



Challenge 4 -- Part 1

Azure Cognitive Services

AI Infrastructure and Arch.

SAMRAT THAPA -- 200481763

# Using CLI to access Azure Services

```
Command Prompt
The following tenants don't contain accessible subscriptions. Use 'az login --allow-no-subscriptions' to have tenant level access.
da9a94b6-4681-49bc-bd7c-bab9eac0ad3c 'Georgian College'
68bc6278-7aeb-4bd8-a5c7-1bb6a423769e 'businessintel'
daa42394-642d-4045-8650-7a8e66199840 'BusinessIntell'
85eef715-df7c-4c90-b4d0-74ad3cc015ed 'Skinopathy'
No subscriptions found for 200481763@student.georgianc.on.ca.

C:\Users\tsamr>az login
A web browser has been opened at https://login.microsoftonline.com/organizations/oauth2/v2.0/authorize. Please continue the login in the web browser. If no web browser is available or if the web browser fails to open, use device code flow with 'az login --use-device-code'.
[
  {
    "cloudName": "AzureCloud",
    "homeTenantId": "da9a94b6-4681-49bc-bd7c-bab9eac0ad3c",
    "id": "8c1bcaa6-91ae-435f-9dcf-25a67d95315f",
    "isDefault": true,
    "managedByTenants": [],
    "name": "Azure for Students",
    "state": "Enabled",
    "tenantId": "da9a94b6-4681-49bc-bd7c-bab9eac0ad3c",
    "user": {
      "name": "200503303@student.georgianc.on.ca",
      "type": "user"
    }
  }
]
```

Command Prompt

List all the Cognitive Services accounts in a resource group.

[https://aka.ms/cli\\_ref](https://aka.ms/cli_ref)

Read more about the command in reference docs

```
C:\Users\tsamr>az cognitiveservices account list-kinds
```

```
[
  "AnomalyDetector",
  "CognitiveServices",
  "ComputerVision",
  "ContentModerator",
  "ConversationalLanguageUnderstanding",
  "CustomVision.Prediction",
  "CustomVision.Training",
  "Face",
  "FormRecognizer",
  "ImmersiveReader",
  "Internal.AllInOne",
  "LUIS",
  "LUIS.Authoring",
  "LanguageAuthoring",
  "MetricsAdvisor",
  "Personalizer",
  "QnAMaker.v2",
  "SpeechServices",
  "TextAnalytics",
  "TextTranslation"
]
```

```
C:\Users\tsamr>
```

Command Prompt

```
"CustomVision.Training",  
"Face",  
"FormRecognizer",  
"ImmersiveReader",  
"Internal.AllInOne",  
"LUIS",  
"LUIS.Authoring",  
"LanguageAuthoring",  
"MetricsAdvisor",  
"Personalizer",  
"QnAMaker.v2",  
"SpeechServices",  
"TextAnalytics",  
"TextTranslation"  
]
```

```
C:\Users\tsamr>az group create --location westus --resource-group MyAIInfraGroupSamrat
```

```
{  
  "id": "/subscriptions/8c1bcaa6-91ae-435f-9dc9-25a67d95315f/resourceGroups/MyAIInfraGroupSamrat",  
  "location": "westus",  
  "managedBy": null,  
  "name": "MyAIInfraGroupSamrat",  
  "properties": {  
    "provisioningState": "Succeeded"  
  },  
  "tags": null,  
  "type": "Microsoft.Resources/resourceGroups"  
}
```

```
C:\Users\tsamr>
```

[Home](#) >

## Resource groups

Georgian College (georgiancollege.onmicrosoft.com)

[+ Create](#) [Manage view](#) [Refresh](#) [Export to CSV](#) [Open query](#) [Assign tags](#)


[Subscription equals all](#) [Location equals all](#) [Add filter](#)

[0 Unsecure resources](#)

[0 Recommendations](#)

No grouping

List view

<input type="checkbox"/> Name ↑↓	Subscription ↑↓	Location ↑↓	
<input type="checkbox"/>  MyAinfraGroupSamrat	Azure for Students	West US	...

```
Command Prompt
}

C:\Users\tsamr>az cognitiveservices account create -n MyCognitiveService -g MyAIInfraGroupSamrat --kind Face --sku S0 -l
WestEurope --yes
Notice
I certify that use of this service is not by or for a police department in the United States.
{
  "etag": "\"7802e528-0000-0d00-0000-638c1e3e0000\"",
  "id": "/subscriptions/8c1bcaa6-91ae-435f-9dcb-25a67d95315f/resourceGroups/MyAIInfraGroupSamrat/providers/Microsoft.Cogn
itiveServices/accounts/MyCognitiveService",
  "identity": null,
  "kind": "Face",
  "location": "WestEurope",
  "name": "MyCognitiveService",
  "properties": {
    "allowedFqdnList": null,
    "apiProperties": null,
    "callRateLimit": {
      "count": null,
      "renewalPeriod": null,
      "rules": [
        {
          "count": 10.0,
          "dynamicThrottlingEnabled": null,
          "key": "face",
          "matchPatterns": [
            {
              "method": "*",
              "path": "face/*"
            }
          ],
          "minCount": null,
          "renewalPeriod": 1.0
        }
      ],
      "count": 500.0,
      "dynamicThrottlingEnabled": null,
      "key": "container.billing",
      "matchPatterns": [
        {
          "method": "*",
          "path": "billing/*"
        }
      ]
    }
  }
}
```

Home > Resource groups >

Resource groups

Georgian College (georgiancollege.onmicrosoft.co...)

+ Create

Manage view

...

Filter for any field...

Name ↑

MyInfraGroupSamrat

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Policies

Properties

Locks

Cost Management

Cost analysis

Cost alerts (preview)

Budgets

Advisor recommendations

MyInfraGroupSamrat

Resource group

+ Create

Manage view

Delete resource group

Refresh

Export to CSV

Open query

Assign tags

Move

Delete

Export template

...

Essentials

Subscription [\(more\)](#) : [Azure for Students](#)

Subscriptions ID : 8c1bcae8-91ae-433f-9d2b-25a67d95313f

Deployments : [No deployments](#)

Location : West US

Tags [\(edit\)](#) : [Click here to add tags](#)

Resources

Recommendations

Filter for any field...

Type equals all X

Location equals all X

Add filter

Showing 1 to 1 of 1 records. ☐ Show hidden types

No grouping

List view

Name ↑	Type ↑	Location ↑	
MyCognitiveService	Face API	West Europe	...

```
Command Prompt
"provisioningState": "Succeeded",
"publicNetworkAccess": "Enabled",
"quotaLimit": null,
"restore": null,
"restrictOutboundNetworkAccess": null,
"scheduledPurgeDate": null,
"skuChangeInfo": null,
"userOwnedStorage": null
},
"resourceGroup": "MyAIInfraGroupSamrat",
"sku": {
  "capacity": null,
  "family": null,
  "name": "S0",
  "size": null,
  "tier": null
},
"systemData": {
  "createdAt": "2022-12-04T04:12:44.954813+00:00",
  "createdBy": "200503303@student.georgianc.on.ca",
  "createdByType": "User",
  "lastModifiedAt": "2022-12-04T04:12:44.954813+00:00",
  "lastModifiedBy": "200503303@student.georgianc.on.ca",
  "lastModifiedByType": "User"
},
"tags": null,
"type": "Microsoft.CognitiveServices/accounts"
}

C:\Users\tsamr>az cognitiveservieces account delete --name MyCognitiveService --resource-group MyAIInfraGroupSamrat
'cognitiveservieces' is misspelled or not recognized by the system.
Did you mean 'cognitiveservices' ?

Examples from AI knowledge base:
https://aka.ms/cli\_ref
Read more about the command in reference docs

C:\Users\tsamr>az cognitiveservices account delete --name MyCognitiveService --resource-group MyAIInfraGroupSamrat

C:\Users\tsamr>
```



Home > Resource groups >

Resource groups

Georgian College (georgiancollege.onmicrosoft.co...

+ Create

Manage view

Filter for any field...

Name ↑

MyInfraGroupSamrat

MyInfraGroupSamrat

Resource group

Search

+ Create

Manage view

Delete resource group

Refresh

Export to CSV

Open query

Assign tags

Move

Delete

Export template

Essentials

Subscription [\(move\)](#) [Azure for Students](#)

Subscription ID : 8c1bcaa6-91ae-435f-9dcb-25a67d95315f

Deployments : [No deployments](#)

Location : West US

Tags [\(edit\)](#) [Click here to add tags](#)

Resources

Recommendations

Filter for any field...

Type equals all

Location equals all

Add filter

Showing 0 to 0 of 0 records

Show hidden types

No grouping

List view

Name ↑

Type ↑

Location ↑

No resources match your filters

Try changing or clearing your filters.

Create resources

Clear filters

Learn more

```
Command Prompt
"capacity": null,
"family": null,
"name": "S0",
"size": null,
"tier": null
},
"systemData": {
  "createdAt": "2022-12-04T04:12:44.954813+00:00",
  "createdBy": "200503303@student.georgianc.on.ca",
  "createdByType": "User",
  "lastModifiedAt": "2022-12-04T04:12:44.954813+00:00",
  "lastModifiedBy": "200503303@student.georgianc.on.ca",
  "lastModifiedByType": "User"
},
"tags": null,
"type": "Microsoft.CognitiveServices/accounts"
}

C:\Users\tsamr>az cognitiveservieces account delete --name MyCognitiveService --resource-group MyAIInfraGroupSamrat
'cognitiveservieces' is misspelled or not recognized by the system.
Did you mean 'cognitiveservices' ?

Examples from AI knowledge base:
https://aka.ms/cli\_ref
Read more about the command in reference docs

C:\Users\tsamr>az cognitiveservices account delete --name MyCognitiveService --resource-group MyAIInfraGroupSamrat

C:\Users\tsamr>az group create -n rg-example -l eastus
{
  "id": "/subscriptions/8c1bcaa6-91ae-435f-9dc6-25a67d95315f/resourceGroups/rg-example",
  "location": "eastus",
  "managedBy": null,
  "name": "rg-example",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}

C:\Users\tsamr>
```

Home 2

## Resource groups

Georgian College (georgiancollege-onmicrosoft.com)

[+ Create](#) [Manage view](#) [Refresh](#) [Export to CSV](#) [Open query](#) [Assign tags](#)

Filter for any field...

Subscription equals all

Location equals all

[Add filter](#)

 0 Unsecure resources

 0 Recommendations

No grouping

List view

<input type="checkbox"/> Name ↑	<input type="checkbox"/> Subscription ↑	<input type="checkbox"/> Location ↑	
<input type="checkbox"/> <a href="#">[9] MyAinfaGroupSamrat</a>	Azure for Students	West US	...
<input type="checkbox"/> <a href="#">[9] rg-example</a>	Azure for Students	East US	...

```
C:\Users\tsamr>az vm create -n vm-example -g rg-example --count 2 --size Standard_B1ls --image Debian --generate-ssh-key
```

Argument '--count' is in preview and under development. Reference and support levels: [https://aka.ms/CLI\\_refstatus](https://aka.ms/CLI_refstatus)  
SSH key files 'C:\Users\tsamr\.ssh\id\_rsa' and 'C:\Users\tsamr\.ssh\id\_rsa.pub' have been generated under ~/.ssh to allow SSH access to the VM. If using machines without permanent storage, back up your keys to a safe location.  
It is recommended to use parameter "--public-ip-sku Standard" to create new VM with Standard public IP. Please note that the default public IP used for VM creation will be changed from Basic to Standard in the future.

```
[
  {
    "additionalCapabilities": null,
    "applicationProfile": null,
    "availabilitySet": null,
    "billingProfile": null,
    "capacityReservation": null,
    "diagnosticsProfile": null,
    "evictionPolicy": null,
    "extendedLocation": null,
    "extensionsTimeBudget": null,
    "fqdns": "",
    "hardwareProfile": {
      "vmSize": "Standard_B1ls",
      "vmSizeProperties": null
    },
    "host": null,
    "hostGroup": null,
    "id": "/subscriptions/8c1bcaa6-91ae-435f-9dcb-25a67d95315f/resourceGroups/rg-example/providers/Microsoft.Compute/virtualMachines/vm-example0",
    "identity": null,
    "licenseType": null,
    "location": "eastus",
    "macAddresses": "60-45-BD-A8-4A-7F",
    "name": "vm-example0",
    "networkProfile": {
      "networkApiVersion": null,
      "networkInterfaceConfigurations": null,
      "networkInterfaces": [
        {
          "deleteOption": null,
          "id": "/subscriptions/8c1bcaa6-91ae-435f-9dcb-25a67d95315f/resourceGroups/rg-example/providers/Microsoft.Network/networkInterfaces/vm-exampleVMNic0",
          "primary": null,
```

## Resource groups

Georgian College (georgiancollege.onmicrosoft.co...

[+ Create](#) [Manage view](#) [...](#)

Filter for any field...

Name ↑

[rg-example](#) [...](#)

## rg-example

Resource group

[Search](#) [...](#)[Overview](#)[Activity log](#)[Access control \(IAM\)](#)[Tags](#)[Resource visualizer](#)[Events](#)[Settings](#)[Deployments](#)[Security](#)[Policies](#)[Properties](#)[Locks](#)[Cost Management](#)[Cost analysis](#)[Cost alerts \(preview\)](#)[Budgets](#)[Advisor recommendations](#)[Monitoring](#)[Insights \(preview\)](#)[Alerts](#)[Metrics](#)[Connect to external...](#)[+ Create](#) [Manage view](#) [Delete resource group](#) [Refresh](#) [Export to CSV](#) [Open query](#) [Assign tags](#) [Move](#) [Delete](#) [Export template](#) [...](#)[Essentials](#)Subscription (preview) [Azure for Students](#)Deployments: [1 Succeeded](#)

Subscription ID: Bc1bcaa6-91ae-435f-9ddc-25a67d95315f

Location: East US

Tags [Go to](#) [Click here to add tags](#)[Resources](#)[Recommendations](#)

Filter for any field...

Type equals all [×](#)Location equals all [×](#)[Add filter](#)Showing 1 to 10 of 10 records. [Show hidden types](#) [ⓘ](#)No grouping [▼](#)List view [▼](#)

<input type="checkbox"/> Name ↑	Type ↑	Location ↑	
<input type="checkbox"/> <a href="#">vm-example0</a>	Virtual machine	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-example0_OsDisk_1_aa066dbbf244ef3b0e3576b6c7e44c1</a>	Disk	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-example1</a>	Virtual machine	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-example1_OsDisk_1_58e10faf1bd74a81a402b7d0d9f9ec03</a>	Disk	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-examplef45G</a>	Network security group	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-examplePublicIP0</a>	Public IP address	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-examplePublicIP1</a>	Public IP address	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-exampleVMNic0</a>	Network interface	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-exampleVMNic1</a>	Network interface	East US	<a href="#">...</a>
<input type="checkbox"/> <a href="#">vm-exampleVNET</a>	Virtual network	East US	<a href="#">...</a>

# Creating Cognitive Service Resource

Home > Create a resource > Marketplace > Cognitive Services >

## Create Cognitive Services

Basics Network Identity Tags Review + create

Get access to Vision, Language, Search, and Speech Cognitive Services with a single API key. Quickly connect services together to achieve more insights into your content and easily integrate with other services like Azure Search.

[Learn more](#)

**Project Details**

Subscription \*

Resource group \*  [Create new](#)

**Instance Details**

Region

Name \*

Location specifies the region only for included regional services. This does not specify a region for included non-regional services. Custom Voice service is not available in this region. [Click here for more details.](#)

Pricing tier \*

[View full pricing details](#)


By checking this box I acknowledge that I have read and understood all the terms below \*

**Responsible AI Notice**

[Review + create](#) [Previous](#) [Next: Network >](#)


[Give feedback](#)


[Home](#)


 **Microsoft.CognitiveServicesAllInOne-20221203232805** | Overview [🔗](#) [⋮](#)


Deployment


[Delete](#) [Cancel](#) [Redeploy](#) [Download](#) [Refresh](#)



 Overview

 Inputs

 Outputs

 Template

 **Your deployment is complete**

 Deployment name: Microsoft.CognitiveServicesAllInOne-20221203... Start time: 12/3/2022, 11:30:18 PM  
Subscription: Azure for Students Correlation ID: 4b1fb450-ad10-415e-b6ca-84a59a2f0009   
Resource group: AisntraResourceGroup


Deployment details


Next steps

[Go to resource](#)

Give feedback

[Tell us about your experience with deployment](#)

**Cost Management**  
Get notified to stay within your budget and prevent unexpected charges on your bill.  
[Set up cost alerts >](#)

**Microsoft Defender for Cloud**  
Secure your apps and infrastructure  
[Go to Microsoft Defender for Cloud >](#)

**Free Microsoft tutorials**  
[Start learning today >](#)

**Work with an expert**  
Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.  
[Find an Azure expert >](#)

## Azure services



## Resources

Recent Favorite

Name	Type	Last Viewed
 cognitive-service-aiinfra	Cognitive Service	a few seconds ago
 aiinfra-resource-group	Resource group	a few seconds ago
 rg-example	Resource group	4 minutes ago
 NetworkWatcherQ	Resource group	4 minutes ago
 Azure for Students	Subscription	2 weeks ago
<a href="#">See all</a>		

## Navigate



## Tools





An aerial photograph of a multi-lane highway bridge spanning a body of water. The bridge has several lanes in each direction, with white lane markings. Several vehicles, including cars and trucks, are visible on the bridge. The water is a deep teal color with visible ripples. In the top right corner, there is a solid red rectangle.

Thank You