

Extract Entities from Text

Readme

Version 1.0 21/01/2020



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1. Introduction

This document contains all essential information for the user to make full use of the Bot. This manual includes a description of the functions available and step-by-step procedures for setup & configuration of the Bot and the MeaningCloud license.

1.1 Overview

This Bot extracts from a text the most relevant information, such as people, places, organizations or products mentioned, known as named *entities*. These entities provide a semantic representation of a document, enabling to develop intelligent applications to process content in several languages.

Moreover, you can also add <u>your own dictionaries</u> to extend MeaningCloud's capabilities of tagging entities and adapt them to a different domain or to your application's requirements.

The process involved in the Bot takes the following steps:

- 1. Read data from text source to be analyzed.
- 2. Send request to MeaningCloud API.
- 3. Receive response from MeaningCloud API with the entities extraction of the text.

The possible types of *entities* that may be output are described in the <u>MeaningCloud ontology</u>. It's possible to append in the output both the entity type and the relevance value obtained. The results can be also be filtered by relevance value.

By default, the output format is the following:

EntityName1; EntityName2; EntityName3...

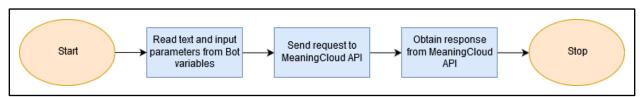
Output format with Ontology types:

EntityName1 (EntityType1); EntityName2 (EntityType2); EntityName3...

Output format with Ontology types and Relevance:

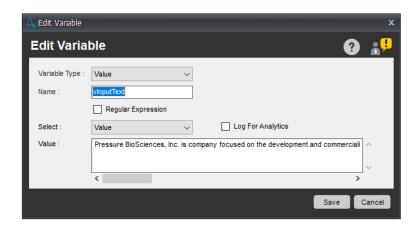
EntityName1 (EntityType1) (Relevance1); EntityName2 (EntityType2) (Relevance2); EntityName3...

Visual Flow





Input: Text read from vInputText AA variable



Output: Response from API



1.2 Common Use cases



Examples of some use cases include:

- Extract the most relevant entities from any piece of news or web content to monitor trends and create business intelligence applications.
- Find out the subjects and the interests of your target audience in social networks. Identify the trends associated with the conversation topics.
- Tag your content or your products using the categories as an aid to navigation or to detect related content in your website.



2. Requirements & Prerequisites

2.1 System Requirements



For the PC or Server where the Bot needs to run:

✓ RAM: 8GB or higher.

✓ Processor: 3.5 GHz+ with 4 multi-cores or higher.

✓ Storage: 2GB or higher in the AA Client Installation drive

Further information is shown in Enterprise Client & Control Room system requirements.

2.2 Prerequisites



Software needed:

✓ AA Enterprise Client 11.x

✓ AA Enterprise Control Room 11.x

Accounts / License needed:

- ✓ MeaningCloud License Key (A MeaningCloud account is required to obtain a free key)
- ✓ AA Enterprise License

2.3 Security Measures



There are some security best practices recommendations that you may follow with your Bot:

• It is recommended to store the MeaningCloud license key in a secured environment like the Automation Anywhere Credential Vault.



3. Getting Started

3.1 Skill Matrix



The functionality of the Bot has been divided into a set of skills.

Below is an overview of how the TaskBots and MetaBots map to these skills:

Skill	TaskBot Files	MetaBot Files
Extract the most relevant entities from a text.	Extract Entities From Text.atmx	MeaningCloudExtractEntitiesMetabot.mbot

Skill	MetaBot Files	
Perform requests to MeaningCloud's Topics Extraction API and retrieve the response	MeaningCloudExtractEntitiesMetabot.mbot	



3.2 Installation Hierarchy



Once the Bot is downloaded and installed, the installer creates the files in the folder structure as shown below:

Folder Structure on your Machine

Folder Structure	Description	
<aa application="" path=""> • My Tasks</aa>	<aa application="" path="">is the location where AA files are stored on your machine.</aa>	
○ Bot Store	Bot Store folder contains all the Bots installed from the Bot Store.	
 ExtractEntitiesFromText-MeaningCloud 	ExtractEntitiesFromText -MeaningCloud contains files and folders needed for the Bot.	
My TasksExtract Entities From Text.atmx	My Tasks folder contains all the developed TaskBots.	
 Error Folder Logs Error Log Day-Month-Year.txt Snapshots Error Snap Day-Month-Year 	Error Folder is where logs and snapshots of screens will be placed if something goes wrong with the Bot during execution.	
HourMinuteSecond.png • My MetaBots • MeaningCloudExtractEntitiesMetabot.mbot	My Metabots folder contains the developed Metabots needed for the Bot execution.	



3.3 Quick Start

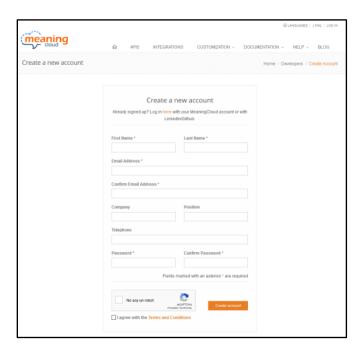
3.3.1 **Setup**



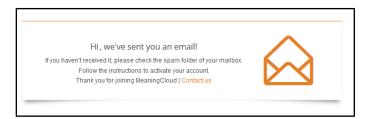
Step 1: Setting up a MeaningCloud account

In order to use Bots that include MeaningCloud applications, a valid license key is needed. The first step is to create an account in MeaningCloud:

https://www.meaningcloud.com/developer/create-account



After registering, you will receive a confirmation mail in your Inbox.





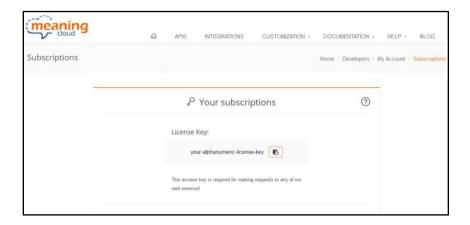
Review your mail Inbox and confirm your registration in the MeaningCloud mail that has been sent.



Step 2: Obtain your free license key

Log in the Developer area (https://www.meaningcloud.com/developer/login) and click on "Subscription" at the very top of the page.

The license key is available in the "Subscriptions" section. Copy its value to the clipboard to store it in a Bot variable or in the Credential Vault.



By creating an account in MeaningCloud, you are automatically subscribed to the Free plan, which enables you to make up to 20k credits per month (a credit is a request up to 500 words, that is, a request for a text with 600 words, would cost 2 credits) at a rate of 2 requests per second. It also limits the user resources you can use. To increase these limits, you can upgrade your plan.

3.3.2 Configuration



Below is a table that summarizes the input and output variables that are present inside the Bot. Mandatory input variables are necessary to run the Bot properly. A description and examples are included in the table.



INPUT VARIABLES				
Variable Name	Туре	Mandatory	Purpose	Example Input
vInputLanguage	Text	Yes	It specifies the language in which the text must be analyzed.	en (for other language examples see the <u>API request</u>)
vInputText	Text	Yes	Input text that's going to be analyzed.	London is a beautiful city.
vLicenseKey	Text	Yes	The license key is required for making requests to any of our web services. You can get a valid licensekey for free just by creating an account at https://www.meaningcloud.com .	<a by<br="" key="" license="" provided="">MeaningCloud.>
vOutputWithOntologyTypes	Text	No	Append the entity ontology type in the response. By default, it's set to false.	true
vOutputWithRelevance	Text	No	Append the entity relevance in the response. By default, it's set to false.	true
vDetectionThreshold	Text	No	Detection threshold as a percentage with respect to the top relevance result. By default, its value is 50.	80
vServerURL	Text	No	Address of the API server. By default it's set to our SaaS deployment. Users with an on- premises deployment can use it as the API server.	https://api.meaningcloud.com
vUserCustomDictionary	Text	No	User dictionaries allow you to include user-defined entities in the extraction.	my_custom_entities_en (to create new user dictionaries see the dictionaries documentation)

OUTPUT VARIABLES				
Variable Name	Туре	Mandatory	Purpose	Example Output
vResponseJSON	Text	No	The result of the entities extraction in JSON format.	<json string=""></json>
vResponseEntities	Text	No	Entities detected in the text (and ontology type if configured), separated by semicolons.	United Kingdom (100); IMF (50); EU (50)



4. Reports



There are no Bot Insight Reports generated for this Bot.



5. Logs



In case of Errors, Error Logs & Screenshots are generated within Error Folder (Highlighted below in yellow)

- My Tasks
 - Bot Store
 - ExtractEntitiesFromText-MeaningCloud
 - Error Folder
 - Logs (Folder)
 - Error Log Day-Month-Year.txt
 - Snapshots (Folder)
 - Error Snap Day-Month-Year HourMinuteSecond.png

Error Logs will contain the below information:

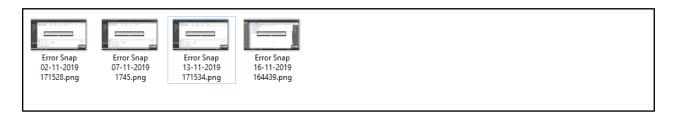
- Task Name
- Error Line Number
- Error Description
- Generated Timestamp

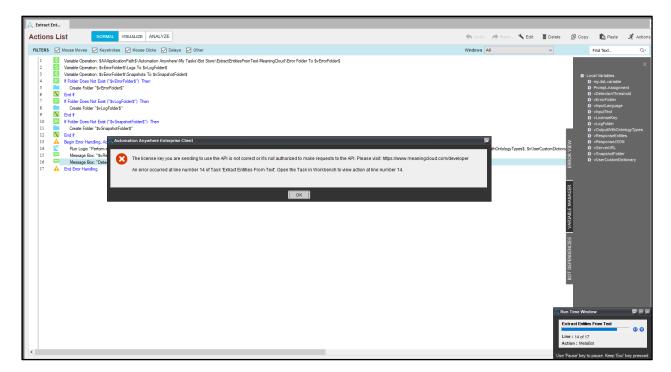
Example of Log File:





Example of Screenshot Generated Error File:







6. Troubleshooting & Support

6.1 Support





You can send us an email to support@meaningcloud.com.



Questions on Bot Functionality or Feature can also be posted to the Community site A-People.



Automation Anywhere provides a <u>Product Documentation portal</u> which can be accessed for more information about Automation Anywhere products and guidance on building bots and Digital Workers.

6.2 FAQs



Q: I am getting an error with the message 'The license key you are sending to use the API is not correct'.

A: Please check that the Bot variable 'vLicenseKey' contains the key license provided by MeaningCloud.

Q: How can I get a free key license to use MeaningCloud services?

A: A MeaningCloud account is required in order to obtain a free license key. Please visit the following link in order to create a new account: https://www.meaningcloud.com/developer/create-account



Q: I'm getting an error with the message 'Upgrade your plan to have a higher volume or wait for the credits to be reset when you billing month is over'.

A: By creating an account in MeaningCloud, you are automatically subscribed to the Free plan, which provides 20k credits per month. If your consumption is higher than that, just upgrade your plan to have a higher limit: https://www.meaningcloud.com/developer/account/subscriptions/upgrade

Q: I'm getting an error with the message "Resource access denied."

A: This error is returned when you don't have access to a resource or language, either because you are not subscribed to any of the packs that include it or because the trial period has finished. You can check to which pack the resource belongs in the <u>vertical</u> or <u>language packs</u> sections, and then in your subscription, check if you have access to that pack.

If you require access to the resource/s included in a pack, check our <u>plans and pricing</u> to subscribe to it, or just write us with your requirements to work out a solution.



Appendix A: Record of Changes

No.	Version Number	Date of Change	Author	Notes
1	1.0	21/01/2020	MeaningCloud	Version 1 Release



Appendix B: Acronyms

No.	Acronym	Description	
1	AA	Automation Anywhere	
2	JSON	JavaScript Object Notation	
3	АРІ	Application Programming Interface	
4	URL	Uniform Resource Locator	
5	RAM	Random Access Memory	
6	PC	Personal Computer	
7	OS	Operating System	



Appendix C: References

No.	Торіс	Reference Link
1	Create a Credential in Credential Vault	Click <u>here</u>
2	System Requirements – Client	Click <u>here</u>
3	System Requirements – Control Room	Click <u>here</u>
4	A-People Community Site	Click <u>here</u>
5	Automation Anywhere Documentation Portal	Click <u>here</u>
6	MeaningCloud Developer site	Click <u>here</u>
7	MeaningCloud Ontology	Click <u>here</u>
8	MeaningCloud User Dictionaries	Click <u>here</u>
9	MeaningCloud Topics Extraction: Documentation	Click <u>here</u>
10	MeaningCloud Topics Extraction: API Request	Click <u>here</u>
11	MeaningCloud Topics Extraction: API Response	Click <u>here</u>
12	MeaningCloud Account creation	Click <u>here</u>
13	MeaningCloud Vertical Packs	Click <u>here</u>
14	MeaningCloud Language Packs	Click <u>here</u>
15	MeaningCloud Plans and Pricing	Click <u>here</u>