

AI Services



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AI Services

Agenda



- What is Azure AI Services?
- Getting started
- Monitoring



What is Azure AI Services?

AI Services

What is Azure AI Services?



Decision

Make smarter decisions faster with Decision services

Decision



Document Intelligence

Extract key-value pairs, text, and tables from your documents

Document Intelligence



Metrics Advisor

Monitor metrics and diagnose issues

Metrics Advisor



Speech

Build voice-enabled solutions confidently and quickly with Speech services

Speech



Vision

Identify and analyze content within images and videos with Vision services

Vision

- Provides multiples AI services:
 - Decision
 - Language
 - Speech
 - Vision
 - Document Intelligence
 - Metrics Advisor



Language

Extract meaning from unstructured text with Language services

Language




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Getting started

AI Services


Clone GitHub Repo

 **mslearn-ai-services** Public archive


Watch 9









main 1 Branch 0 Tags

<> Code

 **ivorb** Update README for archiving ✓

59678bf · 3 months ago

 **114 Commits**

 Instructions	Added steps for Key Vault creation and access policy setup v...	3 months ago
 Labfiles	Added Labfiles for lab 05	3 months ago
 .gitignore	new file: .gitignore	6 months ago
 LICENSE	Initial commit	2 years ago
 README.md	Update README for archiving	3 months ago
 _build.yml	initial commit of pages files	2 years ago
 _config.yml	initial commit of pages files	2 years ago
 index.md	Update index.md	3 months ago

[GitHub Repo](#)

AI Services

Create AI Services



azure-ai-start | Keys and Endpoint

Azure AI services multi-service account



Regenerate Key1



Regenerate Key2



Overview



Activity log



Access control (IAM)



Tags



Diagnose and solve problems



Resource visualizer



Resource Management



Keys and Endpoint



Pricing tier



Networking



Identity



Cost analysis



Properties



> Security



> Monitoring



> Automation



> Help



These keys are used to access your Azure AI Foundry API. Do not share your keys. Store them securely—for example, using Azure Key Vault. We also recommend regenerating these keys regularly. Only one key is necessary to make an API call. When regenerating the first key, you can use the second key for continued access to the service.

Show Keys

KEY 1

.....



KEY 2

.....



Location/Region ⓘ

eastus



Endpoint

https://azure-ai-start.cognitiveservices.azure.com/



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AI Services

Run Sample Script

```
scripts > mslearn-ai-services > Labfiles\01-use-azure-ai-services\Python\sdk-client.py
You, 11 minutes ago | 1 author
1 AI_SERVICE_ENDPOINT=https://ai.azure.com/endpoint?api-version=2023-05-01
2 AI_SERVICE_KEY=B8b7XJ...
```

```
(udemy-azureai102) C:\Temp\Udemy AzureAI102\scripts\mslearn-ai-services\Labfiles\01-use-azure-ai-services\Python\sdk-client>python sdk-client.py
```

```
Enter some text ("quit" to stop)
hallo wie geht es dir?
Language: German
```

```
Enter some text ("quit" to stop)
quit
```



Monitoring

AI Services


















Monitoring - Alert config

[Home](#) > [azure-ai-start](#)




















azure-ai-start | Alerts

Azure AI services multi-service account

-  Overview
-  Activity log
-  Access control (IAM)
-  Tags
-  Diagnose and solve problems
-  Resource visualizer
-  Resource Management
 -  Keys and Endpoint
 -  Pricing tier
 -  Networking
 -  Identity
 -  Cost analysis
 -  Properties
- > Security
- > Monitoring
 -  **Alerts**
 -  Metrics
 -  Diagnostic settings
 -  Logs
- > Automation
- > Help

Select a signal

 Processed Text Records	Platform metrics
 QA Text Records	Platform metrics
 Ratelimit	Platform metrics
 Server Errors	Platform metrics
 Speaker Recognition Transactions	Platform metrics
 Speech Model Hosting Hours	Platform metrics
 Successful Calls	Platform metrics
 Synthesized Characters	Platform metrics
 Text Characters Translated	Platform metrics
 Text Custom Characters Translated	Platform metrics
 Text Trained Characters	Platform metrics
 Total Calls	Platform metrics
 Total Errors	Platform metrics
 Total Token Calls	Platform metrics
 Total Transactions (Deprecated)	Platform metrics
 Translator Pro App Seconds	Platform metrics
 Video Seconds Synthesized	Platform metrics
 Voice Model Hosting Hours	Platform metrics
 Voice Model Training Minutes	Platform metrics

Apply

Cancel



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Monitoring – Alert config

[Home](#) > [azure-ai-start](#) | Alerts >

Create an alert rule

Scope **Condition** Actions Details Tags Review + create

Configure when the alert rule should trigger by selecting a signal and defining its logic.

Signal name ⓘ

Total Calls

[See all signals](#)

Alert logic

ⓘ We have set the condition configuration automatically based on popular settings for this metric. Please review and make changes as needed.

Threshold type ⓘ ☒ Static ☐ Dynamic

Aggregation type ⓘ

Total

Value is ⓘ

Greater than

Unit ⓘ

Count

Threshold ⓘ

2

Split by dimensions

Use dimensions to monitor specific time series and provide context to the fired alert. [About monitoring multiple time series](#)

Dimension name	Operator	Dimension values	Include all future values
<div>Select dimension</div>	<div>=</div>	<div>0 selected</div> <div>Add custom value</div>	<input type="checkbox"/>

When to evaluate

Check every ⓘ

1 minute

Lookback period ⓘ

5 minutes

+ Add condition

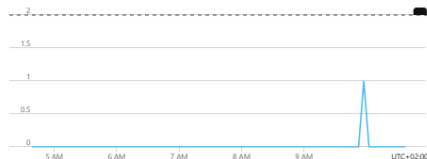
Preview

\$0.10 USD/month

Whenever the total Total Calls is greater than 2

Preview time range : Over the last 6 hours

Time series : Aggregate



Total Calls (Sum), azure-ai-start | 1

[Review + create](#)

[Previous](#)

[Next: Actions >](#)



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Monitoring – Action Group

[Home](#) > [azure-ai-start | Alerts](#) > [Create an alert rule](#) >

Create action group ...

[Basics](#) [Notifications](#) [Actions](#) [Tags](#) [Review + create](#)

Choose how to get notified when the action group is triggered. This step is optional.

Notification type ⓘ	Name ⓘ	Selected ⓘ
Email/SMS message... ▼	Email to private ✓	Email  
▼		



AI Services

Monitoring – Action Group

[Home](#) > [azure-ai-start | Alerts](#) >

Create an alert rule ...

[Scope](#) [Condition](#) [Actions](#) [Details](#) [Tags](#) [Review + create](#)

Product details

Metric alert rule

1 Condition	Total pricing
Terms of use Privacy statement	0.10 USD/month
	Pricing

Scope

Scope level

Resource

🔑 Subscription

🔑 Azure subscription 1 > [UdemyCourse](#) > [azure-ai-start](#)

Condition

Signal name	TotalCalls
Operator	Greater than
Aggregation type	Total
Threshold value	2
Lookback period	5 minutes
Check every	1 minute

Actions

Action group name	Contain actions
ag1	1 Email ⓘ

Details

Project details

Subscription	Azure subscription 1
Resource group	UdemyCourse
Region	global

Create

Previous



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AI Services

Monitoring – Metrics

Home > azure-ai-start



azure-ai-start | Metrics

Azure AI services multi-service account



Can I get alerted based on live metrics?

What metrics do people commonly use to track this kind of resource?

How can I programmatically access Azure metrics?



Search

0 <<

+ New chart Refresh Share

Local Time: Last 24 hours (Automatic - 5 minutes)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Resource Management

Keys and Endpoint

Pricing tier

Networking

Identity

Cost analysis

Properties

> Security

> Monitoring

Alerts

Metrics

Diagnostic settings

Logs

> Automation

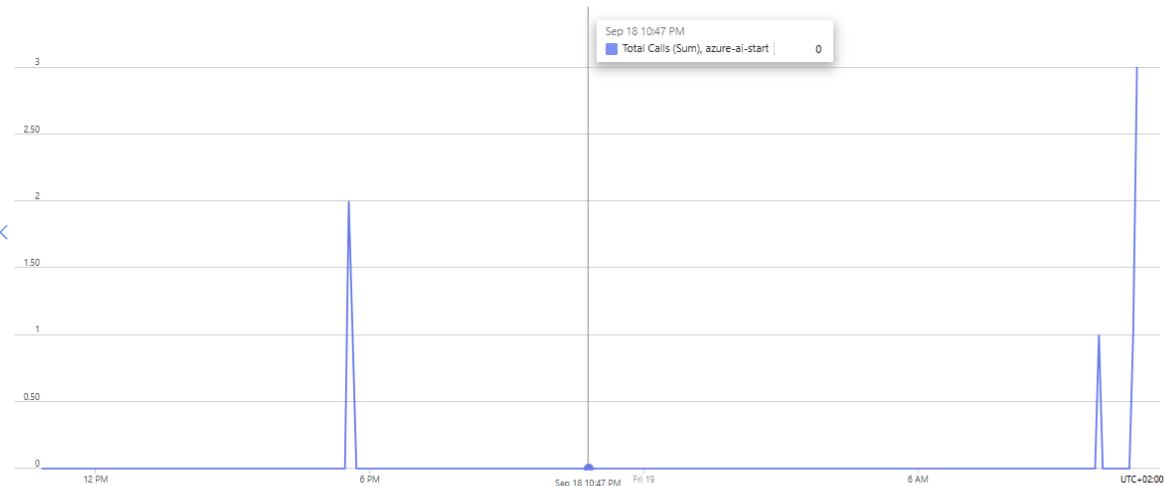
> Help

Sum Total Calls for azure-ai-start

+ Add metric Add filter Apply splitting

Line chart Drill into Logs New alert rule Save to dashboard

azure-ai-start, Total Calls, Sum



Total Calls (Sum), azure-ai-start | 0

Using Containers

AI Services

Using Containers

[Home](#) > [Container instances](#) >

Create container instance

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ Azure subscription 1

Resource group * ⓘ UdemyCourse

[Create new](#)

Container details

Container name * ⓘ mysentiment2 ✓

Region * ⓘ (US) East US

Availability zones (Preview) ⓘ None

SKU Standard

Image source * ⓘ

- ☐ Quickstart images
☐ Azure Container Registry
☒ Other registry

⚠ Please be aware that Docker Hub has recently introduced a pull rate limit on Docker images. When specifying an image from the Docker Hub registry, this may impact the creation of your container instance. [Learn more](#) ⓘ

Run with Azure Spot discount ⓘ

☐

ⓘ Spot containers are not available in the selected region. [Learn more](#) ⓘ

Image type * ⓘ

- ☒ Public ☐ Private

Image * ⓘ mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment3.0-en ✓

ⓘ If not specified, Docker Hub will be used for the container registry and the latest version of the image will be pulled.

OS type *

- ☒ Linux ☐ Windows

ⓘ This selection must match the OS of the image chosen above.

Size * ⓘ

1 vcpu, 4 GiB memory, 0 gpus

[Change size](#)

[Review + create](#)

[< Previous](#)

[Next : Networking >](#)

[Basics](#) [Networking](#) [Monitoring](#) [Advanced](#) [Tags](#) [Review + create](#)

Configure additional container properties and variables.

Restart policy ⓘ

On failure

Environment variables

Mark as secure	Key	Value
Yes	ApiKey
No	Billing	https://azure-ai-start.cognitives...
No	Eula	accept
No		

Command override ⓘ

[]

Example: ["/bin/bash", "-c", "echo hello; sleep 100000"]











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Using Containers


[Home](#) > [Microsoft.ContainerInstances-20250919113843](#) | [Overview](#) >

 **mysentiment2**
Container instances


  Start  Restart  Stop  Delete  Refresh  Give feedback

Overview


 Activity log

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 Resource visualizer

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Essentials

Resource group (move) : [UdemyCourse](#)

Status : Running

Location : East US

Subscription (move) : [Azure subscription 1](#)

Subscription ID : 9b8688c3-4700-4975-8bcf-8ad3a2248379

Tags (edit) : [Add tags](#)

SKU : Standard

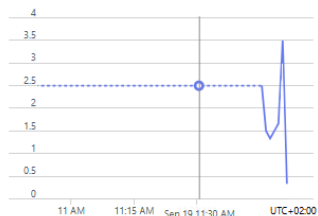
OS type : Linux

IP address (Public) : 4.157.126.95

FQDN : **mysentimentcontainer.byfrf6cfrecbhaq.eastus.azurecontainer.io**

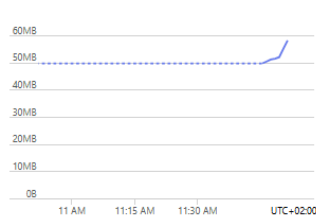
Container count : 1

CPU (millicores)



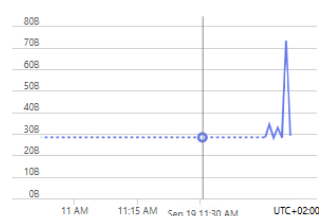
CPU Usage (Avg), mysentiment2 | --

Memory



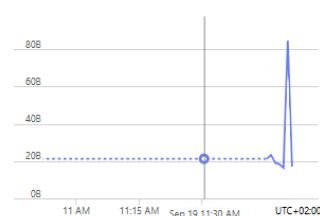
Memory Usage (Avg), mysentiment2 | 52.88MB

Network bytes received



Network Bytes Received Per Second (Avg), myse... | --

Network bytes transmitted



Network Bytes Transmitted Per Second (Avg), my... | --



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Test Container

```
curl -X POST "mysentimentcontainer.byfrf6cfcrecbhaq.eastus.azurecontainers.io:5000/text/analytcs/v3.1/sentiment" -H "Content-Type: application/json" --data-ascii '{"documents":[{"id":1,"text":"The performance was amazing! The sound could have been clearer."},{"id":2,"text":"The food and service were unacceptable. While the host was nice, the waiter was rude and food was cold."}]}'
```

```
{"documents":[{"id":"1","sentiment":"positive","confidenceScores":{"positive":0.99,"neutral":0.0,"negative":0.0},"sentences":[{"sentiment":"positive","confidenceScores":{"positive":0.99,"neutral":0.0,"negative":0.0},"offset":0,"length":29,"text":"The performance was amazing! "},{"sentiment":"neutral","confidenceScores":{"positive":0.19,"neutral":0.47,"negative":0.34},"offset":29,"length":34,"text":"The sound could have been clearer."}],"warnings":[]},{"id":"2","sentiment":"negative","confidenceScores":{"positive":0.0,"neutral":0.01,"negative":0.98},"sentences":[{"sentiment":"negative","confidenceScores":{"positive":0.0,"neutral":0.01,"negative":0.98},"offset":0,"length":40,"text":"The food and service were unacceptable. "},{"sentiment":"negative","confidenceScores":{"positive":0.0,"neutral":0.02,"negative":0.98},"offset":40,"length":63,"text":"While the host was nice, the waiter was rude and food was cold."}],"warnings":[]}],"errors":[],"modelVersion":"2022-11-01"}
```



Content Safety

AI Services

Content Safety

[Home](#) > [AI Foundry](#) | [Content safety](#) >

Create Content Safety ...

⚠ Changes on this step may reset later selections you have made. Review all options prior to deployment.

Basics Network Identity Tags Review + create

Machine learning assisted moderation APIs that detect material that is potentially offensive, risky, or otherwise undesirable, to assure the contents in community is safe.

[Learn more](#)

Project Details

Subscription * ⓘ Azure subscription 1 ▼

Resource group * ⓘ UdemCourse ▼

[Create new](#)

Instance Details

Region ⓘ East US ▼

Name * ⓘ contentsafety20250919 ✓

Pricing tier * ⓘ Standard S0 ▼

[View full pricing details](#)

[Home](#) > [ContentSafetyCreate-20250919145700](#) | [Overview](#) > [UdemCourse](#) > [contentsafety20250919](#)



contentsafety20250919 | Keys and Endpoint ☆ ...

Content safety

Search

[Regenerate Key1](#) [Regenerate Key2](#)

[Overview](#)

[Activity log](#)

[Access control \(IAM\)](#)

[Tags](#)

[Diagnose and solve problems](#)

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[Resource Management](#)

🔑 Keys and Endpoint

[Encryption](#)

[Pricing tier](#)

[Networking](#)

[Identity](#)

[Cost analysis](#)

[Properties](#)

[Security](#)

[Monitoring](#)

[Automation](#)

[Help](#)

📘 These keys are used to access your Azure AI Foundry API. Do not share your keys. Store them securely– for example, using Azure Key Vault. We also recommend regenerating these keys regularly. Only one key is necessary to make an API call. When regenerating the first key, you can use the second key for continued access to the service.

[Show Keys](#)

KEY 1

..... [Copy](#)

KEY 2

..... [Copy](#)

Location/Region ⓘ

eastus [Copy](#)

Endpoint

https://contentsafety20250919.cognitiveservices.azure.com/ [Copy](#)

AI Services

Content Safety

[Home](#) > [ContentSafetyCreate-20250919145700](#) | [Overview](#) > [UdemyCourse](#) > [contentsafety20250919](#) | [Access control \(IAM\)](#) >

Add role assignment ...

[Role](#) [Members](#) [Conditions](#) [Review + assign](#)











Selected role Cognitive Services User

Assign access to ☒ User, group, or service principal
☐ Managed identity

Members [+ Select members](#)

	Name	Object ID	Type
	No members selected		
Description	<div>Optional</div>		

Select members

-  angeladiazrod(Guest)
angeladiazrod@gmail.com
-  angeladiazrod1(Guest)
angeladiazrod1@outlook.com
-  babakbani(Guest)
babakbani@live.com
-  babakbani(Guest)
babakbani@gmail.com
-  Bert Gollnick
BertGollnick@GollnickDataSolutions.onmicrosoft.com
-  ellena.weiss(Guest)
ellena.weiss@edeka.de
-  jens(Guest)
jens@it-henneberg.com
-  Jesko Rehberg(Guest)
jesko.rehberg@dar-analytics.de
-  Lea Massari(Guest)
lea.massari@otto.de
-  lea.massari(Guest)
lea.massari@yahoo.de

Selected members:

-  Bert Gollnick
BertGollnick@GollnickDataSolutions.onmicrosoft.com

Select

Close


[Review + assign](#)


[Previous](#)


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AI Services

Content Safety

 Azure AI Foundry

 bertgollnick-hub

 AI Services



Overview

Model catalog

Playgrounds

AI Services

Build and customize

Agents PREVIEW

Templates

Fine-tuning

Content Understanding PREVIEW

Prompt flow

Observe and optimize

Tracing PREVIEW

Monitoring

Protect and govern

Evaluation

Guardrails + controls

Risks + alerts PREVIEW

Governance PREVIEW

My assets

Models + endpoints

Data + indexes

Web apps

More

Management center

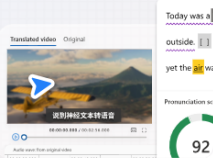
Azure AI Services

Create intelligent apps with these small, task-specific models—created responsibly by Microsoft—that are accurate, cost-efficient, and ready to use with a single key.

Speech playground


Improve speech-to-text accuracy with custom speech, generate natural-sounding neural voices with professional voice fine-tuning, create custom avatar, and more.

Try Speech



Content Understanding

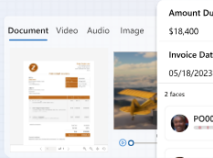
Transform content of any modality into task specific structured data using Generative AI.


 Content Understanding Preview

Content Understanding


Turn unstructured documents, images, video, and audio into structured data with the new Generative AI-powered Content Understanding service.

Try Content Understanding



 Document field extraction Preview


Infuse your solutions with AI capabilities



Speech

Enhance customer experiences through speech to text, text to speech, and speech translation features.


[View all Speech capabilities](#)



Language + Translator

Analyze, summarize and translate using LLM-powered natural language processing capabilities.


[View all Language + Translator capabilities](#)



Vision + Document

Discover information and insights from documents, images and video with OCR and multi-modal AI.


[View all Vision + Document capabilities](#)




Content Safety

Detect harmful, offensive, or inappropriate user-generated or AI-generated content in your app including text, image, and multi-modal APIs.

[View all Content Safety capabilities](#)

 Docs

 All resources

Manage AI Services

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AI Services

Content Safety – Python Test

contentsafety20250919 | Keys and Endpoint ☆ ...

Content safety

[Regenerate Key1](#)[Regenerate Key2](#)[Overview](#)[Activity log](#)[Access control \(IAM\)](#)[Tags](#)[Diagnose and solve problems](#)[Resource visualizer](#)[Resource Management](#)[Keys and Endpoint](#)[Encryption](#)[Pricing tier](#)[Networking](#)[Identity](#)[Cost analysis](#)

These keys are used to access your Azure AI Foundry API. Do not share your keys. Store them securely– for example, using Azure Key Vault. We also recommend regenerating these keys regularly. Only one key is necessary to make an API call. When regenerating the first key, you can use the second key for continued access to the service.

[Show Keys](#)**KEY 1**

.....

**KEY 2**


.....

**Location/Region** ⓘ

eastus

**Endpoint**

https://contentsafety20250919.cognitiveservices.azure.com/



AI Services

Content Safety – Python Test

1. Select a sample or type your own

Note: Before you choose a sample, be aware that some

Safe content

Chopping tomatoes and cutting them into cubes or wedges are great ways to practice your knife skills.

Violent content

The dog was gr

to their severe

deep laceration

2. Test

Chopping tomatoes and cutting them into cubes or wedges are great ways to practice your knife skills.

Run test

Sample code

You can use the following code to start integrating your current capability and settings into your application.

```
https://contentsafety20250919.cognitiveservices.azure.com/ Python v
1 #
2 # Copyright (c) Microsoft. All rights reserved.
3 # To learn more, please visit the documentation - Quickstart: Azure C
4 #
5
6 import enum
7 import json
8 import requests
9 from typing import Union
10
11
12 class MediaType(enum.Enum):
13     Text = 1
14     Image = 2
15
16
17 class Category(enum.Enum):
18     Hate = 1
19     SelfHarm = 2
20     Sexual = 3
21     Violence = 4
22
23
24 class Action(enum.Enum):
25     Accept = 1
26     Reject = 2
```

Resource key

Region

eastus

Copy

Close



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