Application Programming Interface Specifications

Integrated e-filing and CPC 2.0 Project

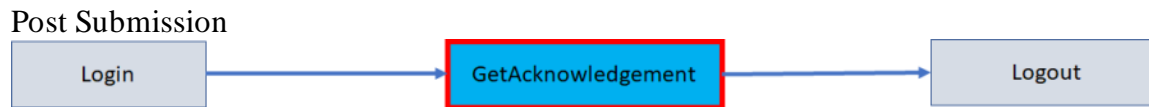| API Name	Acknowledgement API Flow
API Description	API used to get acknowledgement for submitted ITRs

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1. Overview

As noted in the ERI Specification Overview document the interaction during the submission phase includes 3 key steps in addition to the Login and Logout. This document defines the specification to get the acknowledgement for submitted ITR as highlighted in the figure below.

Post Submission

2. About API

Requester	Type-2 ERI
Provider	ItrWeb
Description	These APIs shall be used to get acknowledgment after submission of the ITRs
Mode of Integration (Real time / Batch)	Real Time
Processing Details	
Pre-Processing Details	User should have established a session using the Login API specifications. Taxpayers should have submitted the ITR through this ERI Taxpayers get acknowledgement when ITR verification is completed.
Service Name	ItrService
API URL	http<hostname>/itrweb/auth/v0.1/returns/getAcknowledgement

3. Target Audience and Pre-requisites

This is technical document and is target to ERIs working in their application and interested to integrate their application with IEC 2.0 platform.
The pre-requisites to call this API is that ERI is already registered with IEC 2.0 platform. They have valid credentials to call the API.

4. getAcknowledgement API Details

This service is used to get acknowledge of the ITR after the taxpayer has submitted the ITR.

4.1 API Usage Scenario

ERI can get the acknowledge for their client (taxpayer) in the eFiling system using this API. When client or taxpayer has already submitted the ITR and ERI wants to get acknowledgement for their client.
When ERI submits request for get acknowledgement, there are two high level activities are performed:

1. ERI application will get acknowledgement number from the taxpayer.
2. ERI application will call getAcknowledgement API to get the acknowledgement.

4.2 API Request process

ERI application must have already establish the login session and auth token with eFiling system using the login API. Application will initiate getAcknowledgement request as below:

1. ERI application will capture the taxpayer's details as explained as part of the request attribute details.
2. Application will call getAcknowledgement API with values captured from the taxpayer as per request attribute details.
3. API will return the PDF as base64 format.
4. ERI application can show PDF document to the taxpayer.

4.3 API Protocol

getAcknowledgement API is exposed as REST API over the HTTPS. The input data should be sent as JSON document using Content-Type "application/json".

4.4 Request Parameters

The request will consist of request header and request body:

4.4.1 Request Header:

Header is mandatory and will consists of following values:
Mandatory Request Header Parameters:

Header Name	Header Value

Content-type	application/json
clientId	clientId value which is provided to ERI as part of the registration
clientSecret	clientSecret value which is provided to ERI as part of the registration
authToken	Auth token from the Login Flow
accessMode	"API"

4.4.2 Request Body:

Request body will consist of below attributes:

1. **data:** data attribute will be Base64 encoded string of API request json. Details of request json attributes are explained in request data element details.
2. **eriUserId:** It is mandatory and valid value is user ID of the ERI
3. **sign:**
- The API request data attribute should be digitally signed for the message integrity and non-repudiation purposes.
- Digital signing should always be performed by the ERI from value of data attribute which was generated from request json.
- The signature should be generated using a valid X.509 certificate
- signature value should be generated from data field using ERI's DSC private key.
- ERI should share their DSC public key with ITD to validate the signature.

4.4.3 Details of data attribute:

Below are the request parameters, which is request json used to create data attribute as explained above data attribute of the request body:

Name of the Parameter	Data type	Max length	Is Mandatory	Description
serviceName	String	60	Yes	It is mandatory and valid value is **"EriGetAckowledgement"**
Pan	String	10	Yes	It is mandatory and valid value is PAN of the taxpayer
arnNumber	String	15	Yes	Unique acknowledgement receipt number

4.5 Response Parameters

Name of the Parameter	Data type	Max length	Is Mandatory	Description
Messages	List<String>		Yes (on error)	List of information messages. There can be one or more messages. The messages array will be null if there are no messages. **"messages": []**
Errors	List<Error>		Yes (on error)	List of errors. The value will be null if there is no error. **"errors": []**
successFlag	Boolean		Yes (on error)	Possible value is false.
Ack	Byte Array		Yes (on Success)	Binary format PDF

4.6 getAcknowledgement API - Sample Request format

```
{
"data": "",
"sign": "",
"eriUserId": ""
}
```
data tag will be Base64Encoded string from following request json
```
{
"serviceName": "EriGetAckowledgement",
"pan": "",
    " arnNumber ": "123466645",
}
```

4.7 getAcknowledgement API - Sample Response format

For Errors:

```
{
   "messages": [
```

```
    {
        "code": "EF500058",
        "type": "ERROR",
        "desc": "The PAN is not a valid client for this ERI.",
        "fieldName": null
    }
  ],
  "errors": [],
  "successFlag": false,
  "header": {
    "formName": null
  }
}
```

On Success:

<<Downloadable PDF File in binary format>>

5. API Exception Details

Scenario	Error code	Details	Error String	Message Type
When user enters incorrect arnNumber	EF20038	When user enters incorrect arnNumber (Acknowledgment Number)	Invalid Receipt number. Please retry and enter correct acknowledgement number.	ERROR
When arnNumber is not accessible for Eri user	EF500053	When ack number given is not submitted by that Eri user who is calling getAcknowledgment.	Acknowledgement form cannot be generated for this ITR as it is not submitted through this ERI.	ERROR
When PAN is null	EF20008	When user does not enter the PAN	PAN cannot be null or empty. Please enter correct PAN	ERROR
When ERI client linkage fails	EF500058	When the PAN is not a valid client of logged in ERI user	The PAN is not a valid client for this ERI.	ERROR

When Acknowledgement number is not for the entered PAN	EF00158	When user enters Acknowledgement number which is not linked with given PAN	The entered Acknowledgement number is not linked to the PAN entered in the database, please enter correct PAN.	ERROR
When attributes are incorrect in json request data	EF20123	When request data is invalid	Invalid Request Data	ERROR