**ULIP Integration Requirement Document**

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Project Name: ULIP

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Revision History

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# Introduction

## Purpose

The purpose of this document is to define and provide details for accessing API for Vessel Import export information using VCN number, be number, be date, Shipping bill number, shipping bill date from ULIP system.

This document details the following points:

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

# The Overall Description

User will share the information such as **VCN number, BE number, BE Date** , **shipping bill number and Shipping Bill Date** based on data send by user ULIP system will call respective **KPL API** for accessing information.

Following are the point for accessing vessel information:

1. This API will share vessel information and import and export data based on information provided by user.
2. ULIP will expose API for getting data from KPL API.
3. **KPL/01** API will take **VCN Number** from user and get data from KPL API.
4. **KPL/02** API will take **BE number and BE Date** from user and get data from KPL API.
5. **KPL/03** API will take **Shipping bill number and Shipping Bill Date** from user and get data from KPL API.

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

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

## KPL/01

This API will take below details and connect with KPL API to get data.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Field Description** | **Format** | **Required/Not – Required** | **Length** |
| 1 | **vcn\_no** | VCN number present in KPL system | '^[a-zA-Z0-9]{2,14}$' | Required | Min 2 Max 14 |

### Technical Approach

1. All the data will be shared through rest web services.
2. ULIP system will provide **VCN number** for which detail is required.
3. We have to send secret key with header.
4. KPL API will share information which exist in KPL system in JSON format.
5. KPL Integration will add JSON in **response** key in response body.
6. ULIP system will provide the data in JSON Object format in response body.

**Example:**

VCN Number **INMAA120210958** is shared by ULIP system, then KPL-integration will make a request to KPL API.

**Request:**

The request must be of the following format, where VCN number is passed within the URL parameters in JSON format.

[**https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/01**](https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/01)

**Curl URL**

curl --location --request POST 'https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/01' \

--header 'Authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYzNjQ0MzU4MiwiYXBwcyI6ImRhdGFwdXNoIn0.iw\_GeHxE9bAkuaH2zaxnsFkt\_4s0pXsGSjdSYI04N-w3d0HGs0HV4x3DDlL88NAnEnGv2qvUMJl8LXL7ShHfog' \

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

--header 'Accept: application/json' \

--data-raw '{

    "vcn\_no":"INNML121070010"

}'

For obtaining secret key, refer [Section 1.](#_Data_Transmission_&)6

**Response**

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

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

Development in Progress

1. **In case of VCN number not exist in KPL system**

Development in Progress

1. **In case VCN number exist**

Development in Progress

**Status Code 200**: vessel 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.

## KPL/02

This API will take below details and connect with KPL API to get data.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Field Description** | **Format** | **Required/Not – Required** | **Length** |
| 1 | **be\_no** | BE number present in KPL system | [0-9]{1,7} | Required | Min 1 Max 7 |
| 2 | **be\_date** | BE Date number present in KPL system | ^\d{4}\-(0[1-9]|1[012])\-(0[1-9]|[12][0-9]|3[01])$ | Required | 10 |

### Technical Approach

1. All the data will be shared through rest web services.
2. ULIP system will provide **BE number, BE Date** for which detail is required.
3. We have to send secret key with header.
4. KPL API will share information which exist in PCS system in JSON format.
5. KPL Integration will add JSON in **response** key in response body.
6. ULIP system will provide the data in JSON Object format in response body.

**Example:**

BE Number **3437935** and BE DATE **2021-09-18** is shared by ULIP system, then KPL-integration will make a request to KPL API.

**Request:**

The request must be of the following format, where BE number , BE date is passed within the URL parameters in JSON format.

**<https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/02>**

**Curl URL**

curl --location --request POST 'https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/02' \

--header 'Authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYzNjQ0MzU4MiwiYXBwcyI6ImRhdGFwdXNoIn0.iw\_GeHxE9bAkuaH2zaxnsFkt\_4s0pXsGSjdSYI04N-w3d0HGs0HV4x3DDlL88NAnEnGv2qvUMJl8LXL7ShHfog' \

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

--header 'Accept: application/json' \

--data-raw '{

    "be\_no":"3437935",

    "be\_date":"2021-09-18"

}'

For obtaining secret key, refer [Section 1.](#_Data_Transmission_&)6

**Response**

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

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

Development In Progress

1. **Invalid BE Date**

Development In Progress

1. **In case of BE number not exist in KPL system**

Development In Progress

1. **In case BE number exist**

Development In Progress

**Status Code 200**: vessel 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.

## KPL/03

This API will take below details and connect with KPL API to get data..

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Field Name** | **Field Description** | **Format** | **Required/Not – Required** | **Length** |
| 1 | **shipping\_bill\_no** | Shipping Bill number present in KPL system | [0-9]{1,7} | Required | Min 1 Max 7 |
| 2 | **shipping\_bill\_date** | Shipping Bill Date present in KPL system | ^\d{4}\-(0[1-9]|1[012])\-(0[1-9]|[12][0-9]|3[01])$ | Required | 10 |

### Technical Approach

1. All the data will be shared through rest web services.
2. ULIP system will provide **SB number, SB Date** for which detail is required.
3. We have to send secret key with header.
4. KPL API will share information which exist in KPL system in JSON format.
5. KPL Integration will add JSON in **response** key in response body.
6. ULIP system will provide the data in JSON Object format in response body.

**Example:**

SB Number **9890556**,SB Date **2021-10-05** is shared by ULIP system, then KPL-integration will make a request to KPL API.

**Request:**

The request must be of the following format, where SB number SB DATE is passed within the URL parameters in JSON format.

**<https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/03>**

**Curl URL**

curl --location --request POST 'https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/03' \

--header 'Authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYzNjQ0MzU4MiwiYXBwcyI6ImRhdGFwdXNoIn0.iw\_GeHxE9bAkuaH2zaxnsFkt\_4s0pXsGSjdSYI04N-w3d0HGs0HV4x3DDlL88NAnEnGv2qvUMJl8LXL7ShHfog' \

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

--header 'Accept: application/json' \

--data-raw '{

    "shipping\_bill\_no":"9890556",

    "shipping\_bill\_date":"2021-10-05"

}'

For obtaining secret key, refer [Section 1.](#_Data_Transmission_&)6

**Response**

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

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

Development in Progress

1. **Invalid sb date**

Development in Progress

1. **In case of Shipping bill number not exist in KPL system**

Development in Progress

1. **In case Shipping Bill number exist**

Development in Progress

**Status Code 200**: vessel 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 KPL system through a data exchange URL that has following form:

<https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/01>

**Body:**

{

    "vcn\_no":"INNML121070010"

}

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.ldbstaging.co.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 vehicle details as follow -

***curl -X POST \***

[***https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/01***](https://www.ldbstaging.co.in/ulip/v1.0.0/KPL/01) ***\***

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

***-H 'authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ0ZXN0MSIsImlhdCI6MTYyNTIzMDQyNywiYXBwcyI6ImRhdGFwdXNoIn0.rhumwWJ8BWeeHe9CYmIV1UKyJk-kLHA\_ovX5Zi2OwxEv-td-KpxnfbKDI\_8FZsOoggqx3Al-Du1y2qMoUD7uzA' \***

***-H 'cache-control: no-cache' \***

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

***-H 'postman-token: 8e8a19a4-ea1e-6373-f616-e2e4af9a1338' \***

***-d '*** ***{ vcn\_no": "INMAA120210958"}'***