

Self-Service AI with Power BI Desktop

Enrich your Business Intelligence with Artificial Intelligence

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Artificial Intelligence (AI)

From automagical stuff to machine learning algorithms

From GUI to scripts (DAX, M, R)

Smart Features

Report

- Q & A
- Smart Narrative
- Insights
- Analytic Line
- Key Influencer Visual
- Decomposition Tree Visual
- Smart Custom Visuals
- What-if Parameter

Scripts

- DAX
- R Integration
- Python Integration

Power Query

- Cognitive Services
- Azure Machine Learning
- Column by Example
- Web by Example

Demo



Questions & Answers (Q & A)

Ask a question using natural language

Refine via a related question

Provides answers from the data inside Power BI

Columns, Measures, Content, Filter, Visualisation

Synonyms

<https://docs.microsoft.com/en-us/power-bi/consumer/end-user-q-and-a-tips>

Insights

Majority, Top/Bottom, Correlation, Low Variance,
Steady share with parent

Overall Trends, Seasonality, Change points, Time
series outliers

<https://docs.microsoft.com/en-us/power-bi/consumer/end-user-insight-types>

Smart Narrative

Summarizes the content of a visual in plain English text

Text can be customized

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-smart-narrative>

Analytic Line

Analytics Pane for out-of-the-box lines

Constant, min, max, average, median, percentile
Forecasting

<https://docs.microsoft.com/en-us/power-bi/desktop-analytics-pane>

Key Influencer Visual

You bring one dimension and multiple metrics,
Power BI will detect metric values are typical for
the each dimension value

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-influencers>

Decomposition Tree Visual

You bring one metric and multiple dimensions, Power BI will detect which metric has high or low values on each dimension

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-decomposition-tree>

(Smart) Custom Visuals

Microsoft and third-parties have published custom visuals on AppSource (aka Market Place)

<https://docs.microsoft.com/en-us/power-bi/developer/visuals/power-bi-custom-visuals>

<https://powerbi.microsoft.com/en-us/developers/custom-visualization/>

What-if-parameter

Advanced analytics by running scenarios on your data

Parameter changeable via a slicer

<https://docs.microsoft.com/en-us/power-bi/desktop-what-if>

R Integration

Source

<https://docs.microsoft.com/en-us/power-bi/desktop-r-scripts>

Transformation

<https://docs.microsoft.com/en-us/power-bi/desktop-r-scripts>

Visual

<https://docs.microsoft.com/en-us/power-bi/desktop-r-visuals>

<https://docs.microsoft.com/en-us/power-bi/service-r-packages-support>

Python Integration

Source

<https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-python-scripts>

Transformation

<https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-python-scripts>

Visual

<https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-python-visuals>

<https://powerbi.microsoft.com/en-us/blog/python-visualizations-in-power-bi-service/>

Cognitive Services

Enrich your data by using a pre-trained machine learning model

<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/tutorials/tutorial-power-bi-key-phrases>

<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/how-tos/text-analytics-how-to-install-containers>

Quick Start - Microsoft

Find on page

keyphrase

No results

Options

Microsoft Azure

Create a resource

Home

Dashboard

All services

FAVORITES

All resources

Resource groups

App Services

Function Apps

SQL databases

Azure Cosmos DB

Virtual machines

Load balancers

Storage accounts

Virtual networks

Azure Active Directory

Monitor

Advisor

Security Center

Cost Management + Billing

Help + support

Home > PowerAIDemo - Quick start

PowerAIDemo - Quick start

Cognitive Services

Search (Ctrl+J)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

RESOURCE MANAGEMENT

Keys

Quick start

Pricing tier

Billing By Subscription

Properties

Locks

Automation script

Monitoring

Alerts

Metrics

Diagnostic settings

Logs

Support + troubleshooting

Resource health

New support request

Home > PowerAIDemo - Quick start > Manage keys

Manage keys

Regenerate Key1

Regenerate Key2

NAME

PowerAIDemo

KEY 1

KEY 2

1 Grab your keys

Every call to Cognitive Services requires a 'Key' from the left menu.

2 Make an API call to this endpoint: https://northeurope.api.cognitive.microsoft.com/

Get in-depth information about each properties and methods of the API. Test your keys with the built-in testing console without writing a single line of code. Once you have the API running, you can check your consumption and the API health on Azure portal in your API 'Overview'.

Content Moderator API reference

Content Moderator Portal

Computer Vision API reference

Face API reference

Language Understanding API reference

Language Understanding Portal

Translator Text API reference

Custom Translator (preview) Portal

Text Analytics API reference

Bing Search API reference

Bing Custom Search API reference

Bing Custom Search Portal

Realtime API usage

API metrics alert

Diagnostics settings

Logs

Billing by subscription

Resource health status

3 Enjoy coding

Learn more about the features, tutorials, developer tools, examples and how-to guidance to speed up.

Documentation

Additional resources

Region availability

Support options

Azure Machine Learning

Enrich your data by using a self-trained machine learning model

<https://powerbi.microsoft.com/en-us/blog/power-bi-azure-ml/>

Web services - Microsoft

https://studio.azureml.net/Home/ViewWorkspaceCached

Find on page keyphrase No results Options

Microsoft Azure Machine Learning Studio

Markus Ehrenmueller-Free...

PROJECTS

EXPERIMENTS

WEB SERVICES

NOTEBOOKS

DATASETS

TRAINED MODELS

SETTINGS

web services

NAME	CREATED ON	PROJECT
<input type="checkbox"/> Extract Key Phrases	2/22/2019 11:54:18 PM	None
<input type="checkbox"/> Extract key phrases and generate word cloud	2/12/2019 3:36:18 PM	None

Web services - Microsoft

https://studio.azureml.net/Home/ViewWorkspaceCached

Find on page keyphrase No results Options

Microsoft Azure Machine Learning Studio

extract key phrases

DASHBOARD CONFIGURATION

General New Web Services Experience preview

Published experiment

View snapshot View latest

Description

No description provided for this web service.

API key

Default Endpoint

API HELP PAGE

REQUEST/RESPONSE

BATCH EXECUTION

Request Response API Documentation for Extract Key Phrases

Updated: 03/08/2019 14:58

WebServiceAPIKey (

Previous version of this API

Submit a request

Input Parameters

Output Parameters

Web App Template for RRS

Sample Code

API Swagger Document

Endpoint Management Swagger Document

Request

Method	Request URI
POST	https://ussouthcentral.services.azureml.net/workspaces/ /execute?api-version=2.0&details=true

Note: You may omit the details parameter from the query string. This would cause ColumnTypes to be omitted from the output

Request Headers

Column by Example

Create new column, without typing any formula

<https://docs.microsoft.com/en-us/power-bi/desktop-add-column-from-example>

Web by Example

Extract data from web page,
even when there is no tidy table

<https://docs.microsoft.com/en-us/power-bi/desktop-connect-to-web-by-example>

Where are the instructions?

New platform for all technical documentation

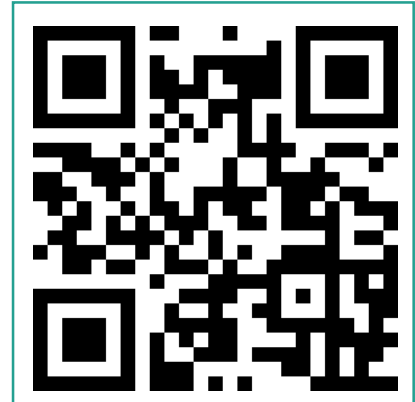
docs.microsoft.com

All content

open source, hosted on GitHub, community-enabled & in your own language

Help the community of users worldwide

<https://aka.ms/intldocs> & <https://aka.ms/msossloc>



Questions?

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DATA



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SQL Server 2005 – 2019

BI Developer
Database Developer
Database Admin



Microsoft
CERTIFIED
Solutions Expert

Business Intelligence

Data Platform

Microsoft
CERTIFIED
Trainer



PowerBIUG
POWER BI USER GROUP



PASS
AUSTRIA

