Chapter 1: Getting Started with Microsoft Cognitive Services

Export Template Wizard

? ✕
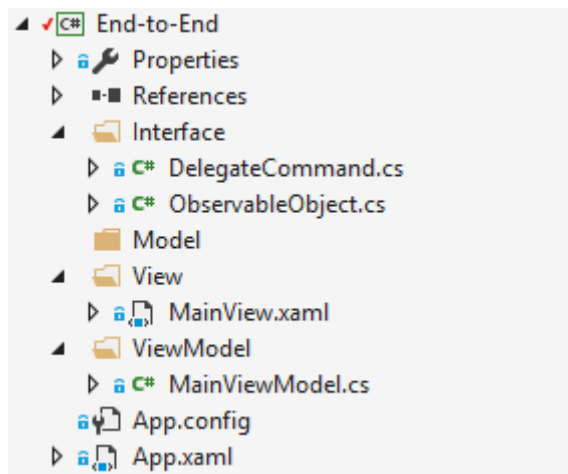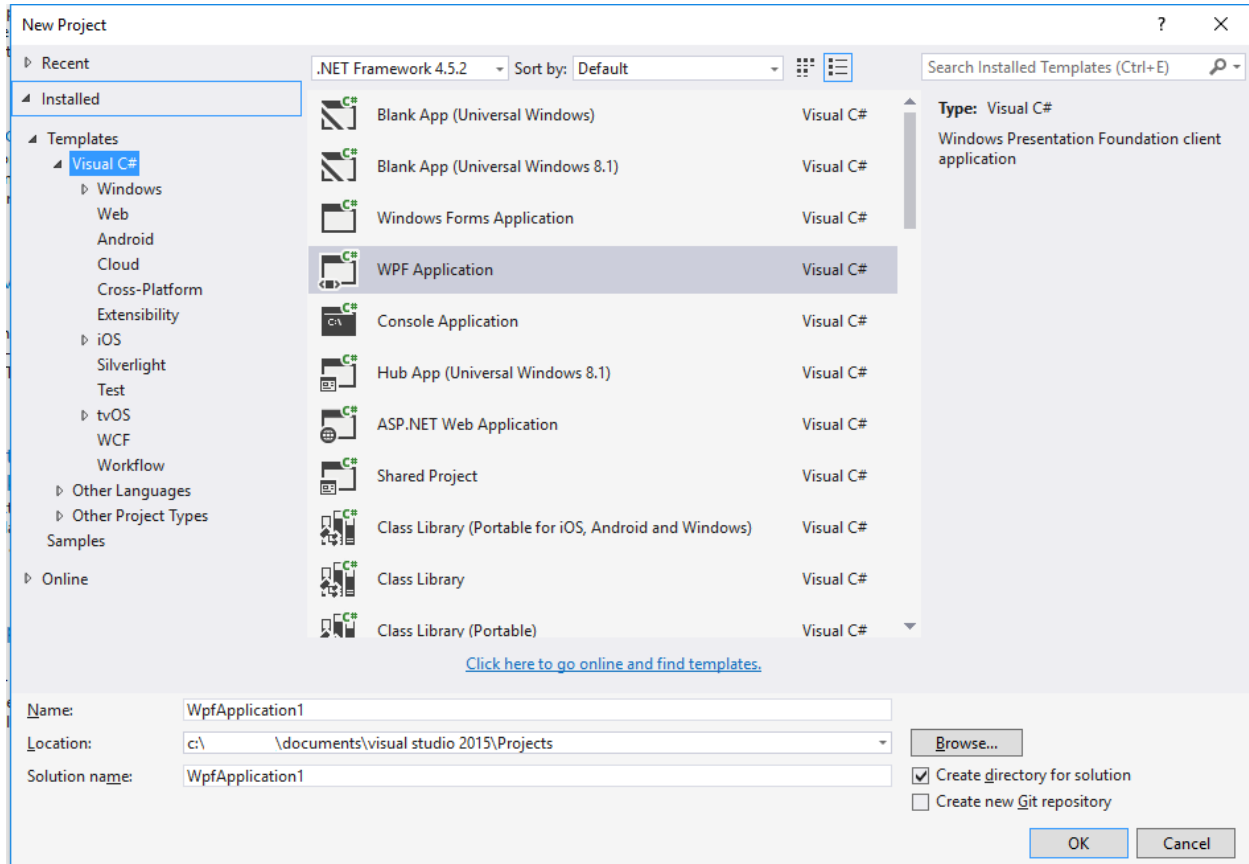
Choose Template Type

This wizard will allow you to export a project or project item from the current solution to a template which future projects can then be based upon.

Which type of template would you like to create?

◉ Project template

A project template will allow a user to create a new project based on your exported project. A user will be able to utilize your template from the New Project dialog box for client projects and from the New Website dialog box for websites.

○ Item template

An item template will allow a user to add your item to one of their existing projects. Your template will be available to the user from the Add New Item dialog box.

From which project would you like to create a template?

| WpfApplication1 | ⌄ |

| < Previous | Next > | Finish | Cancel |

Export Template Wizard

Select Template Options

Template name:

WpfApplication1

Template description:

\<No description available\>

Icon Image:

[   ] Browse...

Preview Image:

[   ] Browse...

Output location:

C:\   \Documents\Visual Studio 2015\My Exported Templates\WpfApplication1.zip

☑ Automatically import the template into Visual Studio

☑ Display an explorer window on the output files folder

[< Previous] [Next >] [Finish] [Cancel]

Everything

▼ Filter

🔍 face api   ✕

Results

NAME	PUBLISHER	CATEGORY
😊 Face API	Microsoft	AI + Cognitive Services
👤 VU Face Recogn	VU LLC	Compute
👤 VU Face Recogn - BYOL	VU LLC	Compute
▶ Bing Maps API for Enterprise	Bing Maps	Web + Mobile

Create

Face API

* Name

Enter a name

* Subscription

Windows Azure MSDN ? Visual Studio Ulti ... ⌄

* Location

West Europe ⌄

* Pricing tier (View full pricing details)

⌄

All Available Pricing

F0 (You have already created 1 F0 for this subscription.)

S0 (10 Calls per second)

☐ * I confirm I have read and understood the notice below.

🔄¹ Regenerate Key1   🔄² Regenerate Key2

Notice: It may take up to 10 minutes for the newly (re)generated keys to take effect.

NAME

FaceApi

KEY 1

2

KEY 2

4!

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

RESOURCE MANAGEMENT

Keys

Quick start

Pricing tier

Properties

Search (Ctrl+/)

Browse   Installed   Updates
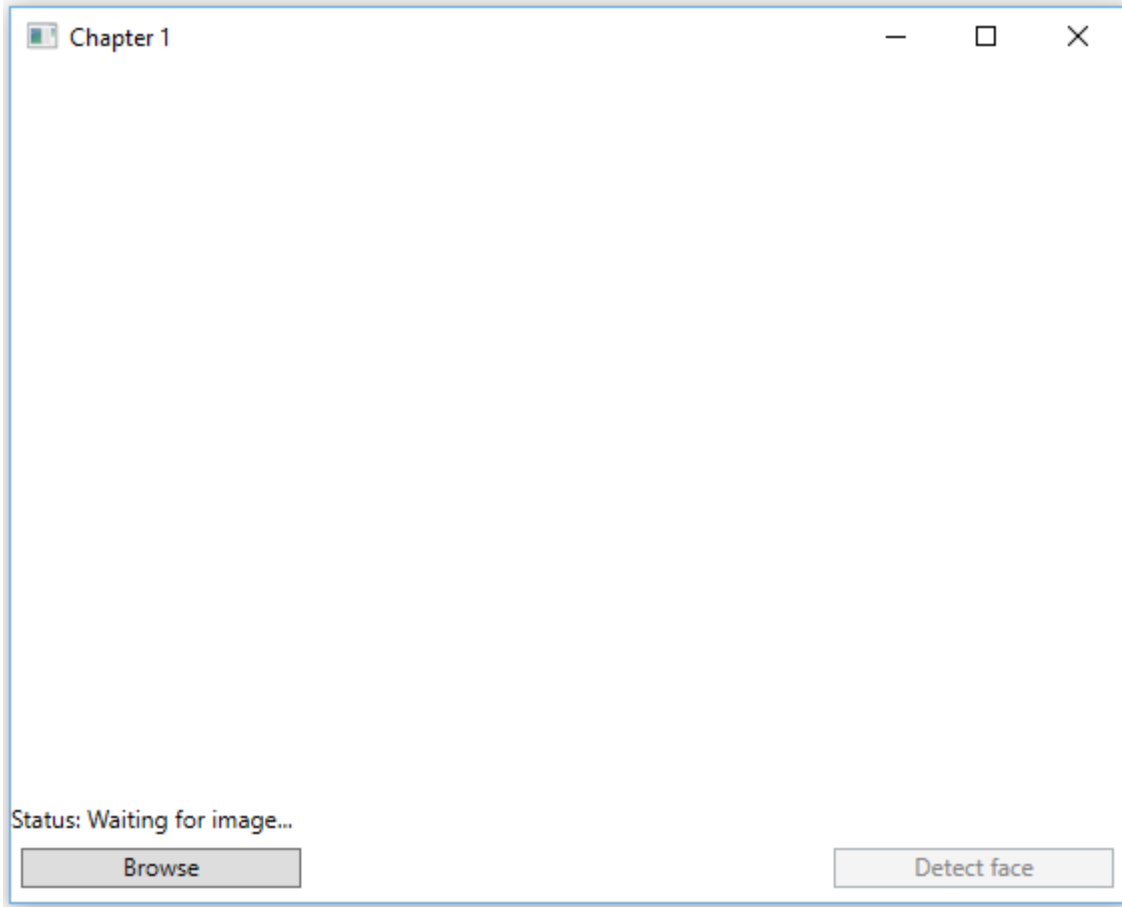
microsoft.projectoxford.face   ✕ ▾   ↻   ☐ Include prerelease

Microsoft.ProjectOxford.Face by Microsoft, 9,74K downloads   v1.1.0
Detect, identify, analyze, organize, and tag faces in photos with Microsoft Face API client library.

Status: Waiting for image...

Browse | Detect face

FaceApi
Cognitive Services

Search (Ctrl+/)

🗑 Delete

Essentials ⌃

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource group (change)
Book
Status
Active
Location
West Europe
Subscription name (change)
Windows Azure MSDN ? Visual Studio Ultimate
Subscription ID

API type
Face API
Pricing tier
Standard
Endpoint
https://westeurope.api.cognitive.microsoft.com/face/v1.0
Manage keys
Show access keys ...
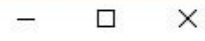
Chapter 2: Analyzing Images to Recognize a Face

| Analysis | Description | Celebs | OCR | Thumbnail | Face verification | Similar face | Face grouping |
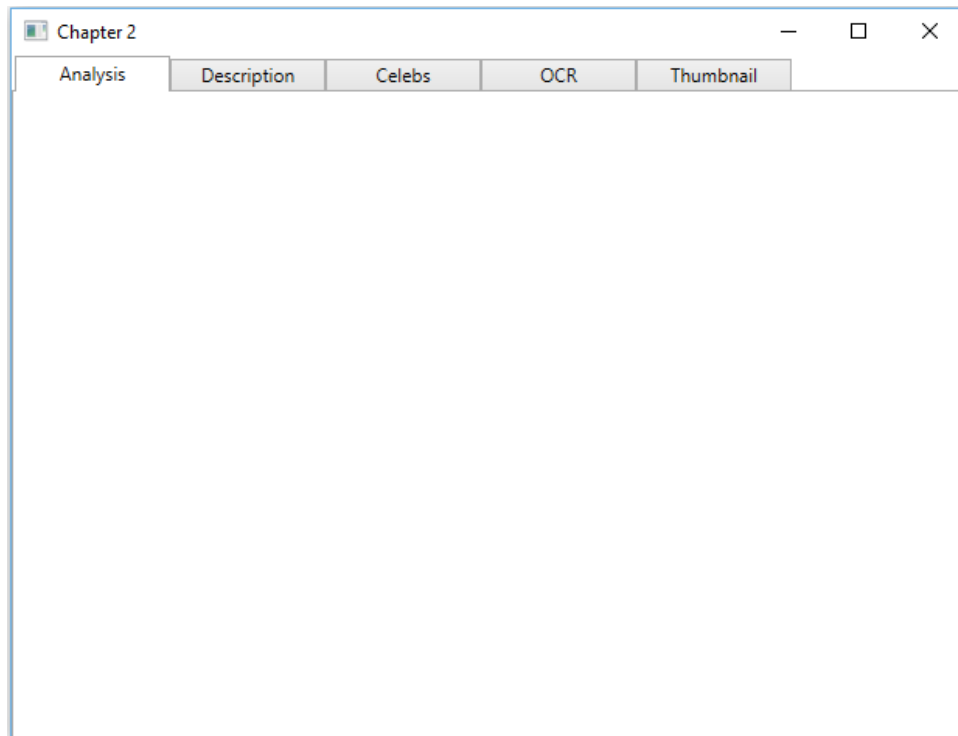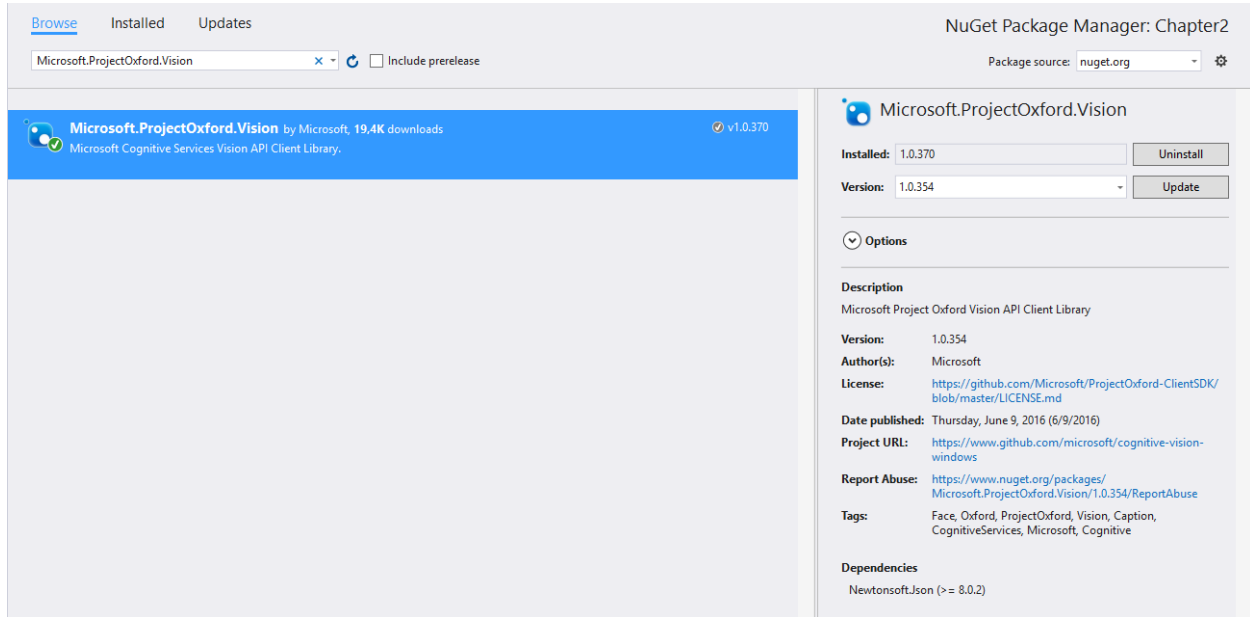
Visual Features:

ImageType
Color
Faces
Adult
Categories
Tags
Description

Browse and analyze

Analysis Results:

Description: a harbor with a boat in the water
Probability: 0,75724296883707

Categories:
        outdoor_
                Probability: 0,0078125

        outdoor_oceanbeach
                Probability: 0,4296875

Image content is adulty: False
Image content is racy: False

The image is Jpeg
Image size: 3264 * 2448 px

Request ID is: 5964b01a-9205-49e3-be06-c0b9d45e2548
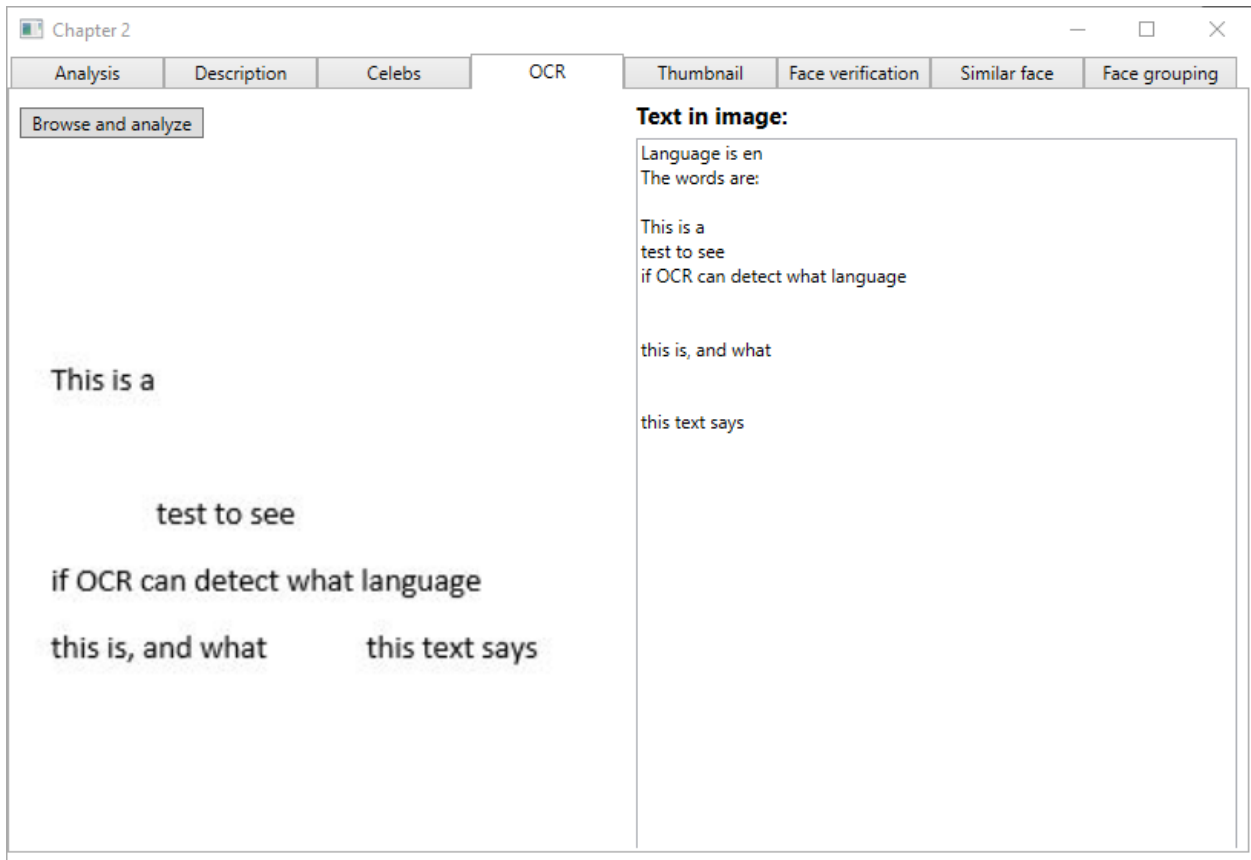
| Analysis | Description | Celebs | OCR | Thumbnail | Face verification | Similar face | Face grouping |

Browse and analyze

This is a

test to see

if OCR can detect what language

this is, and what   this text says

Text in image:

Language is en
The words are:

This is a
test to see
if OCR can detect what language

this is, and what

this text says

| Analysis | Description | Celebs | OCR | Thumbnail | Face verification | Similar face | Face grouping |

Image 1

525a88e5-e77b-407c-ba1a-11e3ce162eda

Image 2

5a1cd2a8-e7e5-41ce-a96a-2fd8cb38c4a5

Image 3

d35187c4-9fb2-4dc0-90a6-04724e5cbcb0

Image 4

9fddf235-2dc5-4b5f-b7e3-561b5e203ace

Image 5

f4d805ac-0926-4af8-85a5-df86b0d97433

Image 6

e199a798-38b8-4d1c-b1c4-b946d16048d7

| Group images | **Face groups:** |

There are 2 group(s)
Groups: Image 4 - Image 6 -
Image 3 - Image 1 -
Messy group: Image 2 - Image 5 -

| Home | Administration |

Administration

Person groups

Add new person group | Person group name/id:

Person groups:

Add new person | Person name:

| Administrators |
| Family 3 |

Add   Add

| Delete person group | Train person group |

Persons

Persons:

| Leif |

| Delete person | Add face |

Status:

ViewModel initialized

Smart Home

Home | Administration

Smart Home

Logon to group:

Administrators
Family 3

Image logon

Welcome home, Leif

Create review team

Before you begin, let's create a team to help you collaborate on administering and using the review tool. Optionally, invite others now to join your team.

Region : * | West Europe

Team Name : * | Book

Team Id : * | Book

Invite others : | Enter email addresses separated by commas.

☑ I agree to the Microsoft Cognitive Services Terms and Microsoft Privacy Statement.

Create Team

Content Moderator | Dashboard | Try | Review ▾ | ⚙ | Book | ❓▾ | Hello Leif Henning Larsen ▾

Overall Stats

| Total | 1 | 🖼 1 / 0 | Complete | 0 | 🖼 0 / 0 | Pending | 1 | 🖼 1 / 0 |

By User

No Data Available

By Tags

No Data Available

Image   Text

Default   ⌄ | 12 | 🏷 0   🏷 1

⋯

a   r   Clear
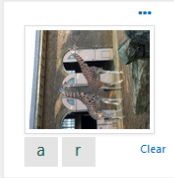
Next >>

API

Endpoint :   **https://westeurope.api.cognitive.microsoft.com/contentmoderator/review/v1.0**

Reference :   API Reference

Id :   **book**

Trial Ocp-Apim-
Subscription-Key :   **3**   **6**

Whitelisted Resource Id(s) ⓘ

Id   🗑

[Enter your cognitive service resource Id]   ✚

Workflow Settings ⓘ

Ocp-Apim-Subscription-
Key: *   3(6   ⓘ

Image List Ids: ⓘ

Term List Ids: ⓘ

Base Url: https://westeurope.api.cognitive.microsoft.com/contentmoderator/moderate   ⓘ

                                            Edit

Chapter 3: Analyzing Videos

Video Operations

Browse video:

| Browse |

Video Operation:

| FaceDetection ▾ |

| Execute operation |

Operation result

Video Operations

Browse video:

Browse

Video Operation:

Thumbnail

Execute operation

Operation result

Running
Video operation is running
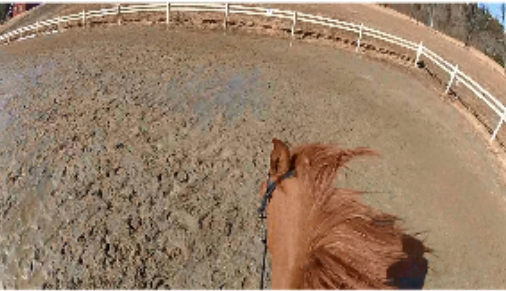
Video Operations

Browse video:

| Browse |

Video Operation:

| Thumbnail ⌄ |

| Execute operation |

Operation result

Succeeded
Video operation completed successfully
Video can be fetched at: https://api.projectoxford.ai/video/v1.0/operation

Video Operations

Browse video:

Browse

Video Operation:

FaceDetection ⌄

Execute operation

Operation result

Succeeded
Video operation completed successfully
Results:
{
    "version": 1,
    "timescale": 12800,
    "offset": 0,
    "framerate": 25,
    "width": 640,
    "height": 480,
    "fragments": [
        {

Video Operations

Browse video:

Browse

Video Operation:

MotionDetection ⌄

Execute operation

Operation result

```
Succeeded
Video operation completed successfully
Results:
{
    "version": 2,
    "timescale": 12800,
    "offset": 0,
    "framerate": 25,
    "width": 640,
    "height": 480,
    "regions": [
        {
```

Chapter3

Video Operations

Browse video:

Browse

Video Operation:

Emotion ⌄

Execute operation

Operation result

Succeeded
Video operation completed successfully
Emotion results:
Emotion: Anger / Score: 0
Emotion: Contempt / Score: 0
Emotion: Disgust / Score: 0
Emotion: Fear / Score: 0
Emotion: Happiness / Score: 0
Emotion: Neutral / Score: 0
Emotion: Sadness / Score: 0
Emotion: Surprise / Score: 0

Video Indexer API

HOME   APIS   PRODUCTS   ISSUES   SIGN IN

Sign up

Already a member? Sign in now

Create a new API Management account

To complete your registration fill out the form below.

Email

Email

First name

First name

Last name

Last name

Sign up

Annotations

⏮	person	⏭	⏮	indoor	⏭	⏮	man	⏭	⏮	screenshot	⏭
⏮	abstract	⏭	⏮	standing	⏭	⏮	monitor	⏭
⏮	floor	⏭	⏮	laptop	⏭	⏮	computer	⏭
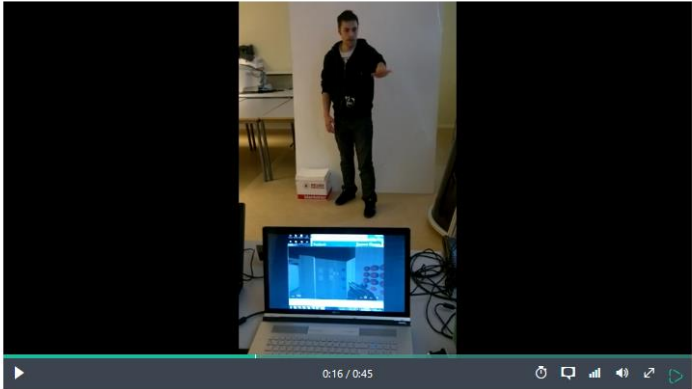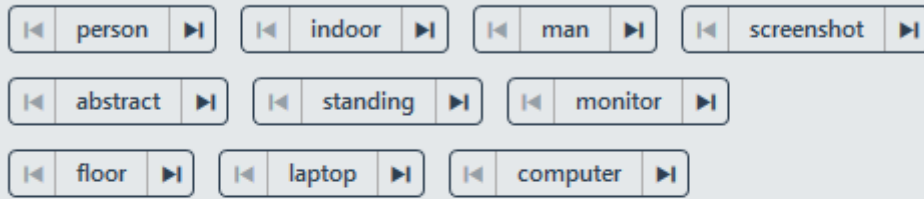
Speech sentiment

■ Positive (76%)

■ Neutral (19%)

■ Negative (5%)

You know

it's so cold

to get excited about technology and um.

In fact, my daughter saw this picture and said,

who is that and um.

In

all a lot has changed uh in fact,

one of the developers as I was prepping for it and said Hey there's

Video Indexer API

Free Preview

This is the Free Preview tier for Video Indexer

This product contains 1 API:

- Video Indexer APIs - Production

Subscribe

You have successfully subscribed to the **Free Preview** product. Try the APIs in this product now.

Profile

👤 Change account information

Email	leif_h_89@hotmail.com
First name	Leif Henning
Last name	Larsen

Your subscriptions

📊 Analytics reports

Subscription details			Product	State	Action
Subscription name	Free Preview	Rename	Free Preview	**Active**	✖ Cancel
Started on	09/05/2017				
Primary key	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Show | Regenerate			
Secondary key	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Show | Regenerate			

Your applications

➕ Register application

Name	Category	State
No results found.		

Looking to close your account?

Close account

Chapter 4: Letting Applications Understand Commands

LearningLuisService - Keys
Cognitive Services account - PREVIEW
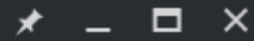
↻ Regenerate Key1   ↻² Regenerate Key2

🔍 Search (Ctrl+/)

- 🧠 Overview
- 📘 Activity log
- 👥 Access control (IAM)
- 🏷️ Tags
- 🔧 Diagnose and solve problems

RESOURCE MANAGEMENT

- 🔑 Keys
- 🔵 Pricing tier
- 🎛️ Properties
- 🔒 Locks
- 🖥️ Automation script

HELP

- ☁️ Quick start

ACCOUNT NAME

LearningLuisService

KEY 1

4████████████████████3

KEY 2

a███████████████████5

My Keys

Here you can set up the keys of your LUIS account; the programmatic API, Azure endpoint, and other external services keys ... Learn more

Programmatic API Key: afb8dd68c6fb45759ade13ce946b1634

Reset Programmatic Api Key

Endpoint Keys   External Keys

Add a new key   Buy key on Azure

Key Name	Key				Apps		Actions
					ouseApplication		✏ 🗑
					POC		✏ 🗑

Add a new key   ✕

Key Value (REQUIRED)

a	8

Key Name (OPTIONAL)

SmartHouseApplication

Save   Cancel

Create a new app   ✕

Name (REQUIRED)

SmartHouseApplication

Culture (REQUIRED)

English   ⌄

* App culture is the language that your app understands and speaks, not the interface language.

Description (OPTIONAL)

Application description ...

Key to use (OPTIONAL)

⌄

Create

SmartHouseA...
Version: 0.1

⚙ Settings

Dashboard

Intents

Entities

Prebuilt domains PREVIEW

Features

Train & Test

Publish App

← Back to App list

Overview

Facts & statistics about the app's data and the received endpoint hits at any period of time ... Learn more

Dashboard   Suggested utterances

App Id: 6   3

App status		
	Last train: Jan 12, 2017, 9:55:08 PM	Last published: Jan 10, 2017, 10:23:14 PM

Intent Count	Entity Count	List Entity Count	Labeled Utterances Count
4 / 80	2 / 30	0 / 50	44

Endpoint Hits Per Period
PER DAY (LAST WEEK)

No endpoint hits or utterances to show.
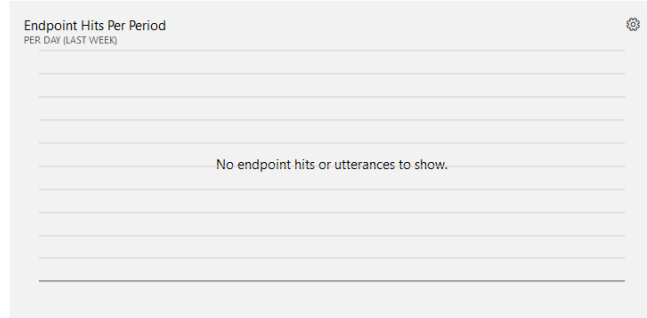
Total Endpoint Hits
SINCE APP CREATION

90

Key Usage

Intent Breakdown
ON LABELED UTTERANCES

11.4%
22.7%
40.9%

Entity Breakdown
ON LABELED UTTERANCES

Add Entity   ✕

Entity name (REQUIRED)

Rooms

Entity type (REQUIRED)

Simple
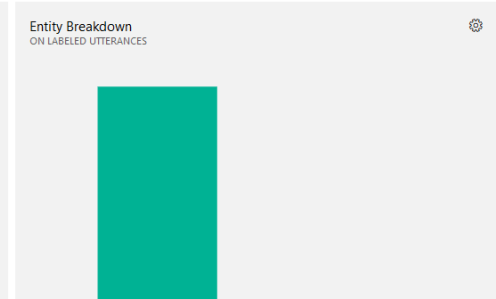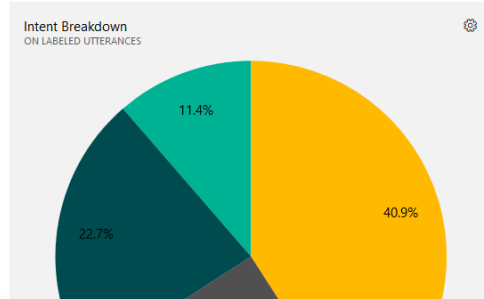
[Save]   [Cancel]

Add Entity

Entity name (REQUIRED)

Date

Entity type (REQUIRED)

Hierarchical

Child # 1

StartDate

Child # 2

EndDate

+ Add child

Save   Cancel

Edit Phrase list

Phrase list name(REQUIRED)

Rooms

Value(REQUIRED)

Kitchen,living room,bathroom,bedroom,office,hallway,garage

Hide related values

Phrase list values(REQUIRED)   Related Values   ↻ Recommend

Kitchen × living room × bathroom × bedroom × office ×   Add values and click 'Recommend' to get suggestions
hallway × garage ×

✓ Is exchangeable?

✓ Is active?

Save   Cancel

Add Intent   ✕

Intent name (REQUIRED)

GetRoomTemperature

| Save | Cancel |

GetRoomTemperature

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... Learn more

Utterances (17)   Entities in use (1)   **Suggested utterances**

| 🖫 Save | ✕ Discard | 🗑 Delete | Reassign Intent ⌄ | Labels view (Ctrl+E): | Entities ▾ |
| | | | | Search in utterances ... 🔍 | ▽ |

☐	Utterance text	Suggested Intent
☐	get me the latest [$NewsCategory] news .	**1** GetNews

SetRoomTemperature

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... Learn more

Utterances (11)   Entities in use (1)   Suggested utterances

| Type a new utterance & press Enter ... | ✕ |

| 🖫 Save | ✕ Discard | 🗑 Delete | Reassign Intent ⌄ | Labels view (Ctrl+E): | Entities ▾ | Search in utterances ... 🔍 | ▽ |

☐	Utterance text	Predicted Intent
☑	set the temperature in the [$Rooms] to [$temperature]	**0.98** SetRoomTempera...

Calendar

The Calendar domain provides intents and entities related to calendar ... Learn more

Added

Camera

The Camera domain provides intents and entities related to using a ... Learn more
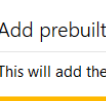
Not added

Communication

The Communication domain provides intents and entities related to ... Learn more

Not added

Add prebuilt domain ✕

This will add the "Events" domain to the application. Proceed?

Yes   No
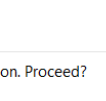
The Entertainment domain provides intents and entities related to ... Learn more

Not added

The Events domain provides intents and entities related to booking ... Learn more

Not added

Fitness

The Fitness domain provides intents and entities related to tracking ... Learn more

Not added

Intents

A listing of intents in the application. Click an intent to view/edit its details, or add a new intent ... Learn more

Add Intent   Add prebuilt domain intents

Search for intent

Intent Name ↓	Utterances		
Calendar.Add	18	✏	🗑
Calendar.CheckAvailability	10	✏	🗑
Calendar.Delete	9	✏	🗑
Calendar.Edit	11	✏	🗑
Calendar.Find	10	✏	🗑

Test your application

Use this tool to test the current and published versions of your application, to check if you are progressing on the right track ... Learn more

Train Application   Last train: Sep 11, 2017, 6:33:21 AM | Last publish: Sep 11, 2017, 6:39:00 AM

Interactive Testing   Batch Testing

☐ Enable published model

Labels view (Ctrl+E) [Entities ▾] | Reset console

Type a test utterance & press Enter →

show me the temperature in the [$Rooms]

Current version results

Top scoring intent
None (0.2)

Other intents
SetRoomTemperature (0.12)   GetRoomTemperature (0.08)
GetRoomTemperature2 (0)   GetNews (0)
Calendar.CheckAvailability (-1)   Calendar.Delete (-1)
Calendar.Edit (-1)   Calendar.Add (-1)   Calendar.Find (-1)

Publish App

Publish your app as a web service or as a chat bot. You can publish a new app or an updated version of a published app ... Learn more

Essentials

Latest publish:Approximately 8 month(s) ago

Endpoint Key(REQUIRED)

[▼]

Add a new key to your account

Publish settings

Endpoint slot

[Production   ▼]

Slot info

Published version Id: 0.1   Published date: Jan 10, 2017, 10:23:14 PM

Endpoint url

https://westus.api.cognitive.microsoft.com/luis/v2.0/apps/6   3?subscription-key=   &timezoneOffset=0&v
erbose=true&q=

☑ Add verbose flag   ☐ Enable bing spell checker   Timezone
                                                                          [(GMT) Western Europe Time, London, Lisbon, Casab ▼]

[Train   ] [Publish   ]

External Key Associations

[Add Key Association]

JSON   Raw Data   Headers
Save Copy

query: "get the bedroom temperature"
▼ topScoringIntent:
    intent: "GetRoomTemperature"
    score: 0.981855154
    ▼ actions:
        ▼ 0:
            triggered: true
            name: "GetRoomTemperature"
            ▼ parameters:
                ▼ 0:
                    name: "Room"
                    type: "Rooms"
                    required: true
                    ▼ value:
                        ▼ 0:
                            entity: "bedroom"
                            type: "Rooms"
                            resolution:
▼ intents:
    ▼ 0:
        intent: "GetRoomTemperature"
        score: 0.981855154
        ▼ actions:
            ▼ 0:
                triggered: true
                name: "GetRoomTemperature"
                ▼ parameters:
                    ▼ 0:
                        name: "Room"
                        type: "Rooms"
                        required: true
                        ▼ value:
                            ▼ 0:
                                entity: "bedroom"
                                type: "Rooms"
                                resolution: Object
    ▼ 1:
        intent: "None"
        score: 0.106256679
    ▼ 2:
        intent: "SetRoomTemperature"
        score: 0.00191827933

Overview

Facts & statistics about the app's data and the received endpoint hits at any period of time ... Learn more

Dashboard   Suggested utterances

App Id: 6   3

Smart Home   — □ ✕

| Home | LUIS | Administration |

Input text   **Results**

what is the bedroom temperature?

Status: Succeeded
Summary: Top intent is GetRoomTemperature with score 0,8229306. Found 1 entities.

Entities found: 1
Entities:
Name: Rooms   Value: bedroom

Execute utterance

Intent Breakdown
ON LABELED UTTERANCES

Entity Breakdown
ON LABELED UTTERANCES
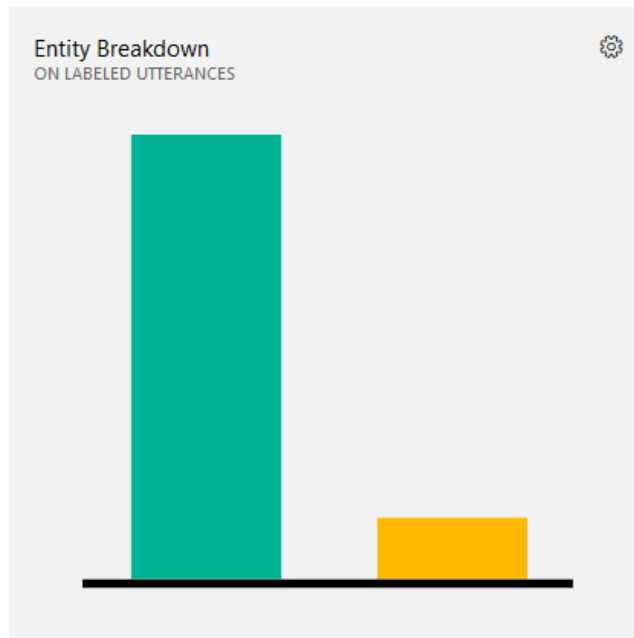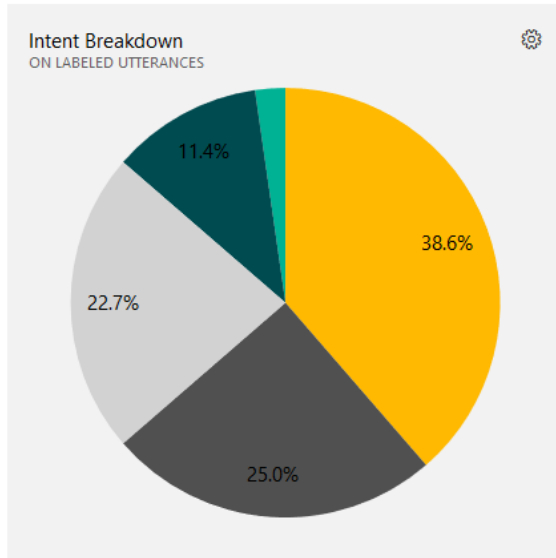
Watch 1

Name	Value
▲ ● result	{Microsoft.Cognitive.LUIS.LuisResult}
🔧 DialogResponse	null
▲ 🔧 Entities	Count = 0
▷ ● Raw View	
▲ 🔧 Intents	{Microsoft.Cognitive.LUIS.Intent[3]}
▷ ● [0]	{Microsoft.Cognitive.LUIS.Intent}
▷ ● [1]	{Microsoft.Cognitive.LUIS.Intent}
▷ ● [2]	{Microsoft.Cognitive.LUIS.Intent}
🔧 OriginalQuery	"can you tell me the bedroom temperature?"
▷ 🔧 Reply	{Method = {Microsoft.Cognitive.LUIS.LuisResult <.ctor>b__0(System.String)}}
▲ 🔧 TopScoringIntent	{Microsoft.Cognitive.LUIS.Intent}
🔧 Actions	{Microsoft.Cognitive.LUIS.Action[0]}
🔧 Name	"None"
🔧 Score	0.6122963

GetRoomTemperature

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... Learn more

Utterances (17)　　Entities in use (1)　　**Suggested utterances**

💾 Save　✕ Discard　🗑 Delete　Reassign Intent ⌄　　　　Labels view (Ctrl+E): [Entities ⌄]

　　　　　　　　　　　　　　　　　　　　　　　　　　　[Search in utterances ... 🔍] ▽

☐	Utterance text	Suggested Intent
☐	get me the latest [$NewsCategory] news .	**1** GetNews

Name	Value
▲ ● result	{Microsoft.Cognitive.LUIS.LuisResult}
🔧 DialogResponse	null
▲ 🔧 Entities	Count = 1
▲ ● [0]	{[Rooms, System.Collections.Generic.List`1[Microsoft.Cognitive.LUIS.Entity]]}
🔧 Key	"Rooms"
▲ 🔧 Value	Count = 1
▲ ● [0]	{Microsoft.Cognitive.LUIS.Entity}
🔧 EndIndex	26
🔧 Name	"Rooms"
▷ ● Resolution	Count = 0
🔧 Score	0.8959288
🔧 StartIndex	20
🔧 Value	"bedroom"
▷ ● Raw View	
▷ ● Non-Public members	
▷ ● Raw View	
▷ 🔧 Intents	{Microsoft.Cognitive.LUIS.Intent[3]}
🔧 OriginalQuery	"can you tell me the bedroom temperature?"
▷ 🔧 Reply	{Method = {Microsoft.Cognitive.LUIS.LuisResult <.ctor>b__0(System.String)}}
▲ 🔧 TopScoringIntent	{Microsoft.Cognitive.LUIS.Intent}
▷ 🔧 Actions	{Microsoft.Cognitive.LUIS.Action[1]}
🔧 Name	"GetRoomTemperature"
🔧 Score	0.491344

Chapter 5: Speaking with Your Application

Speaker profiles

Add new speaker profile

[Add]

Speaker profiles:

be4d3d7b-9b50-4b12-9180-ad0ba926b844

| Delete speaker | Start enrollment rec. | Stop recording | Reset enrollment |

Status:

Enrollment finished. Enrollment status: Enrolled

Smart Home   — □ ✕

| Home | LUIS | Administration |

Smart Home

Logon to group: Hi there, be4d3d7b-9b50-4b12-9180-ad0ba926b844

| Image logon | Start Camera | Stop camera |
| Start Recording | Stop Recording |

Speaker profiles

Add new speaker profile

Add

Verification phrases:

```
i am going to make him an offer he cannot refuse
houston we have had a problem
my voice is my passport verify me
apple juice tastes funny after toothpaste
you can get in without your password
you can activate security system now
my voice is stronger than passwords
```

Speaker profiles:

```
f365b19e-3ada-4fa3-a72f-7ba3e513ad9b
```

Delete speaker	Start enrollment rec.	Stop recording	Reset enrollment
Start verification	Stop verification		

Status

Enrollment status: Enrolled

Speaker profiles

Add new speaker profile

Add

Verification phrases:

i am going to make him an offer he cannot refuse

houston we have had a problem

my voice is my passport verify me

apple juice tastes funny after toothpaste

you can get in without your password

you can activate security system now

my voice is stronger than passwords

Speaker profiles:

f365b19e-3ada-4fa3-a72f-7ba3e513ad9b

| Delete speaker | Start enrollment rec. | Stop recording | Reset enrollment |
| Start verification | Stop verification |

Status

Verification result: Accept with High confidence.
Phrase used: houston we have had a problem

Chapter 5

Speaker profiles

Add new speaker profile

[Add]

Verification phrases:

- i am going to make him an offer he cannot refuse
- houston we have had a problem
- my voice is my passport verify me
- apple juice tastes funny after toothpaste
- you can get in without your password
- you can activate security system now
- my voice is stronger than passwords

Speaker profiles:

f365b19e-3ada-4fa3-a72f-7ba3e513ad9b

| Delete speaker | Start enrollment rec. | Stop recording | Reset enrollment |

| Start verification | Stop verification |

Status

Verification result: Reject with High confidence.
Phrase used:

Chapter 6: Understanding Text

MainView — □ ✕

| Spell check | Text analysis | Linguistic analysis | Web LM |

Input query:

petal

Pre context:

bike

Execute spell check

Post context:

Results:

Spell checking results:

Token is: petal
Suggestion: pedal - with score: 1

MainView — □ ✕

| Spell check | Text analysis | Linguistic analysis | Web LM |

Input query:

thisisalongwordineedtobreakup

[Break words] [Cond. Prob] [Joint Prob] [Next words]

Results:

Candidate: this is a long word i need to break up, with probability: -19,081
Candidate: thisisalongword i need to break up, with probability: -20,153
Candidate: this is a long word i need to breakup, with probability: -20,297
Candidate: this is a longword i need to break up, with probability: -20,615
Candidate: thisisalongword i need to breakup, with probability: -21,369

MainView

| Spell check | Text analysis | Linguistic analysis | Web LM |

Input query:

my name;is

| Break words | Cond. Prob | Joint Prob | Next words |

Results:

Probability of 'is' being the next word in 'my name' is -0,262

MainView

| Spell check | Text analysis | Linguistic analysis | Web LM |

Input query:

```
this,this is,my name is
```

| Break words | Cond. Prob | Joint Prob | Next words |

Results:

```
Probability of 'this' to appear together is -2,282
Probability of 'this is' to appear together is -3,541
Probability of 'my name is' to appear together is -5,213
```

MainView

| Spell check | **Text analysis** | Linguistic analysis | Web LM |

Input query:

Dette er en test på om jeg får norsk språk som resultat

[Detect language] [Detect key phrases] [Detect sentiment]

Results:

Detected language: Norwegian with score 1

| Spell check | Text analysis | Linguistic analysis | Web LM |

Input query:

this is probably the coolest technology I have worked with

[Detect language] [Detect key phrases] [Detect sentiment]

Results:

Document ID: FirstId
Sentiment is positive, with a score of 0,8326857

MainView

☐ ☐ ✕

| Spell check | Text analysis | Linguistic analysis | Web LM |

Analyzers:

| POS_Tags |
| Constituency_Tree |
| Tokens |

Input query:

given sentences of text, we can do linguistic analysis on this.

[Analyse linguistics]

Results:

```
    "IN",
    "DT",
    "."
  ]
]
[
  "(TOP (S (PP (VBN given) (NP (NP (NNS sentences)) (PP (IN of) (NN text)))) (, ,) (NP (PRP
]
[
  {
    "Len": 63,
    "Offset": 0,
    "Tokens": [
```

MainView — ☐ ✕

| Spell check | Text analysis | Linguistic analysis | Web LM |

Input query:

what is the next big

| Break words | Cond. Prob | Joint Prob | Next words |

Results:

Candidate: storm, with probability: -0,103
Candidate: thing, with probability: -0,926
Candidate: step, with probability: -2,029
Candidate: sports, with probability: -2,235
Candidate: move, with probability: -2,366

Chapter 7: Extending Knowledge Based on Context

Smart Home   — □ ✕

| Home | LUIS | Entity Linking | Administration |

Input text

For months, the four scientific instruments at the heart of the James Webb Space Telescope have been sealed in what looks like a huge pressure cooker. It's a test chamber that simulates the grueling operating conditions they will face after Webb is launched into orbit in 2018. But in fact, "pressure cooker" is an apt metaphor for the whole project. The infrared Webb observatory is the biggest, most complex, and most expensive science mission that NASA has ever attempted. Like that of its predecessor, the Hubble Space Telescope, Webb's construction has been plagued by redesigns, schedule slips, and cost overruns that have strained relationships with contractors, international partners, and supporters in the U.S. Congress. Lately the project has largely stuck to its schedule and its $8 billion budget. But plenty could still go wrong, and the stakes are high: Both the future of space-based astronomy and NASA's ability to build complex science missions depend on its success.

Entity: [ ]   Offset: [0]   [Link entities]

Results

Entities found: 5

Entity 'James Webb Space Telescope'
        Score 0,993
            Wikipedia ID 'James Webb Space Telescope'
            Matches in text: 2

Text match: 'James Webb Space Telescope'
Found at position: 64

Text match: 'Webb'
Found at position: 241   364   534

Projects

FBTCogServices   **+ ADD PROJECT**

Projects   Sample Code   Documentation   API Reference

Projects > FBTCogServices

FBTCogServices Model ID:

BUILDS   RULES

Step 1: Add a catalog file (schema)

📁 BROWSE FOR FILE...

Catalog uploaded

Step 2: Add usage files (schema)

📁 BROWSE FOR FILE...

Uploaded files

usage1.csv   🗑

Step 3: Create a build

NEW BUILD

FBTCogServices

Build Type

FBT

Description

Frequently Bought Together build definition, with default values

Hide Advanced

FBT Support Threshold

6

FBT Maximum Item Set Size

2

FBT Minimal Score

0

FBT Similarity Function

Jaccard (Balanced)

Enable Modeling Insights

False

RESET   BUILD

Step 3: Create a build

NEW BUILD

ACTIVE BUILD	BUILD ID	TYPE	STATUS	DATE CREATED	
⦿	1590442	FBT	Success	11/30/2016, 4:41:19 AM	SCORE

Select seed items below, or search by name.

Search

Disney Interactive Studios Infinity Figure-francesco	Word 2013 32/64 ES PKL Online DwnLd C2R NonCmcl NR	Windows Server CAL 2012 English MLP 5 User CAL	HP Stream 7 Tablet Case - Black #K2N05AA#ABL	3D Systems Cube Cartridge Gen3 PLA White #391146	HP ENVY 15 TouchSmart Silver
Ubisoft Assassin's Creed IV:Black Flag PC	Her Interactive Nancy Drew: #22 Trail of the Twister PC Game ESD	Take 2 Nickelodeon Dance Xbox 360	Trina Turk Printed Sleeve for Surface Pro 3 - Fall 2 Floral #TTRKSP-001-F2F	Belkin Mini Displayport to HDMI 6' Cable	ADONIT Jot Mini Fine Point Stylus- Turqoise #ADJMT
Disney Interactive Studios Infinity Figure - Rapunzel	HP Pavilion TouchSmart 11 Silver	OfficePro 2013 32/64 ES PKL Online NaOnly DwnLd C2R NR	GOPRO LCD Touch BacPac #ALCDB-303	Nokia Micro USB Car Charger DC-15	EA FIFA World Cup 2014 Brazil Xbox 360

Page 1

Cart

Nokia Micro USB Car Charger DC-15

Recommendations

Microsoft Online Coupon SKU (0.00953)

I2ICogServices
Build Type

| Recommendation | ⌄ |

Description

| I2I Default Build |
| .:: |

Hide Advanced

Number of model iterations

| 40 | ⌄ |

Number of Model Dimension

| 20 | ⌄ |

Item Cut-off Lower Bound

| 2 | ⌄ |

Item Cut-off Upper Bound

| |

User Cut-off Lower Bound

| 2 | ⌄ |

User Cut-off Upper Bound

| |

Enable Modeling Insights

| False | ⌄ |

Enable U2I

| True | ⌄ |

RESET BUILD

Model

I2ICogServices

Products

Wedge Touch Mouse Bluetooth Surface Edition EN/XD/ES Hdwr

Recommend items

Recommendations

Recommended items:

Score: 0,7226764
Reason: People who like 'Wedge Touch Mouse Bluetooth Surface Edition EN/XD/ES Hdwr' also like 'Cmplt Warranty U!
Item ID: DQF-00248
Item Name: Cmplt Warranty USD Surface Pro2/Pro3

Score: 0,7202604
Reason: People who like 'Wedge Touch Mouse Bluetooth Surface Edition EN/XD/ES Hdwr' also like 'Type Cover 3 SC E!
Item ID: RD2-00080
Item Name: Type Cover 3 SC English Hdwr Black

Score: 0,7189347
Reason: People who like 'Wedge Touch Mouse Bluetooth Surface Edition EN/XD/ES Hdwr' also like 'DckngStn-SrfPro3
Item ID: 3Q9-00001
Item Name: DckngStn-SrfPro3 SC EN/XD/ES Hdwr

Chapter 8: Querying Structured Data in a Natural Way
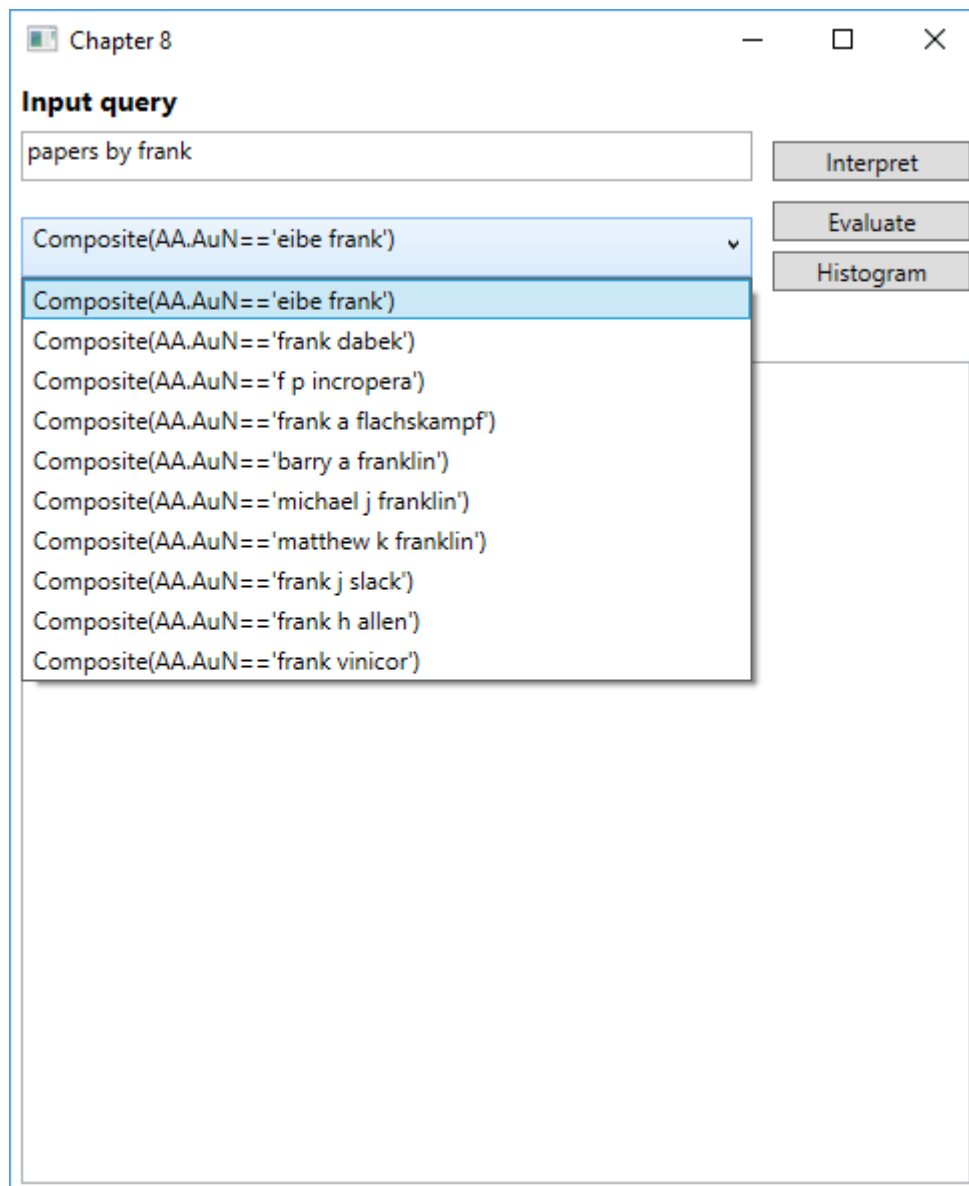
Chapter 8 — □ ✕

Input query

| papers by frank | | Interpret |

| Composite(AA.AuN=='eibe frank') ▾ | Evaluate |
| | Histogram |

| Composite(AA.AuN=='eibe frank') |
| Composite(AA.AuN=='frank dabek') |
| Composite(AA.AuN=='f p incropera') |
| Composite(AA.AuN=='frank a flachskampf') |
| Composite(AA.AuN=='barry a franklin') |
| Composite(AA.AuN=='michael j franklin') |
| Composite(AA.AuN=='matthew k franklin') |
| Composite(AA.AuN=='frank j slack') |
| Composite(AA.AuN=='frank h allen') |
| Composite(AA.AuN=='frank vinicor') |

Chapter 8

Input query

papers by frank

[Interpret]

Composite(AA.AuN=='frank dabek') ▾

[Evaluate]

[Histogram]

Results

Expression Composite(AA.AuN=='frank dabek') returned 10 entities

Paper title: chord a scalable peer to peer lookup protocol for internet applications
    Date: 2003-02-01
Authors:
    ion stoica
    r morris
    david libennowell
    david r karger
    m f kaashoek
    frank dabek
    hari balakrishnan

Paper title: wide area cooperative storage with cfs
    Date: 2001-10-21
Authors:
    frank dabek
    m frans kaashoek
    david r karger
    robert morris
    ion stoica

Paper title: vivaldi a decentralized network coordinate system
    Date: 2004-08-30
Authors:
    frank dabek

Chapter 8

Input query

papers by frank

[Interpret]

Composite(AA.AuN=='frank dabek') ▾

[Evaluate]
[Histogram]

Results

Totalt number of matching entities: 19
Attribute: Y
        Value '2003' was found 5 times
        Value '2001' was found 2 times
        Value '2004' was found 4 times
        Value '2010' was found 1 times
        Value '2006' was found 4 times
        Value '2002' was found 2 times
        Value '1998' was found 1 times

Attribute: F.FN
        Value 'computer science' was found 15 times
        Value 'distributed computing' was found 11 times
        Value 'computer network' was found 6 times
        Value 'world wide web' was found 5 times
        Value 'chord' was found 4 times
        Value 'routing' was found 2 times
        Value 'the internet' was found 2 times
        Value 'steady state' was found 1 times
        Value 'application software' was found 1 times
        Value 'routing protocol' was found 1 times

Click here to see details about the web service

Enter a query below to see interpretations. After 1 second, entities and histograms will be fetched for the first interpretation. You can click on other interpretations to fetch objects and histograms for them.

papers by

Interpret URL: interpret?complete=1&results=0&query=papers by

papers by james r bergen
papers by hugh r wilson
papers by paramvir bahl
papers by bishnu s atal
papers by suzanne l hanauer
papers by andrew blake
papers by zhengyou zhang
papers by hugues hoppe

Evaluate URL:
evaluate?attributes=*&expr=Composite(Author.Name=='james r bergen')

{
    "logprob": -13.963,
    "Title": [
        "a four mechanism model for threshold spatial vision"
    ],
    "Year": [
        1979
    ],
    "Keyword": [],
    "Author": [
        {
            "Id": [
                2225066386
            ],
            "Name": [
                "hugh r wilson"
            ],
            "Affiliation": [
                "microsoft"
            ]
        }

CalcHistogram URL:
histogram?attributes=*&expr=Composite(Author.Name=='james r bergen')

{
    "attribute": "Title",
    "distinct_values": 1,
    "total_count": 1,
    "histogram": [
        {
            "value": "a four mechanism model for threshold spatial vision",
            "logprob": -13.963,
            "count": 1
        }
    ]
}

{
    "attribute": "Year",
    "distinct_values": 1,
    "total_count": 1,
    "histogram": [
        {
            "value": 1979,

Creating a QnA service

Add sources which contain question and answer pairs you would like to include in your knowledge base.

SERVICE NAME

What would you like to name your service?

The service name is for your reference and you can change it at anytime.

Learning Cognitive Services

FAQ URL(S)

What is the URL of your company FAQ page?

This will help us gather relevant data about your business and extract QnA pairs that you can later use in your bot. Here is an example of a page that would work.

https://www.microsoft.com/en-us/software-download/faq   **+ Add another**

FAQ FILES

No FAQ URL? No worries. Upload files containing your question and answer pairs.

Supported formats are .tsv, .pdf, .doc, .docx, each under 2MB. Upload up to five files containing questions and answers in sequence. See an example

Select file...

STARTING FROM SCRATCH

Would you prefer to enter questions and answers manually? No problem.

You will be able to do it in the next step.

Learning Cognitive Services

Download Knowledge Base | Replace Knowledge Base

↻ Save and retrain   ⬆ Publish

Retrained a few seconds ago

Knowledge Base	KNOWLEDGE BASE	27 QnA pairs	+ Add new QnA pair

Test

Settings

Question	Answer
⌃ Original source: Editorial	
1 Hi	Hello
⌃ Original source: https://www.microsoft.com/en-us/software-download/faq	
1 How do I find my Windows product key?	Windows 8.1 and Windows 10:\nThe product key is located inside the product packaging, on the receipt or confirmation page for a digital purchase or in a confirmation e-mail that shows you purchased Windows. If you purchased a digital copy from [Microsoft Store](http://www.microsoftstore.com/store/msusa/en_US/home), you can locate your product key in your Account under Digital Content.\nWindows 7 \nThe product key is located inside the box that the Windows DVD came in, on the DVD, on the receipt or confirmation page for a digital purchase or in a

KNOWLEDGE BASE | 28 QnA pairs   + Add new QnA pair

Question	Answer

∧ Original source: Editorial

1 | Hi | Hello

2 | How are you doing? | I'm doing great, how about you?

Add alternative phrasing
Delete QnA pair

∧ Original source: https://www.micr... d/faq

Knowledge Base

Test

Settings

TEST

Chat

...manufacturer or reseller may be removed during installation.
Windows 8.1 & 10: The product key may be embedded on the motherboard or may be on the Certificate of Authenticity sticker on the bottom of the device.
Windows 7: For devices that came with Windows 7 pre-installed, the product key may be on the Certificate of Authenticity sticker on the bottom of the device.
For more information about Windows product keys and genuine Microsoft products, see What is a product key and How to Tell site.

Learning Cognitive Services · 1 min ago

what is wrong with my iso download?

You · Now

If you become disconnected while files are being downloaded through your web browser, reconnect to the internet and retry your download.

Choose the most appropriate answer from these alternatives.

The media creation tool (...
You can use the ISO file ...
If you become disconnecte...
None of the above

Provide multiple alternative phrasings to the question, to broaden the knowledge base.

Add alternative here   +
what is wrong with my iso...   ✕

Download chat logs | Upload chat logs

Type your message...

Learning Cognitive Services

Your service has never been deployed.

Review your changes

Source	QnA in production	QnA in current draft	QnA added	QnA deleted
https://www.microsoft.com/en-us/software-download/...	0	27	27	0
Editorial	0	2	2	0

Download Diff File

Cancel   Publish

Success! Your service has been deployed. What's next?

You can always find the deployment details in your service's settings.
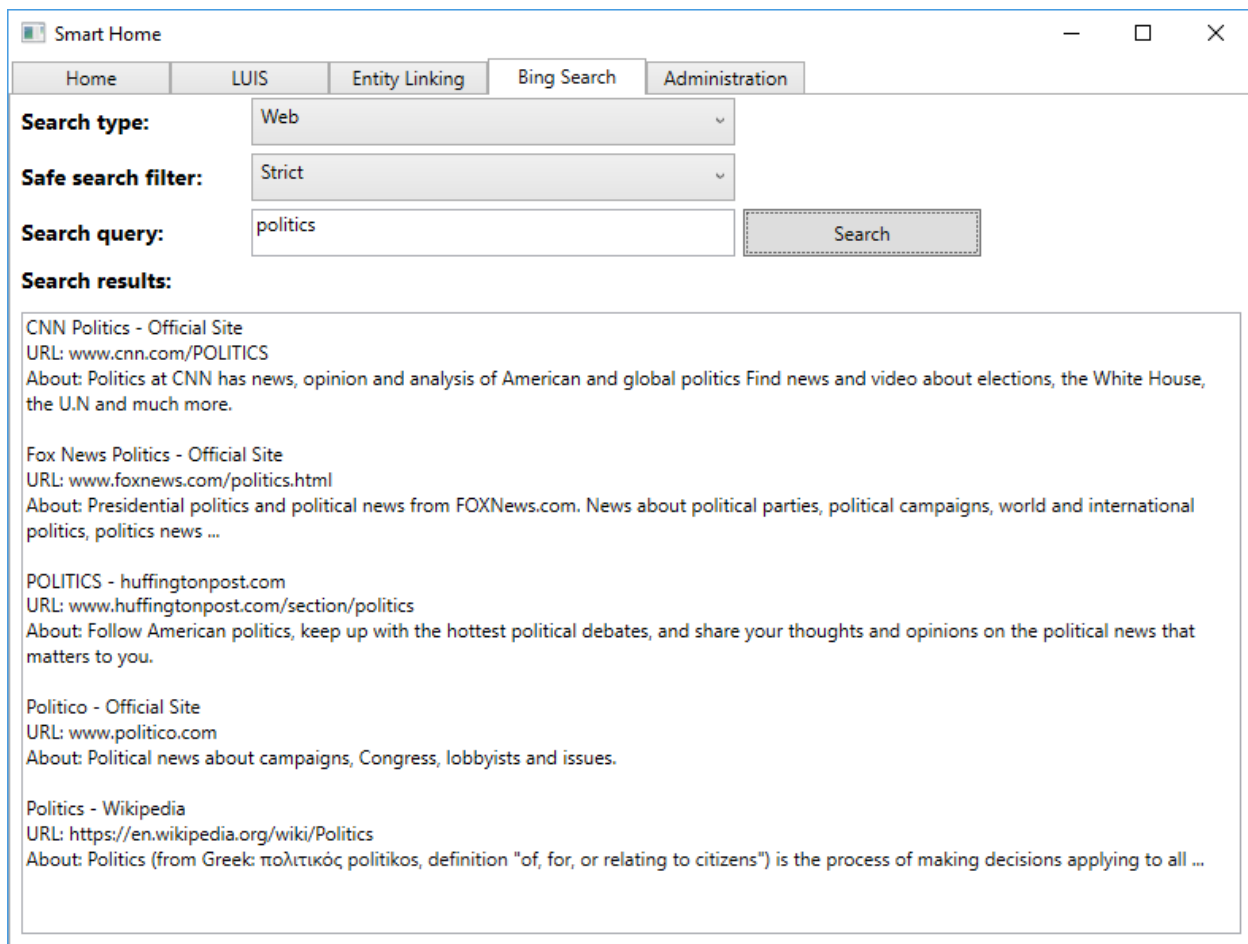
Use the below HTTP request to build your bot. Learn how.

Sample HTTP request	POST /knowledgebases/ft 55/generateAnswer Host: https://westus.api.cognitive.microsoft.com/qnamaker/v1.0 Ocp-Apim-Subscription-Key: c3 :744 Content-Type: application/json {"question":"hi"}

Need to fine-tune and refine? Go back and keep editing your service.

Edit Service

Chapter 9: Adding Specialized Searches

Smart Home   — □ ✕

| Home | LUIS | Entity Linking | Bing Search | Administration |

Search type: Web   ⌄

Safe search filter: Strict   ⌄

Search query: politics   [Search]

Search results:

CNN Politics - Official Site
URL: www.cnn.com/POLITICS
About: Politics at CNN has news, opinion and analysis of American and global politics Find news and video about elections, the White House, the U.N and much more.

Fox News Politics - Official Site
URL: www.foxnews.com/politics.html
About: Presidential politics and political news from FOXNews.com. News about political parties, political campaigns, world and international politics, politics news ...

POLITICS - huffingtonpost.com
URL: www.huffingtonpost.com/section/politics
About: Follow American politics, keep up with the hottest political debates, and share your thoughts and opinions on the political news that matters to you.

Politico - Official Site
URL: www.politico.com
About: Political news about campaigns, Congress, lobbyists and issues.

Politics - Wikipedia
URL: https://en.wikipedia.org/wiki/Politics
About: Politics (from Greek: πολιτικός politikos, definition "of, for, or relating to citizens") is the process of making decisions applying to all ...

Smart Home

| Home | LUIS | Entity Linking | Bing Search | Administration |

Search type: News

Safe search filter: Moderate

Search query: manchester united [Search]

Search results:

Manchester United Transfer News: Latest Rumours on Nelson Semedo Before January
Published: 28.12.2016 09.45.00
Manchester United are reportedly planning a £35 million move for Benfica right-back Nelson Semedo to be a long-term replacement for Antonio Valencia. According to the Mirror, talks have already begun over a move to Old Trafford for the Portugal ...

Manchester United shun Benfica's Victor Lindelof after defence improves
Published: 28.12.2016 20.07.00
• Talks over Sweden defender were in progress for several weeks • United have conceded only two goals in a winning run of five games Manchester United have opted against making a move for the Benfica defender Victor Lindelof after José Mourinho ...

Manchester United target Leon Bailey could leave Genk in January
Published: 28.12.2016 19.44.00
Leon Bailey has been linked with Manchester United and Leicester. Leon Bailey, a reported target for Manchester United and Leicester City, has said he could follow in Wilfred Ndidi's footsteps by leaving Genk. With Ndidi set to wrap up a move to Leicester ...

Victor Lindelof: Manchester United will not bid for Benfica centre-back
Published: 28.12.2016 19.01.00
Victor Lindelof made his debut for Benfica during the 2013-14 season and has 11 caps for Sweden Manchester United will not make a move for Benfica defender Victor Lindelof during the January transfer window. United manager Jose Mourinho was reported to be ...

Search type: ImageSearch ▾   Seach query: soccer   [Search]

Image search results:

# of results: 933

Image name: How I got Fired from my sons soccer team | Children's Directory
Image size: 1829573 B
Image host: childrensdirectory.net/2014/10/how-i-got-fired-from-my-soccer...
Image URL: http://www.bing.com/cr?IG=871E010D672D402DBFCA2B584314AB58&CID=32

Image name: Pics Photos - About Soccer About Soccer
Image size: 269084 B
Image host: funny-quotes.picphotos.net/about-soccer-about-soccer/data3.whicdn...
Image URL: http://www.bing.com/cr?IG=871E010D672D402DBFCA2B584314AB58&CID=32

Image name: Barcelona Needs Depth, but It's Losing It Every Day - NYTimes.com
Image size: 396765 B
Image host: www.nytimes.com/2013/07/17/sports/soccer/barcelona-needs-depth-but...
Image URL: http://www.bing.com/cr?IG=871E010D672D402DBFCA2B584314AB58&CID=32

Image name: Soccer Images | Crazy Gallery
Image size: 5941362 B
Image host: www.crazygallery.info/soccer.html
Image URL: http://www.bing.com/cr?IG=871E010D672D402DBFCA2B584314AB58&CID=32

Chapter 9 — □ ✕

Search type: VideoSearch ∨   Seach query: cats   Search

Video search results:

# of results: 1000

Video name: Cats the Musical: Jellicle Songs
Video duration: PT3M20S
Video URL: https://www.youtube.com/watch?v=tLvMjWHMNiU
Publisher: YouTube

Video name: Cats Meowing and Talking Compilation Video
Video duration: PT3M31S
Video URL: https://www.youtube.com/watch?v=fiAIQA8-Yks
Publisher: YouTube

Video name: Funny Cats Compilation 2016 - Best Funny Cat Videos Ever ...
Video duration: PT3M48S
Video URL: https://www.youtube.com/watch?v=njSyHmcEdkw
Publisher: YouTube

Video name: TALKING CATS - COMPILATION, CHATTERING CATS, TICKYUL
Video duration: PT6M20S
Video URL: https://www.youtube.com/watch?v=57zOdS9pB38
Publisher: YouTube

Chapter 10: Connecting the Pieces

Add Entity

×

Entity name (REQUIRED)

NewsCategory

Entity type (REQUIRED)

Simple

∨

Save   Cancel

Add Intent

×

Intent name (REQUIRED)

GetNews

Save   Cancel

GetNews

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... Learn more

Utterances (5)   Entities in use (1)   Suggested utterances

Type a new utterance & press Enter ...	✕

💾 Save   ✕ Discard   🗑 Delete   Reassign Intent ⌄   Labels view (Ctrl+E): [Entities ⌄]   [Search in utterances ... 🔍]   ▽

☐	Utterance text	Predicted Intent
☐	what is the latest from [$NewsCategory] ?	**0.92** GetNews

Smart Home   — ☐ ✕

Home	LUIS	Entity Linking	Bing Search	Administration

Input text   **Results**

Result message: STT completed with status: RecognitionSuccess

Retrieved the following results:
Read me the latest Sports News.

Calling LUIS with the top result

Status: Succeeded
Summary: Top intent is GetNews with score 0,9797508. Found 1 entities.

Action: GetNews
Action triggered: True

[Record command]   [Execute utterance]