# An Overview of the Azure Cognitive Services



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### Introduction



#### **Azure Cognitive Services**

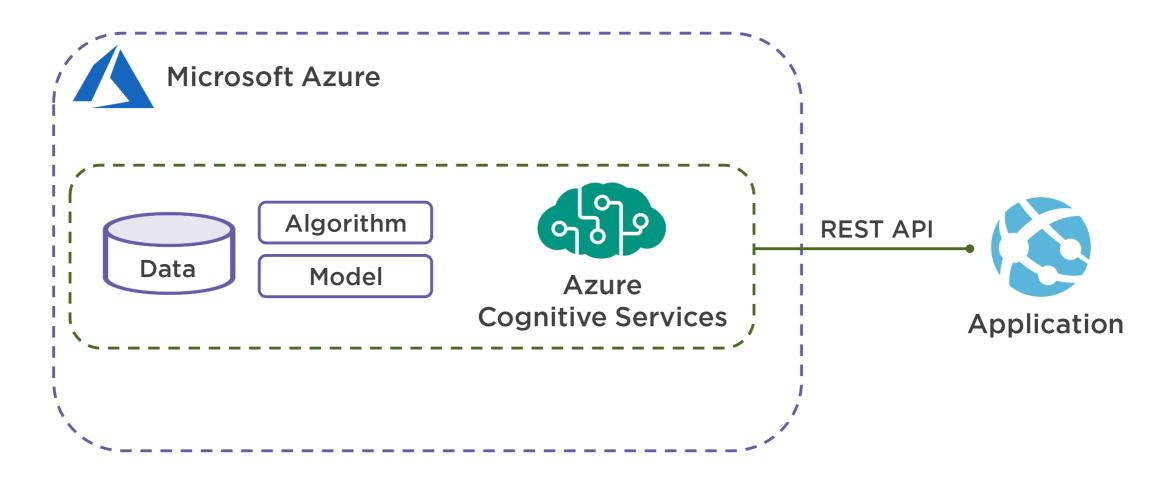
- Landscape
- Catalogue
- SLA
- Pricing
- Scaling



## The Cognitive Services Landscape



## Cognitive Services Make Things Easy





## The Cognitive Services Landscape

Microsoft Azure Cognitive Services

Computer Vision API
Translator Speech API
Text Analytics API

....

**March 2016** 

**IBM Watson** 

Visual Recognition API
Speech to Text API
Personality Insights API

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September 2015

**Google Cloud Platform** 

Video Intelligence API
Vision API
Translation API

....

**March 2016** 

**Amazon Web Services** 

Amazon Comprehend Amazon Lex Amazon Polly

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November 2016



## Cognitive Services Catalogue



## Cognitive Services Catalogue

	Vision	Speech	Language	Knowledge	Search
	Custom Vision	Custom Speech	Language Understanding	Custom Decision	Custom Search
•	Computer Vision Content Moderator Face Emotion Video Indexer	<ul> <li>Translator Speech</li> <li>Bing Speech</li> <li>Speaker Recognition</li> </ul>	<ul> <li>Bing Spell Check</li> <li>Web Language Model</li> <li>Text Analytics</li> <li>Translator Text</li> <li>Linguistic Analysis</li> </ul>	<ul> <li>Recommendations</li> <li>Knowledge Exploration</li> <li>Entity Linking Intelligence</li> <li>Academic Knowledge</li> <li>QnA Maker</li> </ul>	<ul> <li>Autosuggest</li> <li>News Search</li> <li>Web Search</li> <li>Entity Search</li> <li>Image Search</li> <li>Video Search</li> </ul>
			Cognitive Services Labs		

Project Abu Dhabi

**Project Nanjing** 

**Project Prague** 

**Project Wollongong** 

**Project Johannesburg** 

**Project Cuzco** 

## Emotion API Example

#### Request

{ "url": "http://example.com/picture.jpg" }



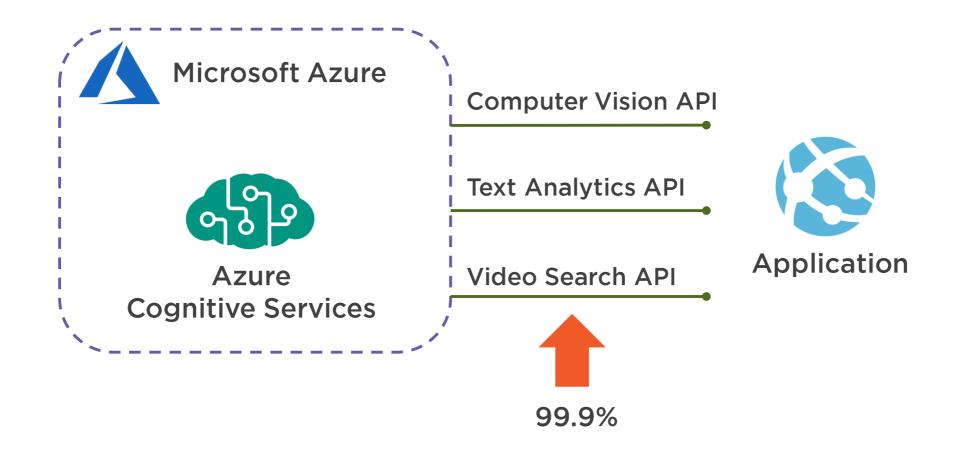
#### Response

```
"faceRectangle": {
 "left": 68,
 "top": 97,
 "width": 64,
 "height": 97
"scores": {
 "anger": 0.00300731952,
 "contempt": 5.14648448E-08,
 "disgust": 9.180124E-06,
 "fear": 0.0001912825,
 "happiness": 0.9875571,
 "neutral": 0.0009861537,
 "sadness": 1.889955E-05,
 "surprise": 0.008229999
```

## Cognitive Services SLA, Pricing, and Scaling



## Cognitive Services SLA





## Cognitive Services Pricing

#### Free

20 calls / min 5K calls / month

## Standard Per amount of calls

10 calls / sec €0.085 / 1,000 calls

## Standard Per month

100K calls / month €0.50 / 1K Overage Calls



### Cognitive Services Pricing

Free

20 calls / min 5K calls / month Standard Per amount of alls

10 d

€0.0 5 / 1,00 cans

Standard Jonth

100K calls / month

€0.50 / 1K Overage Calls



## Cognitive Services Scaling

Free

20 calls / min

**Standard S1** 

10 calls / sec



## Cognitive Services Scaling

Free

20 calls / min

Standard S1

10 calls / sec

Standard S2

100 calls / sec



## Cognitive Services Scaling

Free

20 calls / min

Standard S1

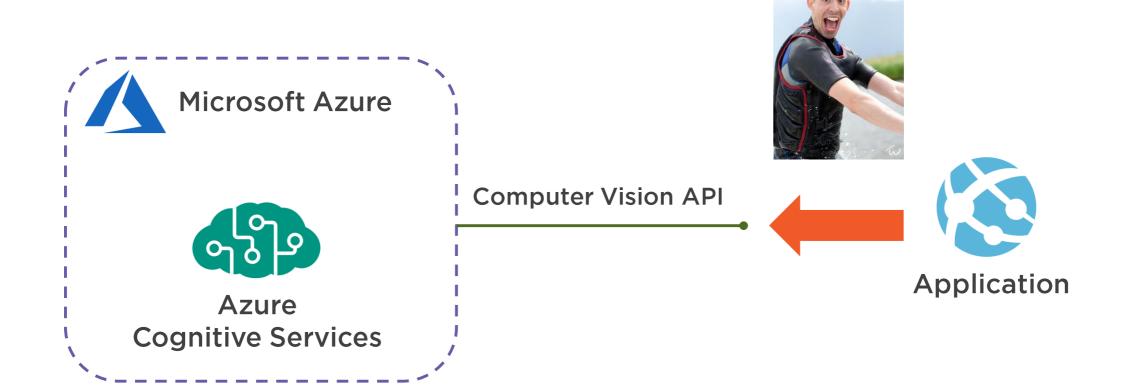
10 calls / sec

**Standard S2** 

100 calls / sec



## Data in Cognitive Services



### Data in Cognitive Services

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

Microsoft will use data you send to the Cognitive Services to improve Microsoft products and services. Where you send personal data to the Cognitive Services, you are responsible for obtaining sufficient consent from the data subjects. The General Privacy and Security Terms in the Online Services Terms do not apply to the Cognitive Services. Please refer to the Microsoft Cognitive Services section in the Online Services Terms for details. Microsoft offers policy controls that may be used to disable new Cognitive Services deployments.



# Things to Remember



## Many vendors that offer Cognitive Services

- Field is relatively new

#### 20+ Azure Cognitive Services

- Predefined data and model
- Custom data and model
- Predefined algorithm

**SLA of 99.9%** 

Different pricing for each API

Manually scale between pricing tiers

