**ULIP Integration Requirement Document**

Version No.: 1.0

Date: 10/01/2022

Project Name: ULIP

This document contains proprietary information of NEC corporation India Pvt Ltd**.** Unauthorized access, copying and replication are prohibited. This document must not be copied in whole or part by any means, without the written authorization of NEC corporation India Pvt Ltd, Noida, India.

Revision History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Date | Author | Reviewer | Significant Changes |
| 1.0 | 10/01/2022 | Girish Chander |  | Baseline Version |

**Table of Contents**

[Introduction 4](#_Toc81467388)

[1.1 Purpose 4](#_Toc81467389)

[The Overall Description 4](#_Toc81467390)

[1.2 Data Integration between AAICLAS System and ULIP application 4](#_Toc81467391)

[1.3 AAICLAS/01 4](#_Toc81467392)

[1.3.1 Technical Approach 5](#_Toc81467393)

[1.4 AAICLAS/02 9](#_Toc81467394)

[1.4.1 Technical Approach 10](#_Toc81467395)

[1.5 Data Transmission & Authentication Mechanism 15](#_Toc81467396)

# 

# Introduction

## Purpose

The purpose of this document is to define and provide details for accessing API for AAICLAS system information from ULIP system.

This document details the following points:

1. **Data Integration between AAICLAS** **and ULIP web service**: Identification of operational points where data integration between AAICLAS and ULIP web service will be needed.
2. **Technical Approach** for performing Data Integration

# The Overall Description

User will share the information such as **AWB** **number, HAWB number, LOCATION** based on data send by user ULIP system will call respective **AAICLAS** API for accessing information.

Following are the point for accessing cargo information: -

1. This API will share data based on information provided by user.
2. ULIP will expose API for getting data from **AAICLAS** API.
3. **AAICLAS /01** API will take AWB number and LOCATION from user and get data from AAICLAS API.
4. **AAICLAS/02** API will take AWB number, HAWB number and LOCATION from user and get data from AAICLAS API.

## Data Integration **between** AAICLAS System and ULIP application

User will share information to ULIP system based on data shared ULIP will provide data to user.

## AAICLAS/01

This API will take **AWB number** and **LOCATION** and connect with AAICLAS API to get data.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Field Description** | **Format** | **Required/Not – Required** | **Length** |
| 1 | **awbnumber** | Master Airway bill Number as available in AAICLAS system. | ^[a-zA-Z0-9.]\*$ | Required | NA |
| 2 | **location** | Location as available in AAICLAS system | [A-Z]{1,3} | Required | Max 3 |

### Technical Approach

1. All the data will be shared through rest web services.
2. ULIP system will provide **AWB number and Location** for which detail is required.
3. AAICLAS API will share details of cargo information which exist in AAICLAS system in JSON format.
4. AAICLAS Integration will add JSON in **response** key in response body.
5. ULIP system will provide the data in JSON Object format in response body.

**Example:**

AWB number **61835488224** and Location **CCU** is shared by ULIP system, then AAICLAS-integration will make a request to AAICLAS API.

**Request:**

The request must be of the following format, where AWB number and Location is passed within the URL body in JSON format.

https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0/AAICLAS/01

{

"awbNumber": "61835488224",

"location":"CCU"

}

**Curl URL**

curl --location --request POST 'https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0/AAICLAS/01' \

--header 'authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJhdWRpdHVzciIsImlhdCI6MTY0MDY2NTk3MiwiYXBwcyI6ImRhdGFwdXNoIn0.z80h8i5-0yygtVtY0lHRRfpIt8nf\_t8v-hrrD8WrDulXZ5bQ9q8Z5U4Tot9r7u6Hd-m3DF\_H5J9LqV\_rlLvCXA' \

--header 'accept: application/json' \

--header 'content-type: application/json' \

--data-raw '{

"awbNumber": "61835488224",

"location":"CCU"

}'

For obtaining authentication token, refer [Section 1.5](#_Data_Transmission_&)

**Response**

To acknowledge the above request, ULIP will send the below response -

1. **In case of invalid format**
2. **Invalid AWB number**

{

    "response": null,

    "error": "true",

    "code": "400",

    "message": "Data format failed OR wrong value entered at:  awbNumber. Format should follow  ^[a-zA-Z0-9.]\*$"

}

1. **Invalid location**

{

    "response": null,

    "error": "true",

    "code": "400",

    "message": "Data format failed OR wrong value entered at:  location. Format should follow  [A-Z]{1,3}"

}

1. **In case of AWB number does not exist in AAICLAS system**

{

    "response": [

        {

            "response": {

                "ExportTrackingData": {

                    "AWB": null,

                    "SHIPPING\_BILL": [],

                    "LOCATION\_DETAILS": [],

                    "XRAY\_DETAILS": [],

                    "ULD\_DETAILS": [],

                    "EGM\_DETAILS": []

                }

            },

            "responseStatus": "SUCCESS"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

1. **In case of location does not exist in AAICLAS system**

{

    "response": [

        {

            "response": "\"Value cannot be null.\\r\\nParameter name: remoteAddress\"",

            "responseStatus": "ERROR"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

1. **In case AWB number and location exist**

{

    "response": [

        {

            "response": {

                "ExportTrackingData": {

                    "AWB": {

                        "Destination": "TPE",

                        "Packages": "33",

                        "GrossWeight": "523",

                        "ChargeableWeight": "523",

                        "TDGDateTime": "19/12/2021 17:33:16",

                        "BAGDateTime": "19/12/2021 18:45:00",

                        "GatePassDateTime": "N/A",

                        "HandOverDateTime": "20/12/2021 14:50"

                    },

                    "SHIPPING\_BILL": [

                        {

                            "ShippingBillNo": "19/12/2021",

                            "ShippingBillDate": "19/12/2021",

                            "HawbNo": "00",

                            "Packages": "33",

                            "GrossWeight": "523",

                            "FOBValue": "164894",

                            "LEONo": "M",

                            "LEODate": "19/12/21"

                        }

                    ],

                    "LOCATION\_DETAILS": [],

                    "XRAY\_DETAILS": [

                        {

                            "XRayDate": "19/12/2021 21:18",

                            "XRayMachine": "2",

                            "XRayBy": "SUNDAR"

                        }

                    ],

                    "ULD\_DETAILS": [

                        {

                            "ULDNo": "BT-SQ517",

                            "ULDType": "BULK",

                            "Status": "R",

                            "FlightNo": "SQ517",

                            "FlightDate": "19/12/2021"

                        }

                    ],

                    "EGM\_DETAILS": [

                        {

                            "EGMNo": "7066",

                            "EGMYear": "19/12/2021",

                            "FlightNo": "SQ517",

                            "FlightDate": "19/12/2021",

                            "ATD": " ",

                            "Commodity": "CRABS",

                            "Packages": "33",

                            "GrossWeight": "523"

                        }

                    ]

                }

            },

            "responseStatus": "SUCCESS"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

**Status Code 200**: cargo data response

**Status Code 400**: Bad request (Invalid json syntax, invalid json key)

**Status Code 401 or 403**: Unauthenticated or Unauthorized

**Status Code 500**: Some internal server error occurred

**Status Code 502**: Server is not responding.

## AAICLAS/02

This API will take **AWB number, HAWB number and location** connect with AAICLAS API to get data.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Field Description** | **Format** | **Required/Not – Required** | **Length** |
| 1 | **awbnumber** | Master Airway bill Number as available in AAICLAS system. | [0-9]{11} | Required | Max 11 |
| 2 | **hawb** | House Airway bill Number  as available in AAICLAS system. | ^[a-zA-Z0-9.]\*$ | Required | NA |
| 3 | **location** | Location as available in AAICLAS system | [A-Z]{1,3} | Required | Max 3 |

### Technical Approach

1. All the data will be shared through rest web services.
2. ULIP system will provide **AWB number ,HAWB number and location** for which detail is required.
3. AAICLAS API will share details of cargo information which exist in AAICLAS system in JSON format.
4. AAICLAS Integration will add JSON in **response** key in response body.
5. ULIP system will provide the data in JSON Object format in response body.

**Example:**

AWB number **15770597822**, HAWB number **21120039** and location **CCU** is shared by ULIP system, then AAICLAS-integration will make a request to AAICLAS API.

**Request:**

The request must be of the following format, where AWB number, HAWB number and location is passed within the URL body in JSON format.

https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0/AAICLAS/02

{

"awbNumber": "15770597822",

"hawb":"21120039",

"location":"CCU"

}

**Curl URL**

curl --location --request POST 'https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0//AAICLAS/02' \

--header 'Authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ1bGlwIiwiaWF0IjoxNjQwNjcxMTU4LCJhcHBzIjoiZGF0YXB1c2gifQ.C1kSY1oUhhaJcch5Svaq9HUB7WtLHYnsVMIm6P1kyvr39qnqNxTqYTZ0QPAEiKsITxdE8ohCyFWPGdvsWrn8cg' \

--header 'accept: application/json' \

--header 'content-type: application/json' \

--data-raw '{

"awbNumber": "15770597822",

"hawb":"21120039",

"location":"CCU"

}'

For obtaining authentication token, refer [Section 1.5](#_Data_Transmission_&)

**Response**

To acknowledge the above request, ULIP will send the below response -

1. **In case of invalid format**
2. **Invalid AWB number**

{

    "response": null,

    "error": "true",

    "code": "400",

    "message": "Data format failed OR wrong value entered at:  awbNumber. Format should follow  [0-9]{11}"

}

1. **Invalid HAWB number**

{

    "response": null,

    "error": "true",

    "code": "400",

    "message": "Data format failed OR wrong value entered at:  hawb. Format should follow  ^[a-zA-Z0-9.]\*$"

}

1. **Invalid location**

{

    "response": null,

    "error": "true",

    "code": "400",

    "message": "Data format failed OR wrong value entered at:  location. Format should follow  [A-Z]{1,3}"

}

1. **In case of AWB number does not exist in AAICLAS system**

{

    "response": [

        {

            "response": {

                "ImportTrackingData": {

                    "AWB\_DETAILS": null,

                    "IGM\_DETAILS": [],

                    "DO\_DETAILS": [],

                    "GP\_DETAILS": [],

                    "LOC\_DETAILS": []

                }

            },

            "responseStatus": "SUCCESS"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

1. **In case HAWB number does not exist in AAICLAS system**

{

    "response": [

        {

            "response": {

                "ImportTrackingData": {

                    "AWB\_DETAILS": null,

                    "IGM\_DETAILS": [],

                    "DO\_DETAILS": [

                        {

                            "DOIssuedBy": "",

                            "DODate": "20/12/2021 03:35:13",

                            "HawbNo": "0",

                            "DOIssuedTo": "UNIQUE LOGISTICS INTERNATIONAL (INDIA) PVT LTD"

                        }

                    ],

                    "GP\_DETAILS": [],

                    "LOC\_DETAILS": []

                }

            },

            "responseStatus": "SUCCESS"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

1. **In case location does not exist in AAICLAS system**

{

    "response": [

        {

            "response": "\"Value cannot be null.\\r\\nParameter name: remoteAddress\"",

            "responseStatus": "ERROR"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

1. **In case AWB number, HAWB number and location exist**

{

    "response": [

        {

            "response": {

                "ImportTrackingData": {

                    "AWB\_DETAILS": {

                        "IgmNo": "1986312",

                        "IgmYear": "2021",

                        "AwbNo": "15770597822",

                        "HawbNo": "21120039",

                        "ArrivedPackages": "2",

                        "ArrivedWeight": "211.5",

                        "ChargeableWeight": "211.5",

                        "DamagedPackages": "0"

                    },

                    "IGM\_DETAILS": [

                        {

                            "IgmNo": "1986312",

                            "IgmYear": "2021",

                            "FlightNo": "QR8094",

                            "FlightDate": "20/12/2021",

                            "SegregationDate": "20/12/2021 06:00",

                            "SegregationStatus": "DONE",

                            "ATA": "20/12/2021 02:25"

                        }

                    ],

                    "DO\_DETAILS": [

                        {

                            "DOIssuedBy": "",

                            "DODate": "20/12/2021 03:35:13",

                            "HawbNo": "0",

                            "DOIssuedTo": "UNIQUE LOGISTICS INTERNATIONAL (INDIA) PVT LTD"

                        },

                        {

                            "DOIssuedBy": "",

                            "DODate": "20/12/2021 07:09:13",

                            "HawbNo": "21120039",

                            "DOIssuedTo": "W.HUNGER HYDRAULICS INDIA PVT.LTD."

                        }

                    ],

                    "GP\_DETAILS": [

                        {

                            "GatePassNo": "N202112210010",

                            "DeliveryPackages": "",

                            "GeneratedOn": "21/12/2021 12:46:38",

                            "DocStatus": "DELIVERED"

                        }

                    ],

                    "LOC\_DETAILS": []

                }

            },

            "responseStatus": "SUCCESS"

        }

    ],

    "error": "false",

    "code": "200",

    "message": "Success"

}

**Status Code 200**: cargo data response

**Status Code 400**: Bad request (Invalid json syntax, invalid json key)

**Status Code 401 or 403**: Unauthenticated or Unauthorized

**Status Code 500**: Some internal server error occurred

**Status Code 502**: Server is not responding.

## Data Transmission & Authentication Mechanism

All data exchange would be done over secure HTTP (HTTPS). Request from ULIP's system would be made in AAICLAS system through a data exchange URL that has following form:

<https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0/AAICLAS/01>

**Body:**

{

"awbNumber": "61835488224",

"location":"CCU"

}

Access to above data exchange URL would be authorized by use of a security mechanism implemented by the ULIP system. It is as follows:

* First time access: It would require a username and password [which would be shared with user beforehand]. Once user hit with valid user id and password, ULIP system will return a basic authorization token to user, using that token user will communicate with ULIP system until token will not get expired.

Brief summary of HTTP Basic Authentication is as follows:

First time when User will hit ULIP secured API through username and password for access token as follow-

***curl -X POST***

‘<https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0/user/login>’

***-H 'accept: application/json'***

***-H 'content-type: application/json'***

***-data ‘{"username":"xxxxxx","password":" XXxxx@12345"} ‘***

**Authorization:**

***Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJpbnRlcmNvbnQiLCJpYXQiOjE1ODU1NjYyMzcsImFwcHMiOiJkYXRhcHVzaCJ9.jb-23DbkWpz-3ptsuuZofzH-ce7jd0xR5WlkFfBPO\_Dzjop01dSx9OamqsjsgUAryLUPtUDiMX07oHG4L2AfFQ***

Upon successful authentication, the user would be logged into the ULIP system and get an access token. Though this token user can communicate with ULIP. This token has expiry time which represent user session. The session time out for the same to be fixed hour, generally it is for 30 minutes. If there is no request coming from user for 30 minutes, then session (token) will be expired and user need to re authenticate.

Using The above token, user can request ULIP system for details as follow -

***curl --location --request POST 'https://www.ulipstaging.dpiit.gov.in/ulip/v1.0.0/AAICLAS/01' \***

***--header 'authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ1bGlwIiwiaWF0IjoxNjQwNjcxMTU4LCJhcHBzIjoiZGF0YXB1c2gifQ.C1kSY1oUhhaJcch5Svaq9HUB7WtLHYnsVMIm6P1kyvr39qnqNxTqYTZ0QPAEiKsITxdE8ohCyFWPGdvsWrn8cg' \***

***--header 'accept: application/json' \***

***--header 'content-type: application/json' \***

***--data-raw '{***

***"awbNumber": "61835488224",***

***"location":"CCU"***

***}'***