

# **ACCUZIP REST API CALLS**

100% Cloud Based DQ and Mail Processing

### **Abstract**

Upload Name and Address Files for CASS Certification, NCOALink Certification, Data Enhancement Services, Canadian Address Verification, Duplicate Detection, Postal Presorting, USPS Documentation, Mail.dat eDoc Output, PostalOne! Upload and print-ready CSV files

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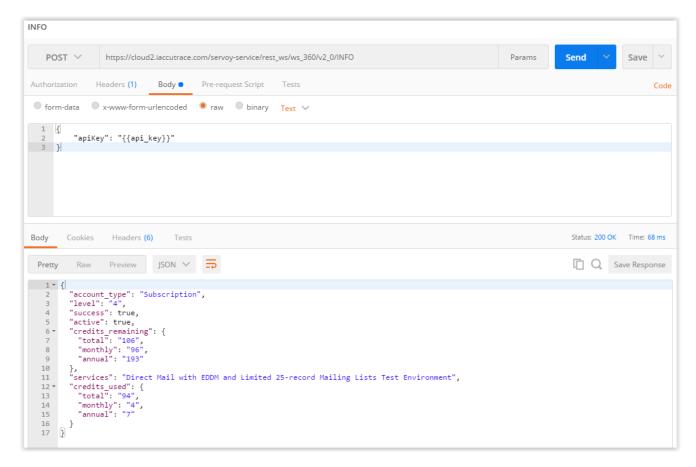
## **ACCOUNT INFO**

Use this web service call to get information about your account and access level.

	ose this web service can to get information about your account and access level.
•	URL
	https://cloud2.iaccutrace.com/servoy-service/rest_ws/ws_360/v2_0/INFO
•	Method:
	POST
•	Body
	Required:
	<apikey></apikey>
•	Success Response:
	• Content: {"account_type":"Subscription","level":"4","success":true,"active":true,"credits_remaining":{"total":"106","mon hly":"96","annual":"193"},"services":"Direct Mail with EDDM and Limited 25-record Mailing Lists Test Environment","credits_used":{"total":"94","monthly":"4","annual":"7"}}
•	Error Response:
	Content: {"success":false,"message":"submitted API_KEY not found < <apikey>"}</apikey>



## • Sample Call using POSTMAN – REST Client:



## Notes:

Use this web service call to determine if your account is Active, number of credits remaining, number of credits used, and what level of access you have, etc...

- Access Levels:
  - o 2 = Direct Mail
  - 3 = Direct Mail and Limited 25-record Mailing Lists Test Environment
  - o 4 = Direct Mail with EDDM and Limited 25-record Mailing Lists Test Environment
  - o 5 = Direct Mail with EDDM and Mailing Lists



## **Upload File**

This Web service call will upload a file to our cloud process. The File Extension of the file name MUST ALWAYS be "csv", e.g., myfilename.csv. If you upload a file with a different extension, it will be ignored and you will not be able to process it. The format of the data can be TAB, PIPE or COMMA-SEPARATED.

Two purposes for using the Upload File Web service call:

- 1) Upload a mailing list
- 2) Upload a list of 5-Digit ZIP codes and optionally CRRT codes to generate an EDDM saturated mailing list

## Information to Upload a mailing list:

The file should be delimited with Tabs, Comma-Quote, PIPE, or some other consistent delimiter with each row terminated with a CRLF (Carriage Return + Line Feed) – ASCII 13 ASCII 10 (HEX 0D HEX 0A)

IMPORTANT: File must contain a minimum of 200 rows. The first row in the file must be the Header Record that describes the column in the file, e.g., contact information and address.

#### **Required Column Names:**

First This column can contain the First and Last Name; Name Prefix, First, Middle and Last, or just the First name. Example: John Smith;

Mr. John M Smith; John

Address This column is the primary address. Example: 100 Main St; PO Box 1

City This column can contain the City, State and Zip; City, State; or just the City name. Example: Los Angeles CA 90001; Los Angeles CA;

Los Angeles

Optional Column Names: (Complete List of Column Names: <a href="http://www.accuzip.com/files/CompleteColumnNameList.xlsx">http://www.accuzip.com/files/CompleteColumnNameList.xlsx</a>)

This column can contain the name prefix, for example Mr; Mrs; Mr. and Mrs.

Middle This column can contain the middle name of the contact

Last This column can contain the last name of the contact

Address2 This column can contain secondary address information, for example Ste 200; # 200

St This column can contain the State abbreviated name, for example CA, TX

Zip This column can contain the ZIP or ZIP+4 code, for example 99999; 99999-9999

Urban This column can contain the Puerto Rico Urbanization Name

Company This column can contain the company/firm name

#### File Content Examples:

- Example 1 Comma Separated File:
  - "first","last","address","address2","city","st","zip"
  - John","Smith","PO Box 7602","","St Thomas","VI","00801"
- Example 2 Comma Separated File:
  - "first","address","city"
  - "John Smith","PO Box 7602","St Thomas VI 00801"
- Example 1 PIPE Separated File:
  - "first"|"last"|"address"|"address2"|"city"|"st"|"zip"
  - "John"|"Smith"|"PO Box 7602"|""|"St Thomas"|"VI"|"00801"
- Example 2 PIPE Separated File:
  - first|address|city
  - John Smith PO Box 7602 St Thomas VI 00801



# Information to Upload a list of 5-Digit ZIP codes and optionally CRRT codes to generate an EDDM saturated mailing list:

This file must always be named <a href="mailto:eddm@.csv">eddm@.csv</a> and always be delimited with commas with each row terminated with a CRLF (Carriage Return + Line Feed) – ASCII 13 ASCII 10 (HEX 0D HEX 0A). No header record is needed. The file name is: <a href="mailto:eddm@.csv">eddm@.csv</a> and required fields are listed below. You can also use our free EDDM UI and integrate into your own website as an IFrame. See EDDM Web Service Calls.pdf for more information.

#### **Required Columns:**

5-Digit ZIP code This is the Low ZIP Code, or specific ZIP Code.

5-Digit ZIP code This is the High ZIP Code. This ZIP Code is entered only if you want a Range of ZIP Codes between the Low (above) and this ZIP Code.

CRRT code This is the Low CRRT Code, or specific CRRT Code

CRRT code This is the High CRRT Code. This CRRT Code is entered only if you want a Range of CRRT Codes between the Low (above) and this

CRRT Code.

#### File Content Examples:

- Example 1 Single ZIP Code: An EDDM mailing list will be generated for 100% of the Total Possible addresses in the ZIP Code.
  - 93422,...
- Example 2 Range of ZIP Codes: An EDDM mailing list will be generated for 100% of the Total Possible addresses for all valid ZIP Codes listed, including all ZIP Codes between the Low and High ZIP Codes.
  - 93422,93425,,
- Example 3 Single ZIP Code and all City Routes: An EDDM mailing list will be generated for 100% of the Total Possible addresses in the ZIP Code for all City Routes.
  - 93422,,C000,C999
- Example 4 Multiple ZIP Codes and specific CRRT Codes. An EDDM mailing list will be generated for 100% of the Total Possible addresses in the ZIP Codes and ZIP Code ranges listed below within the specific CRRT code or CRRT code range listed next to each ZIP Code or ZIP Code range
  - 93422,,C001,C002
  - 93423,,C001,C010
  - 93424,,C011,
  - 93401
  - 93446,93447,,

#### URL

https://cloud2.iaccutrace.com/ws\_360\_webapps/v2\_0/uploadProcess.jsp?manual\_submit=false

• Method:

**POST** 

URL Params

Required:

manual\_submit=false



Required Data Params (The order of the data params is extremely important. See Postman example below.)

backOfficeOption json	
apiKey	GUID key provided with your account. See additional comments (below)
callbackURL	http://mysite.com/getAccuzipCallback.php. See additional comments (below)
guid	
file	filepath

#### Additional Data Params

dataQualityResults	false OR
See "New dataQualityResults JSON Propert	ty Settings" below
dataQualityResults_CASS	false
dataQualityResults_NCOA	false
dataQualityResults_NCOA_DUPS_01	false
dataQualityResults_NCOA_DUPS_02	false
dataQualityResults_NCOA_DUPS_03	false
dataQualityResults_DUPS_01	false
dataQualityResults_DUPS_02	false
dataQualityResults_DUPS_03	false

des_credits	false
col_address	Header Field Name for Mailing Address, e.g., my address*
col_address2	Header Field Name for Secondary Address, e.g., my adr2*
col_city	Header Field Name for City name, e.g., my city*
col_st	Header Field Name for State abbreviation, e.g., my state*
col_zip	Header Field Name for ZIP Code or ZIP+4 or Postalcode, e.

list owner paf id PAF ID assigned by AccuZIP to process files through our Licensed NCOALink service

- \* The Field Names here must match exactly (not case sensitive) with the first row (Header) field names for the address components.
- \* You can only use one of the dataQualityResults settings. The dataQualityResults\_\* settings return a different JSON output with accurate postage totals vs. the dataQualityResults which returns approximate postage costs.

#### • Additional Data Params Description

- dataQualityResults If set to *true* (not recommended) our service will automatically DPV Confirm addresses after upload has completed. Data Quality (DQ) results will appear in the GET QUOTE. The DQ results will help you determine the quality. See GET QUOTE for the DQ return values. This process only returns a few summary values and does not replace the GET CASS call. Setting this value to *true* does not produce any detail output and is an unnecessary option for most scenarios. Our recommendation is to set this as *false*.
- des\_credits Setting this value to *true* will trigger the GET QUOTE to return the number of credits that you have in your account.



o Additional information on DES Services: <a href="http://accuzip.com/products/des/index.htm">http://accuzip.com/products/des/index.htm</a>

## Success Response:

• **Content:** {"success360Import":true,"quote\_started":true,"cass\_started":false,"guid":"7ebb2c37-648b-4f6e-aa6d-240dc55aef2c"}

#### • Error Response:

Content: {"success":false,"message":"ERROR Invalid API Key!"}

### • New dataQualityResults JSON Property Settings:

When you use one of these JSON properties in the UPLOAD FILE call, the GET QUOTE result will contain new JSON properties for the Postage and Rate Categories.

Note: Use only one of these settings in the UPLOAD FILE

CASS ONLY

dataQualityResults CASS true

CASS AND NCOA ONLY

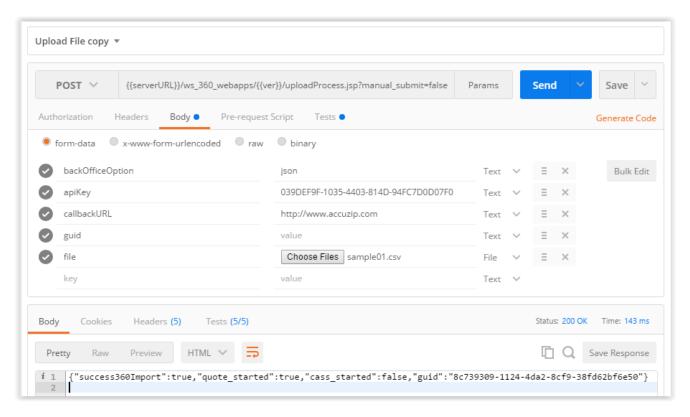
dataQualityResults NCOA true

- CASS AND NCOA AND DUPLICATE DETECTION BY ADDRESS AND COMPANY ONLY dataQualityResults NCOA DUPS 01 true
- CASS AND NCOA AND DUPLICATE DETECTION BY ADDRESS AND FIRST AND LAST NAME ONLY dataQualityResults NCOA DUPS 02 true
- CASS AND NCOA AND DUPLICATE DETECTION BY ADDRESS AND HOUSEHOLD NAME ONLY dataQualityResults NCOA DUPS 03 true
- CASS AND DUPLICATE DETECTION BY ADDRESS AND HOUSEHOLD NAME ONLY dataQualityResults\_DUPS\_01 true
- CASS AND DUPLICATE DETECTION BY ADDRESS AND HOUSEHOLD NAME ONLY dataQualityResults DUPS 02 true
- CASS AND DUPLICATE DETECTION BY ADDRESS AND HOUSEHOLD NAME ONLY dataQualityResults DUPS 03 true

Note: See GET QUOTE for new JSON result when any of these values are set to true.

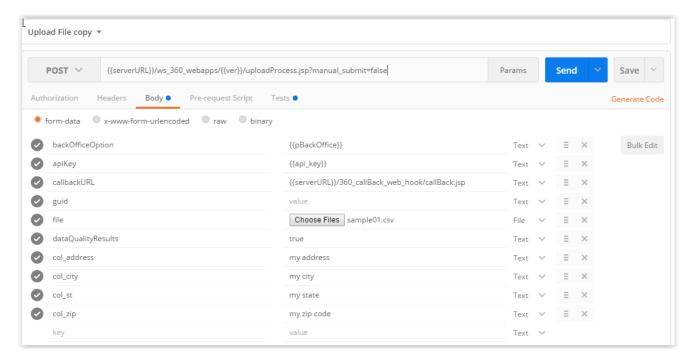


• Sample Call using POSTMAN – REST Client:





## Sample Call with "Additional Data Params" using POSTMAN – REST Client:



#### Notes:

Basically, the file you are uploading must be an ASCII Text file where each row is terminated with a CRLF and the columns are delimited using a consistent delimiter. If you are creating a Comma Separated file, then make sure that the columns are also surrounded by Quotes so that if there are commas in the actual data, the columns end up in the correct spot. The Column Header Names should conform to the names listed above, however, you can have additional column names using whatever naming convention you would like.

callBack in form data: For example, if you specify: <a href="http://mysite.com/getAccuzipCallback.php">http://mysite.com/getAccuzipCallback.php</a>, our Web service will do an HTTP GET to: <a href="http://mysite.com/getAccuzipCallback.php?guid=<guid>("<guid>" is the guid returned in the JSON object in the "Upload File" POST REST API call) when one of the GET REST API calls are finished processing in the AccuZIP Cloud. This allows your Web service to get notified the job was complete, which could then fire off other REST calls to us to get the available PDF or CSV files that contain the Postal Documentation and Print Ready data. This technique is also known as "WebHooks". Which essentially means user-defined callbacks. So we are allowing you to tell us where you want the callback to go to.



## **GET REST API calls that support the HTTP GET callBack:**

#### **Presort Postal Discount**

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/PRESORT

## CASS Certify Only

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS

### CASS Certify and NCOALink (Change of Address)

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/NCOA

### CASS Certification, NCOALink, Duplicate Detection, Presort

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-DUPS-PRESORT

Duplicates are detected by ADDRESS

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-NCOA-DUPS\_01-PRESORT

Duplicates are detected by ADDRESS

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-NCOA-DUPS\_02-PRESORT

Duplicates are detected by FIRST AND LAST NAME

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-DUPS 03-PRESORT

Duplicates are detected by HOUSEHOLD NAME

### CASS Certification, Duplicate Detection, Presort

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS-PRESORT

Duplicates are detected by ADDRESS, and if provided, also by COMPANY

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS\_01-PRESORT

Duplicates are detected by ADDRESS

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS\_02-PRESORT

Duplicates are detected by FIRST AND LAST NAME

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-DUPS 03-PRESORT

Duplicates are detected by HOUSEHOLD NAME

## CASS Certify and NCOALink (Change of Address) and Presort

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-NCOA-PRESORT

#### CASS Certify and Presort

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-PRESORT



**Alternate method to callBack:** If your programming language does not support a HTTP GET callBack, use the GET QUOTE RESTful web service call to know the status of the backend process. Each time you call GET QUOTE after calling the following GET RESTful web service calls:

- CASS Certification, NCOALink, Presort
- CASS Certification, Duplicate Detection, Presort
- CASS Certification, NCOALink, Presort
- CASS Certification, Presort
- CASS Certification, NCOALink, Duplicate Detection, Presort

Use these JSON objects to determine what process is running and when the entire process is completed.

"task\_name":"FINISHED",

 This describes what task is currently, e.g., OPTIMIZING; CASS CERTIFY; NCOALINK; DUPLICATE DETECTION; PRESORT; CONTAINER TAGS; POSTAL DOCUMENTATION; CREATING UNIQUE IMB; CREATING OUTPUT; FINALIZING; FINISHED

"task\_percentage\_completed":"100",

 Currently, for all processes, this value is either 0 or 100, which indicates it has Started or Finished

"task state": "FINISHED",

 This JSON object value will return FINISHED only when the "Presort Postal Discount" or "CASS Certification, NCOALink, Duplicate Detection, Presort" is completely finished and the documentation and print ready files are ready to download.



## **Get Quote** (Approximate Values)

Use this web service call after a file has been uploaded to our Cloud. This GET web service call will return a quote for the approximate postage amount the user will save vs. what they would have paid if they did not clean, standardize and presort their list.

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/QUOTE

•	Method:
	GET
•	URL Params
	Required:
	<guid></guid>
•	Success Response:
	<ul> <li>Content: {"task_name":"FINISHED","First_Class_Flat":"\$619","task_percentage_completed":"100","Estimated_Postage_Standard_Card":"\$549","Estimated_Postage_Standard_Letter":"\$549","format":"","task_state":"FINISHED","First_Class_Card":"\$154","Estimated_Postage_First_Class_Card":"\$526","drop_zip":"", "First_Class_Letter":"\$132","total_presort_records":"","Estimated_Postage_Standard_Flat":"\$936","Standard_Card":"\$382","total_postage":"","Standard_Letter ":"\$382","Estimated_Postage_First_Class_Flat":"\$1,262","success":true,"presort_class":"","total_records":"2,001","Estimated_Postage_First_Class_Letter":"\$79_9","mail_piece_size":"","Standard_Flat":"\$945","postage_saved":""}</li> <li>Content when using "Additional Data Params" in Upload File:</li> </ul>
	{"dq_dpvhsa_d":"11","dq_dpvhsv":"19","Estimated_Postage_Standard_Card":"\$548","Estimated_Postage_Standard_Letter":"\$548","First_Class_Card":"\$154","dq_message":"DQ results have been calculated successfully","Estimated_Postage_First_Class_Card":"\$526","dq_dpvhsa_n":"27",

- dq\_message":"DQ results have been calculated successfully", "Estimated\_Postage\_Standard\_Etter":"\$526", "dq\_dpvhsa\_n":"27",

  "First\_Class\_Letter":"\$132", "Standard\_Card":"\$382", "dq\_dpvhsa\_s":"56", "total\_postage":"", "presort\_class":"", "total\_records":"2,000", "dq\_dpvhsa\_y":"1906","

  mail\_piece\_size":"", "First\_Class\_Flat":"\$619", "format":"", "drop\_zip":"", "total\_presort\_records":"", "Estimated\_Postage\_Standard\_Flat":"\$935", "Standard\_Letter

  ":"\$382", "Estimated\_Postage\_First\_Class\_Flat":"\$1,261", "success":true, "Estimated\_Postage\_First\_Class\_Letter":"\$798", "Standard\_Flat":"\$945", "postage\_saved

  ":"", "des\_credits": "0")
- Content when using the new dataQualityResults\_???? "Additional Data Params" in Upload File:

  {"dq\_dpvhsa\_s":"70", "First\_Class":{{"flat":{{"postage":"1126.12","AB":"91","PRESORT":"0","MB":"30","savings":"846.88","58":"470","SP":"27","38":"1355"}},"let

  ter":{{"postage":"812.98","AB":"1186","PRESORT":"0","MB":"760","savings":"114.33","58":"0","SP":"27","38":"0"}},"card":{{"postage":"529.70","AB":"1186","PR

  ESORT":"0","MB":"760","savings":"160.85","58":"0","SP":"27","38":"0"}},"Nonprofit":{{"flat":{{"AB":"77","AD":"8","HP":"0","58":"607","CR":"0","38":"1233","5}}

  D":"0","postage":"603.20","3D":"3","MB":"29","MD":"16","savings":"1369.80","WS":"0","HD":"0","SP":"0","HD":"0","SP":"0","BP"

Name","setting":"2"}],"dq\_dpvhsa\_d":"11","dq\_dpvhsv":"31","NCOALink":[{"months\_19\_48":"205","matches":"296","months\_1\_18":"91","moved\_no\_forwarding":"7"}],"success":true,"dq\_dpvhsa\_y":"1892","dq\_message":"DQ results have been calculated

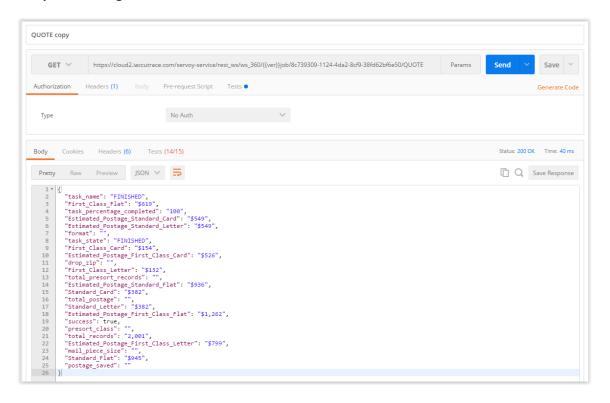
successfully", "Standard": [{"flat": [{"AB": "77", "AD": "8", "HP": "0", "5B": "607", "CR": "0", "3B": "1233", "5D": "0", "postage": "930.72", "3D": "3", "MB": "29", "MD": "16", "sa vings": "1042.28", "WS": "0", "HD": "0", "SP": "0", "Iletter": [{"AB": "1186", "AD": "0", "HP": "0", "5B": "0", "CR": "0", "3B": "0", "5D": "0", "postage": "548.86", "3D": "0", "MB": "787", "MD": "0", "savings": "378.45", "WS": "0", "HD": "0", "SP": "0", "]}]], "dq\_dpvhsa\_n": "27"}



Content for EDDM list request upload

("postage\_saved":"","total\_postage":"","drop\_zip":"","Total\_Possible":"12,809","Standard\_Letter":"\$3,612","Standard\_Flat":"\$9,837","format":"","mail\_piece\_size":"","Total\_Residential":"11,935","success": true ,"presort\_class":""}

- Error Response:
  - Content: {"message":"QUOTE is still processing.","success": false}
- Sample Call using POSTMAN REST Client:



#### Notes:

You can use the Mail Class and Size Object, e.g., Standard Letter to get the savings. Savings is based on if the customer did not clean, standardize and presort their list using this service and would be forced to mail at First-Class Single Piece Rate. So the Standard Letter savings is \$402 as compared with a 1oz. First-Class Letter mailed at full single-piece postage.



## Data Quality (DQ) Result Descriptions:

- "dq\_message": "DQ results have been calculated successfully",
  - o DQ Message
- "dq\_dpvhsa\_y": "1906",
  - O Address was DPV confirmed for both primary and (if present) secondary numbers.
- "dq\_dpvhsa\_d": "11",
  - o Address was DPV confirmed for the primary number only, and Secondary number information was missing.
- "dq\_dpvhsa\_s": "56",
  - Address was DPV confirmed for the primary number only, and secondary number information was present but unconfirmed.
- "dq\_dpvhsa\_n": "27",
  - o Both Primary and (if present) Secondary number information failed to DPV Confirm.
- "dq\_dpvhsv": "19",
  - O Address is Vacant for at least 90-days

URL



PROOF OF CONCEPT FOR QUOTING, UPLOADING, CASS, NCOA, DUPLICATE DETECTION, PRESORT, MAIL.DAT, DOCUMENTATION AND PRINT FILE

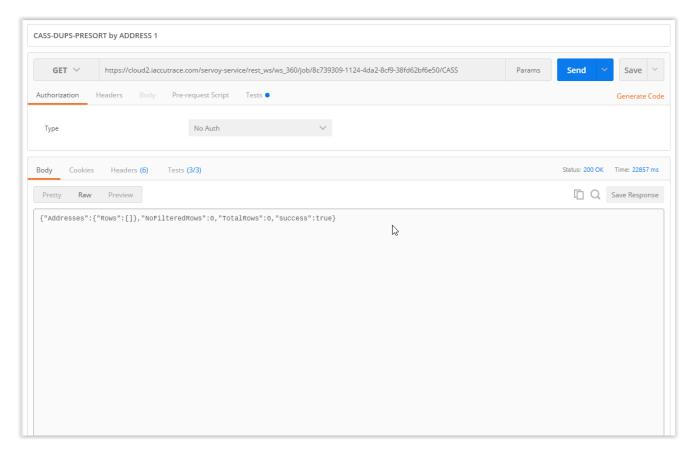
# **CASS Certification**

Use this web service call to clean and standardize all of the addresses in the file. This web service call must be called after the file has been uploaded successfully and before the NCOALink, Duplicate Detection or Presort web service calls.

https://cloud2.iaccutrace.com/servoy-service/rest_ws/ws_360/v2_0/job/ <guid>/CASS</guid>
Method:
GET
URL Params
Required:
<guid></guid>
Success Response:
• Content: {"Addresses":{"Rows":[]},"NoFilteredRows":0,"TotalRows":0,"success":true}
Error Response:
<ul><li>Content: HTTP 500 – INTERNAL_SERVER_ERROR</li></ul>



## Sample Call using POSTMAN – REST Client:



## Notes:

It is important to note that you should never call the NCOALink, Duplicate Detection or Presort web services call before the CASS Certification web service call returns <"success"=true>.

URL



PROOF OF CONCEPT FOR QUOTING, UPLOADING, CASS, NCOA, DUPLICATE DETECTION, PRESORT, MAIL.DAT, DOCUMENTATION AND PRINT FILE

## **NCOALink Certification**

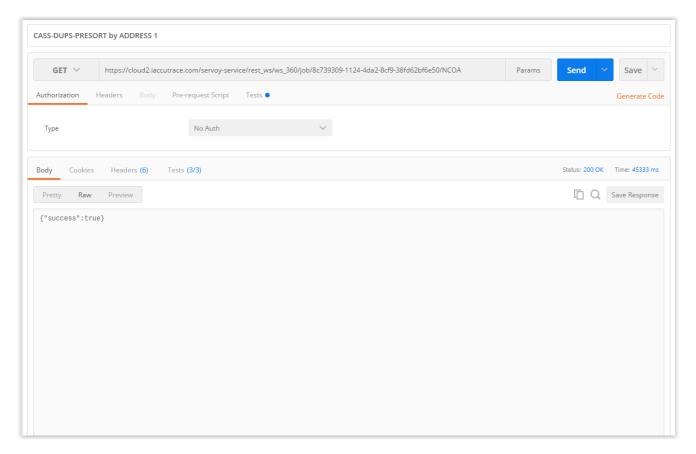
Use this web service call to process the names and addresses that have been previously CASS Certified, through our Licensed NCOALink process for Change of Address matching. Prior to processing any Mailing List through our Licensed NCOA<sup>Link</sup> AccuZIP Inc. must have a fully executed Processing Acknowledgment Form (PAF) on file for each List Owner submitting a Mailing List.

Our electronic PAF can be completed at: <a href="http://accuzip.com/products/ncoalink/paf/new">http://accuzip.com/products/ncoalink/paf/new</a>

	https://cloud2.iaccutrace.com/servoy-service/rest_ws/ws_360/v2_0/job/ <guid>/NCOA</guid>
,	Method:
	GET
,	URL Params
	Required:
	<guid></guid>
,	Success Response:
	Content: {"success":true}
,	Error Response:
	○ <b>Content:</b> HTTP 500 – INTERNAL_SERVER_ERROR



## • Sample Call using POSTMAN – REST Client:



## Notes:

It is important to note that you should only use the NCOALink web service after you have called the CASS Certification web service and received a <"success"=true>.



## **Duplicate Detection**

Use this web service call to remove duplicate records from the CASS Certified and NCOALink Certified file. This will ensure that only one mail-piece is mailed to an address, person, household or company.

• URL

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/DUPS/<duplicateSubType>

• Method:

**GET** 

URL Params

### Required:

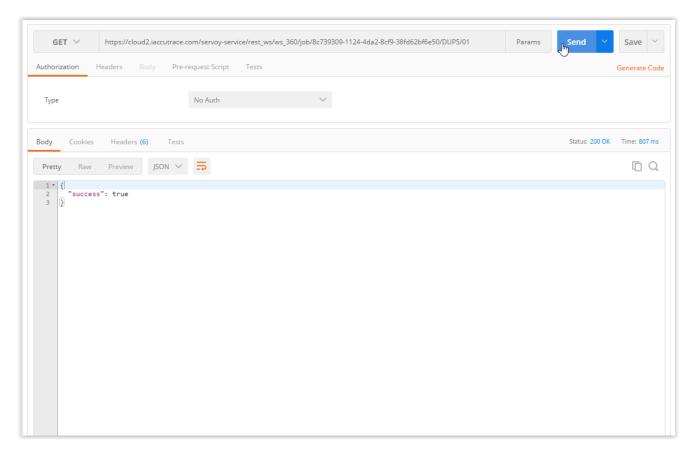
<guid>

## <duplicateSubType>

- 01 Address Only and if exists, Company
- 02 First and Last name
- 03 Household name
- Success Response:
  - o Content: {"success": true}
- Error Response:
  - Content: {"message":"Missing filter value","success":false}



## • Sample Call using POSTMAN – REST Client:



## Notes:

This web service call is optional. If the customer wants to mail to 100% of the list, then do not make this web service call.



## **Update Quote**

Use this web service call to update the object returned with the "Quote", e.g., Class of Mail, Piece Size, etc... It is necessary to make a call to this web service before calling the Presort web service. Otherwise, the Presort web service will not know what Class of Mail or Piece Size you want to use for the presort.

IMPORTANT: For EDDM mailings, you must set the following JSON objects to these specific settings: "presort\_class": "STANDARD MAIL (EDDM)", and "mail\_piece\_size": "LETTER", or "mail\_piece\_size": "FLAT"

•	U	RL
---	---	----

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/QUOTE

•	Method:				

URL Params

**PUT** 

Required:

<guid>

• Header Params

Accept application/json or application/xml

Data Params

See available settings: <a href="http://www.accuzip.com/files/json\_values.xlsx">http://www.accuzip.com/files/json\_values.xlsx</a>

See JSON example: http://www.accuzip.com/files/json\_values\_example.json\_

• Success Response:

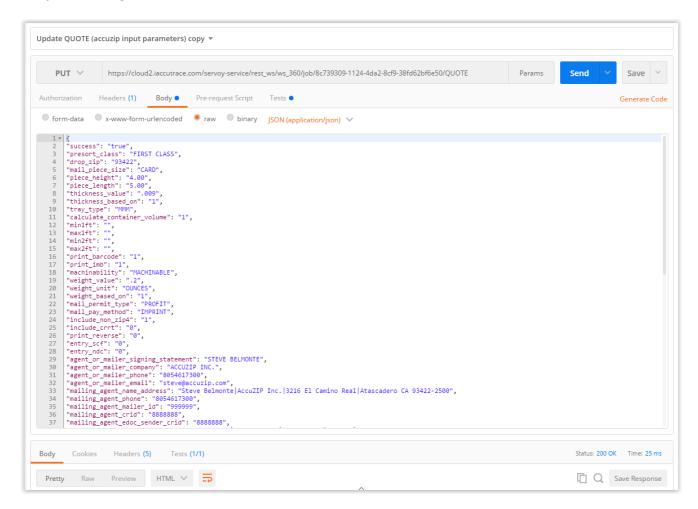
o Content: HTTP 200 - OK

• Error Response:

o Content: HTTP 404 – NOT FOUND



## Sample Call using POSTMAN - REST Client:



### Notes:

To reiterate, it is very important this Update Quote web service be called before the Presort or All-In-One web service. The Update Quote web service only needs to be called once in order to update the "presort\_class", "drop\_zip" and "mail\_piece\_size" objects, and then again if any of these values change.

#### • How to change mail-piece or presort attributes and presort again:

Use the Update Quote after the initial process is completed to change/update any of the mail-piece or presort attributes, and then call the Presort or All-In-One web service call to update the postal documentation (PDF) and print file (CSV)

URL



PROOF OF CONCEPT FOR QUOTING, UPLOADING, CASS, NCOA, DUPLICATE DETECTION, PRESORT, MAIL.DAT, DOCUMENTATION AND PRINT FILE

## **Presort Postal Discounts**

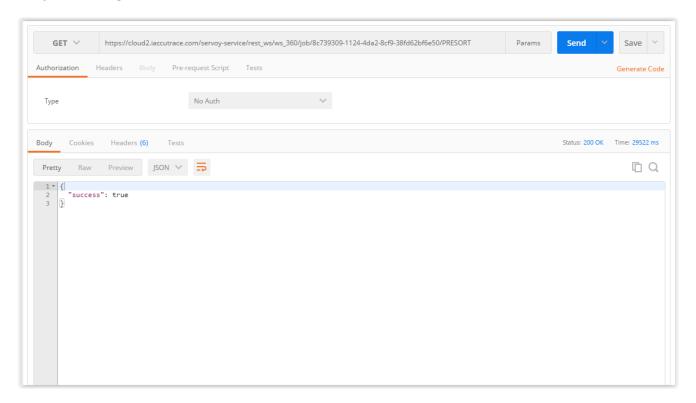
Use this web service call to process addresses that have been CASS Certified through our Cloud Presort engine to claim the lowest postage rates. Our Cloud Presort supports all Classes of Mail and mail-piece sizes, including mixed weight manifest and drop shipment. However, for this initial proof of concept, we are releasing the most popular Cloud Presort options, First-Class and Standard Mail Letters and Flats.

The Cloud Presort settings are controlled by the "Replace Quote" web service call (above).

	https://cloud2.iaccutrace.com/servoy-service/rest_ws/ws_360/v2_0/job/ <guid>/PRESORT</guid>
•	Method:
	GET
•	URL Params
	Required:
	<guid></guid>
•	Success Response:
	Content: {"success":true}
•	Error Response:
	O Content: {"callback":{"message":"Missing info file.","success":false},"success":true}



## • Sample Call using POSTMAN – REST Client:



#### Notes:

After calling the Presort web service, wait for the response before calling it again. You would only call the Presort web service call again if you updated the Quote information using the "Replace Quote" web service call with new information.



## CASS Certification, NCOALink, Duplicate Detection, Presort

Use this web service call to clean and standardize all of the addresses in the file; process the names and addresses that have been previously CASS Certified, through our Licensed NCOALink process for Change of Address matching; remove duplicate records from the CASS Certified and NCOALink Certified file; process addresses that have been CASS Certified through our Cloud Presort engine to claim the lowest postage rates; generate the USPS Documentation in PDF format; and generate the print-ready CSV file. This web service performs all size processes with one call.

Before you can use this REST API call, you must first upload the file (see Upload File) and PUT the JSON object (see Update Quote) that will contain all of the mail-piece characteristics and mailer information (TBA).

#### URL

## CASS Certify, NCOALink, Duplicate Detection and Presort

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-DUPS-PRESORT https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-DUPS 01-PRESORT https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-DUPS 02-PRESORT https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-DUPS 03-PRESORT

### CASS Certify, Duplicate Detection and Presort

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS-PRESORT https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS\_01-PRESORT https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS\_02-PRESORT https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-DUPS\_03-PRESORT

#### CASS Certify, NCOALink and Presort

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CASS-NCOA-PRESORT

#### **CASS Certify and Presort**

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/CASS-PRESORT

- DUPS or DUPS01
  - Duplicates are detected by ADDRESS, and if provided, also by COMPANY
- DUPS02
  - Duplicates are detected by FIRST AND LAST NAME
- DUPS03
  - Duplicates are detected by HOUSEHOLD NAME

#### Method:

GET



URL Params

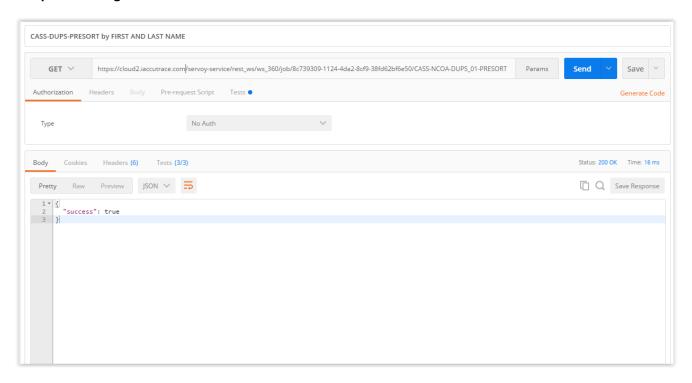
Required:

<guid>

- Success Response:
  - o Content: {"success":true}
- Error Response:

o Content: HTTP 500 – INTERNAL\_SERVER\_ERROR

• Sample Call using POSTMAN – REST Client:



• Notes:

This REST API call does it all, however, it requires the successful "Upload File" and "Update Quote" calls first.



## Download Print Ready, Presorted CSV or Preview CSV (First 25-records)

Use this web service to download the print-ready CSV file that has been CASS Certified, processed through NCOALink (if applicable), Dedupped (if applicable) and Presorted for the lowest postal discounts. You can also download just the first 25-records of the Print Ready, Presorted CSV to use for preview.

You may also download the entire file that was CASS or CASS/NCOALink processed in JSON format using =json

		_	
•	•	R	

https://cloud2.iaccutrace.com/ws 360 webapps/download.jsp?guid=<guid>&ftype=<type>

Method:

**GET** 

URL Params

## Required:

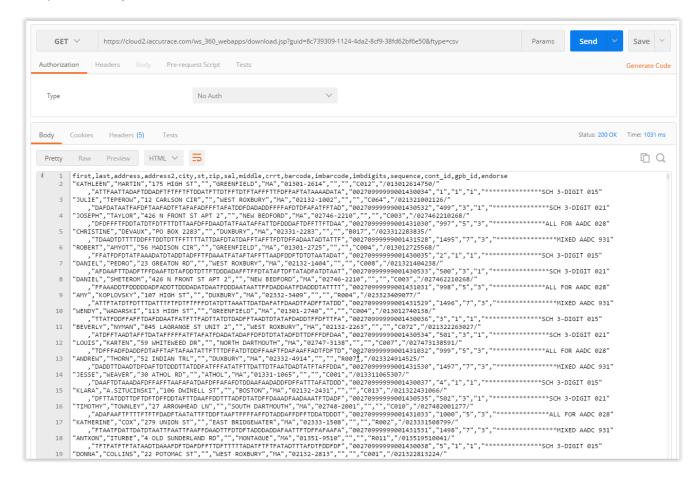
<guid>

<type>

- CSV
- prev.csvjson
- presort.json
- Success Response:
  - Content: CSV file
- Error Response:
  - Content: HTTP 500 INTERNAL\_SERVER\_ERROR
  - Content: HTTP 500 BAD REQUEST
  - **Content:** HTTP 200 OK with error within response body
    - {"success":false,"message":"File with specified extension does NOT exist or belong to
       downloads for submitted GUID prev.csv"}



#### Sample Call using POSTMAN – REST Client:



#### Notes:

This web service will stream the text file direct.



## **Download USPS Documentation as PDF or eDoc** (Mail.dat for PostalOne!)

Use this web service to download a bookmarked PDF of the USPS Documentation. It will include as applicable, Mailing Statement, Qualification Report, CASS Certificate, NCOALink Certificate, Presort Summary, along with other supplemental reports that may be added.

URL

https://cloud2.iaccutrace.com/ws\_360\_webapps/download.jsp?guid=<guid>&ftype=<type>

• Method:

**GET** 

URL Params

## Required:

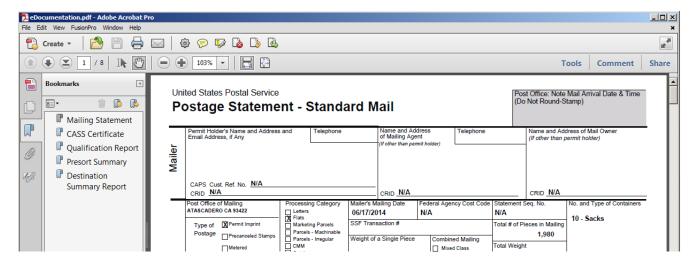
<guid>

<type>

- pdf
- maildat.zip
- Success Response:
  - o **Content:** PDF file; Mail.dat Files for PostalOne! eDoc
- Error Response:
  - Content: HTTP 500 INTERNAL\_SERVER\_ERROR



• Sample Call using POSTMAN – REST Client:



#### Notes:

This web service will stream the PDF file direct.

URL



PROOF OF CONCEPT FOR QUOTING, UPLOADING, CASS, NCOA, DUPLICATE DETECTION, PRESORT, MAIL.DAT, DOCUMENTATION AND PRINT FILE

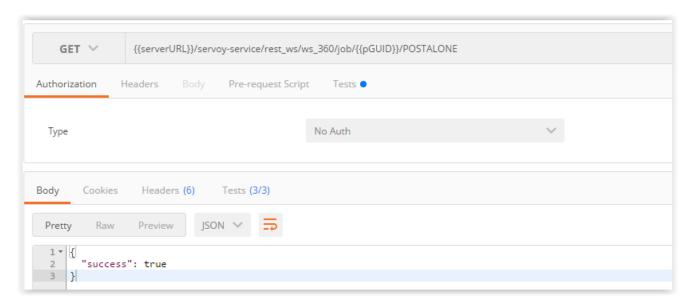
# PostalOne! Automated Upload, Update, Cancel, and Delete

Use this web service call to communicate with PostalOne! using to Upload, Update, Cancel and Delete Full-Service Mail.dat jobs.

	https://cloud2.iaccutrace.com/servoy-service/rest_ws/ws_360/v2_0/job/ <guid>/POSTALONE</guid>
•	Method:
	GET
•	URL Params
	Required:
	<guid></guid>
•	Success Response:
	• Content: {"success":true}
•	Error Response:
	<ul><li>Content: HTTP 500 – INTERNAL_SERVER_ERROR</li></ul>



## • Sample Call using POSTMAN – REST Client:



#### • Important:

It is very, very important that before you make the POSTALONE call, that you call UPDATE QUOTE with the correct Mail.dat values.

Call UPDATE QUOTE (see above) with these important values:

```
{
    "p1_env": "{{environment}}",
    "p1_usr": "{{username}}",
    "p1_psw": "{{password}}",
    "p1_action": "{{action}}",
    "mailing_date":"{{mailingdate}}"
}
```

Note: "maildat\_jobid" must be unique and a maximum of 8-bytes, Alpha/Numeric only. If this JSON value is not provided, the first 8-bytes of the Input File name is used.

See: See available settings: <a href="http://www.accuzip.com/files/json\_values.xlsx">http://www.accuzip.com/files/json\_values.xlsx</a> for the JSON object possible values.



#### Example of how to use the POSTALONE! RESTful API call.

It is important follow the basic steps below in order to successfully use the POSTALONE RESTful API call.

#### UPLOAD FILE

Use the {{guid}} in the response to make the rest of the calls

#### GET QUOTE

 This call is important so that you know the upload was not only successful, you know that our backend has accepted the input file and generated a preliminary postage quote.

#### UPDATE QUOTE

Send all of the Presort settings, including the very important unique {{maildat\_jobid}}
 or the first 8-bytes of the Input File name is used and must be unique for each job.

#### o CASS-NCOA-DUPS 01-PRESORT

You can also call CASS or NCOA or DUPS\_01 or PRESORT separately. These individual RESTful API calls run Sync, meaning that control is not given back to you until the process is completed. The all-in-one RESTful API call runs Async and returns control back to you immediately, and then when the process is completed, our service makes a callBack to your RESTful API so you can begin the next steps.

#### GET QUOTE

If your service does not support a callBack, then you can use the GET QUOTE RESTful API to check the status of the process. See "Alternate method to callBack".

## UPDATE QUOTE

 Here you can include additional values for PostalOne! communication, such as your Credentials and what PostalOne! Environment you want to use. See <a href="http://www.accuzip.com/files/json\_values.xlsx">http://www.accuzip.com/files/json\_values.xlsx</a> for these PostalOne! settings.

```
"p1_env": "{{environment}}",
"p1_usr": "{{username}}",
"p1_psw": "{{password}}",
"p1_action": "{{action}}",
"mailing_date":"{{mailingdate}}"
```

#### POSTALONE

}

Before you make this call, it is very important you have included your PostalOne! credentials "p1\_usr" and "p1\_psw", along with the PostalOne! environment "p1\_env" and the PostalOne! action "p1\_action".

#### GET QUOTE

 When the PostalOne! communication is completed, a callBack will be made to your RESTful API. If your service does not support RESTful API a callBack, use GET QUOTE to check the status. See "Alternate method to callBack"



## **Retrieve Duplicates**

Use this web service call to retrieve the duplicate records found in the "Duplicate Detection" web service. It is important to use the same <duplicateSubType> used in the "Duplicate Detection" web service call in order to retrieve the matching records.

URL

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/DUPLICATES/<duplicateSubType>

Method:

**GET** 

URL Params

## Required:

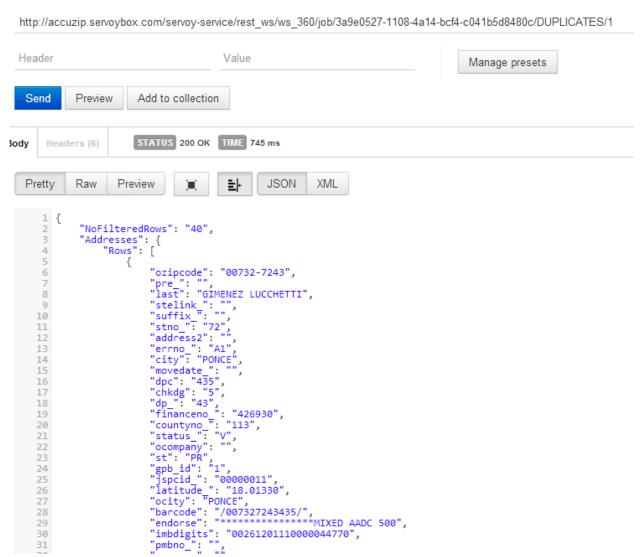
<guid>

<duplicateSubType>

- 01 Address Only and if exists, Company
- 02 First and Last name
- 03 Household name
- Success Response:
  - Content: {"success": true}
- Error Response:
  - Content: {"message":"Missing filter value","success":false}



## Sample Call using POSTMAN – REST Client:



#### • Notes:

Use the retrieved object to populate a grid that displays all of the duplicate records. If you want to highlight the duplicate records, the object named "x" will contain the value "1". This will allow you to set a trigger that may turn the row in the grid a different color to highlight the duplicate records so they are easily identified.



## **Retrieve NCOALink Certified Records**

Use this web service call to retrieve certain types of NCOALink records to display in a grid for the user to review.

URL

https://cloud2.iaccutrace.com/servoy-service/rest\_ws/ws\_360/v2\_0/job/<guid>/MoveUpdate/<filterSubType>

• Method:

**GET** 

URL Params

### Required:

<guid>

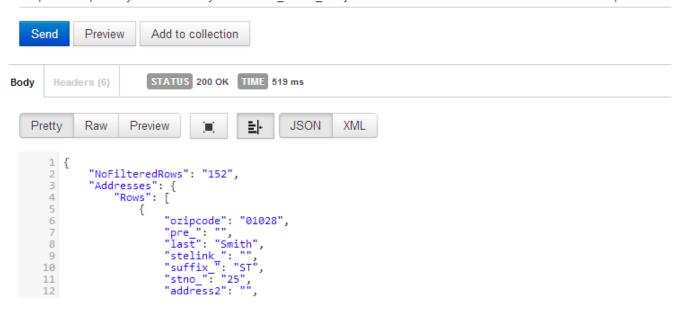
## <filterSubType>

- 1 Moved COA Matches
- 2 Moved New Address cannot be confirmed
- 3 Moved Left No Forwarding
- 4 Moved Foreign Country
- 5 Moved New State
- 6 Individual Match
- 7 Family Match
- 8 Business Match
- 99 All NCOALink Matches
- Success Response:
  - Content: {"NoFilteredRows":"1","Addresses":{"Rows":[{objects]},"success":"true","TotalRows":"20"}}
- Error Response:
  - Content: HTTP 500 INTERNAL\_SERVER\_ERROR



## • Sample Call using POSTMAN – REST Client:

http://accuzip.servoybox.com/servoy-service/rest\_ws/ws\_360/job/33058316-a55e-4c20-8d43-5975947f8b73/MoveUpdate/1



## Notes:

Allow the user to review the results, make changes if needed, then call the "Replace All Data" web service to update the main database before presorting.



## **Retrieve CASS Certified Records**

Use this web service call to retrieve certain types of CASS Certified records to display in a grid for the user to review and edit if necessary.

URL

https://cloud2.iaccutrace.com/servoy-service/rest ws/ws 360/v2 0/job/<guid>/CleanAddresses/<filterSubType>

• Method:

**GET** 

URL Params

### Required:

<guid>

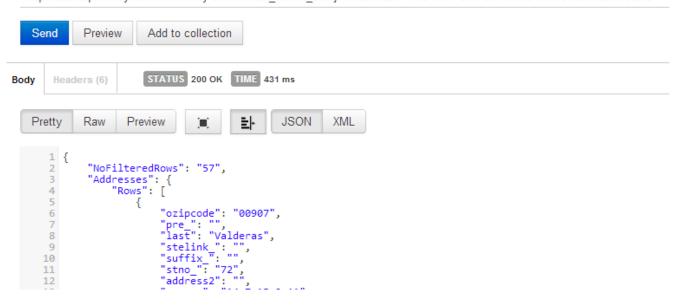
## <filterSubType>

- 2 Unit number provided but not verified
- 3 Unit number missing from known high-rise address
- 4 Vacant
- 5 Business address
- 6 Private Mail Box address
- 7 Address not valid
- 8 Missing address element(s)
- 9 Foreign
- 99 All
- Success Response:
  - o Content: {{"NoFilteredRows":"5","Addresses":{"Rows":[{objects}]},"success":"true","TotalRows":"20"}
- Error Response:
  - Content: HTTP 500 INTERNAL\_SERVER\_ERROR



## • Sample Call using POSTMAN – REST Client:

http://accuzip.servoybox.com/servoy-service/rest\_ws/ws\_360/job/3a9e0527-1108-4a14-bcf4-c041b5d8480c/CleanAddresses/2



## Notes:

You can allow the user to edit the CASS Certified result and make corrections. Then using the CASS REST API Documentation (<a href="https://api.iaccutrace.com/docs/api-cass">https://api.iaccutrace.com/docs/api-cass</a>), you can create a one-button CASS Certified lookup to correct the address on-the-fly.



# **Replace All Data**

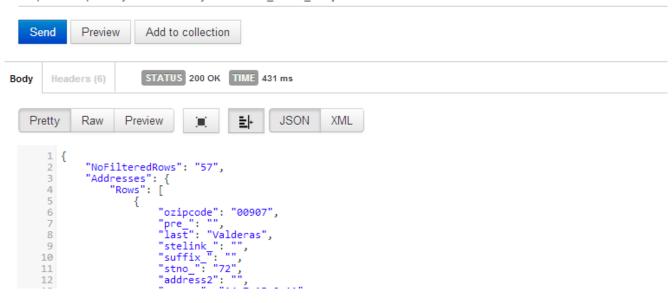
be used if cords where e Presort

Use this web service call to write back all modified rows to the Cloud. This web service call would be you allowed the customer to edit the CASS Certified, NCOALink Certified or Duplicate Detection recognized in a grid for the user to modify. This web service call should be processed before the web service.	
URL	
https://cloud2.iaccutrace.com/servoy-service/rest_ws/ws_360/v2_0/job/ <guid></guid>	
Method:	
PUT	
URL Params	
Required:	
<guid></guid>	
Header Params	
Accept application/json or application/xml	
Data Params	
See objects in these web service GET	
Retrieve CASS Certified Records; Retrieve NCOALink Certified Records; Retrieve Duplicates	
Success Response:	
o Content: HTTP 200 - OK	
Error Response:	
<ul> <li>Content: HTTP 404 – NOT_FOUND</li> </ul>	



## • Sample Call using POSTMAN – REST Client:

http://accuzip.servoybox.com/servoy-service/rest\_ws/ws\_360/job/3a9e0527-1108-4a14-bcf4-c041b5d8480c/CleanAddresses/2



## Notes:

You can allow the user to edit the CASS Certified result and make corrections. Then using the CASS REST API Documentation (<a href="https://api.iaccutrace.com/docs/api-cass">https://api.iaccutrace.com/docs/api-cass</a>), you can create a one-button CASS Certified lookup to correct the address on-the-fly.