



ESTIMATE DOCUMENT RETURN API INTEGRATION GUIDE

Estimate Document Return API Integration Guide

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1. Revision History

Version	Date	Author	Notes
1.0	04/14/2019	J.H., Audatex	Internally approved version
1.1	08/26/2019	J.H., Audatex	Updated the API Spec and Legal Statement
1.2	01/09/2019	T.R., Audatex	Updated API Spec with latest reference content and format
1.3	01/08/2020	T.R.	Formatting changes
1.4	06/02/2020	T.R., Audatex	Updated JSON sample text

2. Preface

2.1 About Audatex and our solutions

Audatex claims solutions will improve productivity and drive faster, more accurate estimating, valuations, and insight for your business. We bring together a unique blend of insurers, collision repair professionals, independent appraisers, and manufacturers to assist in your automotive claim. The result is improved cycle time, along with streamlined communication and accuracy that you can count on.

2.2 About this Guide

This guide provides the necessary information to receive completed estimate documents from Audatex to the Client platform. Assignments will be sent in CIECA BMS compliant format using webservice (Application/JSON API).

This guide describes what you need to know to do the following:

- Get started with your estimate return integration

- Access the Estimate Return Data Mapping
- Contact Audatex Technical Support

3. Getting Started

Integration with Audatex Integrations services is fast and simple. Just follow these 7 steps:

1. Meet pre-requisites
2. Review technical specifications
3. Develop integration services on your side
4. Establish a secure connection with Audatex Integrations
5. Test connectivity and data flow
6. Complete User Acceptance Testing (UAT)
7. Go Live

4. CIECA Membership

Audatex is a Corporate Technology member of Collision Industry Electronic Commerce Association (“CIECA”) and is licensed to use CIECA standards in its products. Clients using CIECA standards such as the BMS standard file format should consult CIECA about whether membership is required to license the materials. Follow this link to the CIECA website to review the guidelines for using the BMS file format and inquire about the benefits and requirements of CIECA membership: <https://www.cieca.com/>

Once you login to CIECA.com as a registered member, access the BMS 5.7 schema files at this URL:

****** Powered by its members, CIECA connects your company to resources that help drive innovation and market growth, create new opportunities for collaboration and foster the development and adoption of critical industry standards. Specific uses of the CIECA standard may require membership to CIECA. We encourage clients and partners who use Audatex APIs to contact CIECA to learn more about their specific requirements.

5. Prerequisites

Clients must work with Audatex to review the scope and requirements of the integration. This phase will ensure all prerequisites are met to ensure a successful integration.

- The Client must be able to consume and expose Application/JSON APIs
- The Client must have a segregated development and test environment to complete Integration testing and UAT. Audatex account representative will work with the Client to schedule and host a kickoff meeting. This meeting will be used to introduce critical technical resources, review the implementation timeline, and help answer any questions.

6 Technical References

6.1 Data Mapping

The Audatex Estimate Return Data Mapping defines all data fields supported by Audatex Integrations and their formats. The Audatex system does not support all fields available in the CIECA BMS.

Please refer to the **Appendix** below to access the Estimate Return Data Mapping

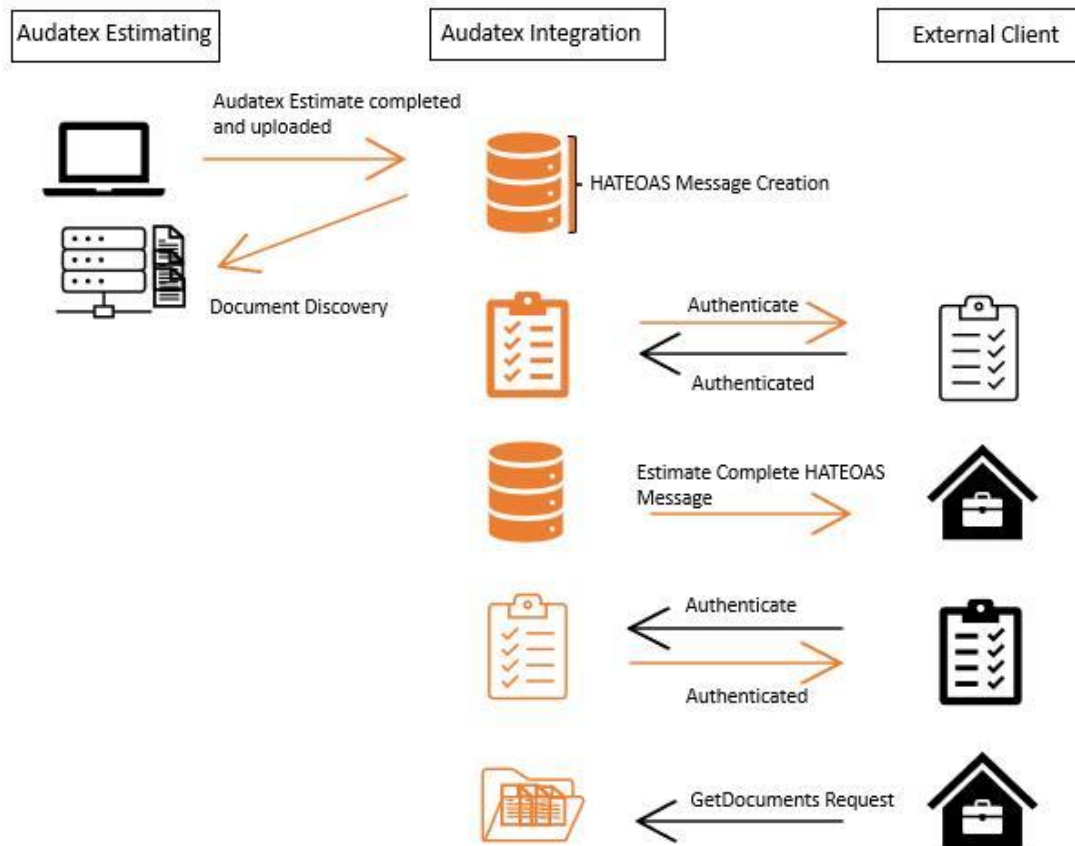
6.2 API Summary

The following table contains a listing of the APIs:

Verb	Owner	Route	Description
POST	Audatex	<i>TEST URL:</i> https://api-demo.audatex.com/connect/token <i>PROD URL:</i> https://api-prod.audatex.com/connect/token	Authenticates client and provides access bearer token.
GET	Audatex	<i>TEST URL:</i> https://api-demo.audatex.com/GetDocuments/api/<apiversion>/claims/{“assignmentId”}/document/{“Locator”} <i>PROD URL:</i> https://api-prod.audatex.com/GetDocuments/api/<apiversion>/claims/{“assignmentId”}/document/{“Locator”}	HTTP Get method for retrieving estimate related documents
POST	Client	https//<client specified value>	Authenticates the Audatex and provides access bearer token. Client authentication value get from Assignment request.

POST	Client	https//<client specified value>	Exposed Endpoint for communicating HATEOAS message to client. Client endpoint value get from Assignment request.
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6.3 Estimate Return Integration Process Overview



Once the client is provisioned on Audatex side, an automated electronic feed of Estimate Document Return data can then be transferred to the Client's Claim Management System from the Audatex Claims Management System:

1. Audatex Estimate (ADX) is completed.
2. Complete Event is consumed by Audatex Integrations
3. Audatex Integrations discovers all documents related to completed estimate
4. HATEOAS message is created within Audatex Integrations
5. Audatex Integrations Authenticates with Client API
6. Audatex Integrations sends Hateos message to Client API
7. Client Authenticates with Audatex Integrations API
8. Client retrieves (HTTP Get) documents contained in HATEOAS message.

6.4 API Specifications

6.4.1 Authenticate - Audatex

Clients will need to authenticate when they call any of the Audatex Integrations APIs.

The following are the supported authentication methods from which one of them can be selected:

- Basic Authorization
- OAuth

Method: POST

URL: <https://<base-url>/connect/token>

Owner: Audatex

This API authenticates the user based on the provided user id and password.

A successful request returns the HTTP status code: **201 CREATED**

Verb	Route	Description
POST	/api/authorize	Authenticates the user and provides access token.

URLs:

- TEST URL: <https://api-demo.audatex.com/connect/token>
- PROD URL: <https://api-prod.audatex.com/connect/token>

Notes:

- Production environment needs that client provide the endpoints - URL and authentication to setup previously. While for testing environments, the client needs to provide into the request all information.
- If the client needs the IP ranges for the configuration, the following IP addresses should be considered:
 - Tanzu Test: 170.76.172.18
 - Tanzu Prod: 170.76.172.20

Token Request

x-www-form-urlencoded

```
{  
  "Clientid": "b2b.fnol",  
  "Secret": "fnol-secret",  
  "Scope": "b2b.fnol.documents",  
  "grant_type": "client_credentials",  
  "username": "XXXX",  
  "password": "XXXX"  
}
```

Data Dictionary

Key	Description
client_id	b2b.fnol
client_secret	fnol-secret
grant_type	client_credentials
scope	b2b.fnol.documents
username	Audatex user id provided by Audatex Integration. Customer has option to use same or different ids to accessing the Assignment API and the Estimate Return API respectively
password	Password provided by Audatex Integrations

Note. Client can pass more than one scope and then be able to use the same token with multiple APIs. Scopes are separated by space. Make sure the scope value for Estimate Return API is the one mentioned in the Data Dictionary above.

Sample Auth Response

```
{
    "access_token":
"eyJhbGciOiJIUzI1NiIsImtpZCI6IjZBMDk2MkY5MDg4MERBOTQzMzhBODgzRkVDQkNGMzZENkdwQzY5RklmLCJ0eXAiOiJKV1QiLCJ4NXQiOiJhZ2xpLVFpQTJwUXppb2dfN0x0emJVVa01hZnMifQ.eyJyYmYiOiJlNTNM1NTAwNTEsImV4cCI6MTU1MzU5Mzl1MSwiaXNzIjoiaHR0cHM6Ly9kaXNWYXRjaC1sb2dpci1kZXEuYXBwcY5wcmVwcmRwY2YwMS5hdWRhZXhwOG9yZS5jb20iLCJhdWQiOiJsiaHR0cHM6Ly9kaXNWYXRjaC1sb2dpci1kZXEuYXBwcY5wcmVwcmRwY2YwMS5hdWRhZXhwOG9yZS5jb20vcmVzb3VyY2VzliwiYjJiLmZub2wuYXBpbll0slmNsaVVudF9pZCI6ImlyYi5mbm9slwlc2NvcGUiOiSiYjJiLmZub2wuYXBpbll19.PjHkbLYSg1ABUMMNOLt_uf8jUU682WMGbA0X04to0L_CglyxMD8bVICZYXBD9AhF09xCOShiONkTWqOLkAmEY9V7Q4Y1Kj7wwaBQmhzejGn5XRrXVhHhu1WmjSLIYKYNeKyqbvnBLkN6Jt dPhXTchYZdt2C6Wzo2_jnXBN9LcCj18H9R3Q71RNwiZ0oWY3VFfl_x-Y33TDZkl69FrEwfCFLgiQpUqk9nvGx-86o18Denb0ld8vMwxjm05heRrLuA3jaNMNP82opmUhSw6Jq_5MVEPD7gXQ99I8ofTAqOXkwwavJOL9QMOR-uy837rawy_WW4fPvN0291xYZZIJ5zurHPiZCqAduHx9okk7alFtj1pyXlmwlF3XISF2EonK_cWWpl4t3kHAHQBYkmafQqKWSmXtY85noISb7ov72qqtxUFaMbKA-kQnoj6TtEuYuA92dJrlKGm2EvKBv6vu2J2wqErFzUoyZMVzAtj7RV0hYI7maY1mbCBR7c9Sfgcg3wO972d7AefwaAs-CX1QN0H20PfQ5TefBMulerI75nGjPo2WptAQm2NGxar79VvQEwyyl9mEHTg-WXCu80ak5QBagwzfU6Gkv6wPWqwW3m6GkeWhelS2Gj8X6VwBoJDpOYYDk2_4XSibVAQKzV9P3TtR0aOFesBK9pj12KVkc",
    "expires_in": 43200,
    "token_type": "Bearer"
}
```


Data Dictionary

Key	Description
access_token	authentication token
expires_in	token TTL in seconds
token_type	Type of authentication

6.4.2 Authenticate – External Client

Method: POST

URL: To be defined by client

Owner: External Client

Authenticates the user based on the provided user id and password.

A successful request returns the HTTP status code: **201 CREATED**

6.4.3 Receive Estimate Complete Message

Method: POST

Owner: External Client

URL: <client defined>

Resource to post Estimate Complete HATEOAS message

The accessToken should be sent as a Bearer credential in HTTP Authorization header. The bearer token will allow access to URL.

Data Dictionary

Key	Description
RQUID	Client BMS AssignmentRq RQUID
MessageType	Audatex.Event.EstimateComplete
ClaimNumber	Claimnumber
body:links:Rel	Xml/PrintImage/Jpeg
body:links:Method	HTTP Method
body:links:Href	HTTP URL to related document

body:links:Type	Mime Type
body:links:info:notation	Notation for attachments
body:links:info:extension	File type extension
body:links:info:attachmentDatetime	Attachment Creation Date/Time

HTTP HEADER

Rquid= BMS RQUID messageType

MessageType=Audatex.Event.EstimateComplete

Sample EstimateReturn JSON

```
{
  "Header" : {
    "Rquid" : "08D943266CB6984C-ff54af838aa242a583c",
    "Cid" : "8bdb2311-6cb2-4d5f-a6f8-cc47ebcd629a",
    "MessageType" : "Audatex.Event.EstimateComplete"
  },
  "Body" : {
    "ClaimNumber" : "5101762",
    "Links" : [
      {
        "Rel" : "claimXml",
        "Method" : "GET",
        "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/311671832/document/f76da32a-3ea2-46c2-
b7cb0be4672ae659",
        "Type" : "application/json",
        "Info" : null
      },
      {
        "Rel" : "printImages",
        "Method" : "GET",
        "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/311671832/document/c7c4bfc2-f121-4a6f-
96957dbd18d806d2",
        "Type" : "application/json",
        "Info" : null
      },
      {
        "Rel" : "printImages",
        "Method" : "GET",
        "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/311671832/document/f835c734-12d3-47af-
b14440e72fbd4498",
        "Type" : "application/json",
        "Info" : null
      }
    ]
  }
}
```

```

        {
            "Rel" : "printImages",
            "Method" : "GET",
            "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/311671832/document/5e77ac5a-3786-4741-
be1d1d65c052d5ff",
            "Type" : "application/json",
            "Info" : null
        },
        {
            "Rel" : "attachments",
            "Method" : "GET",
            "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/539274853/document/a843ecf0-8ced-4b30-
a87931d9cbcf2b08",
            "Type" : "application/json",
            "Info" : {
                "Notation" : "",
                "FileType" : "2",
                "Extension" : ".jpg",
                "AttachmentDatetime" : "2021-08-04T07:53:55",
                "EstimateId" : "0"
            }
        },
        {
            "Rel" : "printImages",
            "Method" : "GET",
            "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/311671832/document/f52e5e1f-0ec7-44a1-
bc4a8916d4d7bedc",
            "Type" : "application/json",
            "Info" : null
        },
        {
            "Rel" : "printImages",
            "Method" : "GET",
            "Href" : "https://api-
demo.audatex.com/GetDocuments/api/<apiversion>/claims/311671832/document/6ed651e9-c2e8-47b3-
b08ce37340b71d87",
            "Type" : "application/json",
            "Info" : null
        }
    ],
    "PassThroughData" : "Loss Description: IV stolen, OK To Pay: YES, Damage
Description: "
    }
}

```

6.4.4 GET DOCUMENT

Method: GET

Owner: Audatex

URL: Specified in Estimate Complete Message

Audatex will retry up to 3 times when it doesn't get "success" from the customer service, using the default timeout which is 15 seconds, after that it will go to the reject queue. We may enable the sending of email notifications upon request.

Data Dictionary

Key	Description
Claim Number	Claim Number
CreatedForProfileId	Audatex External ID that estimate was created with.
ImageId	
AttachmentId	
Extention	File Extension
Payload	Binary64 encoded image
DataType	

Sample GetDocument JSON

```
{
  "header": {
    "cid": "",
    "statusCode": "OK"
  },
  "body": {
    "claimNumber": "5101762",
    "createdForProfileId": "xxxx",
    "imageId": null,
    "attachmentId": null,
    "requestNbr": null,
    "extension": ".xml",
    "payload": "PD94bWwgdmVyc2lvbj0iMS4wLj8+",
    "dataType": "XML.Base64"
  }
}
```

7 Integration Services Development on Client Side

It will be the Client's responsibility to convert the data in the CIECA BMS format to the format required by their system after receiving it from Audatex via Web Services protocol. The Estimate Return message developed by Audatex is Version 5.7.0.

The Estimate Return XML message follows the guidelines from the schema which can be downloaded from CIECA website.

8 Establishing a secured connection with Audatex Integrations

8.1 Securing Connection Options

8.1.1 Audatex to Client

- a. Whitelisting IP's: Audatex will provide IP range so the client can whitelist to allow traffic to necessary resources.
- b. VPN Connection – A VPN can be set up between the two parties to facilitate secure communication.
- c. SSL over Internet
- d. Supported authentications: Basic Auth and OAuth2

8.1.2 Client to Audatex

- a. Endpoints are exposed using SSL protocol over the internet.

9 Test Connectivity and Data Flow

System Integration Testing will be performed in order to cover the below areas:

- a. Detect Defect early
- b. Get earlier feedback on the acceptability of the individual module
- c. Have flexibility on scheduling of Defect fixes, which can be overlapped with development
- d. To ensure data flow, control flow, timing, memory usage, and software requirements is correct

10 User Acceptance Testing (UAT)

Based on client requirements in the Project Charter Audatex will put forth a set of best practice test cases and work with the client to have an approved list of test cases to execute.

After developers have completed System Integration Testing (SIT) in the test environment, the insurance carrier or integration partner will work with Audatex integration teams to complete UAT in Audatex testing environments. UAT must be scheduled with Audatex to ensure resource availability for both parties.

11 Going Live

A production implementation can be scheduled no earlier than 5 business days after the UAT signoff from the Audatex client.

12 Technical Support

	United States	Canada
API Availability	Audatex maintains full services hosting from 6:30 am EST until 12:00 am EST Monday through Saturday (Standard or Daylight Savings Time as applicable) and 10:00 am EST until 2:00 pm EST on Sunday. Services may be available outside of these time frames, but availability is subject to maintenance.	Audatex maintains full services hosting from 6:30 am EST until 12:00 am EST Monday through Saturday (Standard or Daylight Savings Time as applicable) and 10:00 am EST until 2:00 pm EST on Sunday. Services may be available outside of these time frames, but availability is subject to maintenance.
Scheduled Maintenance	Audatex reserves the right to do maintenance whenever necessary. Audatex will strive to limit downtime during normal business hours as outlined in Hours of Operation. Maintenance will normally be scheduled throughout the week.	Audatex reserves the right to do maintenance whenever necessary. Audatex will strive to limit downtime during normal business hours as outlined in Hours of Operation. Maintenance will normally be scheduled throughout the week.

Emergency Maintenance	If emergency maintenance is required, Audatex reserves the right to provide the maintenance with minimal impact on the user community.	If emergency maintenance is required, Audatex reserves the right to provide the maintenance with minimal impact on the user community.
Support Center Hours	Technical assistance is available 8:00 am to 8:00 pm EST Monday through Friday and 9:00 am to 1:00 pm EST Saturday.	Technical assistance is available 8:00 am to 8:00 pm EST Monday through Friday and 9:00 am to 1:00 pm EST Saturday.
Support Center Contact Information	• Phone Number: 1-800-669-4237 • For self-service support, please visit www.mysupportgarage.com • To open a case for support, choose Contact Us. • Emails will receive a response within 1-2 business days	• Phone Number: 1-866-420-2048 • For self-service support, please visit www.training.audatex.us • Email canadatechsupport@audatex.com • Emails will receive a response within 1-2 business days

13 Contact US

24/7 Training & Technical Support	MySupportGarage.com
Email Support	AXUS.AASupportContact@audatex.com
Contact Us	(866) 420-2048