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Eventium NLP API Reference Guide (v1.0.1)

1. Eventium NLP API

Provides various artificial intelligence (AI) based natural language processing techniques such as sentiment analysis, named entity recognition, content summarization, language translation, and more to developers.

2. Starting with the API

- To start, you need a unique key called an API key.
- You can get this by signing up for the API.
- Once you have the key, your apps can start "talking" to our API and use its features.

3. How to Sign-Up?

- We offer the API as a subscription.
- To simplify how you sign up and use the API easy, we work with RapidAPI, a trusted place for developers.
- You can get your API key directly from RapidAPI.
- After signing up, RapidAPI will provide you with an "X-RapidAPI-Key".
- Use this key when your app talks to our API.

4. Learn About the API

4.1 How Does the API Work?

You send text to the API. The API unpacks the text and figures out what to do.

Below are the capabilities of the API.

- Translate Text: Changes the text from one language to another.
- Correct Grammar: Fixes any grammar mistakes in the text.
- Create Summary: Gives a summary of the main points in the text.
- List Named Entities: Finds and classifies names of people, places, companies, or products.
- Extract Sentiment: Looks at the text and figures out the emotional tone (like happy, sad, angry, etc.)
- List Possible Futures: Uses the information it possesses to make smart guesses about the future possibilities.

- Create Simple Lists: Makes the text simpler to understand by creating lists.
- Compress Text Length: Shortens text by removing unneeded information.
- **Get Parts of Speech:** Figures out the role of each word, like is it a noun, verb, adjective, etc.?
- Extract Knowledge Components: Pulls out essential parts of an event, like when it happened, where, and who was involved.
- Visualize Semantic Understanding: Represents the relationships and meanings behind words or phrases in a given text, helping to display how the system comprehends and contextualizes language.
- Visualize Text Dependencies: illustrates the grammatical relationships between words in a sentence, helping to illuminate how words and phrases interconnect and rely on each other within the textual structure.

4.2 Request

4.2.1 Operation

The Eventium API follows REST principles, allowing you to access data resources through standard HTTPS requests in UTF-8 format to an API endpoint. The following HTTP verb is used by the NLU API

METHOD	ACTION
PUT	Submits text to be analyzed by API.
	The API responds in the form of JSON

4.2.2 Endpoints

All responses from the API endpoints come in JSON metadata format. You can reach these endpoints using the base address: https://nlp-suite.p.rapidapi.com/

To use the API endpoints, you must verify your request with an X-RapidAPI-Key.

You can get your API key by signing up.

Fig. Keep in mind, the API endpoints for Eventium NLP services can differ based on your subscription plan. Make sure to use the correct API endpoints for your plan.

4.2.2.1 Extract Sentiment

SUBSCRIPTION PLANS	EXTRACT SENTIMENT ENDPOINTS
BASIC	/Basic/Sentiments
PRO	/Pro/Sentiments
ULTRA	/Ultra/Sentiments

MEGA	/Mega/Sentiments	
1.120,1	, 1110 ga, 2011 in 11011	

4.2.2.2 Get Parts of Speech

SUBSCRIPTION PLANS	GET PARTS OF SPEECH ENDPOINTS
BASIC	/Basic/POS
PRO	/Pro/POS
ULTRA	/Ultra/POS
MEGA	/Mega/POS

4.2.2.3 Extract Knowledge Components

SUBSCRIPTION PLANS	EXTRACT KNOWLEDGE COMPONENTS ENDPOINTS
BASIC	/Basic/Components
PRO	/Pro/Components
ULTRA	/Ultra/Components
MEGA	/Mega/Components

4.2.2.4 Create Summary

SUBSCRIPTION PLANS	CREATE SUMMARY ENDPOINTS
BASIC	/Basic/Summary
PRO	/Pro/Summary
ULTRA	/Ultra/Summary
MEGA	/Mega/Summary

4.2.2.5 Compress Text Length

SUBSCRIPTION PLANS	COMPRESS TEXT LENGTH ENDPOINTS
BASIC	/Basic/Reduction
PRO	/Pro/Reduction

ULTRA	/Ultra/Reduction
MEGA	/Mega/Reduction

4.2.2.6 List Named Entities

SUBSCRIPTION PLANS	LIST NAMED ENTITIES ENDPOINTS
BASIC	/Basic/NER
PRO	/Pro/NER
ULTRA	/Ultra/NER
MEGA	/Mega/NER

4.2.2.7 Correct Grammar

SUBSCRIPTION PLANS	CORRECT GRAMMAR ENDPOINTS
BASIC	/Basic/Grammar
PRO	/Pro/Grammar
ULTRA	/Ultra/Grammar
MEGA	/Mega/Grammar

4.2.2.8 Translate Text

SUBSCRIPTION PLANS	TRANSLATE TEXT ENDPOINTS
BASIC	/Basic/Translation
PRO	/Pro/Translation
ULTRA	/Ultra/Translation
MEGA	/Mega/Translation

4.2.2.9 Create Simple Lists

SUBSCRIPTION PLANS	CREATE SIMPLE LISTS ENDPOINTS
BASIC	/Basic/Simplification

PRO	/Pro/Simplification
ULTRA	/Ultra/Simplification
MEGA	/Mega/Simplification

4.2.2.10 List Possible Futures

SUBSCRIPTION PLANS	LIST POSSIBLE FUTRUES ENDPOINTS
BASIC	/Basic/Impact
PRO	/Pro/Impact
ULTRA	/Ultra/Impact
MEGA	/Mega/Impact

4.2.2.11 Cognitive Search

Conduct efficient and accurate text searches to retrieve relevant information.

SUBSCRIPTION PLANS	COGNITIVE SEARCH ENDPOINTS
BASIC	/Basic/Search
PRO	/Pro/Search
ULTRA	/Ultra/Search
MEGA	/Mega/Search

4.2.3 Headers

We require the content-type header to be set to application/json.

To accomplish this, you must include in the request header: "content-type": "application/json"

4.2.4 Authentication

We employ API keys for application authentication. Developers should focus on building internal applications that only require access to a single user's data.

Authentication is required for all requests made to the API. To accomplish this, a valid API key must be included in the request header (X-RapidAPI-key). Your assigned API key follows this format:

"x-rapidapi-key": "a8e009619xxxxxxxxxx4ea2840f9c19"

4.2.5 Objects

During API requests you will frequently encounter the following JSON object

OBJECTS	DESCRIPTION	EXAMPLE
content	Enter your content	"What color is the sun?"

4.3 Response

All API calls return a JSON file containing a header block and a service block. The header block objects are described below:

4.3.1 JSON Header

OBJECTS	DESCRIPTION	EXAMPLE
service	Service Name	ner
source	Source of the service	TitanVX Atlas NLP
url	URL of the service provider	https://www.titanvx.com
core_version	Version of the platform core	C10A
agent_version	Version of the agent handling the service request	C10A.2
model_version	Version of the NLP model used	C10 06.03.2023
cloud_version	Version of the cloud service hosting the endpoint	C10B
Language	Enter a supported Language	Spanish
user_key	Returned string key originally sent by the user in the request JSON	my_key_23414

4.3.2 Extract Sentiment

OBJECTS	DESCRIPTION	EXAMPLE
OBJECTS	DESCRIPTION	EXAMPLE

header	JSON Header object	JSON Header
sentences []	Array of Sentiment Sentence objects	Sentiment Sentence

Sentiment Sentence

OBJECTS	DESCRIPTION	EXAMPLE
sentiment	Weighted sentiment of the sentence (-1:negative, 1:positive)	0.973151
text	Text string of the sentence	American Gangster is a 2007 American biographical

4.3.3 Get Parts of Speech

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
sentences []	Array of PoS Sentence objects	POS Sentence

POS Sentence

OBJECTS	DESCRIPTION	EXAMPLE
text	Text string of the sentence	American Gangster is a 2007 American biographical
tokens []	Array of Token PoS objects	Token PoS

POS-Token

OBJECTS	DESCRIPTION	EXAMPLE
text	Token text	American
lemma	Token lemma	American
part_of_speech	Token part of speech tag (see POS Table)	NNP
index	Token zero-based index in the document	00
depth	Token zero-based depth in the dependency tree	2
parent	Text of parent of this token	Gangster
parent_index	Zero-based index of the parent of this token	1

dependency	The dependency part label of this token (see Dependency Table)	COMPOUND
ner_type	The entity type of this token (see NER Table)	Person

4.3.4 Extract Knowledge Components

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
sentences []	Array of Component Sentence objects	Component Sentence

Component Sentence

OBJECTS	DESCRIPTION	EXAMPLE
text	Text string of the sentence	American Gangster is a 2007 American biographical
components []	Array of component objects	Component

Component

OBJECTS	DESCRIPTION	EXAMPLE
type	Component type (see Components Table)	subject
text	Token text	American Gangster
start_token	Zero-based index of starting token of the component	00
end_token	Zero-based index of ending token of the component	1
parent_index	Zero-based index of parent token of component	2
tense	Tense of the verb if the component type is a verb	Present perfect
passive	True when the verb component is in passive tense; false otherwise	false
negate	True when the verb is negated; false otherwise	false

4.3.5 Create Summary

OBJECTS	DESCRIPTION	EXAMPLE
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header	JSON Header object	JSON Header
text	Text string of the summarized document	American Gangster is a 2007

4.3.6 Compress Text Length

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
sentences []	Array of Reduction Sentence objects	Reduction Sentence

Reduction Sentence

OBJECTS	DESCRIPTION	EXAMPLE
index	Index of the reduced sentence in the document	1
text	Reduced text of the sentence	American Gangster is a 2007

4.3.7 List Named Entities

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
entities []	Array of Named Entity objects	Named Entity

Named Entity

OBJECTS	DESCRIPTION	EXAMPLE
name	Entity name	Frank Lucas
type	Entity type (see Dependency Table)	Person
metadata []	Array of Entity MD objects	Miscellaneous

4.3.8 Correct Grammar

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header

text	Text string of the summarized document	American Gangster is a 2007
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4.3.9 Translate Text

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
text	Text string of the translated document	American Gangster is a 2007

4.3.10 Create Simple Lists

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
text	Text string of the simplified document	American Gangster is a 2007

4.3.11 List Possible Futures

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
text	Text string of the analyzed document	American Gangster is a 2007

4.3.12 Cognitive Search

OBJECTS	DESCRIPTION	EXAMPLE
header	JSON Header object	JSON Header
text	Text string of the searched document	American Gangster is a 2007

4.3.13 Appendix of Tables

Appendix of tables describing different types and labels returned by the NLP services.



	PART OF SPEECH TAGS
TYPE	DESCRIPTION
ADJ	Adjective
ADP	Adposition
ADV	Adverb
AUX	Auxiliary
CONJ	Conjunction
CCONJ	Coordinating conjunction
DET	Determiner
INTJ	Interjection
NOUN	Noun
NUM	Numeral
PART	Particle
PRON	Pronoun
PROPN	Proper noun
PUNCT	Punctuation
SCONJ	Subordinating conjunction
SYM	Symbol
VERB	Verb
X	Other
EOL	End of line
SPACE	Space
PERIOD	Punctuation mark, sentence closer
СОММА	Punctuation mark, comma
LRB	Left round bracket
RRB	Right round bracket
LEFT_QUOTE	Opening quotation mark
RINGHT_QUOTE	Closing quotation mark
APOSTROPHE	Closing quotation mark

COLON	Punctuation mark, colon or ellipsis
DOLLAR	Symbol currency
HASH	Symbol number sign
AFX	Affix
СС	Conjunction, coordinating
CD	Cardinal number
DT	Determiner
EX	Existential there
FW	Foreign word
НҮРН	Punctuation mark, hyphen
IN	Conjunction, subordinating or preposition
33	Adjective (English), other noun-modifier (Chinese)
JJR	Adjective comparative
PRP_D	Pronoun possessive
JJS	Adjective superlative
LS	List item marker
MD	Verb modal auxiliary
NIL	Missing tag
NN	Noun singular or mass
NNP	Noun proper singular
NNPS	Noun proper plural
NNS	Noun plural
NN	Noun singular or mass
PDT	Predeterminer
POS	Possessive ending
PRP	Pronoun personal
PRP_D	Pronoun possessive
RB	Adverb
RBR	Adverb comparative

RBS	Adverb superlative
RP	Adverb particle
то	Infinitival to
UH	Interjection
VB	Verb base form
VBD	Verb past tense
VBG	Verb gerund or present participl
VBN	Verb past participle
VBP	Verb non-3rd person singular present
VBZ	Verb 3rd person singular present
WDT	Wh-determiner
WP	Wh-pronoun, personal
WP_DOLLAR	Wh-pronoun possessive
WRB	Wh-adverb
SP	Space (English), sentence-final particle (Chinese)
ADD	Email
NFP	Superfluous punctuation
GW	Additional word in multi-word expression
xx	Unknown
BES	Auxiliary be
HVS	Forms of have
_SP	Whitespace 76

Dependencies Table

DEPENDENCY TREE LABELS	
LABEL	DESCRIPTION
ROOT	Root
PUNCT	Adposition
CTNI	Interjection

MARK	Marker	
PARATAXIS	Parataxis	
PRECONJ	Pre-correlative conjunction	
СС	Coordinating conjunction	
CONJ	Conjunct	
NEG	Negation modifier	
ADVMOD	Adverbial modifier	
COMPOUND	Nominal/Cardinal compound	
NMOD	Modifier of nominal	
PREP	Prepositional modifier	
НҮРН	Hyphen	
EXPL	Expletive	
DEP	Unclassified dependent	
QUANTMOD	Modifier of quantifier	
РОВЈ	Object of prepositio	
PREDET	Determiner	
DET	Determiner	
NUMMOD	Numeric modifier	
NPMOD	Noun phrase as adverbial modifier	
AMOD	Adjectival modifier	
POSSESSIVE	Possessive modifier	
CASE	Case marking	
POSS	Possession modifier	
ACL	Clausal modifier of noun (adjectival clause)	
RELCL	Relative clause modifier	
APPOS	Appositional modifier	
NSUBJ	Nominal subject	
NSUBJPASS	Nominal subject (passive)	
DOBJ	Direct object	

ІОВЈ	Indirect object
ACOMP	Adjectival complement
DATIVE	Dative complement (Beneficiary)
ATTR	Attribute of a copula
AGENT	Agent
OPRD	Object predicate
CSUBJ	Clausal subject
CSUBJPASS	Clausal subject(passive)
ССОМР	Clausal complement
ХСОМР	Open clausal complemen
AUX	Auxiliary
AUXPASS	Auxiliary(passive)
PRT	Particle
РСОМР	Complement of preposition
ADVCL	Adverbial clause modifier
NPADVMOD	Noun phrase as adverbial modifier
DIR	Direction (from/to)
CLF	Classifier
COMPLM	Complementizer
СОР	Copula
DISCOURSE	Discourse element
DISLOCATE	Dislocated elements
FIXED	Fixed multi-word expression
FLAT	Flat multi-word expression
GOESWITH	Goes with 'with out'
HMOD	Modifier in hyphenation
INFMOD	Infinitival modifier
LIST	List
META	Meta modifier

NN	Noun compound modifier	
NOUNMOD	Modifier of nominal	
NUM	Number modifier	
NUMBER	Number compound modifier	
ОВЈ	Object	
OBL	Oblique nominal	
ORPHAN	Orphan	
PARTMOD	Participal modifie	
RCMOD	Relative clause modifier	
REPARANDUM	Overridden disfluency	
ROOT_S	Root	
VOCATIVE	Vocative	

•

NER Table

NAMED ENTITY TYPES		
TYPE	DESCRIPTION	
Person	People, including fictional	
Nationality/Politic al group	Nationalities or religious or political groups	
Facility	Buildings, airports, highways, bridges, etc.	
Organization	Companies, agencies, institutions, etc.	
Geographical Entity	Countries, cities, states	
Location	GPE locations, mountain ranges, bodies of water	
Commercial Product	Objects, vehicles, foods, etc. (not services	
Event	Named hurricanes, battles, wars, sports events, etc.	
Art	Titles of books, songs, etc.	
Law	Named documents made into laws.	
Language	Any named language	
Date	Absolute or relative dates or period	
Time	Times smaller than a day	

Percentage	Percentage, including "%"
Currency	Monetary values, including unit
Quantity	Measurements, as of weight or distance
Ordinal	First, second, etc.
РОВЈ	Object of prepositio
Cardinal	Numerals that do not fall under another type
Frequency	Named person or family.
Miscellaneous	Miscellaneous entities, e.g. events, nationalities, products or works of art
Social Event	Festivals, cultural events, sports events, weather phenomena, wars, etc.
Product	Product, i.e. artificially produced entities including speeches, radio shows, programming languages, contracts, laws and ideas
Derivative	Words (and phrases?) that are derived from a name, but not a name in themselves, e.g. 'Oslo-mannen' ('the man from Oslo')
Geopolitical Entity	Geo-political entity, with a locative sense, e.g. 'John lives in Spain'
Geopolitical Organization	Geo-political entity, with an organization sense, e.g. 'Spain declined to meet with Belgium'

Components Table

COMPONENT TYPES	
TYPE	DESCRIPTION
Time	Temporal component
Space	Spatial component
Domain	Domain, group, or topic component
Manner	Manner component or manner clause
Time/Space	Temporal or spatial component (e.g. "at the wedding")
Cause	Causal component or causal clause
Anti-causal	Anti-causal component or clause (e.g. "although X" "even though X")
Consequence	Consequential component or clause (e.g. "therefore X" "thus X"
Correlation	Correlation component or clause (e.g. "as X")
Condition	Conditional component or clause (e.g. "if X")
Goal	Goal component or clause (e.g. "In order to X" "so that X")

Possession	Possession of a noun or nominal phrase
Particle	Particle of a verb
Subject	Subject of a verb
Passive Subject	Monetary valuePassive subject of a verb, including unit
Clausal Subject	Clausal subject of a verb
Passive Clausal Subject	Passive clausal subject of a verb
Clausal Complement	Clausal complement of a verb
Close Clausal Complement	Close clausal complement of a verb
Direct Object	Direct object of a verb
Indirect Object	Indirect object of a verb
Attribute	Attribute of a copula
State	State of a noun or nominal phrase
Agent	Agent of a passive verb
Verb	Verb
Auxiliary	Auxiliary or tense modifier of a verb

4.4 SDKs

To get started easily and quickly, just import the SDK of your choice by copying the provided code snippet into your application (Available at RapidAPI).

4.5 Response Status Codes

The API adheres to the response status codes defined in RFC 2616 and RFC 6585.

STATUS CODE	DESCRIPTION
200	OK - The request has succeeded. The client can read the result of the request in the body and the headers of the response.
400	Bad Request - The request could not be understood by the server due to malformed syntax. The message body will contain more information; see Response Schema.
401	Unauthorized - The request requires user authentication or, if the request included authorization credentials, authorization has been refused for those credentials.
403	Forbidden - The server understood the request, but is refusing to fulfill it.
404	Not Found - The requested resource could not be found. This error can be due to a temporary or permanent condition.

429	Too Many Requests - Rate limiting has been applied.
500	Internal Server Error- When this happens try your request again at a later time or contact our support team to get assistance.
502	Bad Gateway - The server was acting as a gateway or proxy and received an invalid response from the upstream server.
503	Bad Gateway - The server was acting as a gateway or proxy and received an invalid response from the upstream server.

4.6 Rate Limiting

Rate Limiting ensures fair distribution of access to API resources among all users.

Rate limiting is applied per application based on the Client ID/API key, regardless of the number of simultaneous users.

To minimize the number of requests, retrieve multiple entities within a single request. For example, you can ask multiple questions about your text in a single request, significantly reducing the number of requests your application needs to make.

Note: If the API returns a status code 429, it means you have exceeded the request limit. In such cases, please retry your request later or contact our support team to get assistance.