--Crear cuenta outlook.com gratis

Username: femero19783@outlook.com

--Crear cuenta azure gratis

<https://azure.microsoft.com/es-es/pricing/purchase-options/azure-account>

Femero19783@outlook.com

--Install Terraform

<https://developer.hashicorp.com/terraform/install>

--Install Azure Cli

<https://learn.microsoft.com/es-es/cli/azure/install-azure-cli-windows?tabs=azure-cli>

--Crear repositorio de GitHub para Terraform

git init

git add .

git commit -m "Se agrega el proyecto"

git branch -M main

git remote add origin <https://github.com/femero2/Terraform-iac-aks-main.git>

git push -u origin main

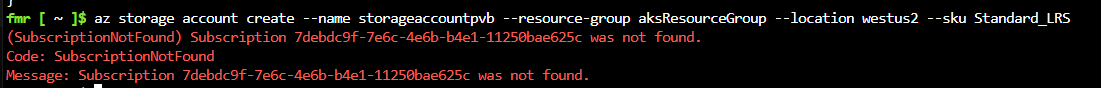
--Preparando ambiente

az group create --name aksResourceGroup --location westus2

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AI-generated content may be incorrect.

az storage account create --name storageaccountpvb --resource-group aksResourceGroup --location westus2 --sku Standard\_LRS



<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/resource-providers-and-types>

az provider list --query "[].{Provider:namespace, Status:registrationState}" --out table

A screenshot of a computer

AI-generated content may be incorrect.

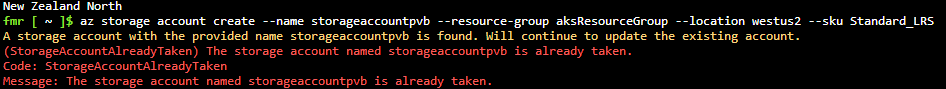
az provider register --namespace Microsoft.Storage

az provider show --namespace Microsoft.Storage

az provider show --namespace Microsoft.Storage --query "resourceTypes[\*].resourceType" --out table

az provider show --namespace Microsoft.Storage --query "resourceTypes[?resourceType=='storageAccounts'].apiVersions | [0]" --out table

az provider show --namespace Microsoft.Storage --query "resourceTypes[?resourceType=='storageAccounts'].locations | [0]" --out table



az storage account create --name storageaccountfmr2 --resource-group aksResourceGroup --location westus2 --sku Standard\_LRS

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AI-generated content may be incorrect.

az storage container create --name containerfmr2 --account-name storageaccountfmr2 --public-access blob

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AI-generated content may be incorrect.

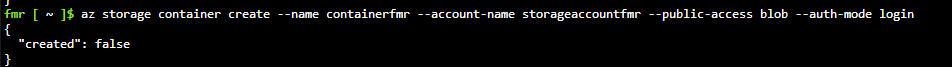
<https://learn.microsoft.com/en-us/azure/storage/blobs/authorize-data-operations-cli>

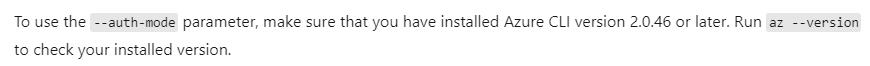
az storage container create --name containerfmr2 --account-name storageaccountfmr2 --public-access blob --auth-mode key --account-key "MXJNO3CEk+g8NvpfperTghzPQnJcrDgUrNwjt9YOI2RSA35fvZqgtX8yQ/j7sV8hInjUv82idyUM+ASt6PO+YQ=="

az storage container exists --account-name storageaccountfmr2 --name containerfmr2 --account-key "MXJNO3CEk+g8NvpfperTghzPQnJcrDgUrNwjt9YOI2RSA35fvZqgtX8yQ/j7sV8hInjUv82idyUM+ASt6PO+YQ=="

az storage container list --account-name storageaccountfmr2 --account-key "MXJNO3CEk+g8NvpfperTghzPQnJcrDgUrNwjt9YOI2RSA35fvZqgtX8yQ/j7sV8hInjUv82idyUM+ASt6PO+YQ=="

<https://learn.microsoft.com/en-us/cli/azure/storage/container?view=azure-cli-latest#az-storage-container-create>





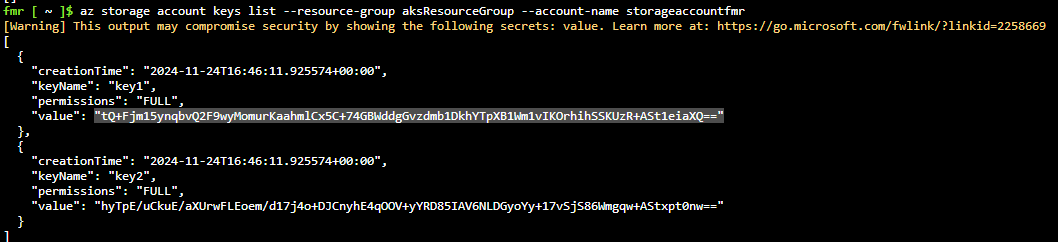
A screenshot of a computer

AI-generated content may be incorrect.

<https://learn.microsoft.com/en-us/azure/storage/blobs/assign-azure-role-data-access?tabs=portal>

<https://learn.microsoft.com/en-us/azure/role-based-access-control/role-assignments-portal>

az storage account keys list --resource-group aksResourceGroup --account-name storageaccountfmr

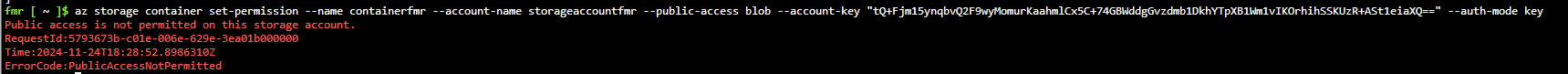


<https://learn.microsoft.com/es-es/azure/storage/blobs/blob-containers-portal>

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AI-generated content may be incorrect.

az storage container set-permission --name containerfmr2 --account-name storageaccountfmr2 --public-access blob --account-key "MXJNO3CEk+g8NvpfperTghzPQnJcrDgUrNwjt9YOI2RSA35fvZqgtX8yQ/j7sV8hInjUv82idyUM+ASt6PO+YQ==" --auth-mode key



<https://learn.microsoft.com/es-es/azure/storage/blobs/anonymous-read-access-configure?tabs=portal>

A screenshot of a computer

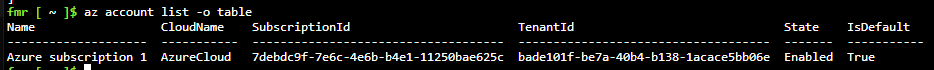
AI-generated content may be incorrect.

A screenshot of a computer

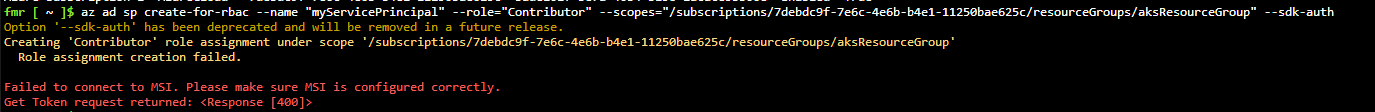
AI-generated content may be incorrect.

az ad sp create-for-rbac --name "myServicePrincipal" --role="Contributor" --scopes="/subscriptions/{subscription-id}/resourceGroups/aksResourceGroup" --sdk-auth

az account list -o table







az login --only-show-errors

az ad sp create-for-rbac --name "myServicePrincipal" --role="Contributor" --scopes="/subscriptions/4dc35885-692b-40aa-a6ca-d9586b1042d7/resourceGroups/aksResourceGroup" --sdk-auth

{

"clientId": "a9663795-1daa-4faf-9854-0d76cd793bc5",

"clientSecret": "o1V8Q~MDlJQWwtLHuKA~9DszuXnXrxqcITvK7beM",

"subscriptionId": "7debdc9f-7e6c-4e6b-b4e1-11250bae625c",

"tenantId": "bade101f-be7a-40b4-b138-1acace5bb06e",

"activeDirectoryEndpointUrl": "<https://login.microsoftonline.com>",

"resourceManagerEndpointUrl": "<https://management.azure.com/>",

"activeDirectoryGraphResourceId": "<https://graph.windows.net/>",

"sqlManagementEndpointUrl": "<https://management.core.windows.net:8443/>",

"galleryEndpointUrl": "<https://gallery.azure.com/>",

"managementEndpointUrl": "<https://management.core.windows.net/>"

}

az login --service-principal --username "243b0423-06e4-4456-a0f1-3855107ea21a" --password "aN-8Q~RqbbwNRnHm9p9MjoxsEBkOALUIKdum6b~U" --tenant "83f668cd-b27e-4d7a-94fb-1265bcac2897"

6. \*\*Add Federated Credential to Azure App Registration\*\*:

1. Go to the Azure Portal.

2. Select "Azure Active Directory" in the left sidebar.

3. Click on "App registrations" and select your app registration.

4. In the left sidebar, select "Certificates & secrets".

5. Click on the "Federated credentials" tab.

6. Click the "Add credential" button.

7. Configure the federated credential:

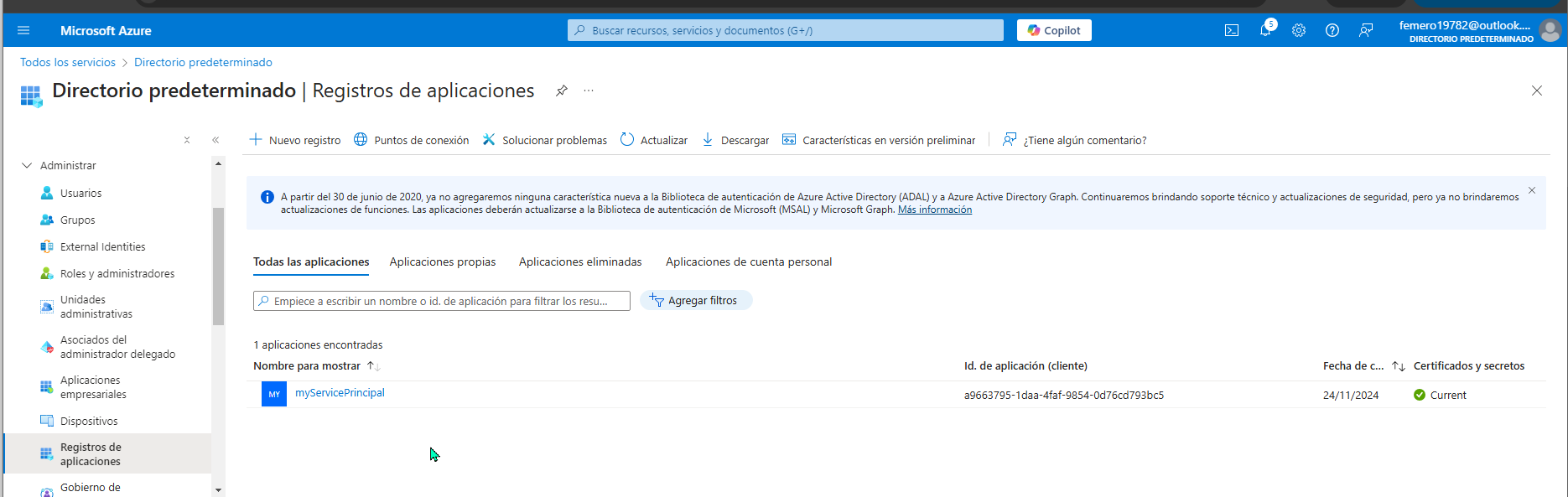
- \*\*Issuer\*\*: Select GitHub.

- \*\*Subject Identifier\*\*: Use the format repo:<GitHub-organization>/<GitHub-repository>:ref:refs/heads/<branch-name>.

- \*\*Name\*\*: Provide a name for the federated credential.

- \*\*Description\*\*: Optionally, provide a description.

8. Click the "Add" button to save the federated credential.



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<https://github.com/femero2>

<https://github.com/femero?tab=repositories>

--Crear repositorio de GitHub para Terraform infra

git init

git add .

git commit -m "Se agrega el proyecto"

git branch -M main

git remote add origin <https://github.com/femero2/Terraform-iac-aks-main.git>

git push -u origin main

git remote set-url origin NEW\_URL

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## Configuración de GitHub Actions

Para ejecutar el flujo de trabajo de Terraform en GitHub Actions, necesitas configurar los siguientes secretos en tu repositorio:

- `AZURE\_CLIENT\_ID`: El ID del cliente del Service Principal de Azure.

- `AZURE\_CLIENT\_SECRET`: El secreto del cliente del Service Principal de Azure.

- `AZURE\_TENANT\_ID`: El ID del inquilino de Azure.

- `AZURE\_SUBSCRIPTION\_ID`: El ID de la suscripción de Azure.

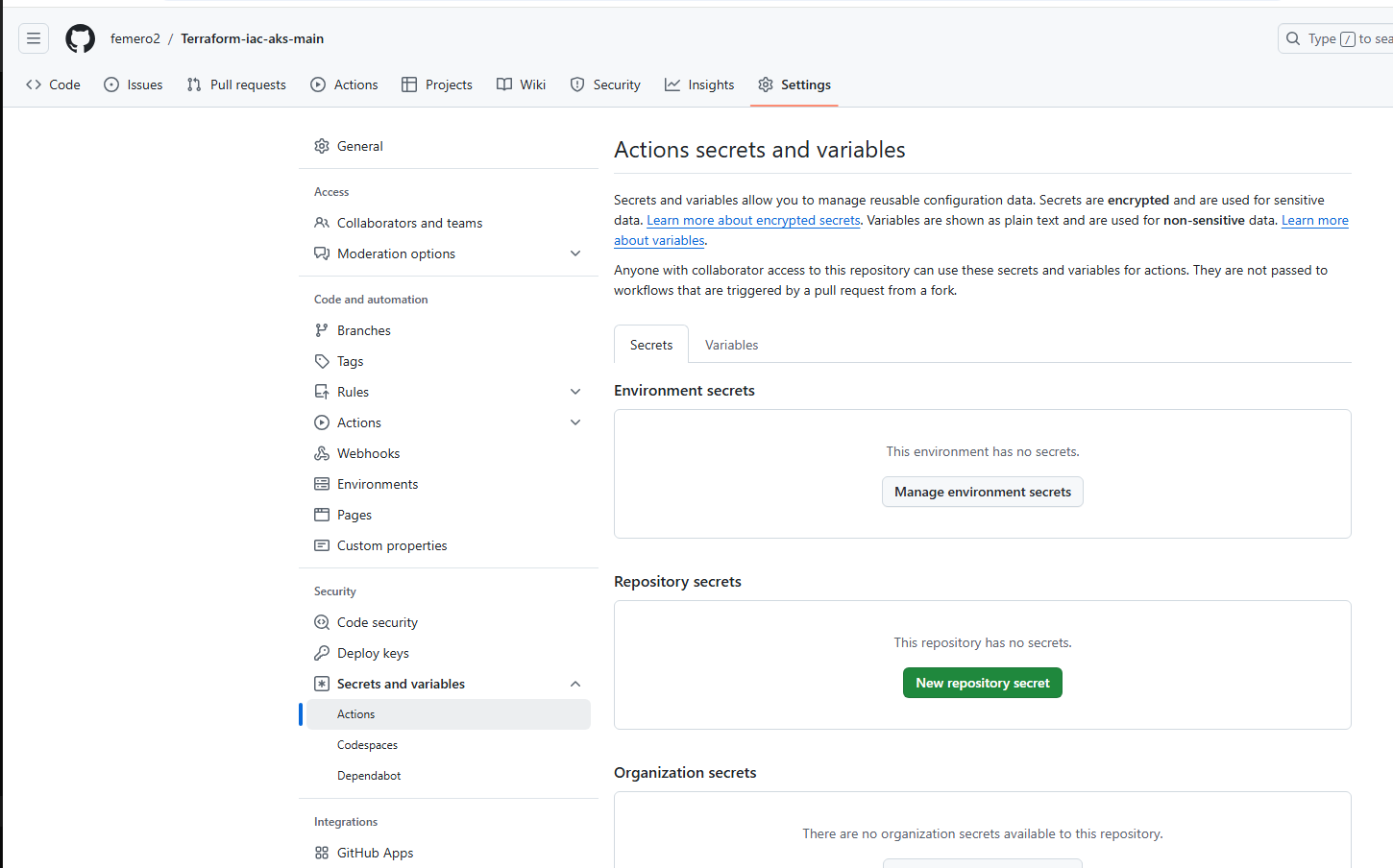
- `RESOURCE\_GROUP\_NAME`: El nombre del grupo de recursos de Azure.

- `STORAGE\_ACCOUNT\_NAME`: El nombre de la cuenta de almacenamiento de Azure.

- `CONTAINER\_NAME`: El nombre del contenedor de almacenamiento de Azure.

- `AKS\_CLUSTER\_NAME`: El nombre del clúster de AKS = aksfmr

- `ACR\_NAME`: El nombre del registro de contenedores de Azure.



az acr list --resource-group aksResourceGroup --output table

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AI-generated content may be incorrect.

--Crear repositorio de GitHub para Terraform artefacto

git init

git add .

git commit -m "Se agrega el proyecto"

git branch -M main

git remote add origin <https://github.com/femero2/GitHubActions-producer-main.git>

git push -u origin main

git remote set-url origin NEW\_URL

az provider list --query "sort\_by([?registrationState=='Registered'].{Provider:namespace, Status:registrationState}, &Provider)" --out table

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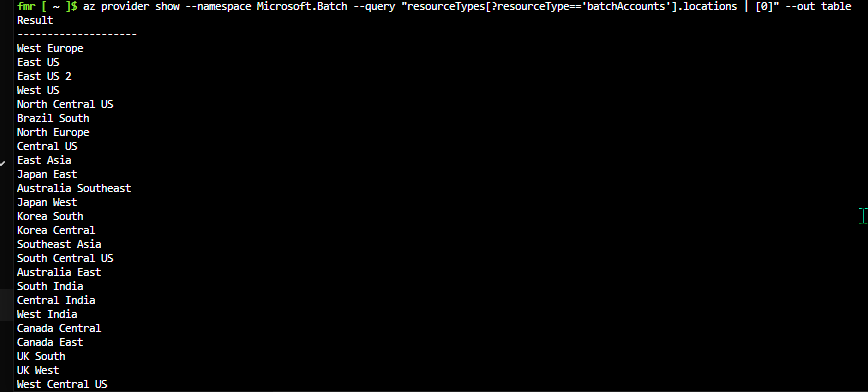
AI-generated content may be incorrect.

az provider show --namespace Microsoft.Batch --query "resourceTypes[?resourceType=='batchAccounts'].apiVersions | [0]" --out table

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AI-generated content may be incorrect.

az provider show --namespace Microsoft.Batch --query "resourceTypes[?resourceType=='batchAccounts'].locations | [0]" --out table



Get-AzureRmResourceProvider -ListAvailable | Select-Object ProviderNamespace | Foreach-Object { Register-AzureRmResourceProvider -ProviderName $\_.ProviderNamespace}

az provider register --namespace Microsoft.Batch

az provider show --namespace Microsoft.Batch

<https://learn.microsoft.com/en-us/azure/developer/terraform/get-started-azapi-resource>

az role assignment create --assignee "243b0423-06e4-4456-a0f1-3855107ea21a" --role "Contributor" --scope "/subscriptions/4dc35885-692b-40aa-a6ca-d9586b1042d7"

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AI-generated content may be incorrect.

az role assignment create --assignee "243b0423-06e4-4456-a0f1-3855107ea21a" --role "Owner" --scope "/subscriptions/4dc35885-692b-40aa-a6ca-d9586b1042d7"

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AI-generated content may be incorrect.

az login

az account set --subscription 4dc35885-692b-40aa-a6ca-d9586b1042d7

az aks get-credentials --resource-group aksResourceGroup --name aksfmr --overwrite-existing

kubectl get deployments --all-namespaces=true

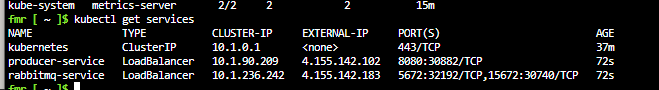
A screen shot of a computer

AI-generated content may be incorrect.

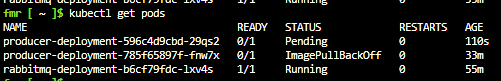
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AI-generated content may be incorrect.

kubectl get services



kubectl get pods



kubectl describe pods producer-deployment-785f65897f-fnw7x

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AI-generated content may be incorrect.

kubectl get nodes

kubectl describe node aks-default-50733833-vmss000000

az aks stop --name aksfmr --resource-group aksResourceGroup

az aks show --name aksfmr --resource-group aksResourceGroup

az aks start --name aksfmr --resource-group aksResourceGroup

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curl -X POST <http://4.155.167.202:8080/produce?message=Federico2> -H "cache-control: no-cache" -H "Content-type:application/json"

<http://4.149.72.4:15672/>

User: user

Pwd: user

A screenshot of a computer

AI-generated content may be incorrect.

kubectl get deployments --all-namespaces=true

kubectl delete deployment producer-deployment

kubectl delete deployment rabbitmq-deployment

kubectl get services

kubectl delete service producer-service

kubectl delete service rabbitmq-service

A screenshot of a computer

AI-generated content may be incorrect.

kubectl logs producer-deployment-6fcb8d9b8f-srrfb --tail=20

kubectl logs rabbitmq-deployment-fb7649d8d-sm6jv --tail=20

kubectl logs producer-deployment-6fcb8d9b8f-srrfb --follow

kubectl proxy

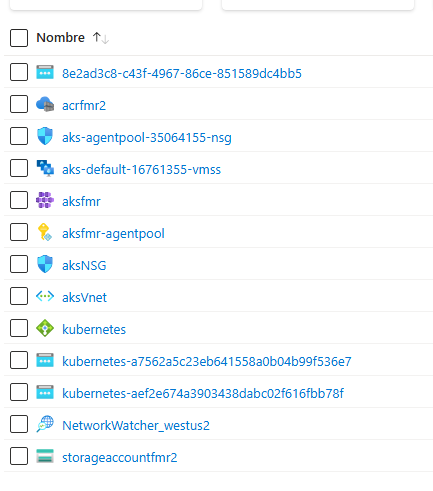
kubectl get nodes -o wide

kubectl get pods -o wide -A

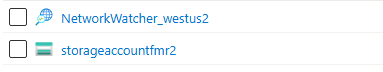
az aks get-versions --location westus2 --output table

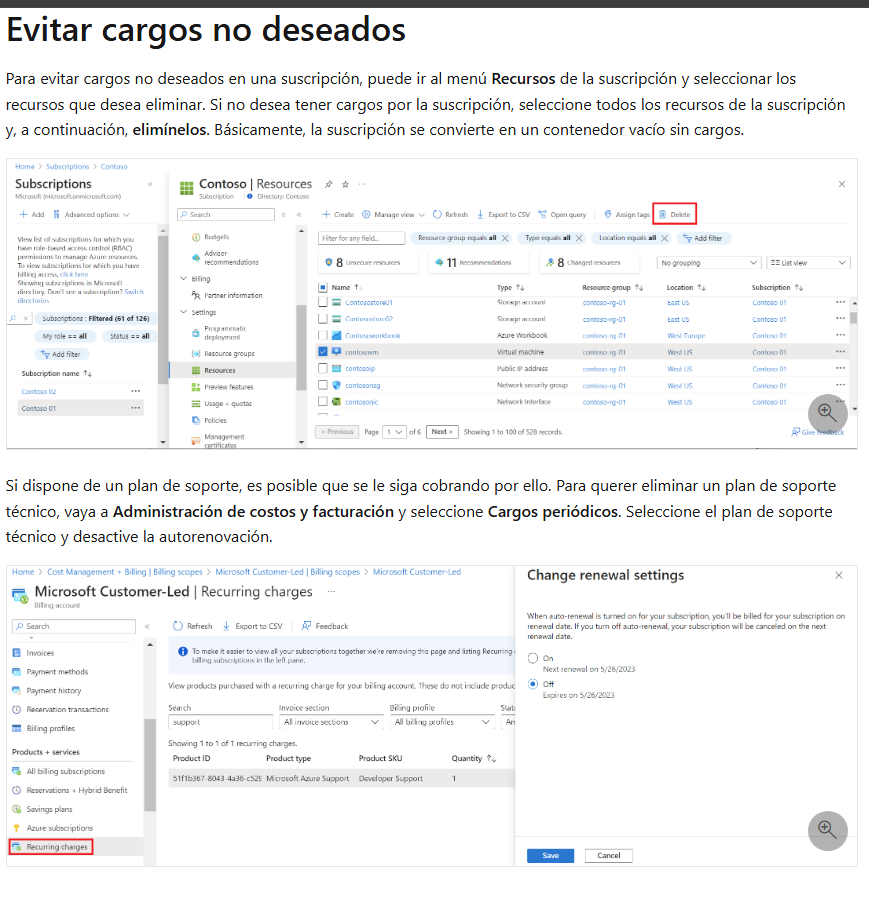
<https://medium.com/devops-dev/day-28-azure-kubernetes-service-aks-353e09f2629c>

ANTES



DESPUES





az group delete --name NetworkWatcherRG

az group delete --name aksResourceGroup