Language

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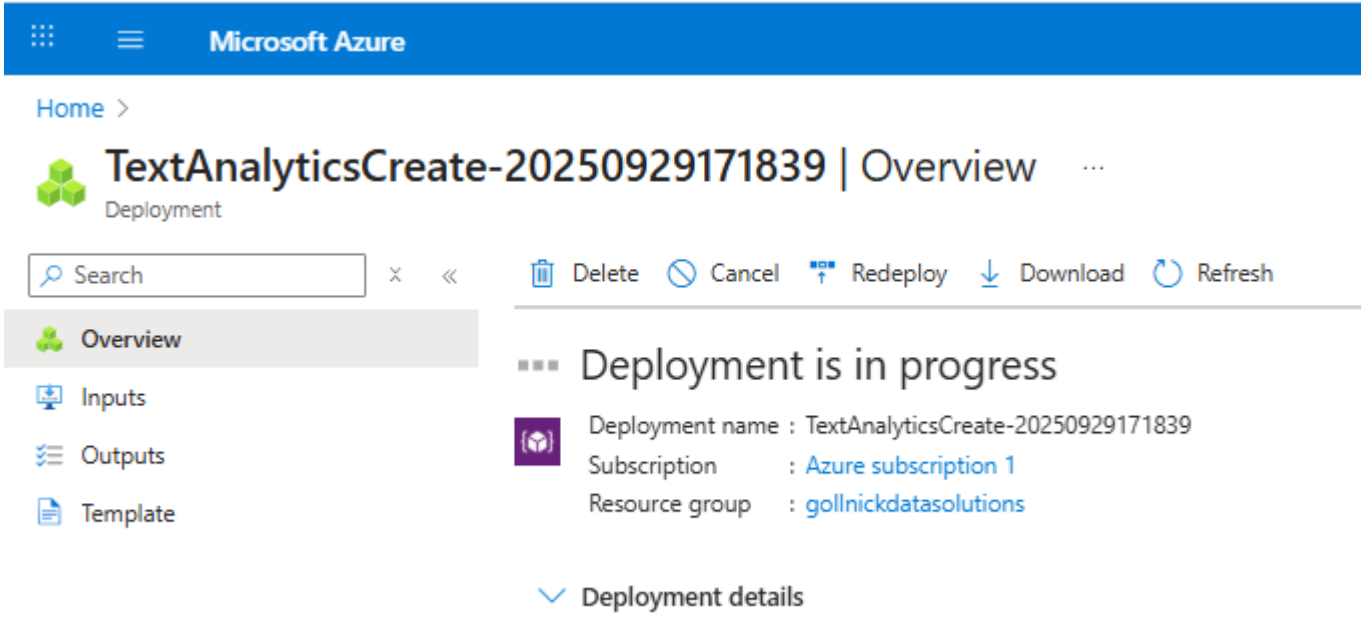
Natural Language Understanding

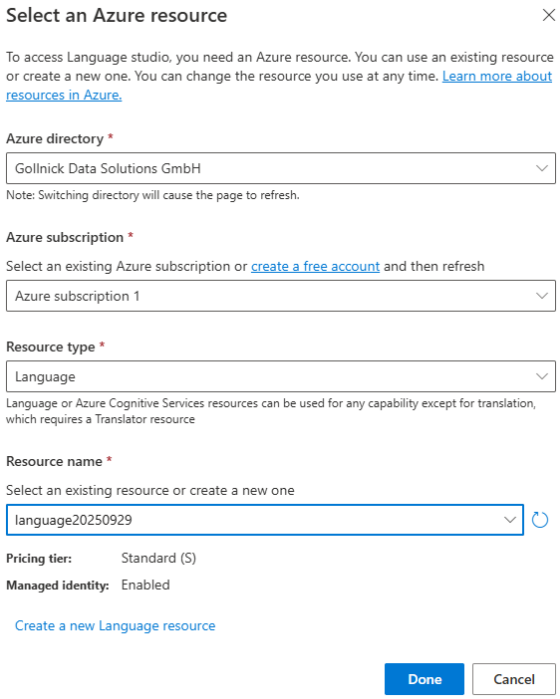
Natural Language Understanding

Create Language Service



Natural Language Understanding

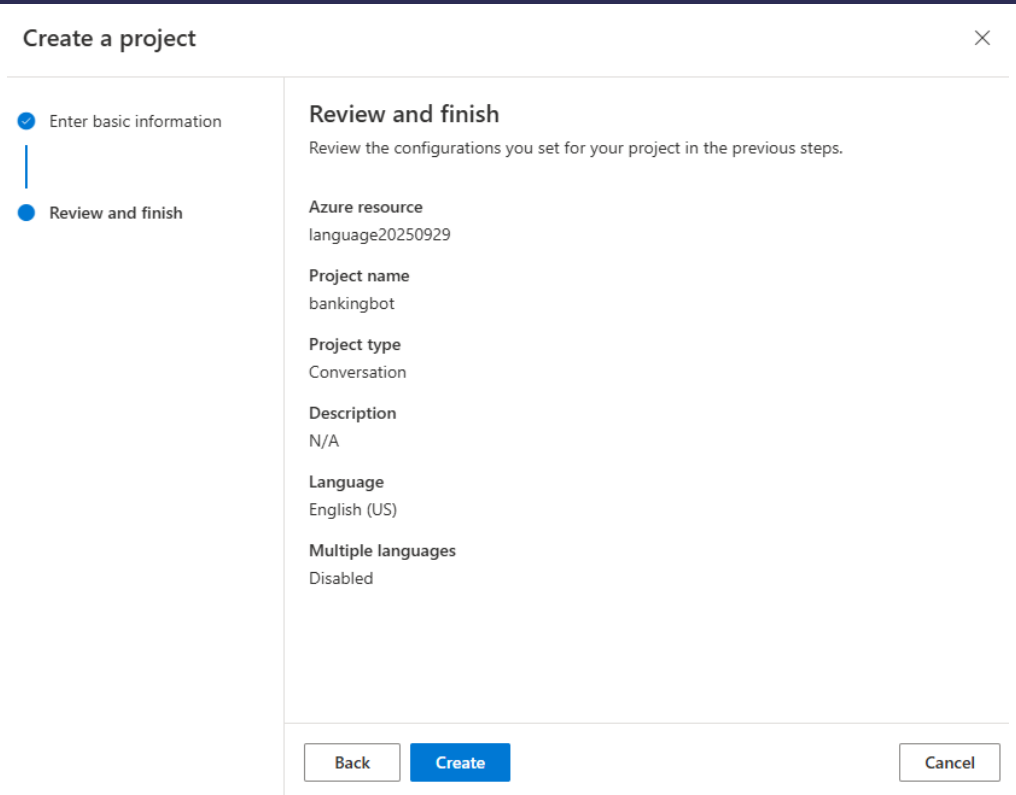
Azure AI – Language Studio

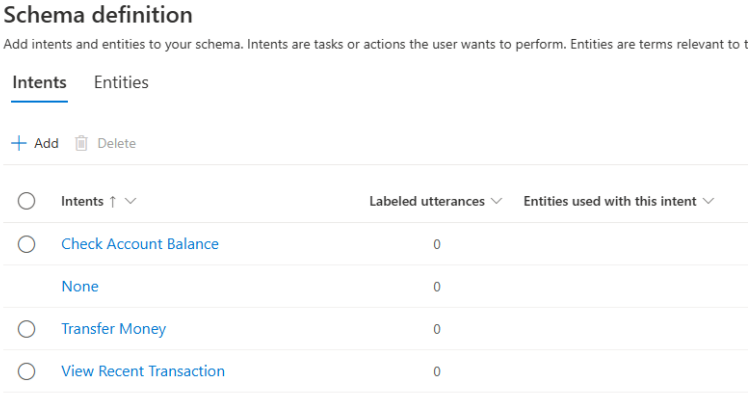


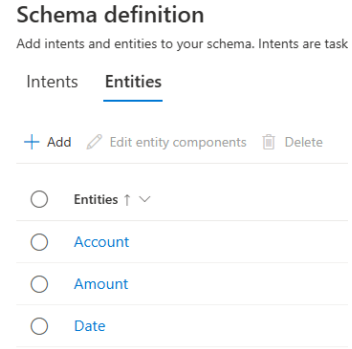
Source: https://language.cognitive.azure.com/

Natural Language Understanding

Create Language Project







Source: https://language.cognitive.azure.com/

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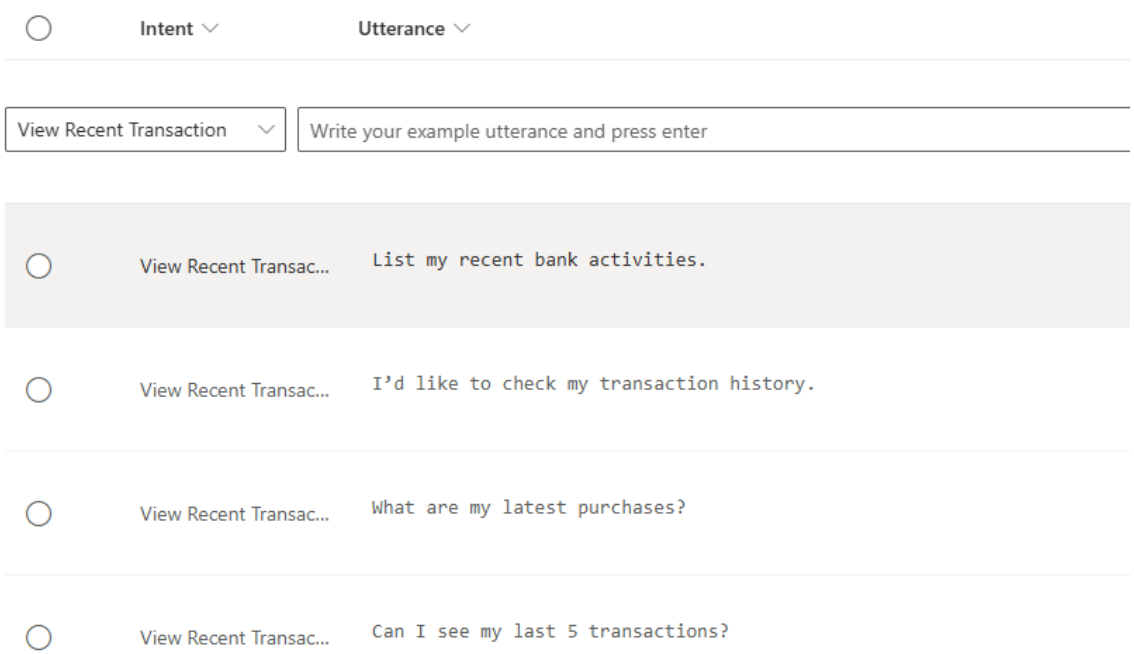
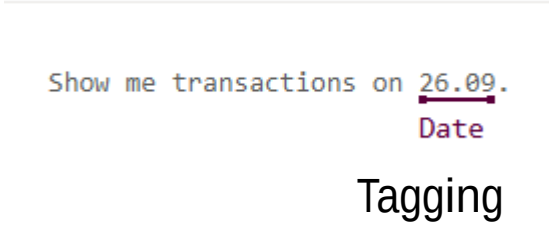
Natural Language Understanding

Set up intents



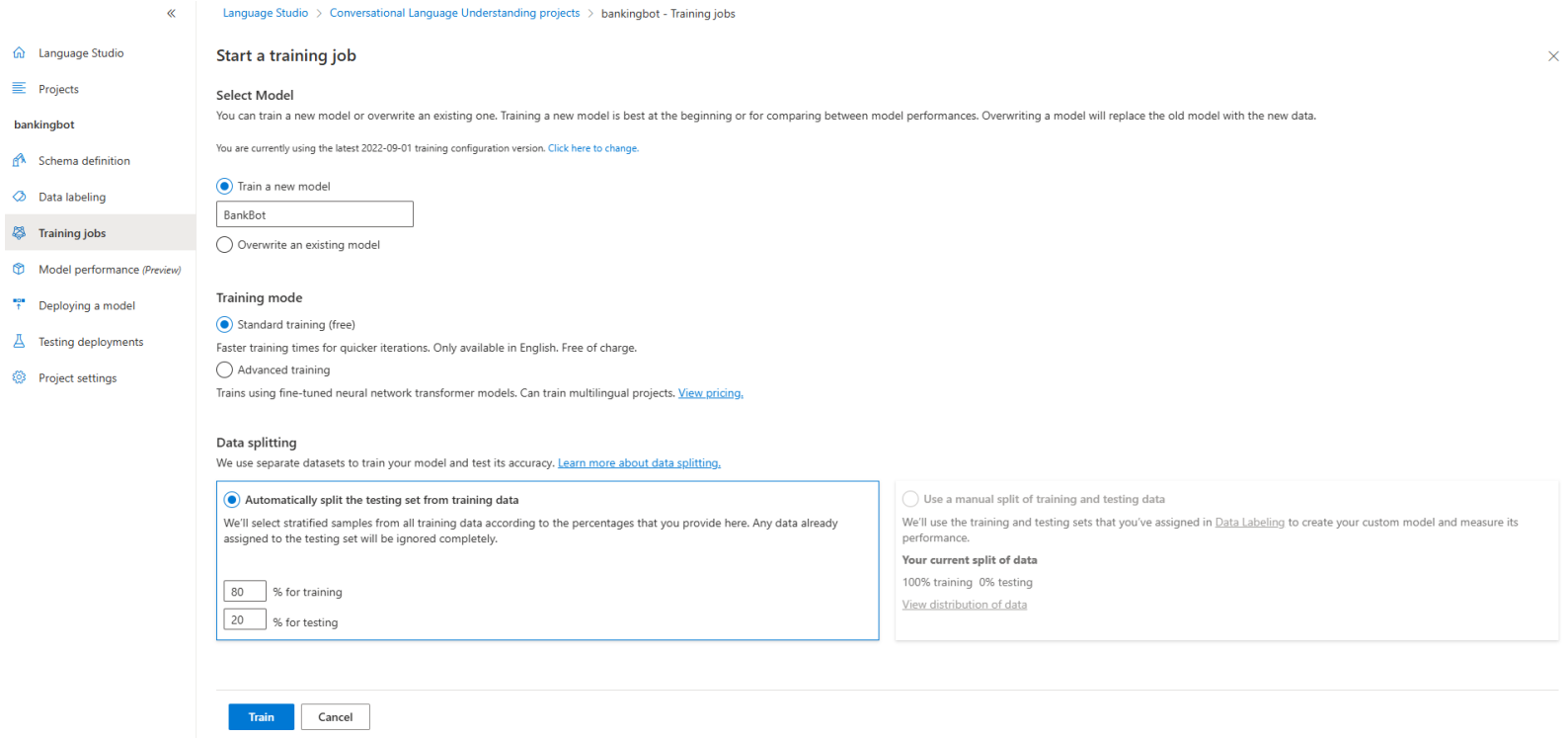


Tagging

Source: https://language.cognitive.azure.com/

Natural Language Understanding

Start training



Source: https://language.cognitive.azure.com/

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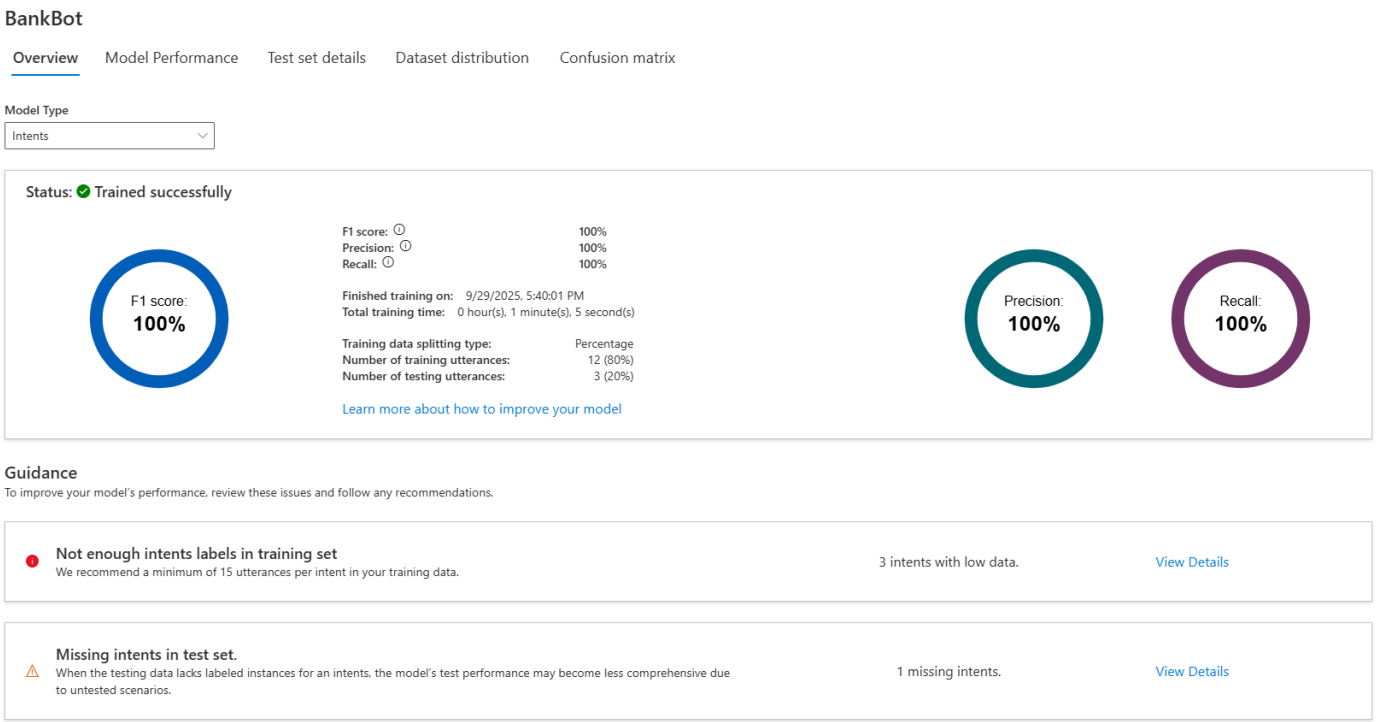
Natural Language Understanding

Model Performance



Source: https://language.cognitive.azure.com/

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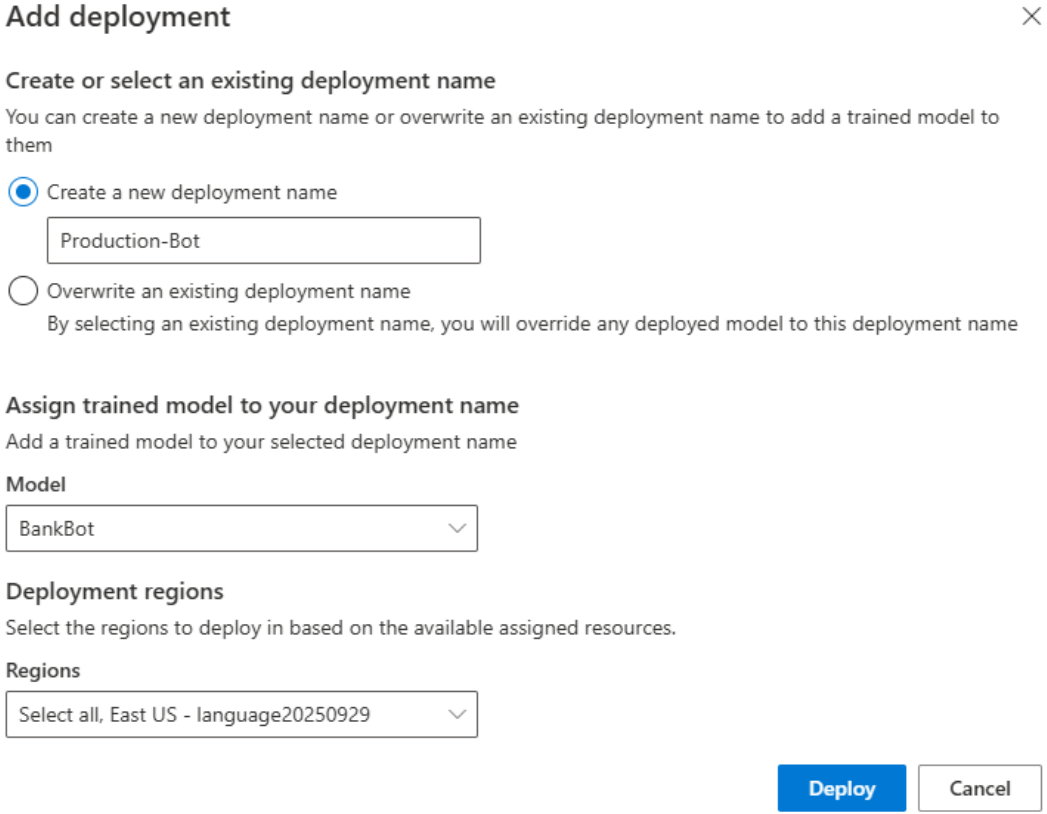
Natural Language Understanding

Model Deployment



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Natural Language Understanding

Test Deployment

Testing deployments

Test a deployment by providing a sample utterance to find out what intent and entities get recognized. These are the sa

Run the test

Deployment name

Production-Bot

Enter your own text, or upload a text document

Can I check how much money i have in my account right now?

Result JSON

Intent

Top intent

Check Account Balance
Confidence: 92.66%

Entities

No entities predicted

Original text

```
Can I check how much money i have in my account right now?
```

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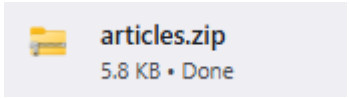
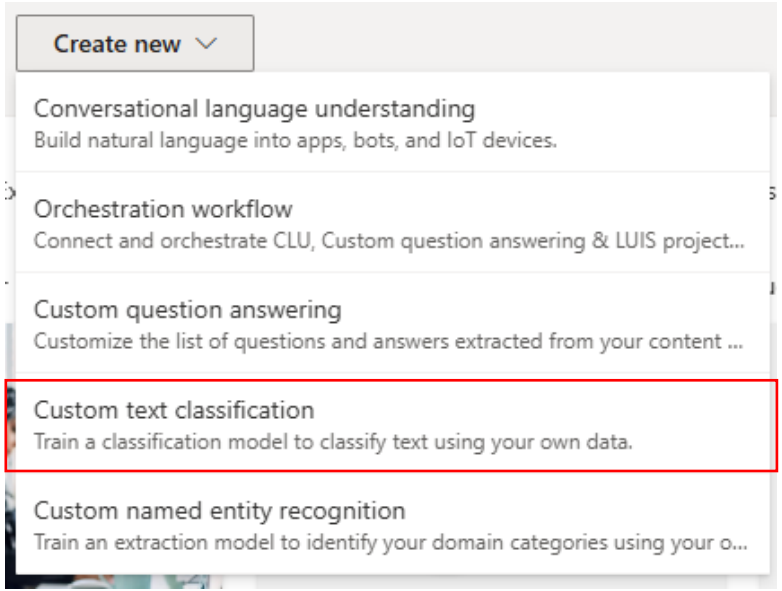
Custom Text Classification

Custom Text Classification

Download Training Data

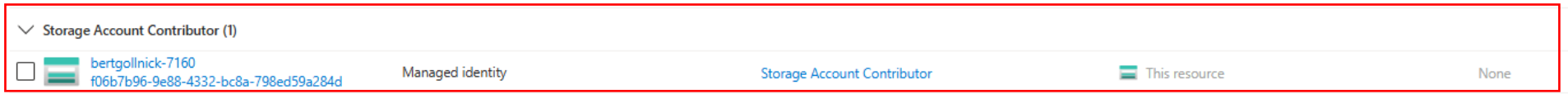


http://aka.ms/classification-articles



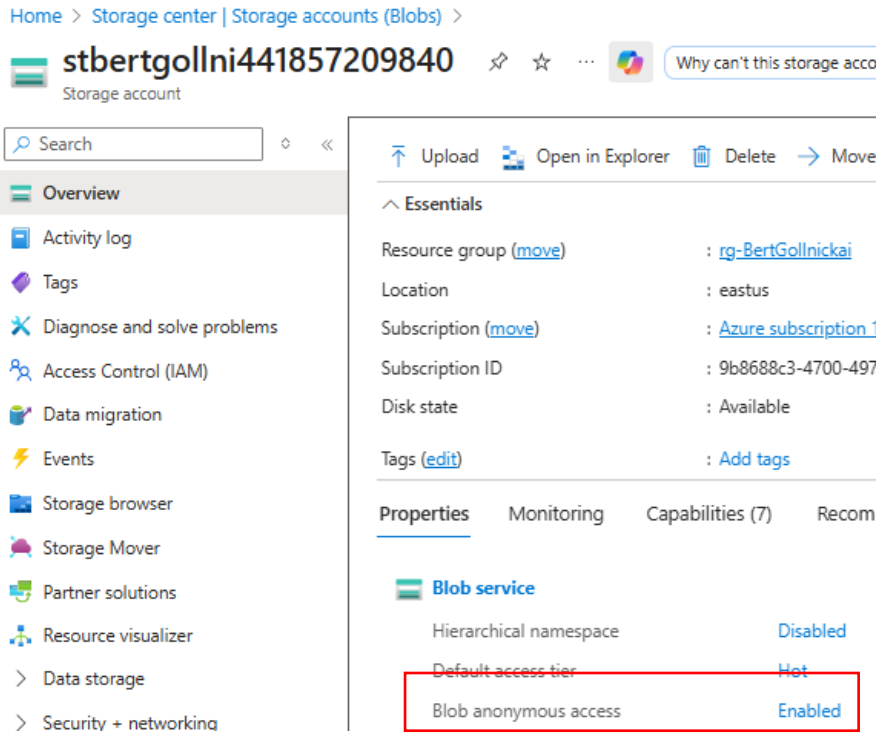
Custom Text Classification

Add Role to



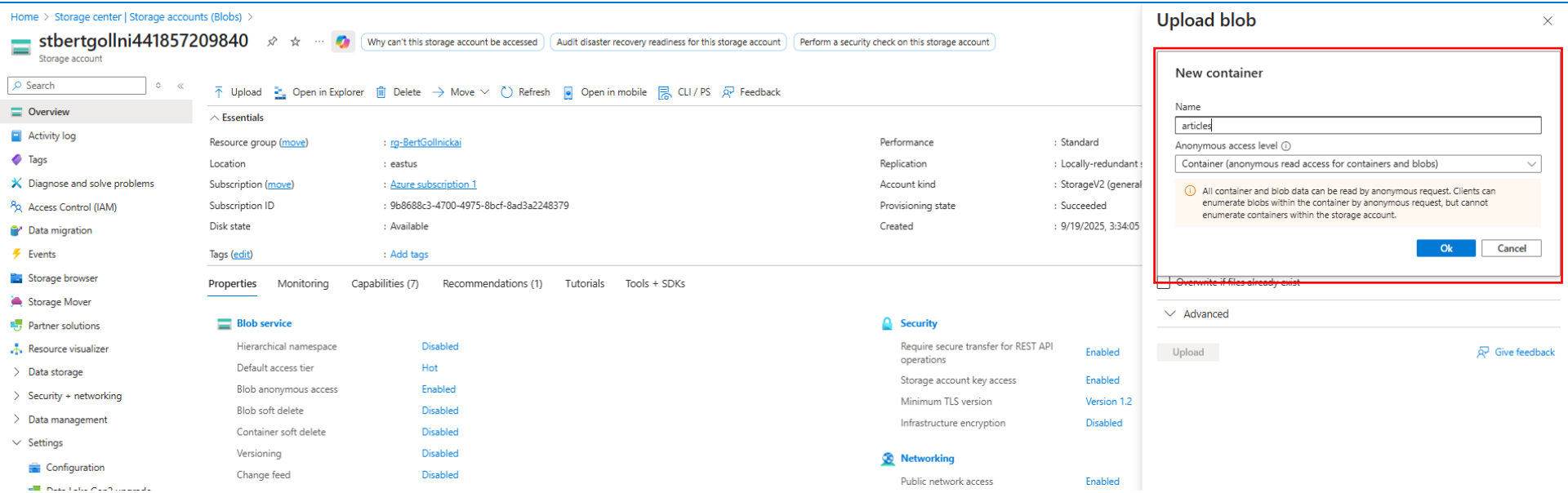
Custom Text Classification

Blob Access



Custom Text Classification

Upload Articles



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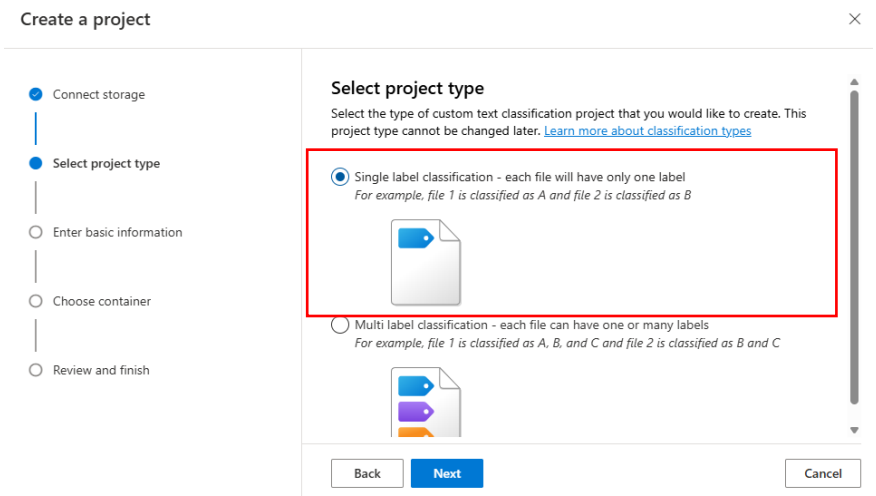
Custom Text Classification

Create new Project



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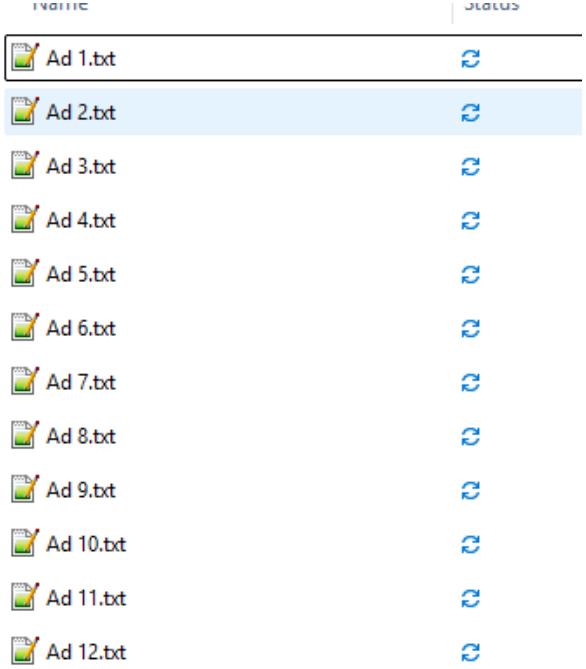
Custom Named Entity Recognition

Custom NER

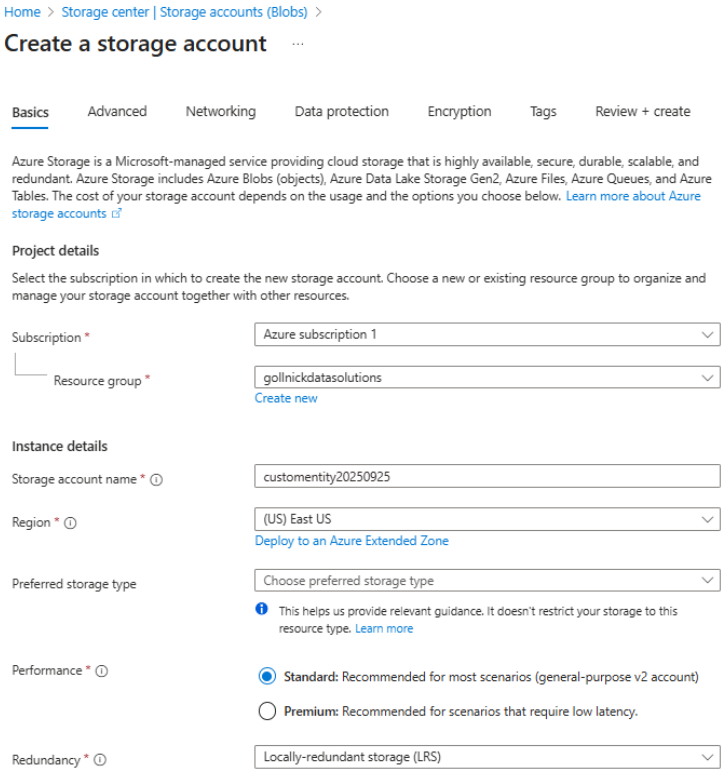
Download Data

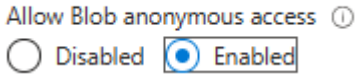
http://aka.ms/entity-extraction-ads

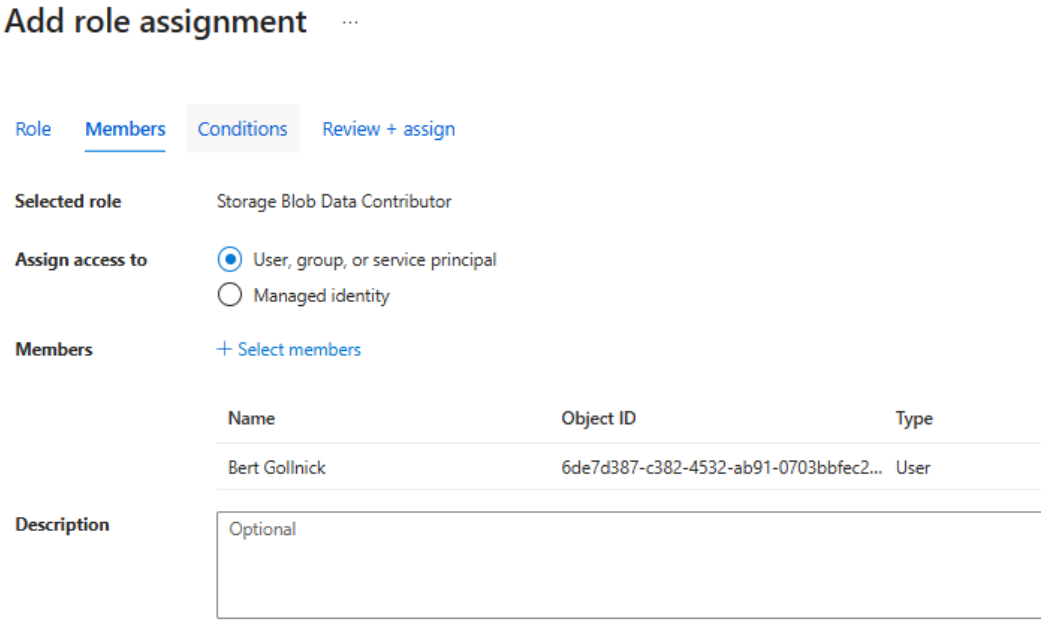


Custom NER

Storage Account

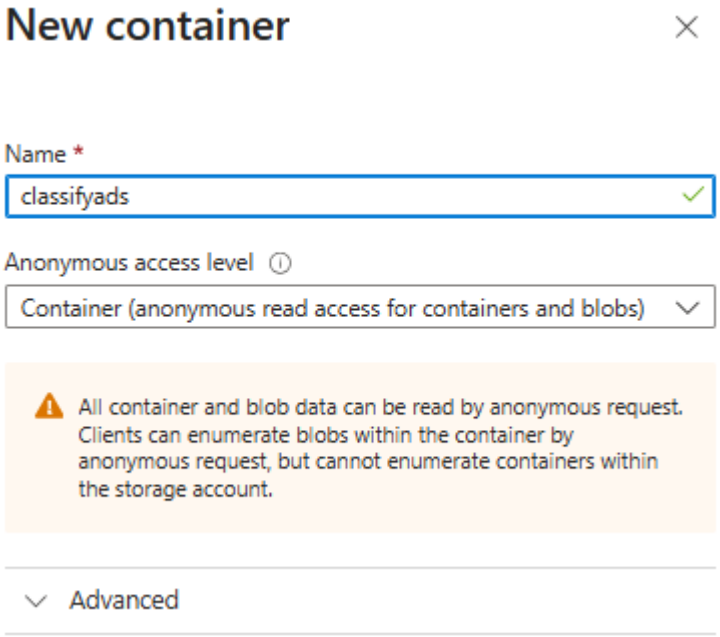


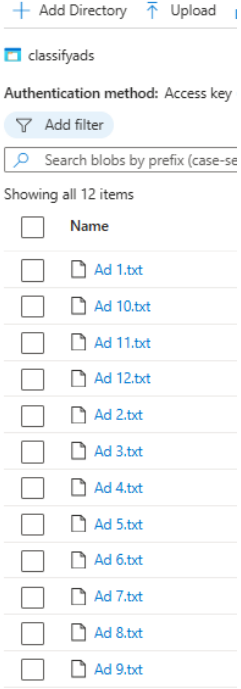




Custom NER

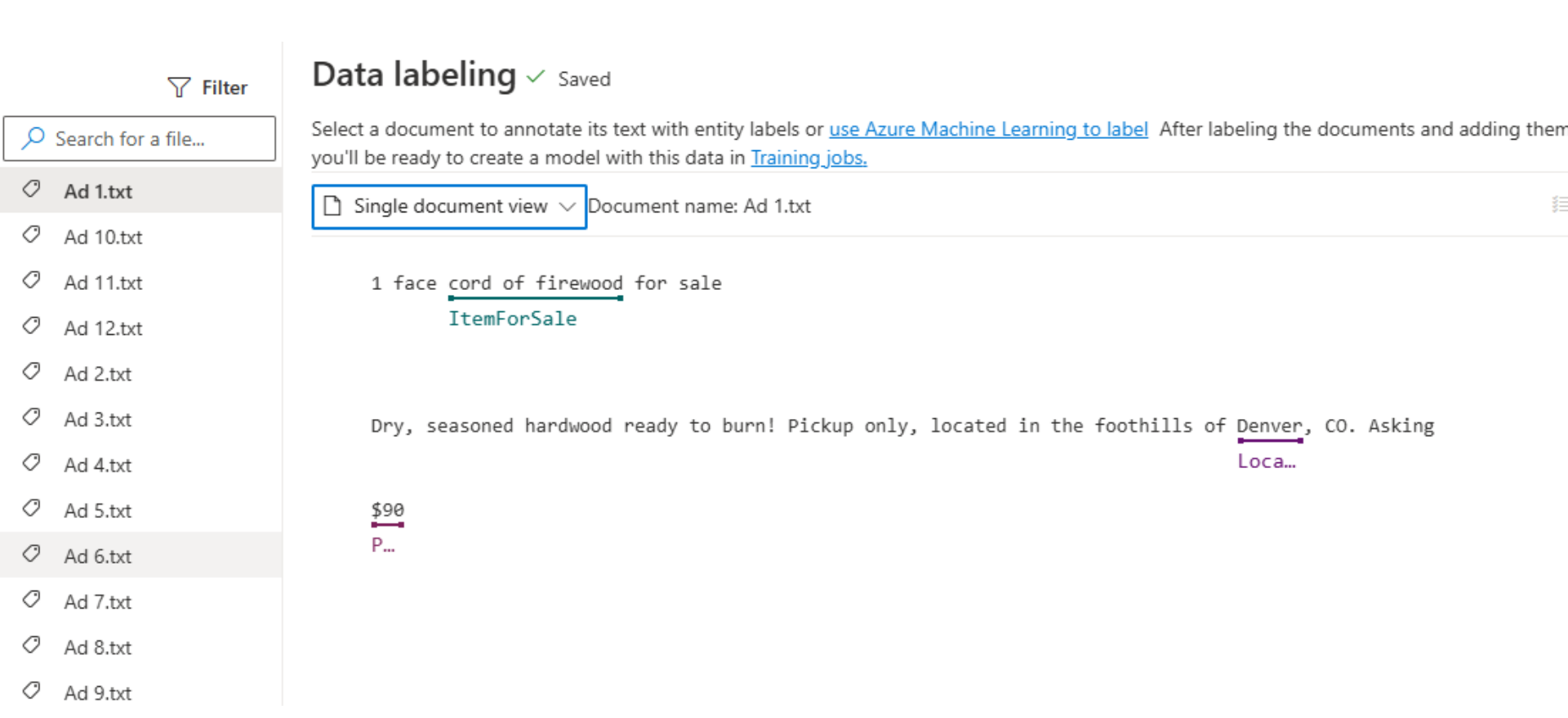
Storage Account





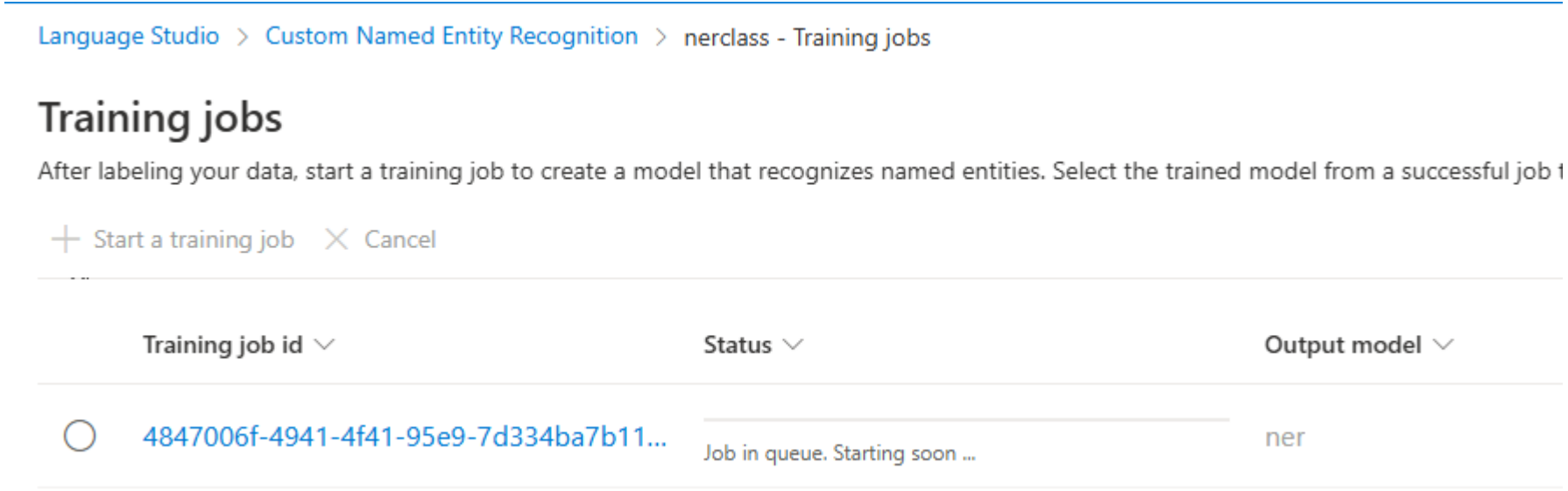
Custom NER

New Project – Data Labeling



Custom NER

Training



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Custom NER

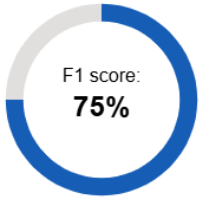
Model Performance

ner

ⓘ Entities that are neither labeled nor predicted in the test set will not be part of the displayed results. Learn more about data splitting.

Overview | Entity type performance | Test set details | Dataset distribution | Confusion matrix

Status: ✅ Trained successfully

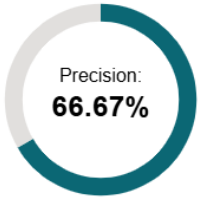


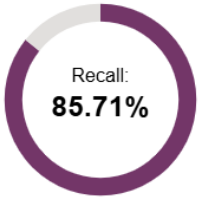
F1 score: ⓘ	75%
Precision: ⓘ	66.67%
Recall: ⓘ	85.71%

Finished training on:	9/29/2025, 7:20:22 PM
Total training time:	0 hour(s), 16 minute(s), 7 second(s)

Training data splitting type:	Percentage
Number of training documents:	10 (83.33%)
Number of testing documents:	2 (16.67%)

Learn more about how to improve your model





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Custom NER

Model Testing

Enter your own text, or upload a text document

Bluetooth earbuds, $100. These work okay, but sometimes disconnect from the phone. I'm sure someone more technical that me could figure it out.

Located in Sacramento, CA

Drag and drop .txt file(s) here
or
Browse for a file

Result JSON

ItemForSale
Entity value: Bluetooth earbuds
Confidence: 93.00%

Price
Entity value: $100
Confidence: 99.00%

Location
Entity value: Sacramento, CA
Confidence: 82.00%

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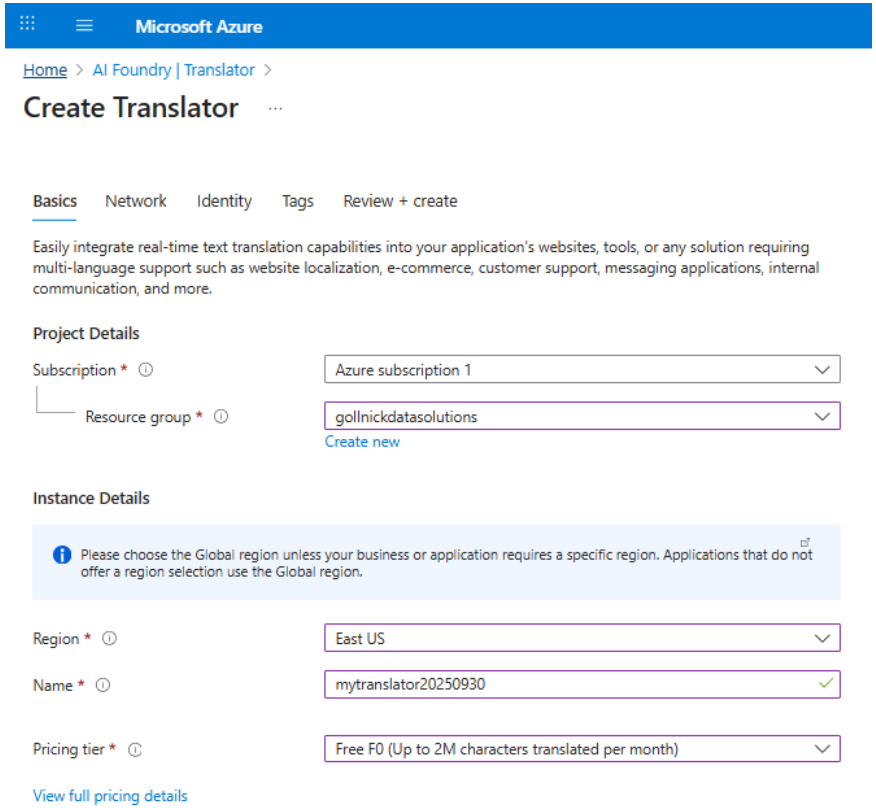
Translation

Translation

Create Translator



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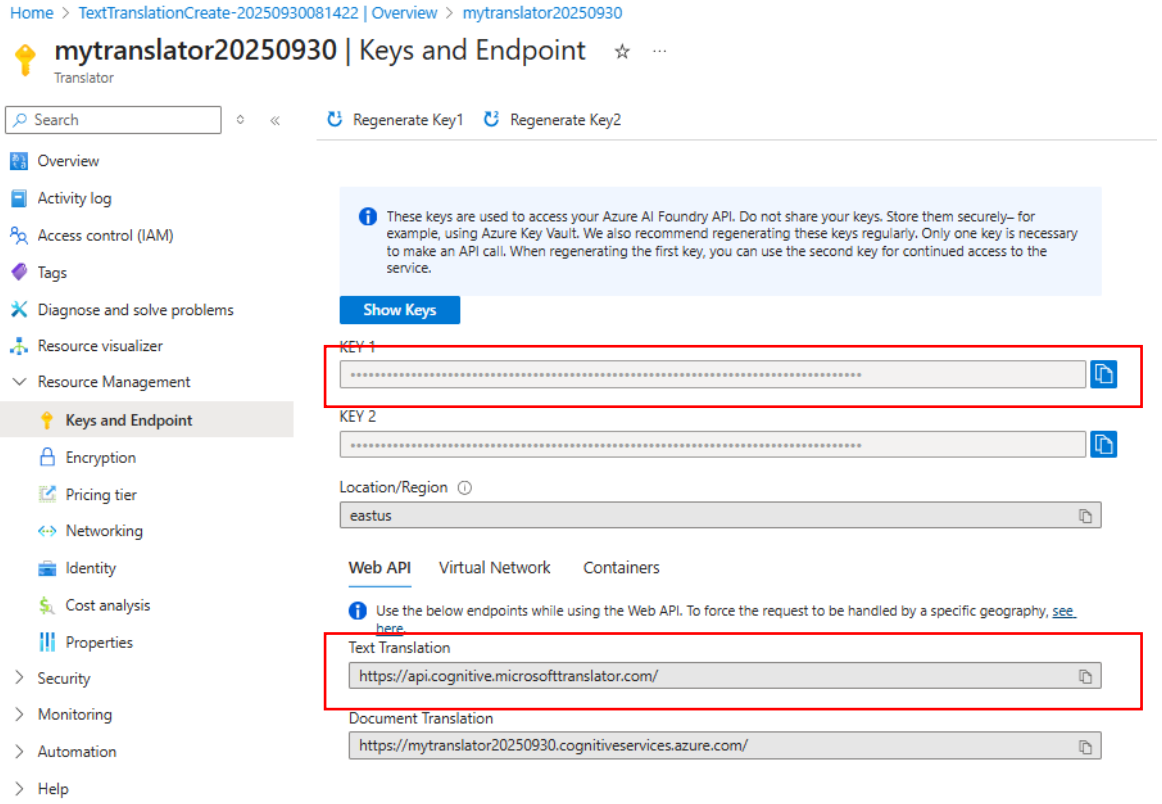
Translation

Create Translator



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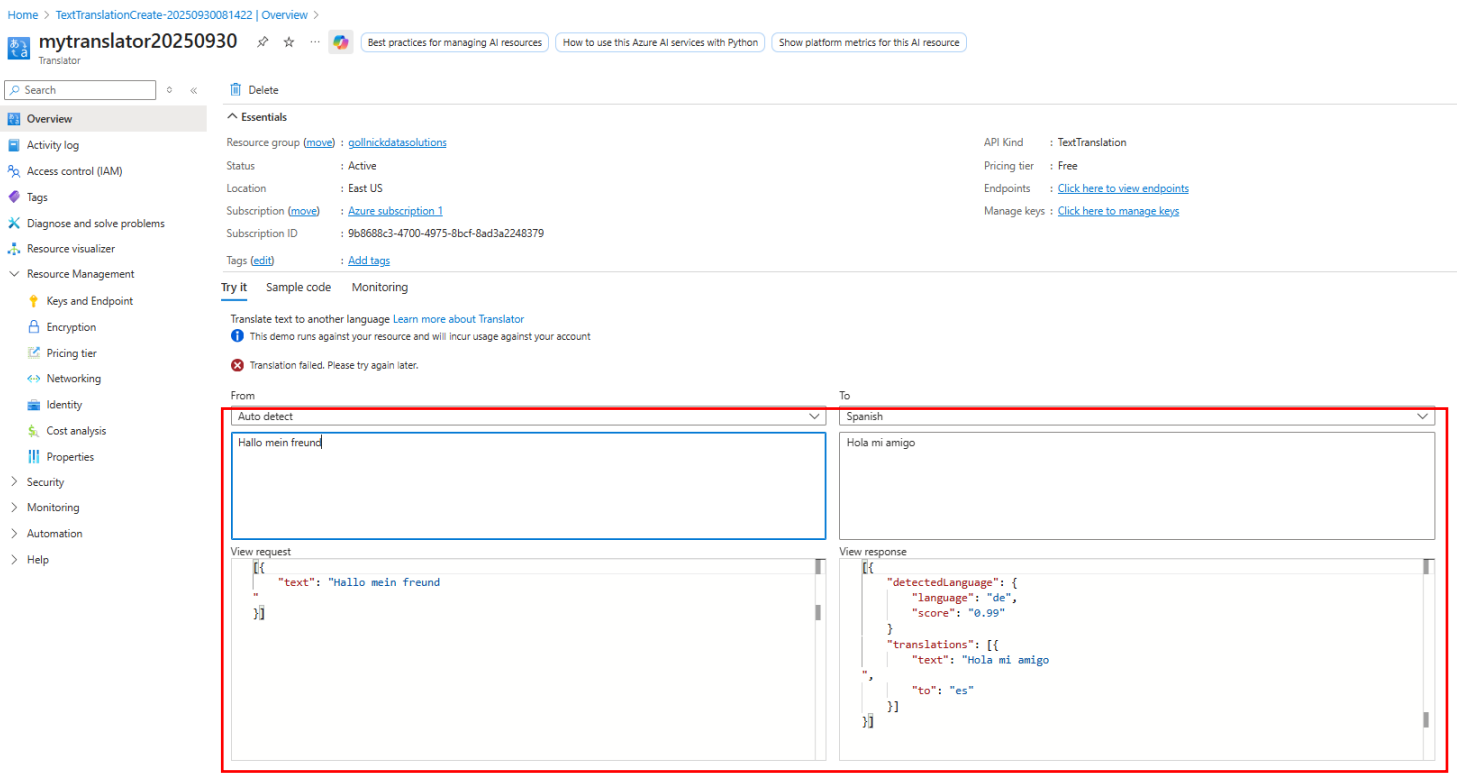
Translation

Test Translator



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Translation

Test Translators in Python

Develop scripts for

- Text translation: sample_translate.py
- Language Detection and translation: text-translation.py

Speech Recognition

Speech Recognition

Create speech service

Home > AI Foundry | Speech service >

Create Speech Services ...

Basics | Network | Identity | Tags | Review + create

Transcribe audible speech into readable, searchable text. Add real-time speech translations to your apps and services. Convert text to audio nearly in real time. Quickly build speech-enabled apps and services using the programming languages you already work with. Customize speech systems to optimize quality for specific scenarios.

Learn more

Project Details

Subscription * : Azure subscription 1

Resource group * : gollnickdatasolutions

Create new

Instance Details

Region : East US

Name * : myspeechservice20250930

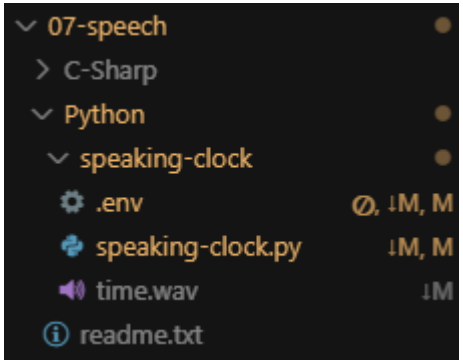
Pricing tier * : Free F0

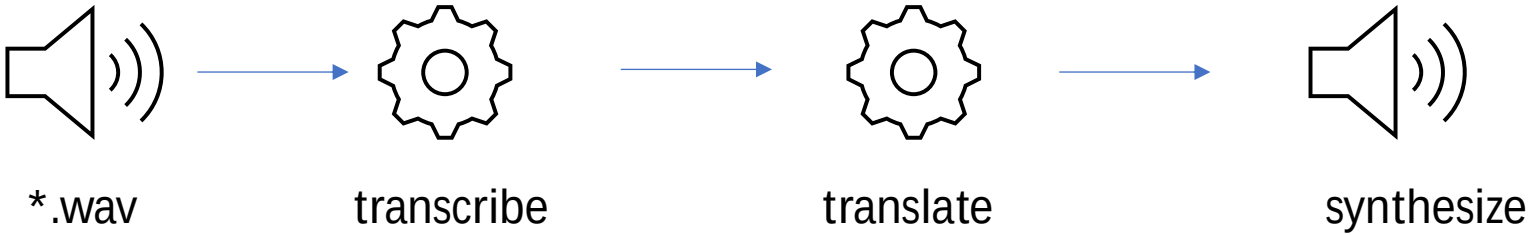
View full pricing details

Speech Recognition

Synthesize text and transcribe audio

Work through scripts for synthesizing text and transcribing audio



Speech Recognition

Synthesize text and transcribe audio