**ULIP Integration Requirement Document**

Version No.: 1.0

Date: 05/07/2021

Project Name: ULIP

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Revision History

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| --- | --- | --- | --- | --- |
| Version | Date | Author | Reviewer | Significant Changes |
| 1.0 | 05/07/2021 | Hasan Mhad Khan |  | Baseline Version |
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# 

# Introduction

## Purpose

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

This document details the following points:

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

# The Overall Description

User will share the information such as **driving license number and date of birth** based on data send by user ULIP system will call respective **SARATHI** API for accessing information.

Following are the point for accessing vehicle information: -

1. This API will share driving license data based on information provided by user.
2. ULIP will expose API for getting data from SARATHI API.
3. **SARATHI/01** API will take driving license and date of birth from user and get data from SARATHI API.

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

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

## SARATHI/01

This API will take driving license number and connect with SARATHI API to get data.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Field Description** | **Format** | **Required/Not – Required** | **Length** |
| 1 | **dlnumber** | Driving license Number as available in SARATHI system. | (([A-Z]{2}(-)[0-9]{2})|([A-Z]{2}[0-9]{2} ))((19|20)[0-9][0-9])[0-9]{7}$ | Required | 16 |
| 2 | **dob** | Date of birth as available in SARATHI system. | yyyy-mm-dd | Required | 10 |

### Technical Approach

1. All the data will be shared through rest web services.
2. ULIP system will provide **driving license** **number and date of birth** for which detail is required.
3. SARATHI API will share details of driving license information which exist in SARATHI system in JSON format.
4. ULIP system will provide the data in JSON Object format in response body.

**Example:**

Driving license Number **GJ04 20120005008** and date of birth **1987-05-26** is shared by ULIP system, then SARATHI-integration will make a request to SARATHI API.

**Request:**

The request must be of the following format, where driving license number and date of birth is passed within the URL body in JSON format.

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

{

"dlnumber": "GJ04 20120005008",

"dob": "1987-05-26"

}

**Curl URL**

curl -X POST \

https://www.ulip.dpiit.gov.in/ulip/v1.0.0/SARATHI/01 \

-H 'accept: application/json' \

-H 'authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYyNTQ2Mjg0MCwiYXBwcyI6ImRhdGFwdXNoIn0.1trNBEuh-BGPjV\_ooeY5Is2RkQK7tz41N4LEfbrV5cwTtiGfjq4tjwMBaUqyvHkeX6P7qPTgV5JDRu0SrTq7jg' \

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

-d '{

"dlnumber": "GJ04 20120005008",

"dob": "1987-05-26"

}'

For obtaining authentication token, refer [Section 1.4](#_Data_Transmission_&)

**Response**

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

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

{

"response": null,

"error": "true",

"code": "400",

"message": "Data format failed OR wrong value entered at: dlnumber. Format should follow (([A-Z]{2}(-)[0-9]{2})|([A-Z]{2}[0-9]{2} ))((19|20)[0-9][0-9])[0-9]{7}$"

}

1. **Invalid dob**

{

"response": null,

"error": "true",

"code": "400",

"message": "Data format failed OR wrong value entered at: dob. Format should follow ^\\d{4}\\-(0[1-9]|1[012])\\-(0[1-9]|[12][0-9]|3[01])$"

}

1. **In case of vehicle number does not exist in SARATHI system**

{

"response": [

{

"response": {

"licOj": null,

"nho": null

},

"responseStatus": "SUCCESS"

}

],

"error": "false",

"code": "200",

"message": "Success"

}

1. **In case vehicle exist**

For response format, please check the attached word file.

****

**Status Code 200**: vehicle 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 SARATHI system through a data exchange URL that has following form:

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

**Body:**

{

"dlnumber": "GJ04 20120005008",

"dob": "1987-05-26"

}

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 --location --request POST 'https://www.ulip.dpiit.gov.in/ulip/v1.0.0/user/login' \***

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

***--header 'Content-Type: application/json' \***

***--data-raw '{***

***"username": "test1",***

***"password": "ulip@123"***

***}'***

**Authorization:**

***Bearer***

***eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYzMDU2MTc1NywiYXBwcyI6ImRhdGFwdXNoIn0.o6h4916Nwl81GPvjFDUgeEHLnMWhAh\_NdW3okMOa6Q2ddw89RWmdDvDx4UYRoUeJ8yfPZyNBxhTPoQZ-uUzgTg'***

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 vehicle details as follow -

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

***--header 'Authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYzMDU2MTc1NywiYXBwcyI6ImRhdGFwdXNoIn0.o6h4916Nwl81GPvjFDUgeEHLnMWhAh\_NdW3okMOa6Q2ddw89RWmdDvDx4UYRoUeJ8yfPZyNBxhTPoQZ-uUzgTg' \***

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

***--header 'Content-Type: application/json' \***

***--data-raw '{***

***"dlnumber": "GJ04 20120005008",***

***"dob": "1987-05-26"***

***}'***