto como DevOps
- Arquitectura desde la línea de comandos





Azure

Your vision, your results, your cloud

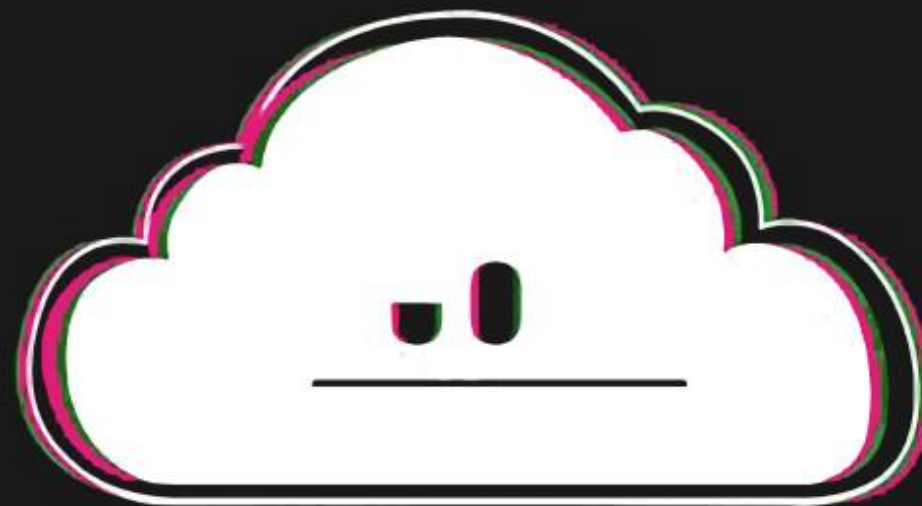
Fabian Alberto Campo

Consultor – MCT – MCSE- MCSD Azure Architect



Microsoft

Que es
Azure?



THERE IS NO CLOUD
IT'S JUST SOMEONE ELSE'S COMPUTER

The NIST Definition of Cloud Computing

- Auto Servicio On Demand
- Recursos comunes
- Elasticidad rápida
- Servicio Medible
- Acceso por red (Internet)

Azure Multiplataforma

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The image displays a multi-step process for setting up an Azure environment. It includes screenshots of a Windows Command Prompt, a PowerShell window, and the Azure Cloud Shell interface.

Windows Command Prompt (Administrator):

```
Microsoft Windows [Version 10.0.17134.1]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>az login
To sign in, use a web browser to open the page https://microsoft.com/devicelogin and enter the code FQVRUR73R to authenticate.
```

Windows PowerShell:

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\Fcampo> Add-AzureRmAccount

Account : fach20533abr18@outlook.com
Name : fach20533abr18
Id : 294ddacd-bb66-4e13-8c8e-9d4945a46f73
IsDefault : true
Name : Azure Pass
State : Enabled
TenantId : a9047765-cac9-48e2-9ffb-ebca0c5d12e3
User : fach20533abr18@outlook.com
Type : user
```

Azure Cloud Shell:

```
Bash
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI 2.0
Type "help" to learn about Cloud Shell

fabian@Azure:~$
```

Microsoft Azure Dashboard:

The dashboard shows a list of resources under the subscription '20533D03labVM1'. The resources are as follows:

Resource Name	Type	Location
20533D03labVM1	Virtual machine	East US
GlobalAzureBC	DevTest Lab	East US
20533D0301-db-avset	Availability set	East US
20533D0301labrgdiag619	Storage account	East US
20533D0301-labVNet	Virtual network	East US
20533D03labVML_OsDisk_1_ebc04aa...	Disk	East US
20533D03labvm1911	Network interface	East US
20533D03labVM1-ip	Public IP address	East US

Quickstart tutorials are also visible on the right side of the dashboard.



Azure PowerShell

Connect-AzureRmAccount

New-AzureRMResourceGroup –Name “GlobalAzureBC-RG” –Location “EastUS”

New-AzureRmStorageAccount -ResourceGroupName “GABC18” -Name gabc18storage33 -Location westus -SkuName standard_lrs

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Demo



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Azure CLI

- <https://docs.microsoft.com/en-us/cli/azure/index?view=azure-cli-latest>

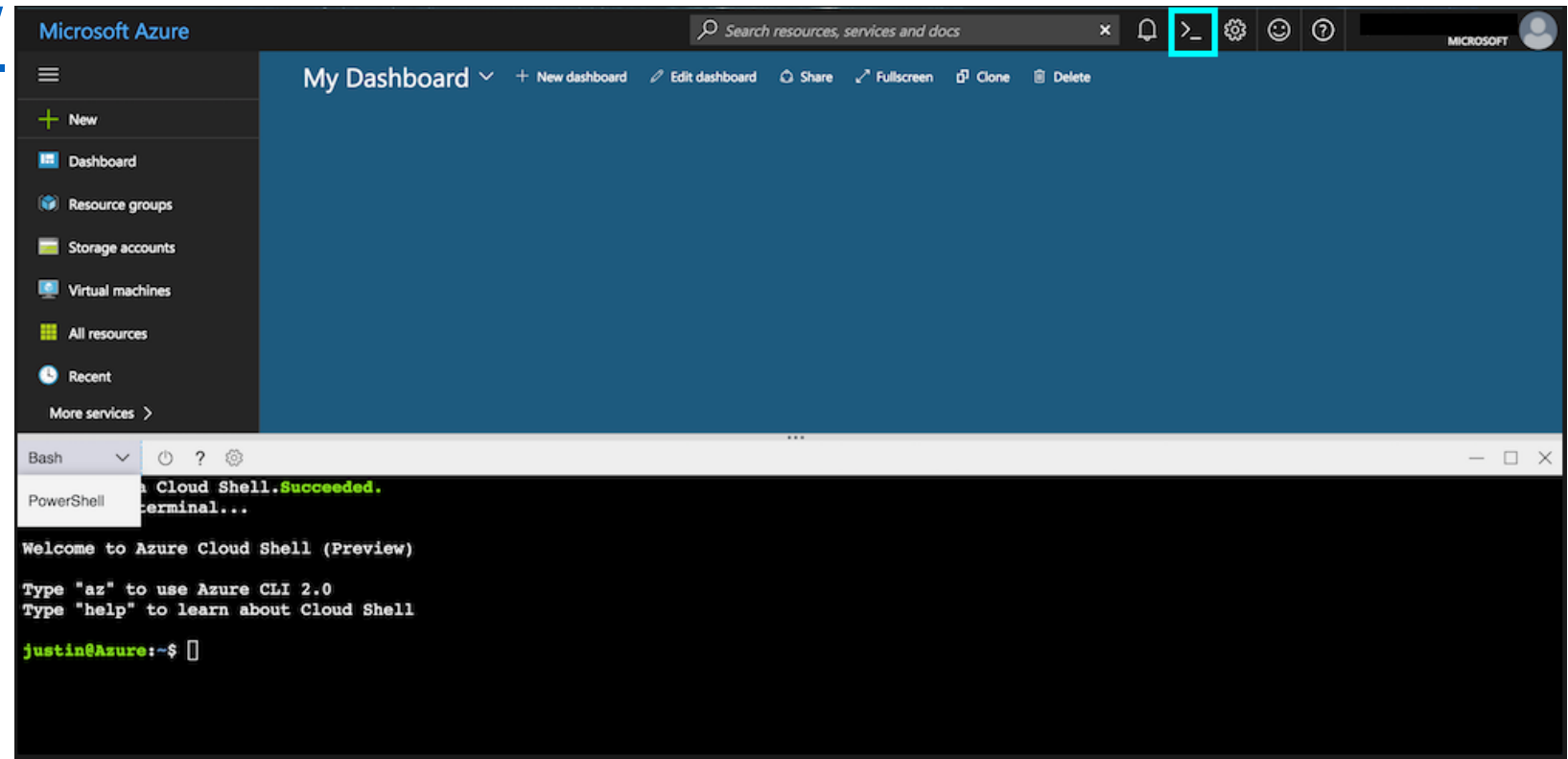
az account list

az account set --subscription "GlobalABC2018"

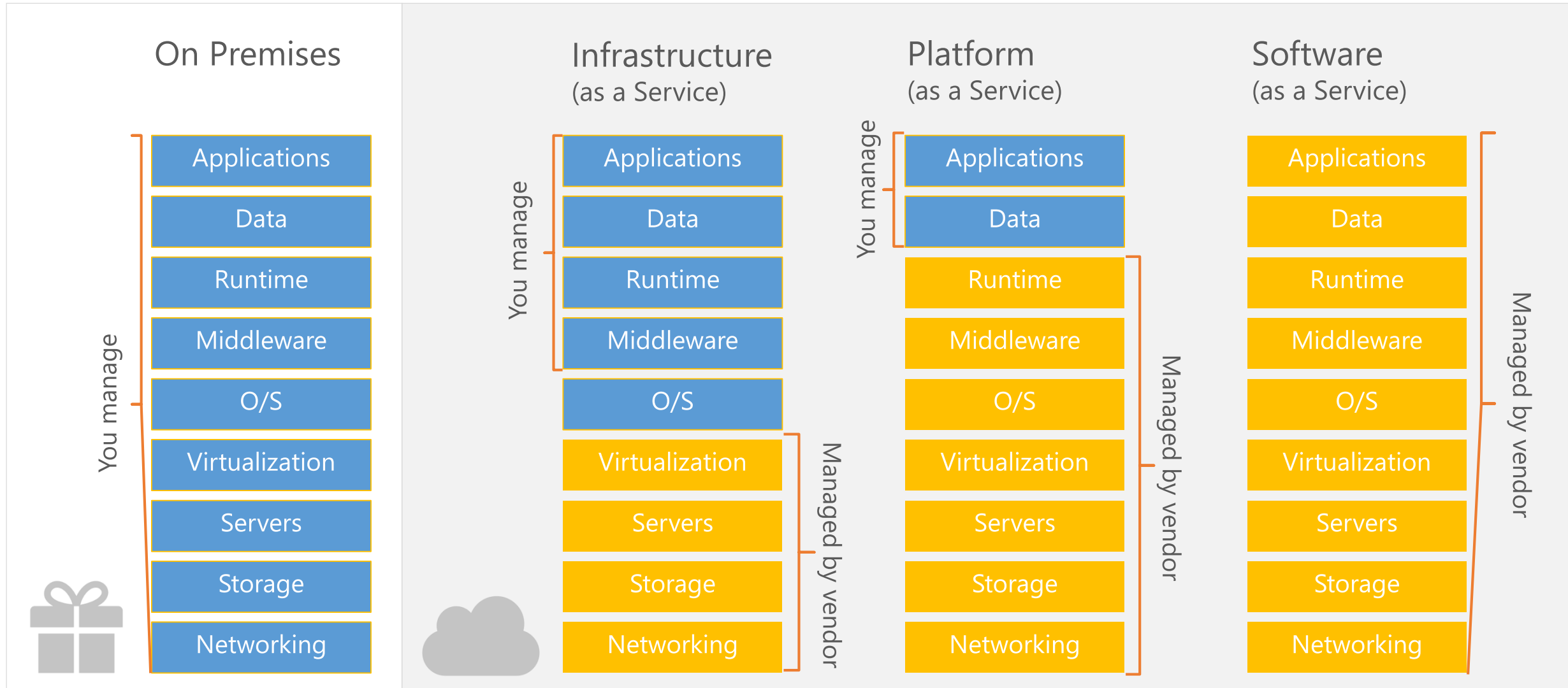
az vm create -n MyLinuxVM -g MyResourceGroup --
image UbuntuLTS

Shell.azure.com

- <https://docs.microsoft.com/es-es/azure/cloud-shell/overview>



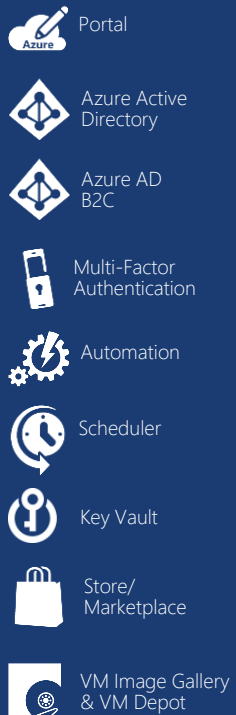
Arquitectura desde la linea de comandos



Azure offer

Platform Services

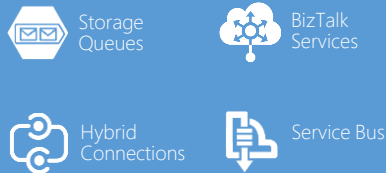
Security & Management



Services Compute



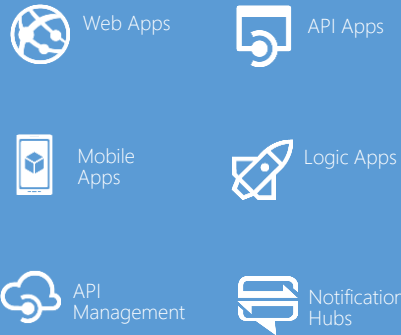
Integration



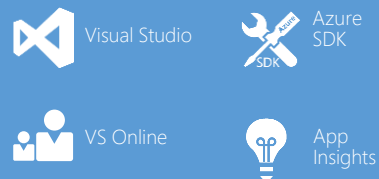
Media & CDN



Web and Mobile



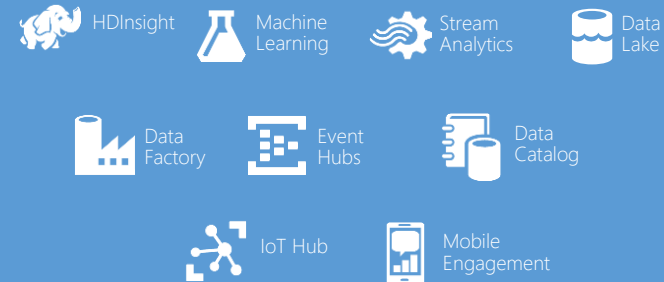
Developer Services



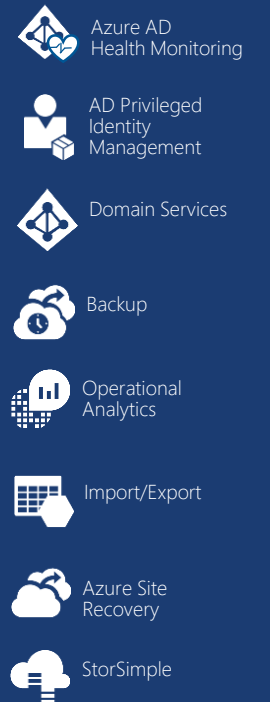
Data



Analytics & IoT



Hybrid Operations



Infrastructure Services

OS/Server Compute



Storage

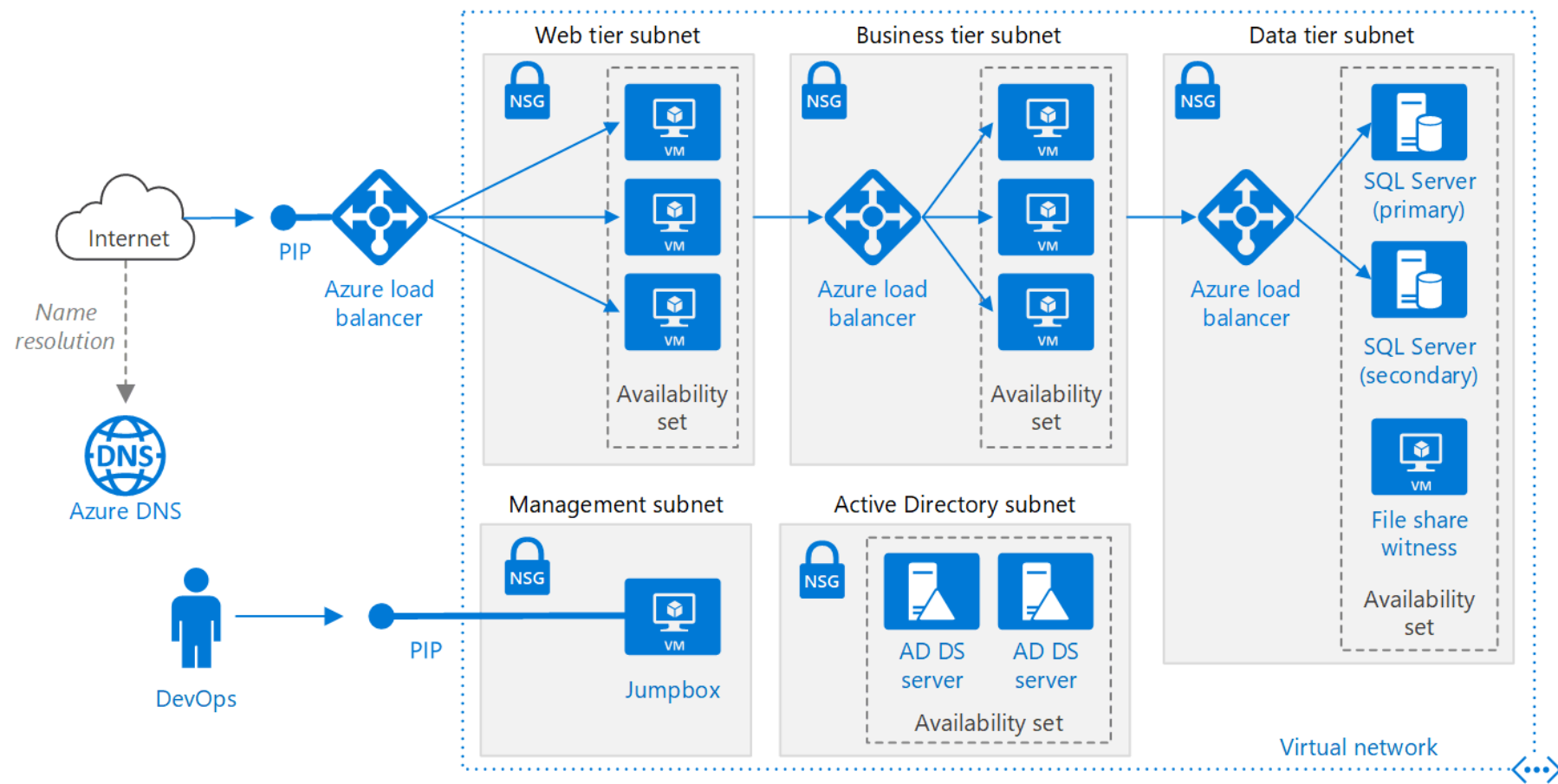


Networking





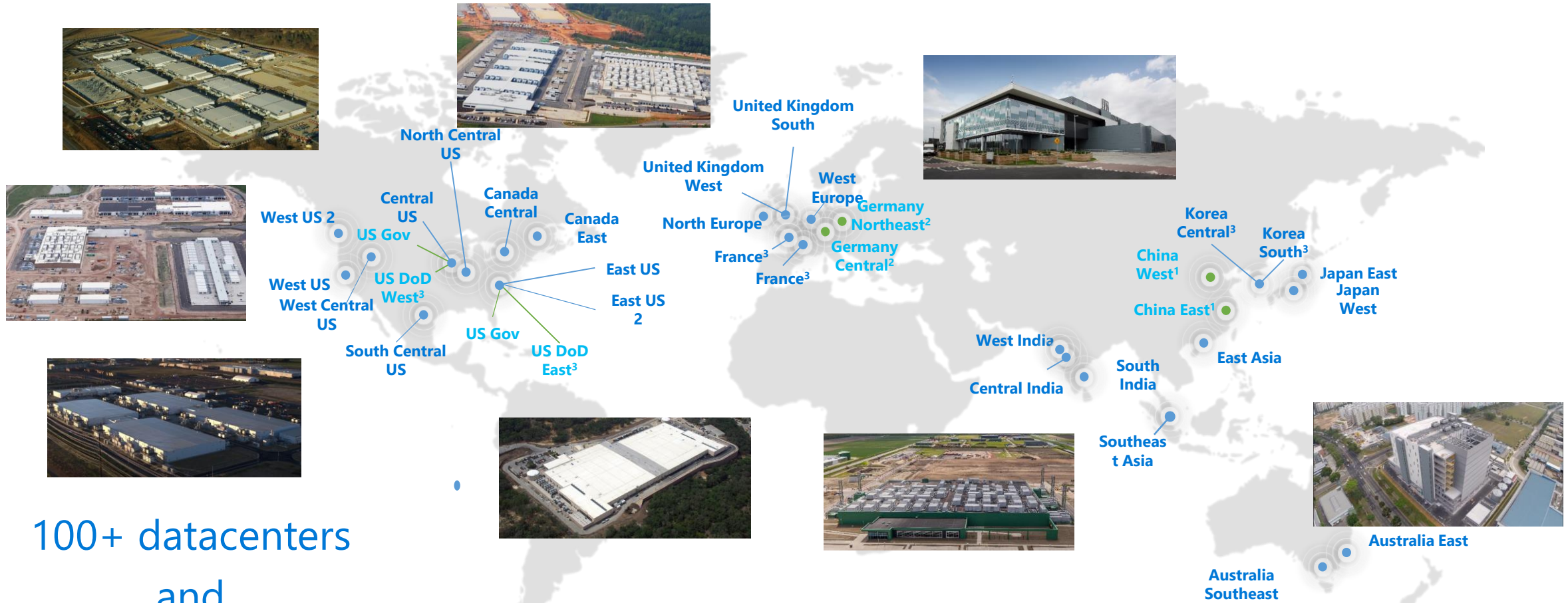
Lift and Shift





Service type	Custom name	Region	Description	SKU	Estimated Cost
Virtual Machines	Web Tier	East US	6 D11 v2 (2 vCPU(s), 14 GB RAM) x 732 Hours; Windows – (OS Only); Pay as you go; 4 managed OS disks – S15	997-03368, AAA-70156	\$1,270.47
Virtual Machines	Database Tier	East US	4 D4 v2 (8 vCPU(s), 28 GB RAM) x 732 Hours; Windows – SQL Server; Pay as you go; 4 managed OS disks – S30	N7H-07129, N9H-00910	\$11,710.72
Virtual Machines	Application Tier	East US	6 D4 v2 (8 vCPU(s), 28 GB RAM) x 732 Hours; Windows – (OS Only); Pay as you go; 6 managed OS disks – S15	997-03503, AAA-70156	\$4,238.96
Virtual Machines	1 Mgmt. VM, 2 ADFS	East US	3 D2 (2 vCPU(s), 7 GB RAM) x 732 Hours; Windows – (OS Only); Pay as you go; 3 managed OS disks – S15	997-00924, AAA-70156	\$551.53
VPN Gateway	Hybrid On Premise Connection	East US	VPN Gateways type, Basic VPN tier, 0 gateway hour(s), 1000 , VPN outbound VPN gateway type	Q5H-00003	\$73.58
Virtual Network	Virtual Networking		1000 data transfer from East US region to East US region		\$20.00
Azure DNS	10 Zones	East US	10 hosted DNS zones, 100 DNS queries		\$45.00
Azure DDoS Protection	Included	East US	There are no charges to use Azure DDoS Protection while in preview. When the service goes GA, pricing goes into effect. Customers will be notified 30 days prior to pricing changes.		\$0.00
Storage	Files, Pictures, Videos, etc.	East US	Block Blob Storage, General Purpose V2, LRS Redundancy, Hot Access Tier, 1000 Capacity, 100,000 Write operations, 100,000 List and Create Container Operations, 100,000 Read operations, 1 Other operations. 1,000 Data Retrieval, 1,000 Data Write	N9H-00074, N9H-01253, N9H-01253, N9H-01236, AAA-70098	\$18.56
Support			Free level	Support	\$0.00
				Monthly Total	\$17,928.83
				Annual Total	\$215,145.92

Azure visto como devops



100+ datacenters
and
Millions of Servers

■ Global datacenters
■ Sovereign datacenters

Grupos de recursos

- **PowerShell**

New-AzureRMResourceGroup –Name “GlobalAzureBC-RG” –Location “EastUS”

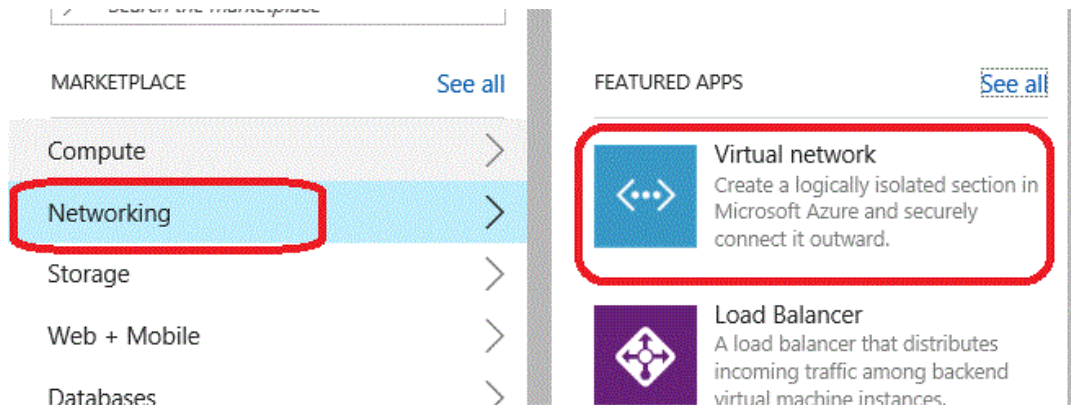
Get-AzureRMResourceGroup |FT

- **Azure CLI**

az group create --name “GlobalAzureBC-RG2” --location “westus”

az group delete –name “MyResourceGroup2”

Networking



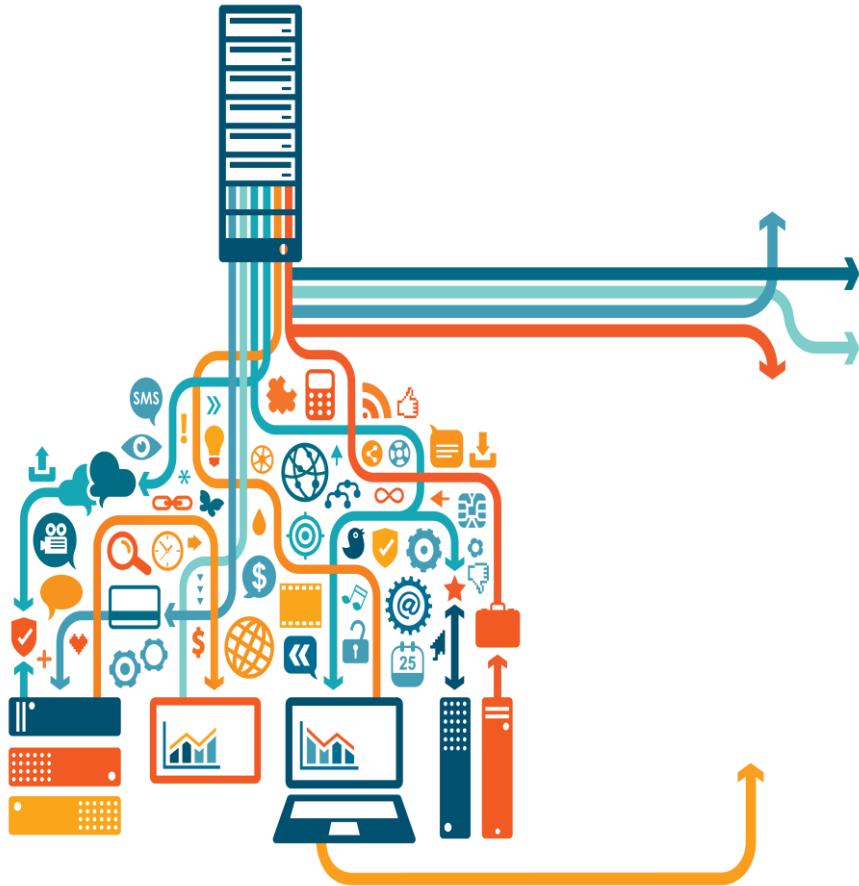
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Azure CLI

• Network Interface Cards

```
az network nic create --
resource-group AdatumRG
--name AdatumNIC --
location centralus --subnet
default --private-ip-address
192.168.0.10 --vnet-name
AdatumVNet
```

Storage Account



Azure CLI

- **Storage accounts**

```
az storage account create --location westus --name
anstorage99 --resource-group globalabc18 --sku Standard_LRS
```

```
az storage account show-connection-string --name anstorage99
--resource-group globalabc18
```

```
Export azure_storage_account=anstorage99
```

```
Export azure_storage_Access_key=<Key>
```

```
Export
azure_Storage_Connection_String="<connection_string>"
```

- **blobs**

```
az storage container create --name <container_name>
```

```
az storage blob upload --file <local_file_path> --
container-name <container_name> --name
<blob_name>
```

SQL

Azure CLI

```
#!/bin/bash

# Set an admin login and password for your database
export adminlogin=ServerAdmin
export password=ChangeYourAdminPassword1

# The logical server name has to be unique in the system
export servername=server-$RANDOM

# The ip address range that you want to allow to access your DB
export startip=0.0.0.0
export endip=0.0.0.0

# Create a resource group
az group create -name myResourceGroup --location westeurope

# Create a logical server in the resource group
az sql server create --name $servername --resource-group myResourceGroup --location westeurope --admin-user $adminlogin --admin-password $password

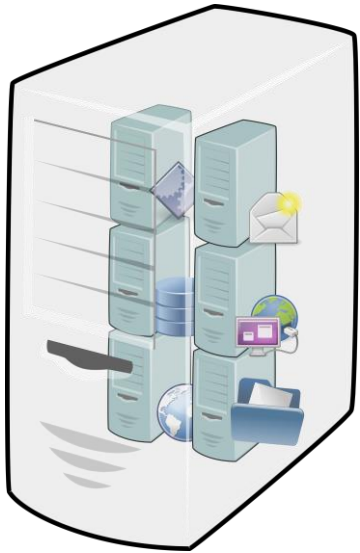
# Configure a firewall rule for the server
az sql server firewall-rule create --resource-group myResourceGroup --server $servername -n AllowYourIrp --start-ip-address $startip --end-ip-address $endip

# Create a database in the server with zone redundancy as true
az sql db create --resource-group myResourceGroup --server $servername --name mySampleDatabase --sample-name AdventureWorksLT --service-objective S0 --zone-redundant

# Update database and set zone redundancy as false
az sql db update --resource-group myResourceGroup --server $servername --name mySampleDatabase --zone-redundant false
```



VM



Azure CLI

```
#!/bin/bash
```

```
# Update for your admin password
```

```
AdminPassword=ChangeYourAdminPassword1
```

```
# Create a resource group.
```

```
az group create --name myResourceGroup --location westus
```

```
# Create a virtual machine.
```

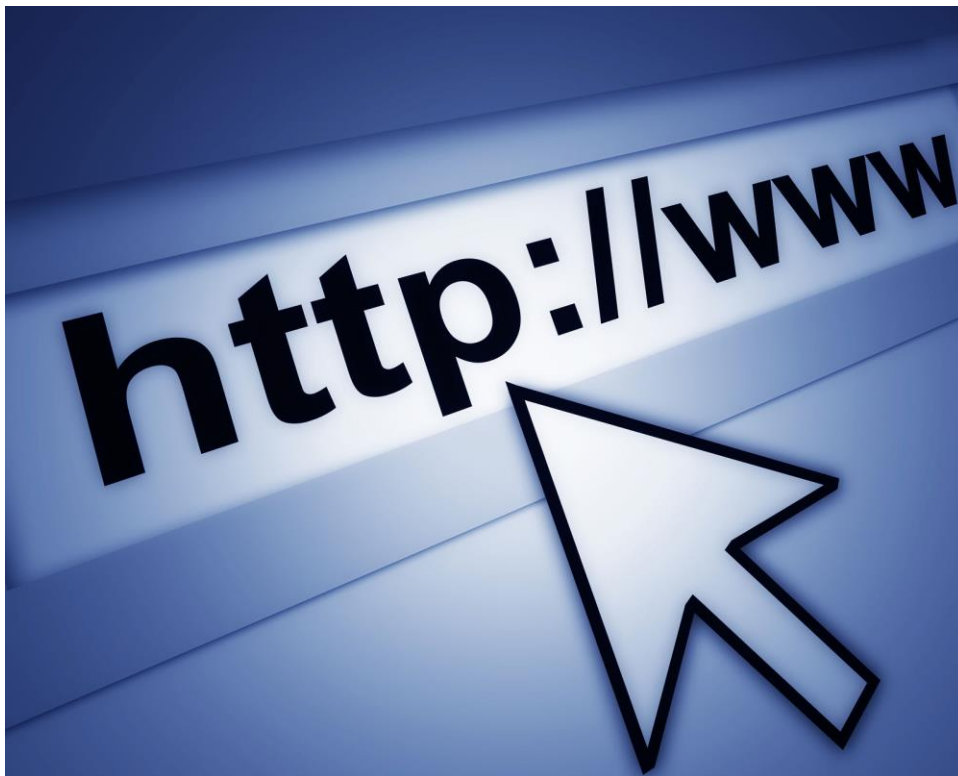
```
az vm create --resource-group myResourceGroup \
```

```
  --name myVM --image win2016datacenter \
```

```
  --admin-username azureuser \
```

```
  --admin-password $AdminPassword --no-wait
```

WebApps



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Azure CLI

```
#!/bin/bash

warurl=https://raw.githubusercontent.com/Azure-Samples/html-docs-hello-world/master/index.html

webappname=mywebapp$RANDOM

# Download sample static HTML page
curl $warurl --output index.html

# Create a resource group.

az group create --location westeurope --name myResourceGroup

# Create an App Service plan in 'FREE' tier.

az appservice plan create --name myAppServicePlan --resource-group myResourceGroup --sku FREE

# Create a web app.

az webapp create --name $webappname --resource-group myResourceGroup --plan myAppServicePlan

# Get FTP publishing profile and query for publish URL and credentials

creds=$(az webapp deployment list-publishing-profiles --name $webappname --resource-group myResourceGroup \

--query "[?contains(publishMethod, 'FTP')].publishUrl,userName,userPWD]" --output tsv))

# Use cURL to perform FTP upload. You can use any FTP tool to do this instead.

curl -T index.html -u ${creds[1]}:${creds[2]} ${creds[0]}/

# Copy the result of the following command into a browser to see the static HTML site.

echo http://$webappname.azurewebsites.net
```

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Demo



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En especial el resto del mundo Open source



Tools



Advanced workloads



Core infrastructure



Azure Stack + Hybrid

DevOps

Nagios



Management



Applications



App frameworks and tools



nodeJS



Databases and middleware



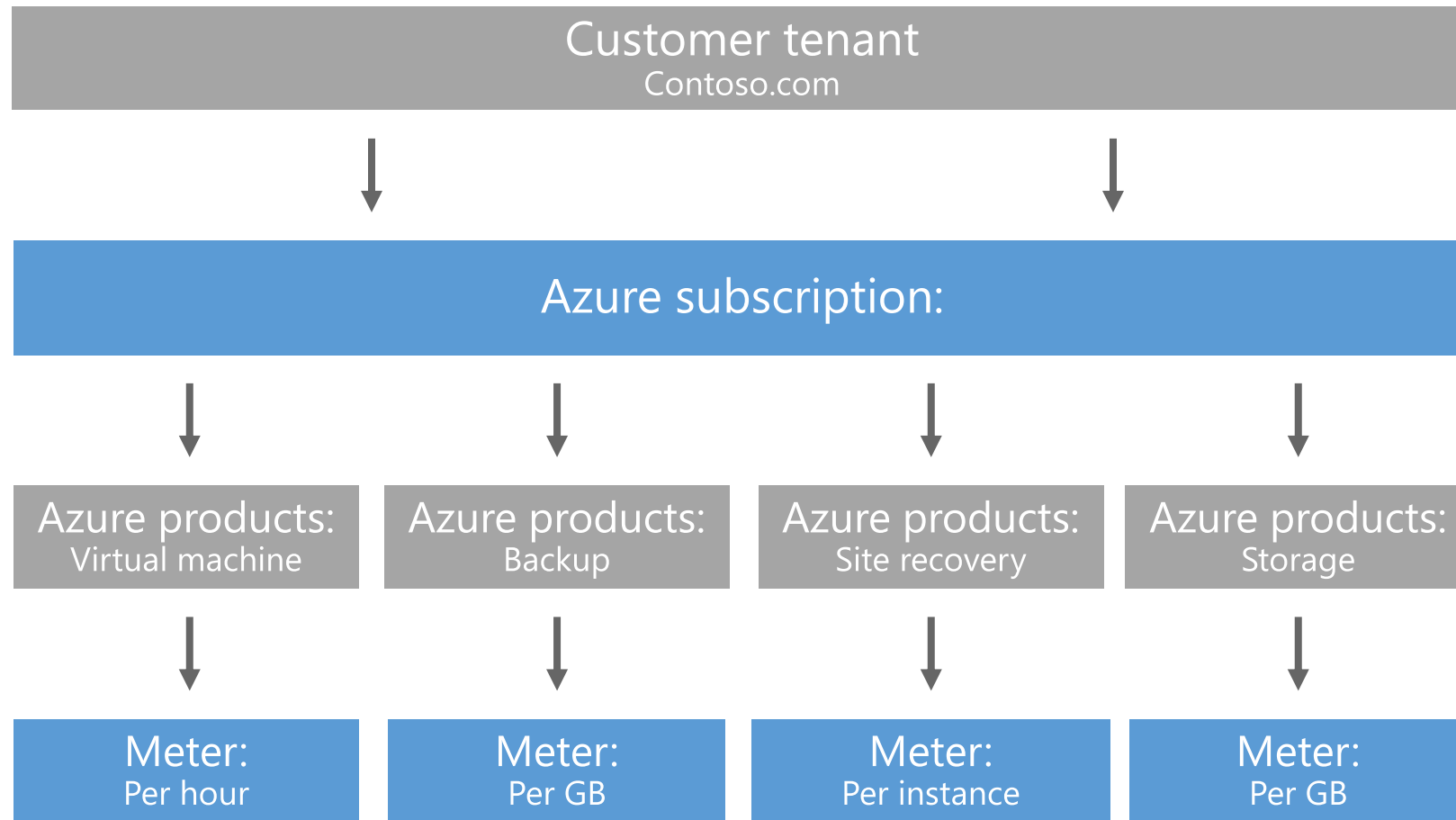
cloudera



Infrastructure



Azure Services account structure



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Preguntas?



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Muchas
Gracias



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