E-Way bill technical help documentation:

T-code: ZEWB

Program: ZEWB\_PROCESS.

Process:

|  |  |  |
| --- | --- | --- |
| P90 | P91 | PER |
| O : STN (Out bound invoice ) | O : STN (Out bound invoice ) | O : STN (Out bound invoice ) |
| G :OGP (out bound gate pass) | G :OGP (out bound gate pass) | T: Trip |
|  | T: Trip |  |
|  | M: Min/MRN |  |

Methods:

1. BOT
2. API

Options:

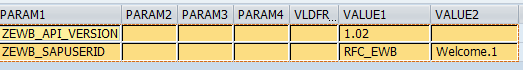
1. E-way bill create
2. Cancel e-way bill
3. Link E-way bill to STN ( link the bill no in SAP server it’s generated form E-way bill portal)
4. Document purge ( Delete document in Queue in bot process )
5. Document status ( status of document to send to BOT)
6. Update Part B (vehicle number updating in E-way bill )
7. E-way bill extension (E-way bill validity extension through API)
8. D link E-way bill ( D Link the bill in SAP server canceled form portal )
9. Display Or Print E-way bill ( Print the generated E-way bill)
10. DMS linking E-way bill ( Upload the E-way bill document(generated form portal ) to SAP server )

ABAP objects:

|  |  |
| --- | --- |
| **Tables to be Maintained** | **Use of table** |
| ZEWB\_API\_CONV | Parameters to mapping bot & API values |
| ZEWB\_ERR\_DESC | API error codes descriptions |
| ZEWB\_COL\_MAP | E-way Bill Details Column Mapping(Mandatory Fields) |
| ZEWB\_PIN\_STATE | Pin code state Mapping ( table for validate pin code based on state) |
| ZEWB\_TRANID | Transporter ID Against the Vendor |
| ZEWB\_UOM | EWB Unit of Measure Mapping (Mapping table for SAP UAM & BOT UAM) |
| ZEWB\_URL\_CONFIG | E-way Bill API URL config ( URL, EWB Client ID, EWB Sec Key) |
| ZEWB\_USER\_DET | E-way Bill User Details(E-way bill portal & API id passwords for all regions ) |
| ZEWB\_VH\_STCODE | State code for vehicle number (Truck number validation ) |

**Param entries**

**ZPARAM**



**Transaction Tables**

|  |  |
| --- | --- |
| ZEWB\_GSTIN\_LOCK | Store Auth Token for re process |
| ZEWB\_DETAILS | E-way Bill Details ( top level details ) |
| ZSCE\_EWB\_HDR | EWB Header Data |
| ZSCE\_EWB\_ITM | EWB Item Data |

Function modules, class & smart forms etc.:

|  |  |  |
| --- | --- | --- |
| ZLOG\_EWB\_CREATE | FM | Fetch all process data |
| Z\_SCE\_EWB\_BOT\_UPDATE | FM | Call by BOT to update e-way bill number and DMS |
| Z\_SCE\_EWB\_DBM | FM | DMS Document Upload called in FM Z\_SCE\_EWB\_BOT\_UPDATE |
| Z\_SCE\_EWB\_BOT\_CANCEL | FM | Call bay BOT to update cancel document |
| Z\_SCE\_EWB\_CANCEL | FM | Fetch data for cancel process |
| Z\_LOG\_EWAY\_BILL | FM | Generate PDF document & DMS for E-way bill number in API process |
| ZLOG\_EWAY\_DETAIL | Smart form | Smart form for E-way bill |
| Y\_EWAY\_DETAIL\_STYLE | Smart Style | Smart Style for Smart form |
| ZCL\_EWB\_API | Class | E-Way Bill NIC API |

API Process:

1. Creation of JIO\_GST RFC destination (HTTPS configuration) sap basis Team.



Session authentication (code in class cl\_ewb\_api=>session\_authentication)

1. Web servers are used to get API key ( . Net service)
2. Proxy generated class: ZEWBCO\_WS\_APITAX\_PAYER\_SYSTEM.
3. URLS for web service ( Consumer proxy)

I. Dev

<http://abaputilitiesdev.ril.com/WsAPITaxPayerSystem/WsAPITaxPayerSystem.asmx?wsdl>

II.QA

<http://abaputilitiesqa.ril.com/WsAPITaxPayerSystem/WsAPITaxPayerSystem.asmx?wsdl>

1. Input to web service API user id, password, GSTN number & public key, get out put as encrypted pass word.
2. To get auth token: Input is encrypted pass word, GSTIN & action as ‘auth’ & output is authkey.

Ex. process:

**URL**: <http://ewaybillasp-sandbox.jiogst.com:8080/ewaybill/v2/session> (get form zewb\_url\_config table Exmple dev url)

**Content-type**: application/json

**Method** : Post

**Request Headers:**

|  |  |
| --- | --- |
| **Attributes** | **Description** |
| ewbsclient\_id | ewbsclient\_id provided by E-Way Bill system after successful registration  ( table ZEWB\_URL\_CONFIG) |
| ewbs\_secretkey | Ewbs\_secretkey provided by E-Way Bill system after successful registration  ( table ZEWB\_URL\_CONFIG) |
| ewb-user-id | Username provided By NIC for the given GSTIN ( table ZEWB\_USER\_DET) |
| gstin | GSTIN of Requester(Tax payer or Transporter) ( table ZEWB\_USER\_DET) |
| api-ver | Version of E-Way Bill API to be invoked. (Table ZPARAM parameter ZEWB\_API\_VERSION ) |
| txn | Unique Transaction ID associated with the request.(Should be alphanumeric String having length 26 to 32). ( concatenate sy-sysid sy-uname(removed special char) sy-datum sy-uzeit '0000000000') |
| ip-usr | Public IP Address of end user who requested access to data. (SAP serve ip used FM TERMINAL\_ID\_GET to get Sever ip) |

**Sample JSON for session authentication**: {"action":"auth","username":"03AABCI6363G1ZT","password":"P1MZiPCbd6XnbTkJtfWKZC7YtxsudAsTSRme/QNpxVOdcJteNq9Hk5mYsQ2R37Ocn4+RIjOCXXRcDnTBllcufAe9JUUyp9CL7olGKMoQp1TRGljF+EpbYJzc8/AEwmUZvicUtie1J4vY91+l/YKvtEbp+k7SVgZJDC+8zn0IF2Ko2xOjNr4SBvHGJbrvaWru1orpFf24Omn0ZeIzM/eunJ6jJ4QW+5yzx5tJY+1nauh2kw1XL/vwEKPfnBBxB3x203rka2jxy/j/g+O8fQQqaySA70Ithb5JVNlH17/FtJweMYGyeA69DKZZg0QsNMIlQHk14UVtTxTN4hLwZ2WaCA=="}

Build the data in JSON format:

1. Convert the structural data into Json format (zui\_cl\_json=>serialize)

Key Based Encryption JSON data**:** (padding standard 'PKCS7'encryption mode 'ECB')

1. A. Java base encryption. ( in active process)
2. Convert the json file string to xstring (FM: SCMS\_STRING\_TO\_XSTRING)
3. Covert Xstirng data in to base encode 64 bit (SSFC\_BASE64\_ENCODE).
4. NAS drive is built for Windows sever. Put file in input folder (al11) and call JAVA Executable file form sap server then converted file placed in output folder.

B. ABAP encryption. (Now using this process in program).

1. Decrypt the encrypted key (zcl\_ewb\_api=>get\_decrypted\_sek).
2. Convert the json file string to xstring (FM: SCMS\_STRING\_TO\_XSTRING)
3. Encrypt JSON data (Class /rgcs/cl\_aes\_utility=>encrypt\_xstring) input is key , json data , padding standard & encryption type.
4. Covert encrypted data in to base encode 64 bit (SSFC\_BASE64\_ENCODE).

Call API post method to generate E-way bill: (zcl\_ewb\_api=>submit\_request)

1. Ex.

**URL** : JIOGST RFC destination (configured by basis team)

**Content-type**: application/json

**Method** : Post

|  |  |
| --- | --- |
| **Attributes** | **Description** |
| ewbsclient\_id | Client-id to be provided by E-WAY BILL SYSTEM ( table ZEWB\_URL\_CONFIG) |
| ewbs\_secretkey | Ewbs\_secretkey provided by E-Way Bill system after successful registration  ( table ZEWB\_URL\_CONFIG) |
| gstin | GSTIN of Requester(Tax payer or Transporter) ( table ZEWB\_USER\_DET) |
| authtoken | Authentication token returned by the E-way bill system |
| ewb-user-id | Username provided By NIC for the given GSTIN ( table ZEWB\_USER\_DET) |
| api-ver | Version of E-Way Bill API to be invoked. (Table ZPARAM parameter ZEWB\_API\_VERSION ) |
| txn | Unique Transaction ID associated with the request.(Should be alphanumeric String having length 26 to 32). ( concodinate sy-sysid sy-uname(removed special char) sy-datum sy-uzeit '0000000000') |
| ip-usr | Public IP Address of end user who requested access to data. (SAP serve ip used FM TERMINAL\_ID\_GET to get Sever ip) |

**Sample JSON:**

{

"action":"GENEWAYBILL",

"data": ""

}

1. IF success :
2. Get encrypted E-way bill number & validity of bill in JSON format.
3. Decrypt the data (zcl\_ewb\_api=>call\_decryption) same reverse process of encryption.
4. Convert JSON format to structural format (zui\_cl\_json=>deserialize).
5. Updating tables: ZEWB\_DETAILS, ZSCE\_EWB\_ITM & ZSCE\_EWB\_HDR.
6. Generating E-way bill Pdf & Creating DMS document using FM (Z\_LOG\_EWAY\_BILL)
7. If Error :
8. Decode error response form BASE 64 to binary format (FM SSFC\_BASE64\_DECODE)
9. Convert Xstring to string (FM ECATT\_CONV\_XSTRING\_TO\_STRING).
10. Convert Json format to structural format (zui\_cl\_json=>deserialize).
11. Pass error codes in the table ZEWB\_ERR\_DESC  get error description.
12. Updating Error description in ZEWB\_DETAILS
13. Then Go For Bot process.

Some of referred documents.

Note:

1. Public key is hard coded in (zcl\_ewb\_api=>session\_authentication).
2. Add new field to JSOSN
3. Add the field in ZST\_EWAY\_BILL\_GENERATION\_REQ structure.
4. Add field in ZEWB\_CREATE structure.
5. Fetch logic written in ZLOG\_EWB\_CREATE FM.
6. Pass data to method ( zcl\_ewb\_api=>generate\_e\_way\_bill ) ZEWB\_PROCESS\_FORMS in include.



**BOT Process:**