Integration Approach and Specification Document

Integrated e-filing and CPC 2.0 Project

Webservice Name	TAN Verification Service
Description	To verify TAN details from e-filing database

Version History

Version	Date	Description
1.0	29-04-2022	Initial Draft

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1 Brief Overview

Integrated e-Filing and CPC envisions to redefine income tax filing and processing in India to provide a best-in-class experience to all taxpayers.
The objectives of the proposed integrated Efiling and CPC 2.0 project are –

1. To partner with government to reform tax processing in the country
2. To provide a differentiated experience to taxpayer
3. To enhance departmental efficiency and effectiveness

The above is planned to be achieved by –

1. Providing ease in filing returns using wizard-based forms and generating pre-filled returns for the taxpayers.
2. Actively promoting e-verification of returns and establish complete (100%) paperless environment.
3. Reducing processing time of returns on year-on-year (YoY) basis and achieve real time processing of returns and credit of refunds.
4. Educating and empowering the taxpayer by pro-actively engaging with taxpayer through digital media
5. Pro-actively communicating and engaging with taxpayer and enhancing transparency
6. Reducing errors, grievances, rectifications on a YoY basis and achieve "first-time-right" outcome
7. Facilitating taxpayer and consistently reducing the outstanding demand
8. Ensuring real time data exchange with all stakeholders and achieve total seamless integration
9. Continuously promoting tax compliance in the country resulting into reduction of tax delinquency

2 Scope

The scope of this document is to provide the technical and operational details to integrate the external agencies for TAN Verification Web Service. It will also include the test strategy.

3 Integration Details

Under this integration, "TAN verification service" functionality is provided post login under "My Account" in External Agency user.

4 Integration Approach

4.1 API Description

External Agencies should register in Efiling2.0 portal as per the Registration process of the Efiling2.0. Efiling admin user will validate the External Agency registration details and approves the registration.

Once admin approves the registration, Efiling portal shares the userid and the login link of Efiling portal through e-mail. External Agency needs to login to Efiling portal and they need to set the password during first login.

Every web-service will include a **Service ID** and **Search parameters** specific to that web-service along with a Request ID.

4.1.1 Request End Point

URL	UAT – https://uatservices.incometax.gov.in/services/auth/v0.1/CommVerService Prod -https://services.incometax.gov.in/services/auth/v0.1/CommVerService
Content-Type	application/xml
Method	Post
Service Type	Incoming

4.1.2 Request Header

The header of the Simple Object Access Protocol (SOAP) request must contain ClientId, ClientSecret, Username Token and Timestamp. Username Token provides a standard way of representing a username (User ID registered in Efiling) and password pair with WS-Security.

The request must be digitally signed using the private key of the user (user must have registered a valid DSC with Efiling). Signature includes key info element that contains X.509 certificate details. To validate the signature details, the following elements must be signed in the SOAP:

- Timestamp
- UsernameToken
- Body

Encryption: After signing, the request (UsernameToken and Body) must be encrypted using the e-Filing's public key

Parameter Name	Description	Field Specification	Sample Value
clientId	Efiling Team will provide the client id from API Gateway as a pre-requisite.	Mandatory	l7xx73b2ac90ce2f4f0d899e3bfb5b04fa84
clientSecret	Efiling Team will provide the client secret from API Gateway as a pre-requisite.	Mandatory	3edda3a406604bfe8a0464003e6ac41d
UsernameToken	user id and password	Alphabets Mandatory	EXTP123456
Timestamp	OASIS standards with expiry time of 180 seconds	Alphabets Mandatory	2020-12-12-23.45.45.000112
Signature	Signature (OASIS standards) of UsernameToken, Timestamp and Body	Alphabets Mandatory	

4.1.3 Request Parameters

The following table provides details on the **Request** Parameters:

Field Name	Description	Mandatory
serviceId	Service ID has to be populated based on the service to be invoked. 10002 – **TAN Verification Service**	Yes

searchParams	Parameters to be verified as per section: 4.2.2	Yes

4.1.4 Response Parameters:

The following table provides details on the **Response** Parameter:

Field Name	Description	Mandatory
serviceId	Service ID has to be populated based on the service to be invoked. 10002 – **TAN Verification Service**	**Yes**
responseParams	Mapping of result parameters as per section: 4.2.5	**Yes**

4.2 Service ID (10002) – TAN Verification

4.2.1 Request Parameters

The following table provides details on the Request Parameters

Field Name	Description	Mandatory
serviceId	10002	Yes
searchParams	Map of parameters to be verified	Yes

4.2.2 List of search Parameters for TAN Verification

The following table provides details on search parameters for TAN Verification

Field Name	Description	Mandatory
tan	TAN of the user.	Yes
name	Full Name (First Name || Middle Name || Last Name)	Yes
pan	Organization PAN	No

4.2.3 Sample Request

Sample payload is depicted in below table.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:dit="http://iec.incometax.gov.in/ditsecws"
xmlns:req="http://iec.incometax.gov.in/ditsecws/request">
<soapenv:Header/>
<soapenv:Body>
<dit:verifyDetails>
<dit:DitRequest uniqueRequestId="EXTA123456-763278367">
<req:serviceId>10002</req:serviceId>
<req:searchParams>
<searchParam searchKey="tan" searchValue="XXXXXXXXXX"/>
<searchParam searchKey ="name" searchValue="ABCD"/>
<searchParam searchKey ="pan" searchValue="XXXXXXXX"/>
</req:searchParams>
</dit:DitRequest>
</dit:verifyDetails>
</soapenv:Body>
</soapenv:Envelope>
```

4.2.4 Response Parameter

The following table provides details on the Response Parameters

Field Name	Description	Mandatory
serviceId	10002	Yes
response	Map of result parameters	Yes

4.2.5 List of Result Parameter for TAN verification Service

The following table provides details on result parameters for TAN Verification

Field Name	Description	Mandatory
Tan	Verification flag (Y/N)	Yes
Name	Verification flag (Y/N)	Yes
Pan	Verification flag (Y/N)	No

4.2.6 Sample Payload

Sample payload is depicted in below table.

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
<soap:Header></soap:Header>
<soap:Body>
<ns3:verifyDetailsResponse xmlns:ns2="http://iec.incometax.gov.in/ditsecws/request"
xmlns:ns3="http://iec.incometax.gov.in/ditsecws"
xmlns:ns4="http://iec.incometax.gov.in/ditsecws/response">
<ns3:DitResponse uniqueRequestId="EXTA101784-100004">
<ns4:serviceId>10002</ns4:serviceId>
<ns4:responseParams>
<result searchKey="tan" isMatched="Y"/>
<result searchKey ="name" isMatched="N"/>
<result searchKey ="pan" isMatched="Y"/>
</ns4:responseParams>
</ns3:DitResponse>
</ns3:verifyDetailsResponse>
</soap:Body>
</soap:Envelope>
```

4.2.7 Error Messages from Service

List of error codes for common verification services are mentioned below. Applicable error codes for TAN verification service can be referred from this.

Error Code	Error Description
EF-WS-SEC-ERR-10004	Duplicate Request. Please submit the request with valid request ID
EF-WS-BVB-ERR-10005	Please provide the Unique Request ID.
EF-WS-BVB-ERR-10006	Invalid Unique Request ID.
EF-WS-BVB-ERR-10006	Invalid Service Id
EF-WS-COM-ERR-10001	Service Unavailable. Please try again later
EF-WS-BVB-ERR-10002	Invalid DSC. Please use the DSC registered with External Agency.
TAN_VER_001	Data is not present in one of the mandatory fields

TAN_VER_002	Null data is passed in the request parameters
TAN_VER_003	Invalid Service Id
TAN_VER_004	One or more of the required fields are absent
TAN_VER_005	Invalid Data format
TAN_VER_006	Invalid data length
TAN_VER_007	Invalid TAN
TAN_VER_008	TAN does not exist
TAN_VER_009	TAN is inactive

4.3 Test Strategy

UAT environment access will be provided to External Agencies for Integration testing over https with the above-mentioned APIs with the provided details

4.4 Security Conditions

All requests to Efiling2.0 should be over https requests with TLS enabled for both Incoming and outgoing requests.
Also signing and encryption of payloads enables external agencies to share payloads more securely.
Efiling system will also provide the below utility to ensure that the data shared between External Agencies and Efiling2.0 system is transferred with encoding. External Agencies may use this for the secure transfer of payloads.

4.5 Frequency of Data Exchange

The frequency of the data exchange will be real-time, event based. Whenever the user clicks on any link or action on the external agency website, respective API of the Efiling gets invoked and synchronous response is received