

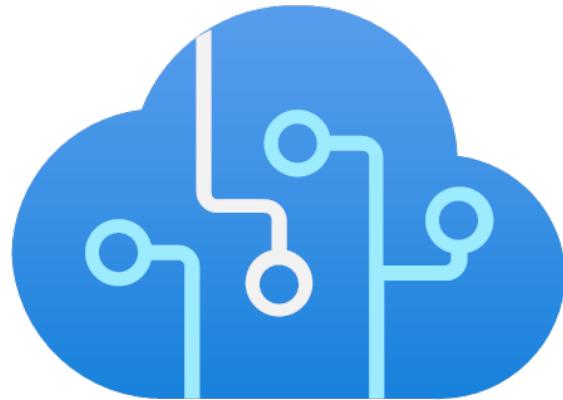
AI Services



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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



Language

Extract meaning from unstructured text with Language services

Language



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



Getting started

AI Services

Clone GitHub Repo

 mslearn-ai-services Public archive

Watch 9

main 1 Branch 0 Tags Go to file Code

	ivorb Update README for archiving ✓	59678bf · 3 months ago
	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](#)



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AI Services

Create AI Services

azure-ai-start | Keys and Endpoint ⭐ ...

Azure AI services multi-service account

Search 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 > Labfil
You, 11 minutes ago | 1 autho
1 AI_SERVICE_ENDPOINT=https://.../ai
2 AI_SERVICE_KEY=B8b7X]
```

(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

Search

- 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
Ratelim	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



AI Services

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
Select dimension	=	0 selected	<input type="checkbox"/>

When to evaluate

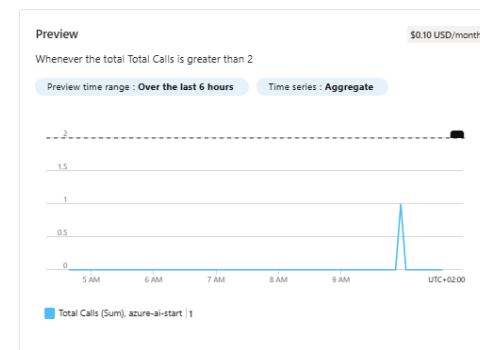
Check every ⓘ

1 minute

Lookback period ⓘ

5 minutes

+ Add condition



Review + create

Previous

Next: Actions >



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AI Services

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
<input type="button" value="▼"/>	<input type="text"/>	 



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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
[Terms of use](#) | [Privacy statement](#)
Total pricing
0.10 USD/month
[Pricing](#)

Scope

Scope level Subscription
Resource 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

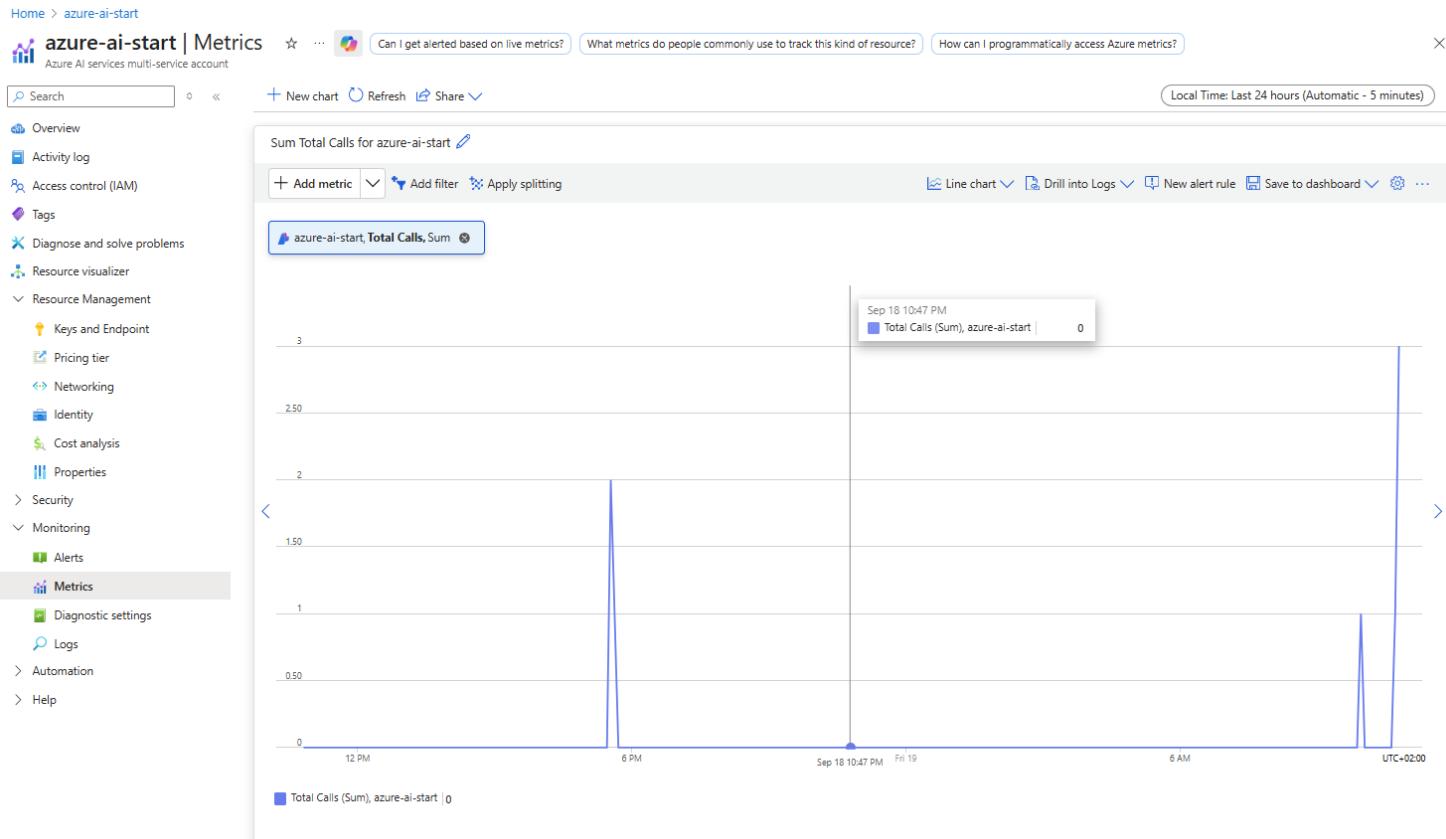
[Create](#) [Previous](#)



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AI Services

Monitoring – Metrics



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 *

ℹ 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

ℹ 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

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

Size *

1 vcpu, 4 GiB memory, 0 gpus

[Change size](#)

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"]

[Review + create](#)

< Previous

Next : Networking >



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AI Services

Using Containers

Home > Microsoft.ContainerInstances-20250919113843 | Overview >

mysentiment2 Container instances

Search Start Restart Stop Delete Refresh Give feedback

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Settings

Containers

Identity

Properties

Locks

> Monitoring

> Automation

> Help

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.byrff6cfcrecbhaq.eastus.azurecontainer.io**
Container count : 1

CPU (millicores)

11 AM 11:15 AM Sep 19 11:30 AM UTC+02:00

CPU Usage (Avg), mysentiment2 | --

Memory

11 AM 11:15 AM Sep 19 11:30 AM UTC+02:00

Memory Usage (Avg), mysentiment2 | 52.88MB

Network bytes received

11 AM 11:15 AM Sep 19 11:30 AM UTC+02:00

Network Bytes Received Per Second (Avg), mysentiment2 | --

Network bytes transmitted

11 AM 11:15 AM Sep 19 11:30 AM UTC+02:00

Network Bytes Transmitted Per Second (Avg), mysentiment2 | --



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AI Services

Test Container

```
curl -X POST "mysentimentcontainer/byfrf6cfcrecbhaq.eastus.azurecontainer.io:5000/text/analytic/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": 0.99}, "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"}
```



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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 * ①

Azure subscription 1

Resource group * ①

UdemyCourse

[Create new](#)

Instance Details

Region ①

East US

Name * ①

contentsafety20250919

Pricing tier * ①

Standard S0

[View full pricing details](#)

Home > ContentSafetyCreate-20250919145700 | Overview > UdemyCourse > contentsafety20250919

contentsafety20250919 | Keys and Endpoint

Content safety

- ⚠ Changes on this step may reset later selections you have made. Review all options prior to deployment.
- [Search](#)
- [Overview](#)
- [Activity log](#)
- [Access control \(IAM\)](#)
- [Tags](#)
- [Diagnose and solve problems](#)
- [Resource visualizer](#)
- [Resource Management](#)
- KEY [Keys and Endpoint](#)
- [Encryption](#)
- [Pricing tier](#)
- [Networking](#)
- [Identity](#)
- [Cost analysis](#)
- [Properties](#)
- [Security](#)
- [Monitoring](#)
- [Automation](#)
- [Help](#)

⟳ Regenerate Key1 ⟳ Regenerate Key2

ⓘ 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 ①

eastus

Endpoint

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

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

Optional

Select members

Search by name or email address

	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 

[Review + assign](#)

[Previous](#)

[Next](#)

[Select](#)

[Close](#)

AI Services

Content Safety

Azure AI Foundry / bertgollnick-hub / AI Services

Manage AI Services

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
Turn unstructured documents, images, video, and audio into structured data with the new Generative AI-powered Content Understanding service.
[Try Content Understanding](#)

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

Document field extraction Preview
Extract fields from documents and forms using a custom generative extraction model.

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](#)

My assets

Models + endpoints

Data + indexes

Web apps

... More

Management center



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AI Services

Content Safety – Python Test

The screenshot shows the Azure AI Foundry Keys and Endpoint page for a resource named "contentsafety20250919". The left sidebar includes links for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Resource Management, Keys and Endpoint (which is selected and highlighted in grey), Encryption, Pricing tier, Networking, Identity, and Cost analysis. The main content area displays two API keys: "KEY 1" and "KEY 2", both represented by redacted text fields with copy icons. Below the keys is a "Location/Region" field set to "eastus". At the bottom is an "Endpoint" field containing the URL "https://contentsafety20250919.cognitiveservices.azure.com/". A callout box with an information icon provides instructions about key security and regeneration. Two "Regenerate Key" buttons are located at the top right of the main content area.

content safety20250919 | Keys and Endpoint

Content safety

Search

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

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 samples may contain sensitive content.

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

Violent content
The dog was given a sharp stick to their severed deep laceration.

2. Test

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

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

```
1 #!/usr/bin/env python
2 # Copyright (c) Microsoft. All rights reserved.
3 # To learn more, please visit the documentation - Quickstart: Azure Cognitive Services Content Safety API
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

