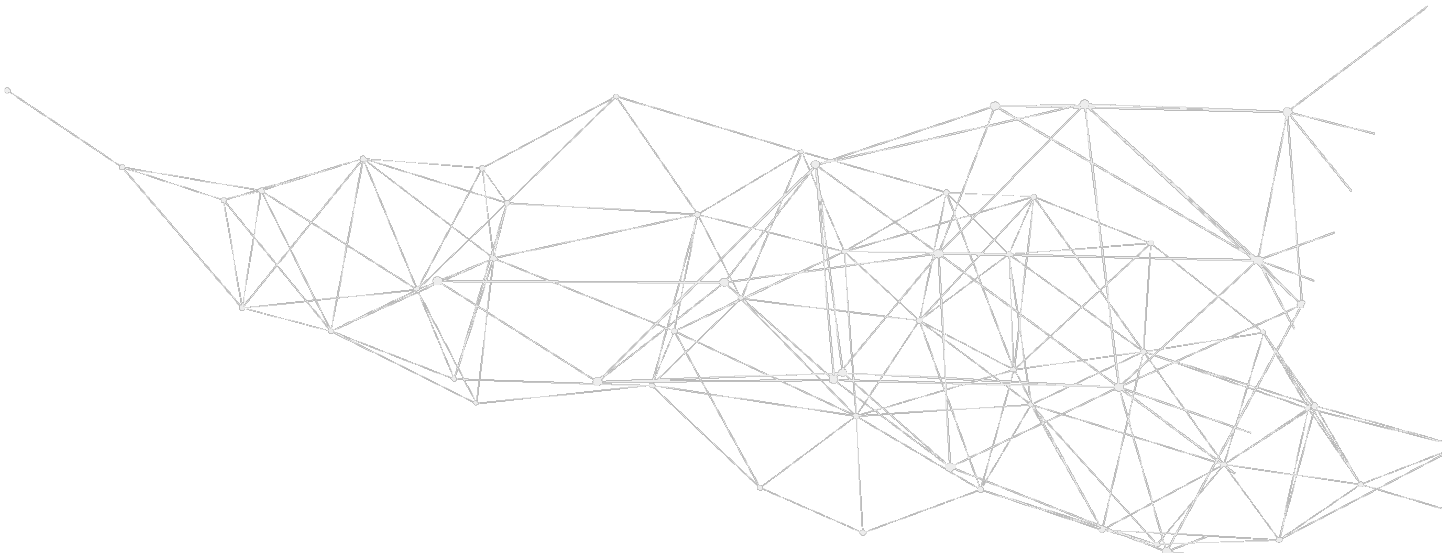
webbula
The Data Solutions Experts

Webbula Hygiene API Developer Guide

Version 4.2.22



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1 | Webbula API Platform Overview

The Webbula API is a RESTful service that provides a conduit for integrating Webbula's emailHygiene and leadHygiene platform into 3rd party applications. The emailHygiene functions are for processing only email addresses while the leadHygiene functions allow for the processing of syntax hygiene for multiple facets of PII including Name, Postal, Phone Number, as well as the threat hygiene process for email addresses. The platform has been designed in such a way that developers have the flexibility to create powerful self-serving internal tools or web-based client-facing applications.

1.1 | Authentication and Security

Once an account and profile(s) have been created by Webbula, developers can create their own API token and IP whitelist in the self-service portal. It is vital to keep all tokens secure and hidden from the public domain. Webbula will not be held responsible for any damages due to compromised tokens.

For an extra layer of security, the platform makes use of HTTPS. In addition, the static IP address(es) of the server(s) that will be interacting with the API must be whitelisted. Only the static IP addresses listed in Webbula's hardware and software firewalls will be able to successfully access the API.

Each API request should use the API token provided by Webbula. The token can be passed via request parameters (**api_key**) or in the header (**X-API-KEY**).

For example:

GET with the token in the header:

```
curl -H "X-API-KEY: TOKEN" https://app.emailhygiene.com/api.v4/version
```

GET with the token as a parameter:

```
curl https://app.emailhygiene.com/api.v4/version?api_key=TOKEN
```

POST with the token as parameter:

```
curl -X POST -d "api_key=TOKEN" https://app.emailhygiene.com/api.v4/version
```

1.2 | Functions List

The API functions are the mechanism by which data can be sent, processed, and retrieved. The tables below have been provided as a high-level overview of the functions and their purpose. More details for each function can be found in additional sections.

Account Functions	Description
account/info	Displays info about the account such as credits remaining and login
account/ips	Displays the IP Address(es) on the access whitelist
account/add_ip	Adds an IP Address to the access whitelist
account/del_ip	Deletes an IP Address from the access whitelist

Single Record Functions	Description
task/express	Conducts the emailHygiene process on a single email address
task/lead	Conducts the leadHygiene process on a single combination of PII (Email, Name, Postal, etc)

Batch File Functions	Description
task/run	Creates a new task and starts the emailHygiene or leadHygiene process on a batch file
task/info	Displays the status and info about a batch file task
task/get_file	Download a specific result file for a batch file task
task/get_files	Download all the result files for a batch file task
hook/list	Displays info and details of all the stored webhooks
hook/get	Displays info and details about a specific webhook
hook/add	Adds and enables a new hook for a specific event
hook/delete	Deletes a stored webhook
hook/update	Updates a stored webhook to implement changes

1.3 | Access Points

The base URL access point is:

https://app.emailhygiene.com/api.v4/

The URL endpoint is created by combining the base URL access point of the environment with the function to execute. Depicted another way, the mask of the complete function call is:

<access_point><function>

All of the API functions can be called using GET or POST except when submitting data via multipart/form-data which requires a POST method.

1.4 | Code Starter Kits

Starter kits are available for a wide variety of platforms to reduce the integration time required. The goal is that the starter kits will demonstrate the API functions and serve as a starting point for integration. They are platform specific working code examples that take a local file, send the file to Email Hygiene, and retrieve the result files. Either put a small test file called “testfile.csv” in “/var/tmp/” or adjust the code in the starter kit to better serve your file system architecture.

Name	Platform	Notes
EH_Starter_Kit.php	PHP	Uses cURL
EH_Starter_Kit.java	Java	Uses HttpURLConnection, org.json.simple
EH_Starter_Kit.rb	Ruby	Uses net/http
EH_Starter_Kit.pl	Perl	Uses LWP
EH_Starter_Kit.py	Python	Uses requests
EH_Starter_Kit.cs	C#	Uses Newtonsoft.Json

2 | Responses and Test Values

To properly integrate the API, Webbula has provided an outline of expected response combinations for key PII elements in the API. Additionally, you can find test values that produce a constant, dependable response to help aid the integration process.

This section focuses on the response and test values for key PII elements. A full anatomy of the API requests and responses can be found in other sections.

2.1 | Email Address

The purpose of processing email addresses through the API is to obtain flags indicating the associated threat level of an email address. The threat level flag will depend if the chosen profile is programmed to utilize Hygiene only, Verification only, or Hygiene and Verification Bundled together. The tables below outline the possible threat flags for each of these scenarios.

Output with Both Hygiene and Verification Filters Bundled:

Single Record Response	Batch File Flag	Risk	Description	Test Value
Reputation	**R**	Extreme	Hazardous email found in a Reputation category filter	ThisIsReputation@webbula.com
Fraud	**F**	Extreme to High	Hazardous email found in a Fraud category filter	ThisIsFraud@webbula.com
Delivery	**D**	High	Hazardous email found in a Delivery category filter	ThisIsDelivery@webbula.com
Conversion	**C**	Moderate	Hazardous email found in a Conversion category filter	ThisIsConversion@webbula.com
Beta	**B**	Moderate to Low	Hazardous email found in a Beta category filter	ThisIsBeta@webbula.com
Invalid	**I**	Extreme	Invalid and will bounce	ThisIsInvalid@webbula.com
Unknown	**U**	High to Moderate	Verification cannot be determined	ThisIsUnknown@webbula.com
Valid	**V**	Low	Passed the profile process	ThisIsValid@webbula.com

Output with Hygiene Filters Only:

Single Record Response	Batch File Flag	Risk	Description	Test Value
Reputation	**R**	Extreme	Hazardous email found in a Reputation category filter	ThisIsReputation@webbula.com
Fraud	**F**	Extreme to High	Hazardous email found in a Fraud category filter	ThisIsFraud@webbula.com
Delivery	**D**	High	Hazardous email found in a Delivery category filter	ThisIsDelivery@webbula.com
Conversion	**C**	Moderate	Hazardous email found in a Conversion category filter	ThisIsConversion@webbula.com
Beta	**B**	Moderate to Low	Hazardous email found in a Beta category filter	ThisIsBeta@webbula.com
Clean	**G**	Low	Passed the profile process	ThisIsValid@webbula.com

Output with Verification Filters Only:

Single Record Response	Batch File Flag	Risk	Description	Test Value
Delivery	**D**	High	Hazardous email found in a Delivery category filter	ThisIsDelivery@webbula.com
Invalid	**I**	Extreme	Invalid and will bounce	ThisIsInvalid@webbula.com
Unknown	**U**	High to Moderate	Verification cannot be determined	ThisIsUnknown@webbula.com
Valid	**V**	Low	Passed the profile process	ThisIsValid@webbula.com

2.2 | Email Activity

The email activity metrics provide insight into the first and most recent timeframes from which email activity has been observed. An activity trajectory is also provided to establish whether the activity of an email is increasing, decreasing or constant over a recalculated 6 month rolling average. The table below outlines the possible values for each of these metrics.

Response	Field	Description

30	activity_most_recent_seen	The most recent email activity has been observed within the last 30 days
90	activity_most_recent_seen	The most recent email activity has been observed within the last 90 days
180	activity_most_recent_seen	The most recent email activity has been observed within the last 180 days
365	activity_most_recent_seen	The most recent email activity has been observed within the last 365 days
365+	activity_most_recent_seen	The most recent email activity has been observed over 365 days ago
Major Deceleration	activity_trajectory	The average activity volume of the email has significantly slowed
Moderate Deceleration	activity_trajectory	The average activity volume of the email has moderately slowed
Slight Deceleration	activity_trajectory	The average activity volume of the email has slightly slowed
Unchanged	activity_trajectory	The average activity volume of the email has remained constant
Slight Acceleration	activity_trajectory	The average activity volume of the email has slightly hastened
Moderate Acceleration	activity_trajectory	The average activity volume of the email has moderately hastened
Major Acceleration	activity_trajectory	The average activity volume of the email has significantly hastened
30	activity_first_seen	Email was first encountered within the last 30 days
90	activity_first_seen	Email was first encountered within the last 90 days
180	activity_first_seen	Email was first encountered within the last 180 days
365	activity_first_seen	Email was first encountered within the last 365 days
365+	activity_first_seen	Email was first encountered over 365 days ago

2.3 | Name

The name fields and values are a response generated from the task/lead function which provides an assessment of several components of contact information. The name response will only appear if your Profile has been configured to allow the task/lead function to work. The table below outlines the possible combinations of responses.

Response	Field	Description
Valid	status	Name that has been assessed as Valid
Invalid	status	Name that has been assessed as Invalid
M	gender	Name modeled to an individual who is Male
LM	gender	Name modeled to an individual who is Likely Male
F	gender	Name modeled to an individual who is Female
LF	gender	Name modeled to an individual who is Likely Female
U	gender	Name that cannot be modeled for a gender
NF	gender	Name that is not found in our model.

2.4 | Postal Address

The postal accuracy_score field and values are a response generated from the task/lead function which provides an assessment of several components of contact information. The postal accuracy_score response will only appear if your Profile has been configured to allow the task/lead function to work. The table below outlines the possible combinations of responses.

Response	Field	Description
0.00%	accuracy_score	Postal that has received a modeled accuracy score of 0.00% (low accuracy)
50.00%	accuracy_score	Postal that has received a modeled accuracy score of 50.00% (medium accuracy)
100.00%	accuracy_score	Postal that has received a modeled accuracy score of 100.00% (high accuracy)

2.5 | Phone Number

The phone number fields and values are a response generated from the task/lead function which provides an assessment of several components of contact information. The phone number response will only appear if your Profile has been configured to allow the task/lead function to work. The table below outlines the possible combinations of responses.

Response	Field	Description	Test Value
Valid	status	Phone number that has been assessed as syntactically Valid	Webbula Mobile
Invalid	status	Phone number that has been assessed as syntactically Invalid	8888888888
Mobile	service_type	The phone number was assigned by the telco as a Mobile number	Webbula Mobile
Landline	service_type	The phone number was assigned by the telco as a Landline number	

3 | Account Functions

This section will outline all of the account API functions in more detail including the data structure, response type, required parameters, and optional parameters.

3.1 | account/info

This account function is used to obtain general information about the account, including credits remaining and billing types.

Input Parameters:

Parameter	Type	Required	Notes
mode	String	No	Allowed values are “short” or “full” and for extra security use “short”. If undefined the default is “full” and displays the *key*.

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
login	String	Login used for the *user*
credits_remaining	Array	An array containing *service*, *scenario user*, and credits available for a given user on the account
service	String	The *service* should always be “CLHYG”
scenario	String	The *scenario* for which the credits applies. Possible values are “HYGIENE”, “VERIFICATION”, “HV BUNDLED”, or “LEADHYGIENE”
user	String	A *user* will be specified if there is more than one *user* associated with the account. Otherwise the value will be “”
records	Integer	The number of credits available for the *user* and *scenario*. If *limited* is “false”, then the value of *records* will always be set to “0”
limited	Bool	If “true” the *scenario* is billed based on prepaid credits and the amount of available prepaid credits can be seen in *records*. If “false” the *scenario* does not use prepaid credits and instead is allowed to have unlimited usage which is invoiced at the end of the month
errors	Array	An array containing any error messages
error	String	Contains an error message and is only visible within the *errors* array when an error has occurred

key	String	The token access key to API and is only displayed in “full” *mode*.
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

curl -H "X-API-KEY: TOKEN" -d 'mode=short' https://app.emailhygiene.com/api.v4/account/info

3.2 | account/ips

This account function is used to obtain the list of IP addresses authorized to make requests to the API. The IP addresses authorized to make requests apply to all users within the account.

Input Parameters:

None

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
ips	Array	List of allowed IPs for the account
errors	Array	An array containing any error messages
error	String	Contains an error message and is only visible within the *errors* array when an error has occurred
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

curl -H "X-API-KEY: TOKEN" https://app.emailhygiene.com/api.v4/account/ips

3.3 | account/add_ip

This account function is used to add an IP address to the authorized list which is able to make requests to the API. IP addresses authorized to make requests; applies to all users within the account.

Input Parameters:

Parameter	Type	Required	Notes
ip	String	Yes	The IP address to be added to the authorized list

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a "1" or a failed execution with a "0"
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array	An array containing any error messages
error	String	Contains an error message and is only visible within the *errors* array when an error has occurred
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

curl -H "X-API-KEY: TOKEN"-d "ip=127.0.0.1" https://app.emailhygiene.com/api.v4/account/add_ip

3.4 | account/del_ip

This account function is used to delete an IP address to the authorized list which is able to make requests to the API.

Input Parameters:

Parameter	Type	Required	Notes
ip	String	Yes	The IP address to be deleted from the authorized list

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array	An array containing any error messages
error	String	Contains an error message and is only visible within the *errors* array when an error has occurred
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

curl -H "X-API-KEY: TOKEN"-d “ip=127.0.0.1” https://app.emailhygiene.com/api.v4/account/del _ip

4 | Single Record Task Functions

This section will outline all of the task API functions in more detail including the data structure, response type, required parameters, and optional parameters.

4.1 | task/express

The task/express function is used to conduct the emailHygiene process on a single email address. This function returns the emailHygiene results in the function response, making it ideal for web forms and other applications where a single email address needs to be processed in real time.

If you would like Webbula to assist in troubleshooting, please maintain a log which includes a date / time stamp, *package*_name, and *transaction* ID from the API output response. The quality of support available may be limited without these details.

Input Parameters:

Parameter	Type	Required	Notes
profile	String	Yes	The profile to be used for processing
emails	String	Yes	A single email address

Output Response:

Returns an array of the email address passed to the function and the corresponding email threat flag. Additional meta data is also available including error messages, suggested corrections, duration, and credits remaining.

Return	Type	Notes
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
package_name	String	Unique identifier for the entire task which should be logged for troubleshooting purposes
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
profile	String	The profile used for processing
duration	Integer	The elapsed time to process the request (in seconds)
emails	Array	An array containing the processed email address with results and corrections

email	String	The processed email address which may have had a suggested correction applied
corrected	String	Contains the original version of the email and is only visible within the *emails* array when a suggested correction has occurred
result	String	The threat flag for the processed email
activity_first_seen	String	The time that has elapsed since Webbula first encountered the email
activity_trajectory	String	A measure of the trajectory of an email's activity
activity_most_recent_seen	String	The time that has elapsed since the email's most recent activity
errors	Array	An array containing any error messages
error	String	Contains an error message and is only visible within the *errors* array when an error has occurred
credits_remaining	Integer	Amount of credits remaining. If the *scenario* has unlimited usage, which is invoiced at the end of the month, *credits_remaining* will have a value of "-"

Examples:

curl -H "X-API-KEY: TOKEN" -d "profile=B2B&emails=test@testdomain.com" https://app.emailhygiene.com/api.v4/task/express

4.2 | task/lead

The task/lead function is used to conduct the leadHygiene process on a single set of PII which can include any combination of Name, Postal Address, Phone Number, and Email Address. This function returns the leadHygiene results in the function response, making it ideal for web forms and other applications where a single record set of PII needs to be processed in real time.

If you would like Webbula to assist in troubleshooting, please maintain a log which includes a date / time stamp and transaction ID. The quality of support available may be limited without these details.

Input Parameters:

Parameter	Type	Required	Notes
profile	String	Yes	The profile to be used for processing
firstname	String	No	A single first name
lastname	String	No	A single last name
address	String	No	The complete address including street, city, state, and ZIP
phone	String	No	A single phone number
emails	String	No	A single email address

Output Response:

Returns arrays of the PII passed to the function and the corresponding *status* flags. Additional metadata is also available for each piece of PII.

Return	Type	Notes
name	Array	An array containing the processed name with parsing and results
prefix	String	The parsed and processed name prefix (Dr, Ms, Mr)
first	String	The parsed and processed first name
middle	String	The parsed and processed middle name
surname	String	The parsed and processed last name
suffix	String	The parsed and processed name suffix (Jr, Sr, PhD)

gender	String	The modeled gender
status	String	Contains the result as to whether the name was assessed as Valid or Invalid
address	Array	An array containing the processed postal address with parsing and results
address	String	The parsed and processed address
Address2	String	The parsed and processed address 2 (Apt, Suite, Unit)
city	String	The parsed and processed city
state	String	The parsed and processed state
zip5	Integer	The parsed and processed zip5
lat	Decimal	The calculated latitude of the postal addresses
lon	Decimal	The calculated longitude of the postal addresses
accuracy_score	Percent	Contains a modeled accuracy score ranging from 0.00% (low accuracy) to 100.0% (high accuracy)
phone	Array	An array containing the processed phone number with parsing and results
number	Integer	The parsed and processed phone number
area_code	String	The parsed and processed area code
prefix	String	The parsed and processed prefix (3 digits after the area code)
suffix	String	The parsed and processed line number (last 4 digits)
service_type	String	The type of phone number (Mobile or Landline) that was assigned by the telco
status	String	Contains the result as to whether the phone number was assessed as syntactically Valid or Invalid
email	Array	An array containing the processed *email* with results and corrections
email	String	The processed email address which may have had a suggested correction applied
corrected	String	Contains the original version of the email and is only visible within the *email* array when a suggested correction has occurred
profile	String	The profile used for processing
status	String	The threat flag for the processed email
errors	Array	An array containing any error messages
error	String	Contains an error message and is only visible within the *errors* array when an error has occurred
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes

credits_remaining	Array	Amount of credits remaining per active *scenario*. If the *scenario* has unlimited usage, which is invoiced at the end of the month, *credits_remaining* will have a value of "-"
duration	Integer	The elapsed time to process the request (in seconds)

Example:

```
curl -H "X-API-KEY: TOKEN" -d 'profile= leadHygiene_Profile&phone=310-724-5633&firstname=Alex&lastname=Smith&address=4 Rand Road, Pine Brook, NJ 07058' https://app.emailhygiene.com/api.v4/task/lead
```

5 | Batch File Task Functions

This section will outline all of the batch file task API functions in more detail including the data structure, response type, and parameters. If there are multiple records of PII that needs to be processed, this is the proper function to use. Using the *task/express* or *task/lead* to iterate through a batch file will result in performance throttling of the account.

5.1 | task/run

This task is used to execute a new package and transaction to process a batch file in one step. The function requires that the data be submitted as a multipart/form-data via POST. As an alternative and convenience, the *data_source* parameter has built-in functionality to submit files via Web, FTP, SSH, or Citrix ShareFile

If you would like Webbula to assist in troubleshooting, please maintain a log which includes a date / time stamp, *package*_name, and *transaction* ID from the API output response. The quality of support available may be limited without these details.

Input Parameters:

Parameter	Type	Required	Notes
profile	String	Yes	The profile to be used for processing
data_file	String	No	The file to be processed as part of a "multipart/form-data" request. This parameter is used only if a raw file is provided and causes the data_*source* parameter to be ignored
md5	String	No	MD5 hash of the file contents to be used as a checksum to ensure the file was received correctly. Required if the *data_file* parameter is populated
data_source	String	No	Type of the source, providing data for the task. See description below; required if data_file is not specified

Data Sources:

The *data_source* parameter can be used to process a file that is accessible via popular locations such as a URL, FTP, or SSH. If the *data_source* parameter is left empty, the API will assume that the file is being submitted locally in raw format from the *data_file* parameter.

Here is a list of currently supported data sources and their input parameters:

Web

Response	Type	Required	Description
url	String	Yes	Web URL where the data file is located
filename	String	No	The name of the data file to be processed. If null, the last part of the *url* parameter is used as the value for *filename*

FTP

Response	Type	Required	Description
host	String	Yes	FTP host
path	String	Yes	Path where the data file is located
port	String	No	FTP port. Default is 21
secure	String	No	Should the API connect via FTPS
username	String	No	FTP username. Default is anonymous
password	String	No	FTP password. Default is anonymous

SSH

Response	Type	Required	Description
host	String	Yes	SSH host
path	String	Yes	Path to where the data file is located
username	String	No	SSH username
password	String	No	SSH password

Citrix ShareFile

Response	Type	Required	Description
subdomain	String	Yes	Sub domain name from ShareFile credentials
client_id	String	Yes	Client ID from ShareFile credentials
client_secret	String	Yes	Client Secret token from ShareFile credentials
path	String	Yes	Path to where the data file is located
username	String	Yes	User name from ShareFile credentials
password	String	Yes	Password from ShareFile credentials

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a "1" or a failed execution with a "0"
package_name	String	Unique identifier for the entire task which should be logged for troubleshooting purposes
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array	Array containing any error messages
error	String	Contains an error message and is only visible within the errors array when an error has occurred
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

Local Raw File using data_file, multipart/form-data POST request

```
curl -k -X POST --header "X-API-KEY: TOKEN" -F "profile=B2B" -F
"data_file=@/var/tmp/testfile.csv" -F "md5=ae0eca4f5671cbdc19340a1df2567611"
https://app.emailhygiene.com/api.v4/task/run
```

Web URL as the data_source

```
curl -k -X POST --header "X-API-KEY: TOKEN" -d
"data_source=web&url=http://youserver.com/file.csv&profile=__test"
https://app.emailhygiene.com/api.v4/task/run
```

FTP as the data_source

curl -k -X POST --header "X-API-KEY: TOKEN" -d "data_source=ftp&host=192.168.1.200&path=/var/tmp/file.csv&profile=__test" https://app.emailhygiene.com/api.v4/task/run

ShareFile as the data_source

curl -k -X POST --header "X-API-KEY: TOKEN" -d "data_source=sharefile&subdomain=domain&client_id=myclientid&client_secret=token&username=myuser&password=mypass&path=/var/tmp/remote.csv&profile=__test" https://app.emailhygiene.com/api.v4/task/run

SSH as the data_source

curl -k -X POST --header "X-API-KEY: TOKEN" -d "data_source=ssh&host=192.168.1.200&username=yoursshuser&password=yoursshpassword&path=/var/tmp/file.csv&profile=__test" https://app.emailhygiene.com/api.v4/task/run

5.2 | task/info

This task function is used to obtain status information on a task that is currently running or in progress. The function can be executed periodically (polling) after a task is created using the task/run function to determine when the results are ready. Alternatively, the Webhook functions, which are described in a different section can be used as a more efficient method for triggering actions.

Input Parameters:

Parameter	Type	Required	Notes
package_name	String	Yes	Unique identifier for the entire task

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
package_name	String	Unique identifier that was used to look up the task and status
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
files	Array	List of available result files for the provided task. Appears when the

		task *status* has the value of "completed". Values in the array will be "insert.csv", "_report.xls", and potentially "parse_errors.csv"
errors	Array	List of errors happened during function execution. Empty if no errors
error	String	Contains an error message and is only visible within the errors array when an error has occurred
duration	Integer	The elapsed time to process the request (in seconds)
status	String	Current status of the task. See the Status Values table below

Status Values:

Name	Description
preparing	The task is being prepared (uploading, formatting, etc.)
prepared	The task is prepared and will be executed soon
running	The task is running through the profile filters
finished	The task is finished and the results are being compiled
canceled	The task was canceled (no fields, no records, errors, etc.)
completed	The task is completed and the results are available for download
unknown	The task is in a transitional status state

Examples:

```
curl -H "X-API-KEY: TOKEN" -d "package_name=hWviW2hLui_1477652942"
https://app.emailhygiene.com/api.v4/task/info
```

5.3 | task/get_file

This task function is used to download a specific results file for a completed task. A full list of the result files that are available to download can be seen in the task/info function for tasks with a "completed" status.

Input Parameters:

Parameter	Type	Required	Notes
package_name	String	Yes	Task identifier, which is obtained on the successful execution of the task/run function
filename	String	Yes	File name to download

Output Response:

System returns the content of the requested file or JSON response with errors.

Examples:

```
curl -H "X-API-KEY: TOKEN" -d "package_name=hWviW2hLui_1477652942&filename=_report.xls"
https://app.emailhygiene.com/api.v4/task/get_file
```

6 | Webhook Functions

Webhooks are user-defined actions which are triggered by some event, such as a task event (e.g. created, status change, etc.). When a trigger event occurs, the API makes an HTTP Post request to the URL configured for the webhook. Users can configure these HTTP requests to invoke behaviors or actions. The data passed with this request will be some task data; the exact data depends upon the triggering event.

6.1 | Webhook Event Types

The predefined events in the table below are used as the trigger point for the API to initiate a request to the call back URL.

Events:

Name	Description
task.status.preparing	Fires a request to the callback URL when a task is in the preparation stage
task.status.prepared	Fires a request to the callback URL when a task is done preparing for execution
task.status.running	Fires a request to the callback URL when a task is processing
task.status.finished	Fires a request to the callback URL when a task is done processing and the results are being prepared
task.status.canceled	Fires a request to the callback URL when a task has been canceled

6.1.1 Webhook Event Format

Webhooks will make post requests to the URL specified. The JSON data passed along with the request will be formatted as follows:

Field	Type	Required	Description
event_type	string	yes	Specific Webhook event type, happened on the task (i.e. concrete type, without asterisk)
login	string	no	Login of the user that initiated task

package_name	string	yes	Task ID
filename	string	yes	Task file name
status	string	yes	Current status of the task
status_details	string	no	Provide extra description for task status (currently running filter, reason for cancellation...)
progress	float	no	Currently running task progress in percent; only provided when task status is “running”

6.2 | hook/list

This Webhook function is used to obtain a list and description of stored webhooks for the Account.

Input Parameters:

None

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array	List of errors happened during function execution. Empty if no errors
error	String	Contains an error message and is only visible within the errors array when an error has occurred
hooks	Array	List of stored webhooks
name	String	The name of the stored webhook which is used as its unique identifier
url	String	Web URL used as a callback point when a specified event occurs
events	String	A single event which initiates a callback to the URL provided. Refer to the Webhook Event Types table for details on the specific events available

is_active	Boolean	Toggle to denote if a Webhook is enabled (true) or disabled (false)
retries	Integer	Number of attempts to callback to the provided URL. Default is 1
retry_delay_ minutes	Integer	The delay (in minutes) between calls to the provided URL. Default is 1
created	Date / Time Stamp	The create date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour) Format ISO 8601
modified	Date / Time Stamp	The most recent updated date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour) Format ISO 8601
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

curl -H "X-API-KEY: TOKEN" https://app.emailhygiene.com/api.v4/hook/list

6.3 | hook/get

This Webhook function is used to look up an existing hook. An error is returned if a Webhook with the provided name can't be found.

Input Parameters:

Parameter	Type	Required	Notes
name	String	Yes	The name of the stored Webhook

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a "1" or a failed execution with a "0"
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array of strings	List of errors happened during function execution. Empty if no errors
error	String	Contains an error message and is only visible within the errors array when an error has occurred
hook	Object	Full description of the retrieved webhook

name	String	The name of the stored webhook which is used as its unique identifier
url	String	Web URL used as a callback point when a specified event occurs
events	String	A single event which initiates a callback to the URL provided. Refer to the Webhook Event Types table for details on the specific events available
is_active	Boolean	Toggle to denote if a Webhook is enabled (true) or disabled (false)
retries	Integer	Number of attempts to callback to the provided URL. Default is 1
retry_delay_minutes	Integer	The delay (in minutes) between calls to the provided URL. Default is 1
created	Date / Time Stamp	The create date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour) Format ISO 8601
modified	Date / Time Stamp	The most recent updated date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour) Format ISO 8601
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

```
curl -H "X-API-KEY: TOKEN" -d
‘{"name":"Hook_X"}'https://app.emailhygiene.com/api.v4/hook/get'
```

6.4 | hook/add

This Webhook function is used to add and enable a new Webhook for a specific event. Newly added Webhooks are active by default. On success this function returns information on the Hook object that was just created.

Input Parameters:

Parameter	Type	Required	Notes
name	String	Yes	The name of the stored Webhook. Should be unique so the name can be used as an identifier
url	String	Yes	Web URL used as a callback point when a specified event occurs
events	String	Yes	Events which initiate a callback to the URL provided. Multiple event types allowed, separated with commas. **Refer to the Webhook Event Types table for details on the specific events available**
is_active	Boolean	No	Toggle to denote if a Webhook is enabled (true) or disabled (false)

retries	Integer	No	Number of attempts to callback to the provided URL. Default is 1
retry_delay_ minutes	Integer	No	The delay (in minutes) between calls to the provided URL. Default is 1

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a “1” or a failed execution with a “0”
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array of strings	List of errors happened during function execution. Not returned if no errors
error	String	Contains an error message and is only visible within the errors array when an error has occurred
hook	Object	Full description of the newly added Webhook
name	String	The name of the stored webhook which is used as its unique identifier
url	String	Web URL used as a callback point when a specified event occurs
events	String	A single event which initiates a callback to the URL provided. Refer to the Webhook Event Types table for details on the specific events available
is_active	Boolean	Toggle to denote if a Webhook is enabled (true) or disabled (false)
retries	Integer	Number of attempts to callback to the provided URL. Default is 1
retry_delay_ minutes	Integer	The delay (in minutes) between calls to the provided URL. Default is 1
created	Date / Time Stamp	The create date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour) Format ISO 8601
modified	Date / Time Stamp	The most recent updated date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour) Format ISO 8601
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

```
curl --request POST \
  --header 'X-API-KEY: TOKEN' \
  --data-raw '{
    "url": "http://mydomain.com/callback.php",
    "name": "Hook_X",
    "events": "task.status.finished",
    "retry_delay_minutes": 3
```

```
}' \
https://app.emailhygiene.com/api.v4/hook/add
```

6.5 | hook/delete

This Webhook function is used to delete an existing Webhook. An error is returned if a Webhook with the provided name can't be found.

Input Parameters:

Parameter	Type	Required	Notes
name	String	Yes	The name of the stored Webhook

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a "1" or a failed execution with a "0"
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array of strings	List of errors happened during function execution. Empty if no errors
error	String	Contains an error message and is only visible within the errors array when an error has occurred
duration	Integer	The elapsed time to process the request (in seconds)

Examples:

```
curl -H "X-API-KEY: TOKEN" -d '{"name":"Hook3"}'
https://app.emailhygiene.com/api.v4/hook/delete
```

6.6 | hook/update

This Webhook function is used to make changes to an existing Webhook. An error is returned if a Webhook with the provided name can't be found. On success this function returns information on the Hook object that was just updated. Besides "*name",* only the parameters that need to be modified are required.

Input Parameters:

Parameter	Type	Required	Notes
name	String	Yes	The name of the stored Webhook
url	String	No	Web URL used as a callback point when a specified event occurs
events	String	No	A single event which initiates a callback to the URL provided. Refer to the Webhook Event Types table for details on the specific events available
is_active	Boolean	No	Toggle to denote if a Webhook is enabled (true) or disabled (false)
retries	Integer	No	Number of attempts to callback to the provided URL. Default is 1
retry_delay_ minutes	Integer	No	The delay (in minutes) between calls to the provided URL. Default is 1

Output Response:

Name	Type	Description
success	Integer	A flag indicating a successful execution with a "1" or a failed execution with a "0"
transaction	String	Unique identifier for the executed transaction which should be logged for troubleshooting purposes
errors	Array	List of errors happened during function execution. Empty if no errors
error	String	Contains an error message and is only visible within the errors array when an error has occurred
hook	Object	Full description of the updated Webhook
name	String	The name of the stored webhook which is used as its unique identifier
url	String	Web URL used as a callback point when a specified event occurs
events	String	A single event which initiates a callback to the URL provided. Refer to the Webhook Event Types table for details on the specific events available
is_active	Boolean	Toggle to denote if a Webhook is enabled (true) or disabled (false)
retries	Integer	Number of attempts to callback to the provided URL. Default is 1
retry_delay_ minutes	Integer	The delay (in minutes) between calls to the provided URL. Default is 1
created	Date / Time Stamp	The create date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour)
modified	Date / Time Stamp	The most recent updated date and timestamp in YYYY-MM-DD HH:mm:ss (24 Hour)

duration	Integer	The elapsed time to process the request (in seconds)

Examples:

```
curl -H "X-API-KEY: TOKEN" -d '{"name":"Hook_X","is_active":false,"retries":5}'
https://app.emailhygiene.com/api.v4/hook/update
```