



PUBLICATION 5718

INFORMATION RETURNS INTAKE SYSTEM
(IRIS) ELECTRONIC FILING APPLICATION TO
APPLICATION (A2A) SPECIFICATIONS



PROCESSING YEAR 2022



Table of Contents

1.	Introduction.....	5
1.1	Purpose.....	6
1.2	Communications.....	7
1.2.1	IRIS Web Site	7
1.3	Registration and Application Process	8
1.3.1	Registration	9
1.3.2	Who should apply for an IRIS TCC	9
1.3.3	Third-Party Transmitters	11
1.4	Transmitter and Issuer TCCs.....	11
1.5	Software Developer TCCs.....	12
1.6	API Client ID	12
2.	Transmissions and Submissions.....	13
2.1	Transmission/Submission Definitions and Limitations	13
2.2	Uniquely Identifying the Transmission.....	14
3.	Transmitting Information Return.....	15
3.1	Transmitting via the Application to Application (A2A) Channel.....	15
3.1.1	Transmission Payload and REST Message via A2A.....	17
3.1.2	A2A Consent.....	17
3.1.3	Access Token Generation for A2A Access Flow	17
3.1.4	Operations	22
3.2	XML Overview for IRIS	27
3.2.1	IRIS XML Schema Package Structure	27
3.2.2	IRIS XML Structure	27
3.2.3	Prohibited and Constrained Special Characters	28
3.2.4	Tag Names	29
3.2.5	Attributes	30
3.2.6	Repeating Group	30
3.2.7	IRIS Schema and Business Rules	31
3.2.8	Validating Schema Versions	33
3.2.9	Example of Schema Versioning.....	34

4.	Validating the Transmission and Return Data	34
4.1	Transmission Validation	35
4.1.1	Missing or Multiple Attachments.....	35
4.1.2	Error Reading or Persisting the Transmission Payload.....	35
4.1.3	Manifest Verification Failure	35
4.1.4	Manifest and XML Payload Schema Validation Failure	36
5.	Acknowledgement Response	37
5.1	Acknowledgement Schema	38
6.	Corrections and Replacements	39
6.1	Corrections Process.....	39
6.1.1	Transmitting Corrections.....	39
6.2	Rejected Transmissions	40
6.2.1	Transmissions Rejected in Pre-Receipt Validation	41
6.2.2	Transmissions/Submissions Rejected by IRIS.....	42
6.3	Replacing an Original Transmission that Rejected	43
6.3.1	Replacing an Original Transmission that Rejected.....	45
6.3.2	Replacing a 'Replacement' Transmission that Rejected	45
6.4	Replacement Submissions	46
6.4.1	Replacing Submission Within a Partially Accepted Transmission	46
6.4.2	Replacing Submission from a Partially Accepted Original Transmission when the Replacements Transmission or Submission was Rejected	47
7.	Extension of Time to File	48
7.1	Request for an Additional Extension of Time to File	48
7.2	Extension of Time to Provide the Recipient Copy	48
8.	Waiver from Filing Electronically	48
9.	Combined Federal/State Filing (CF/SF) Program	50
10.	Other Helpful Information	51
10.1	Due Dates	51
10.2	Help with IRIS Transmissions	52
10.3	Verifying Issuer and Recipient Identity and TINS.....	52
10.4	Additional Resources	52

1. Introduction

The Information Returns Intake System (IRIS) Application to Application (A2A) is a system that uses Extensible Markup Language (XML) format to bulk file large volumes of Form 1099 series.

This publication outlines the communication procedures, transmission formats, business rules and validation procedures for information returns transmitted electronically through the IRIS A2A system. Use the guidelines provided in this publication along with the yearly XML schemas to develop software for IRIS and/or to transmit through the IRIS A2A system. For Tax Year (TY) 2023 in Processing Year (PY) 2024 the following information returns can be filed using IRIS A2A:

- Form 1099-A, Acquisition or Abandonment of Secured Property
- Form 1099-B, Proceeds From Broker and Barter Exchange Transactions
- Form 1099-C, Cancellation of Debt
- Form 1099-CAP, Changes in Corporate Control and Capital Structure
- Form 1099-DIV, Dividends and Distributions
- Form 1099-G, Certain Government Payments
- Form 1099-H, Health Coverage Tax Credit (HCTC) Advance Payments
- Form 1099-INT, Interest Income
- Form 1099-K, Payment Card and Third-Party Network Transactions
- Form 1099-LS, Reportable Life Insurance Sale
- Form 1099-LTC, Long-Term Care and Accelerated Death Benefits
- Form 1099-MISC, Miscellaneous Income
- Form 1099-NEC, Nonemployee Compensation
- Form 1099-OID, Original Issue Discount
- Form 1099-PATR, Taxable Distributions Received From Cooperatives
- Form 1099-Q, Payments from Qualified Education Programs (Under Sections 529 & 530)
- Form 1099-QA, Payments from Distributions From ABLE Accounts
- Form 1099-R, Distributions From Pensions, Annuities, Retirement or Profit-Sharing Plans, IRAs, Insurance Contracts, etc.
- Form 1099-S, Proceeds From Real Estate Transactions

- Form 1099-SA, Distributions From an HSA, Archer MSA, or Medicare Advantage MSA
- Form 1099-SB, Seller's Investment in Life Insurance Contract

Note: Please refer to [Publication 1220, Specifications for Electronic Filing of Form 1097, 1098, 1099, 3921, 3922, 5498 and W-2G](#), for Information Return electronic specifications filed via the Filing Information Returns Electronically (FIRE) System. The procedures in this publication should also be used in conjunction with the most current version of the following publications:

Publication 4557 - Safeguarding Taxpayer Data: A Guide for Your Business: The purpose of this publication is to provide information on legal requirements to safeguard taxpayer data. The target audience is non- government businesses involved in the preparation and filing of income tax returns.

Publication 5719 - Information Returns Intake System (IRIS) Test Package for Information Returns: This publication contains guidelines and instructions for the IRIS Assurance Testing System (IRIS ATS). IRIS ATS is a process to test software and electronic transmissions prior to accepting Software Developers, Transmitters, and Issuers into the electronic filing program.

The following guides/documents provide additional guidance for filing electronically through IRIS:

Publication 5717 – Information Returns Intake System (IRIS) Taxpayer Portal User Guide: Contains general and program specific information for use with the IRIS Taxpayer Portal.

Links to IRIS publications and guides are located at www.irs.gov/iris.

1.1 Purpose

The purpose of this document is to provide the A2A specifications to electronically file information returns with the IRS including the requirements and specifications under the Combined Federal/State Filing Program (CF/SF). Additionally, this publication provides specifications to submit an automatic 30-day extension of time to file certain information returns, and the procedure for replacing and correcting returns. The audience of this document is:

- **Issuer:** A business filing their own information returns regardless of whether they are required to file electronically or volunteer to file electronically.
- **Transmitter:** A third-party sending the electronic information return data directly to IRS on behalf of any business required to file. If you are transmitting returns for your own business, in addition to transmitting returns on behalf of another business, you do not need both the Transmitter and Issuer role. You can file all returns as a Transmitter.
- **Software Developer:** An organization writing either origination or transmission software according to IRS specifications.

Note: Issuer(s) and Transmitter(s) are collectively referred to as transmitters throughout this document unless specifically stated otherwise.

All filers are encouraged to file electronically. Issuers should keep a copy of information returns (or have the ability to reconstruct the data) for at least three years from the reporting due date with the following exceptions:

- Returns reporting federal withholding should be kept for four years.
- Keep a copy of Form 1099-C, Cancellation of Debt, for at least four years from the due date of the return.

1.2 Communications

The Help Desk has been designated as the first point of contact for information return electronic filing issues. Software Developers, Transmitters and Issuers can contact the Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls. The IRS welcomes calls via your choice of relay. Deaf or hard of hearing taxpayers using a relay service may call any of our toll-free numbers. The Help Desk provides assistance in the following areas:

- IRIS Application for Transmitter Control Code (TCC)
- IRIS Assurance Testing System (ATS) and Communication Testing
- Business Rules and Error Code Resolution

1.2.1 IRIS Web Site

For information regarding IRIS and electronic filing Information Returns go to information returns Intake System (IRIS) Program webpage: www.irs.gov/iris
IRIS page provides:

- Online IRIS System (Production and Testing) Status
- IRIS Program Overview
- IRIS ATS Information
- Links to access IRIS Publications, Schemas, Business Rules and much more

If you encounter an issue or limitation that prevents an information return from being submitted electronically through IRIS, and the solution is not posted on the IRIS webpage, please contact the Help Desk. The Service will then work on making the appropriate corrections or assisting with the issue or limitation. Until corrections can be implemented, IRIS may develop “workarounds” which are temporary changes to allow the return to be transmitted electronically. Workarounds will be posted by Tax Year (TY) and linked to the Schema and Business Rules page under the “Known Issues.” IRIS uses QuickAlerts, an IRS e-mail service, to disseminate information quickly regarding IRIS issues to subscribers. This service keeps tax professionals up to date on IRIS issues throughout the year, with emphasis on issues during the filing season. After subscribing, customers will receive “round the clock” communication issues such as electronic specifications and system information needed for Software Developers and Transmitters to transmit to IRS. New subscribers may sign up through the “subscription page” link located on the QuickAlerts “more” e-file Benefits for Tax Professionals page.

1.3 Registration and Application Process

External users must register with the current IRS credential service provider and complete the IRIS Application for Transmitter Control Code (TCC) to submit transmissions using the IRIS intake platform. Information returns cannot be filed through IRIS using any other intake platform TCC. These include:

- e-File Application (MeF)
- Affordable Care Act (ACA) Application for TCC (AIR)
- Partnership Bipartisan Budget Act (PBBA) Application for TCC
- Information Returns (IR) Application for TCC (FIRE)
- IRIS Application for TCC/User Interface intake method (UI)

1.3.1 Registration

Before completing the IRIS Application for TCC, all Responsible Officials, Authorized Delegates and Contacts in the business or organization must be registered or create a new account to validate their identities using the latest IRS authentication process. For additional information visit www.irs.gov/iristcc.

1.3.2 Who should apply for an IRIS TCC

If you are transmitting information returns to IRS or if you are developing software to file information returns electronically, you must apply for one or more TCCs using the IRIS Application for TCC available online. A single application can be used to apply for multiple roles and the necessary TCCs. The IRIS Application for TCC contains three separate roles: Software Developer, Transmitter, and Issuer. Complete the IRIS Application for TCC if your firm or organization is performing one or more of the following roles:

- **Software Developer:** An organization writing either origination or transmission software according to IRS specifications.
- **Transmitter:** A Third-Party sending the electronic information returns data directly to IRS on behalf of any business.
(**Note:** If you are transmitting returns for your own company, in addition to transmitting returns on behalf of another business, you do not need both the Transmitter and Issuer role. You can file all returns as a Transmitter.)
- **Issuer:** A business filing their own information returns regardless of whether they are required to file electronically or volunteer to file electronically

These roles are not mutually exclusive, for example, a firm or organization may be both a Transmitter and a Software Developer. Each role will receive its own TCC to be used based on the activity being performed. For example, Software Developers performing Testing will use the Software Developer TCC. Do not use the Software Developer TCC to transmit Production files.

Note: If an organization requires more than one TCC for any given role, a Responsible Official listed on the application should request an additional TCC by clicking on the 'Request' option under 'Request Additional TCC' on the Application Summary Page. The table below provides examples of who should apply for a TCC.

Table 1-1: TCC Roles

What roles should I select on my IRIS Application for Transmitter Control Code?			
Software Purchased or Developed?	If...	And	Then
Developed	I am a commercial Software Developer developing software and selling software,	I will transmit information for others.	Select both the Software Developer role and the Transmitter role on your application.
Developed	I am developing my own software package, or who has contracted with someone to develop a unique package for my sole use,	I will perform the software testing with IRS and transmit my own information returns.	Select the roles of Software Developer and Issuer on your application.
Purchased	I am purchasing a software package,	I will transmit my own information returns.	Select the role of Issuer on your application. Note: You may not use an Issuer TCC to transmit information returns for others.
Purchased	I am purchasing a software package,	I will transmit my own information returns and transmit for others.	Select the role of Transmitter on your application. Note: The TCC for a Transmitter can be used to transmit your own returns and others. You may not use an Issuer TCC to transmit information returns for others.

1.3.3 Third-Party Transmitters

If you do not have an in-house programmer familiar with XML or do not wish to purchase A2A software that is certified to support the information returns that you plan to file, you can file through a Third-Party Transmitter or use the online Taxpayer Portal. Visit www.irs.gov/iris for additional information.

Only those persons listed as an Authorized User on the IRIS Application for TCC qualify to receive information about a Receipt ID associated with a TCC listed on that application.

If your Third-Party Transmitter needs technical assistance regarding a Receipt ID associated with records that were submitted on behalf of your organization, they should contact the Help Desk. You can contact the Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls.

When filing through a Third-Party Transmitter obtain the following for each submission filed on your behalf:

- A copy of all electronic records within each submission, along with the Receipt ID for the transmission in which they were filed.
- The transmission Acknowledgement that includes the Status that is returned when processing is complete (Accepted, Accepted With Errors, Partially Accepted, Rejected and a detailed list of errors, if any).

Note: The items cited above are critical to your ability to make corrections should your Third-party Transmitter go out of business or be otherwise unavailable to file corrections on your behalf.

1.4 Transmitter and Issuer TCCs

Depending on the roles selected on the application, one or more TCCs will be assigned. Each TCC will have an indicator of Test “T” or Production “P” and status of Active, Inactive, or Dropped. Transmitters and Issuers are issued a TCC in Test “T” status until required Communication Testing is conducted in the ATS environment and passed. Once Communication Testing is passed, the Transmitter should contact the Help Desk to request to be moved to Production “P” status. You can contact the Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls.

1.5 Software Developer TCCs

After selecting the Software Developer role on the application, additional information about the software package being developed is required. The TCC is permanently assigned in “Test” status. A separate Software ID is also assigned for each package. The tax year(s) for the information returns supported, form type, and software package type (Commercial Off the Shelf (COTS), Online, In-house) are also required. Each Software Package and form type has a separate status.

Software Package information must be updated annually through the IRIS

Application for TCC. New Software IDs will be assigned for each tax year. To update your application, the Responsible Official should go to the Software Packages page and click the “Add Software Package” button which is located towards the bottom of the page.

1.6 API Client ID

The IRIS A2A Channel uses the API Client ID to authenticate and authorize access to IRIS A2A services. You must be approved to receive an API Client ID and follow e-Services A2A process flow. To receive a API Client ID for the A2A authorization flow, the following actions must take place:

1. The Responsible Official and Contact users must complete registration for e-Services.
2. Once the registration process is completed, the Responsible Official will need to complete an API Client ID Application. While completing the application, you will need to provide the JWKs file with use of valid X.509 digital security certificate. The certificate will be validated during the application process. Your Client ID will be provided to you at the time of registration. JWKs with use of “x5t” Parameter and “x5c” Parameter A JSON Web Key Set (JWKs) that represents a cryptographic key is used for e-Services API authentication. It contains a public key that validates the API consumer application. JWK will have the following criteria:
 - JWKs should contain a public key using RSA algorithm. RSA provides a key ID for key matching purposes.

- Should contain X.509 certificate using both “x5t” (X.509 SHA-1 Thumbprint) and “x5c” (X.509 certificate Chain) parameters.
- The set of attributes expected in the JWK are:
 - o “kty”: Key Type
 - o “kid”: Key ID
 - o “use”: “sig” Public Key Use
 - o “n”: the modulus
 - o “e”: “AQAB” the public exponent
 - o “x5c”: X. 509 Certificate Chain
 - o “x5t”: X.509 Certificate SHA-1 Thumbprint
- During registration you must provide the JWK Set file. Note: if any of the above attributes is missing from the JWK, the JWK will be invalid.
- It is your responsibility to keep track of the JWK expiration date and provide a new one once the current JWK expires.
- For more information on JWK visit [RFC 7517](#)

3. Once the application is completed, the Responsible Official or Contact will need to sign in and obtain the API Client ID(s) issued to the firm/organization. The API Client ID(s) will be listed on the Application Details or Application Summary pages.

For any questions related to the API Client ID Application, contact the Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls.

2. Transmissions and Submissions

2.1 Transmission/Submission Definitions and Limitations

A **transmission** is an XML payload containing the Manifest and one or more submissions. The Manifest contains information about the Transmitter and transmission.

For the purposes of this document, a **submission** is defined as the combination of an Information Return (IR) Submission Group Type and its associated information return.

Transmission Requirements:

- Must consist of one or more submissions
- Each Submission must be the same form type
- Each submission must be for the same tax year

- Must *not* contain multiple Transmission types (Original, Correction, and Replacement)
- The size of the transmission should not exceed 100MB
- Must include the “**TransmissionTypeCd**” that identifies the type of transmission as follows:

Table 2-1: Transmissions Types.ir.gov

Allowed Data Value	Description
‘O’	A transmission containing original records
‘C’	A transmission containing correction records
‘R’	A transmission containing replacement records

Submission Requirements:

- The reported number of information returns on the transmittal form must match the actual number of information returns in the submission
- Must *not* contain records of different form types or tax years

May contain as many records as the 100MB payload size allows

2.2 Uniquely Identifying the Transmission

The XML Schemas include elements designed to uniquely identify information returns transmissions, submissions within the transmission, and records within the submission. Transmitters must uniquely identify each transmission with a **Unique Transmission Identifier** (UTID). The format for the UTID includes various fields separated by colons (:) as follows: da20a4de-1357-11ed-861d-0242ac120002:IRIS:00000::A.

- **Universally Unique Identifier (UUID)** – is an identifier standard defined by the Internet Engineering Task Force (IETF) in Request for Comments (RFC) 4122. It is a mandatory field and is represented by 32 hexadecimal digits, displayed in five groups separated by hyphens. da20a4de-1357-11ed-861d-0242ac120002
- **Application ID** – the Application ID will be hardcoded IRIS and is a mandatory field.
- **Transmitter Control Code** – is an uppercase alphanumeric field that will contain the Transmitter’s TCC and is mandatory.
- **Reserved** – is an empty field (no space between colons). *This is for future use and is intentionally blank

- **Request Type** – the Request Type defines the type of request, A for A2A

Every transmission that IRIS receives is validated to ensure that the UTID is unique (has not been previously submitted to the IRIS System, including previously submitted rejected returns) and conforms to the pattern assigned in the XML Schema. If a UTID is missing, not sequential or not unique, the transmission is rejected, and no further processing occurs.

Each submission within a transmission must be unique and will include a **Submission Identifier** (SID) for each submission within the same transmission.

Each record within a submission must be unique and will include a **Record Identifier** (RID) for each record within the same submission.

When an error is identified, the error file provides the SubmissionId or RecordId as well as the Xpath for the error. These identifiers are used to replace submissions and to correct records. To replace a submission, the submission is uniquely identified by combining the transmission ReceiptId and SID, using the pipe symbol as separator. To correct records, the transmission ReceiptId, SID and RID are combined using the pipe symbol as follows:

OriginalUniqueSubmissionId = RECEIPTID|SID

UniqueRecordId = RECEIPTID|SID|RID

Original Unique Submission Identifier (OUSID) and **Unique Record Identifier** (URID) enable:

- Transmitters to send replacement submissions and corrected records to the IRS
- Both IRS and Transmitters to track transmissions and submissions

3. Transmitting Information Return

This section provides an overview of transmission methodology, transmission composition, as well as data structure needed to successfully transmit information returns to IRS.

3.1 Transmitting via the Application to Application (A2A) Channel

To invoke the A2A channel, Transmitters must have an active IRS account and an IRIS Transmitter Control Code (TCC) and must be using IRS approved software to submit returns and retrieve acknowledgments.

REST messages are exchanged with IRS using the Web Services request-response model transport mechanism using the HTTPS protocol.

The IRIS system will perform authentication and authorization, threat mitigation, and initial validation on the transmission. IRS Portal will return a fault response, if a transmission contains a threat, if a transmission fails initial validation, or if a connection with the endpoint cannot be established.

The IRIS System validates the REST message and performs additional security checks and Manifest Schema validation on the inbound transmission. If threats are detected or Manifest Schema validation fails, IRS will reject the transmission and inform the Transmitter of the rejection. If no security threats or Manifest schema validation failure are detected, IRIS returns a Receipt ID, the UTID, and a Timestamp to the Transmitter in the REST Response message as part of the synchronous session. The Receipt ID or the UTID is the key information required for a Transmitter to retrieve the acknowledgement for the respective transmission.

Note: The Receipt ID returned to the Transmitter should be kept with the transmission and protected from loss or deletion.

If the Transmitter does not receive the Receipt ID for some reason (e.g., the session times out or is terminated) or it is accidentally lost or deleted, request the Acknowledgement File using the UTID before calling the Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls, to request the Receipt ID for the transmission. The IRIS Help Desk assistor will require the user to identify themselves and the UTID for the transmission in question to provide the respective Receipt ID.

Figure 3-0: Sample XML of Receipt ID through A2A Channel

```
<IntakeA2AResponse>  
  <receiptId>2022-68537508811-4386213b8</receiptId>  
</IntakeA2AResponse>
```

3.1.1 Transmission Payload and REST Message via A2A

The IRIS transmission payload is a xml document that contains “REST message with attachments”. The document is a REST attachment that contains the IRIS Information Return Submissions.

3.1.2 A2A Consent

For A2A Client IDs to run e-Services API transactions on behalf of e-Services users, those Tax Professionals must first grant access to A2A Client ID before a client can request an access token on their behalf. Tax Pro must perform the following two steps to grant access:

1. Tax Professional login to [IRS Consent App](#).
2. Tax Professional sets up A2A access with IRIS.

A2A login endpoint will check if consent exists:

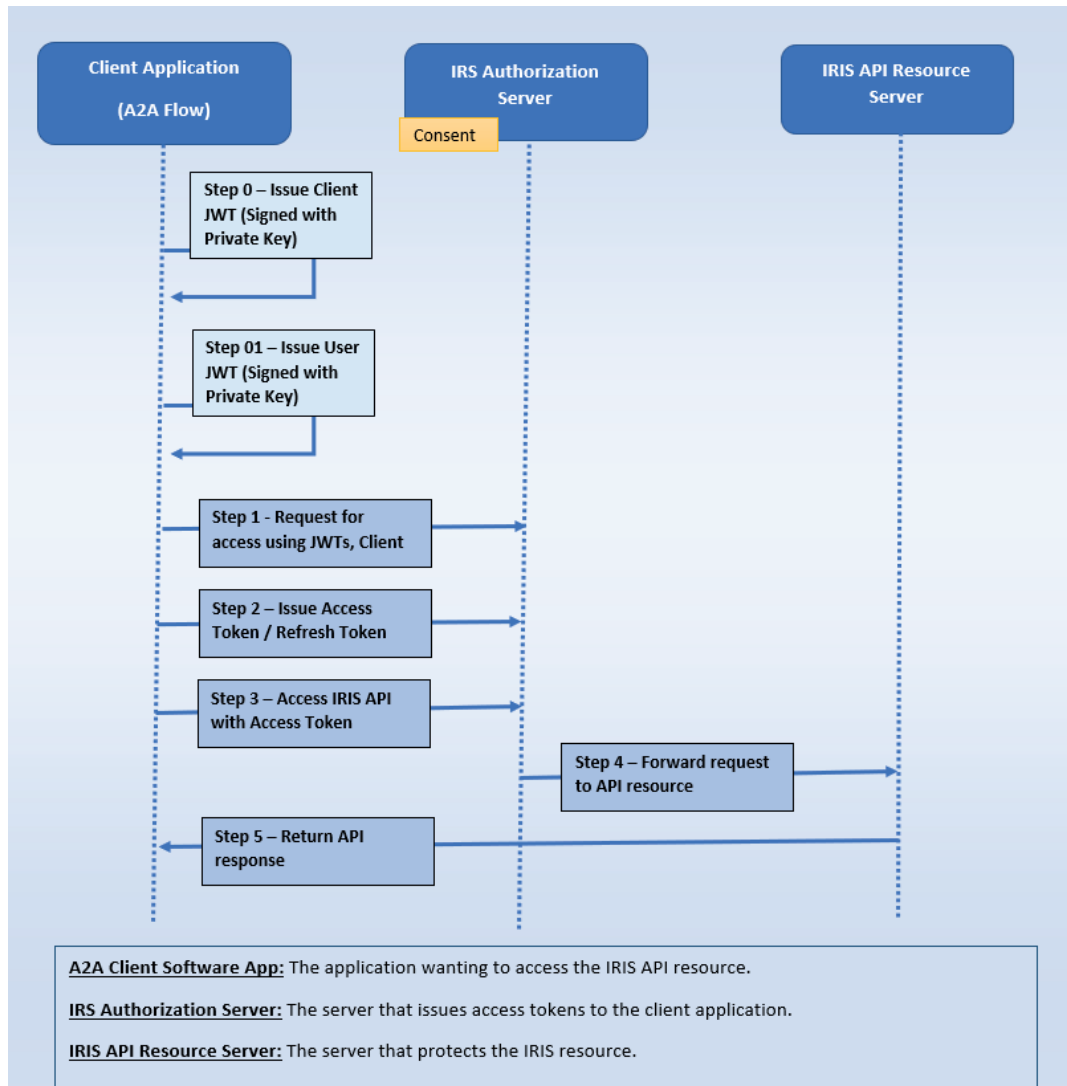
1. If consent exist, A2A login endpoint will provide access token contains consent is true.
2. If consent does not exist, A2A login endpoint returns 401 Unauthorized response with reason for denial.

For any questions related to the API Client ID Application, contact the e-Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls.

3.1.3 Access Token Generation for A2A Access Flow

In A2A flow, the client application requests authorization from the IRS server for API access. The IRS server verifies user’s consent and requires the application to provide a Client ID, and two JWTs. The application uses Client ID and signed (with private keys) JWT Bearer tokens to request an access token. Figure 3-1 shows steps including the generation of the access token.

Figure 3-1: A2A OAuth Flow – Diagram



- A2A Client Software App: The application wanting to access the e-Services API resource.
- IRS Authorization Server: The server that issues access tokens to the client application.
- E-Services API Resource Server: The server that protects the e-Service resource.

The A2A flow illustrated in Figure 3-3 consists of the following steps including the generation of the access token:

Step 0 and 01: The A2A Client App must issue two JWTs and they must be signed with private keys to validate assertion. The JWTs should be in JWT token format using the following claims:

- iss (issuer) – Identifies who issues the token. Must include the Client ID obtained at registration.
- sub (subject) – Subject of the token. Must include:
 - The Client ID for Client JWT token type
 - The User ID for User JWT token type
- User ID is of the format userId-customerId, for example, “dasmith-345870”.
- aud (audience) – the IRS authorization server. The token endpoint of the auth server (See Section 1.1.8)
- iat (issued at time) – Optional. Issued at time. Numeric value of the time the token was created
- exp (expiration time) – Numeric value of the time when the token expires. It must be valid for 15 minutes.
- jti (JWT ID) – Required. Provides unique identifier for the JWT. It prevents the JWT from being replayed. This is required by the IRS API Gateway.

Note: In addition to the required claims above, the JWT header should include the “alg” and the “kid” claims, otherwise the JWT will be invalid.

The JWT Grant type request will have the following parameters:

- grant_type – required, value should be “jwt-bearer”
- Assertion – required, JWT value
- Client assertion type – required, value should also be “jwt-bearer”
- Client assertion – required, JWT value

Step 1: The A2A Client App requests API access using the **URL** token **endpoint**:

<https://api.www4.irs.gov/auth/oauth/v2/token>

The A2A Client App is required to provide the parameters in Table 3-1.

Table 3-1: Token Endpoint - Parameters

PARAMETER	DESCRIPTION
grant_type	Required: Value must be set to “urn:ietf:params:oauth:grant-type:jwt-bearer”
assertion:	Required: The assertion used as authorization grant. Must contain a single jwt. {app-signed-jwt}
client_assertion_type:	Required: The value is urn:ietf:params:oauth:client-assertion-type:jwt-bearer
Client_assertion:	Required: contains a single JWT. Must not contain more than one JWT

The example in Figure 3-2 shows A2A authorization URL **login endpoint**.

Figure 3-2: Login endpoint HTTPs request - Example

```
POST /token.oauth2 HTTP/1.1
Host: api.irs.gov
Content-Type: application/x-www-form-urlencoded
grant_type=urn%3Aietf%3Aparams%3Aoauth%3Agrant-type%3Ajwt-bearer
&assertion=eyJhbGciOiJIUzI1NiIsImtpZCI6IjE2In0.
&client_assertion_type=urn%3Aietf%3Aparams%3Aoauth%3Aclient-assertion-type%3Ajwt-bearer
&client_assertion=eyJhbGciOiJSUzI1NiIsImtpZCI6IjE2In0
```

The client app sends over an access token request using a client ID and signed JWT tokens. Example in Figure 3-3 shows an access token /refresh token POST requests send the JWT tokens. **Note:** The example below is using the test endpoint. JWT is represented as XXXX.XXXX.XXXX be sure to replace them with your JWTs before running the example.

Figure 3-3: Access Token\Refresh Token POST request – JWT Grant Type Examples

```
curl -k -POST https://api.alt.www4.irs.gov/auth/oauth/v2/token \  
-H "Content-Type: application/x-www-form-urlencoded" \  
-d @- <<EOF  
grant_type=urn:ietf:params:oauth:grant-type:jwt-bearer  
&assertion=XXXX.XXXX.XXXX  
&client_assertion_type=urn:ietf:params:oauth:client-assertion-type:jwt-  
bearer  
&client_assertion=XXXX.XXXX.XXXX  
EOF
```

The HTTP response with 200 (OK) status will contain the following parameters as defined in Table 3-2.

Table 3-2: Success Response Parameters

PARAMETER	DESCRIPTION
access_token	Access token that acts as a session ID that the application uses for making requests.
token_type	Value is Bearer for all responses that include an access token
refresh_token	Secret value. Used to obtain new access tokens. (3)
expires_in	The lifetime in seconds of the access token. For example, the value "900" denotes that the access token will expire in 15 minutes from the time the response was generated.

The basic structure of a response is a JSON object that holds the response information. Figure 3-4 shows an example of a successful response.

Figure 3-4: Access Token Successful Response - Example

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Cache-Control: no-store
Pragma: no-cache
{
  "access_token": "<Access-Token>",
  "token_type": "Bearer",
  "refresh_token": "<Refresh-Token>",
  "expires_in": 900
}
```

Step 3 - The A2A Client App now has an access token which can be used to call the IRS A2A endpoints.

Step 4 - The e-Services API server checks the access token in the app's request and decides whether to authenticate the app.

Step 5 - The e-Services API resource sends response successfully.

Note: Access token will expire after 15 minutes and a refresh token gets revoked after one hour. When revoke occurs, application will be redirected to authorization server. For any questions related to the API Client ID Application, contact the e-Help Desk toll free at 1-866-937-4130, for domestic calls, or 470-769-5100 (not toll-free) for international calls.

3.1.4 Operations

This request allows a transmitter to submit information returns using A2A. Details and response messages are provided in Table 1.

Table 1: Submit A2A Transmission

REQUEST			
Operation:	Submit Transmission API		
Description:	This service acceptances the incoming information return from A2A (application/xml)		
Protocol:	REST		
Method:	POST		
Live Endpoint:	https://api.www4.irs.gov/IRIntakeAcceptanceA2A/1.0/irisa2a/v1/intake-acceptance		
Test Endpoint:	https://api.alt.www4.irs.gov/IRIntakeAcceptanceA2A/1.0/irisa2a/v1/intake-acceptance		
Resource:	/irisa2a/v1/intake-acceptance		
Headers:	<ul style="list-style-type: none">Authorization: Bearer <Access-Token>		
Body:	POST <ul style="list-style-type: none">XML Payload per Schema		
RESPONSE			
CODE	DESCRIPTION	CONTENT TYPE	RESPONSE BODY
200	Receipt ID has been generated	application/xml	ReceiptID object
400	Bad request	application/xml	ErrorResponse object
404	Not found	application/xml	ErrorResponse object
500	Internal Server Error	Raw	ErrorResponse object

Figure 1: A2A Intake Acceptance Illustrative Response – Receipt ID has been generated

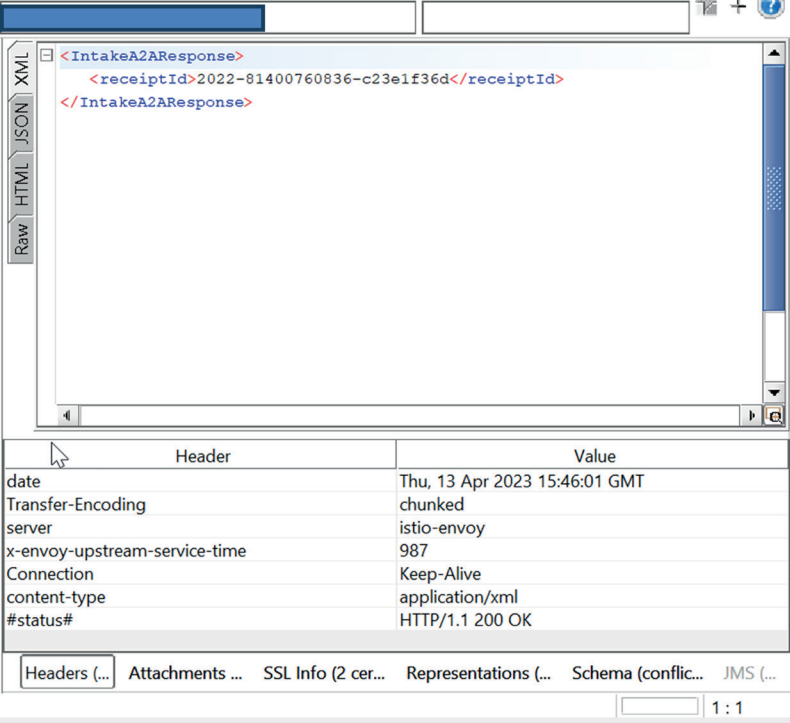


Figure 2: A2A Intake Acceptance Illustrative Response – 404 Not Found

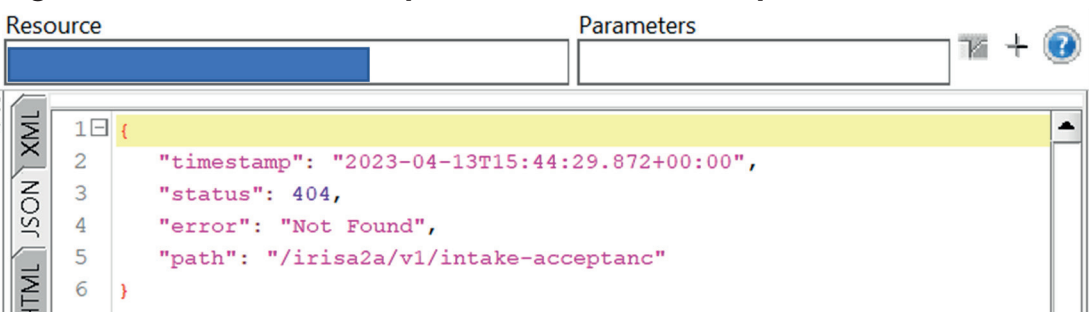
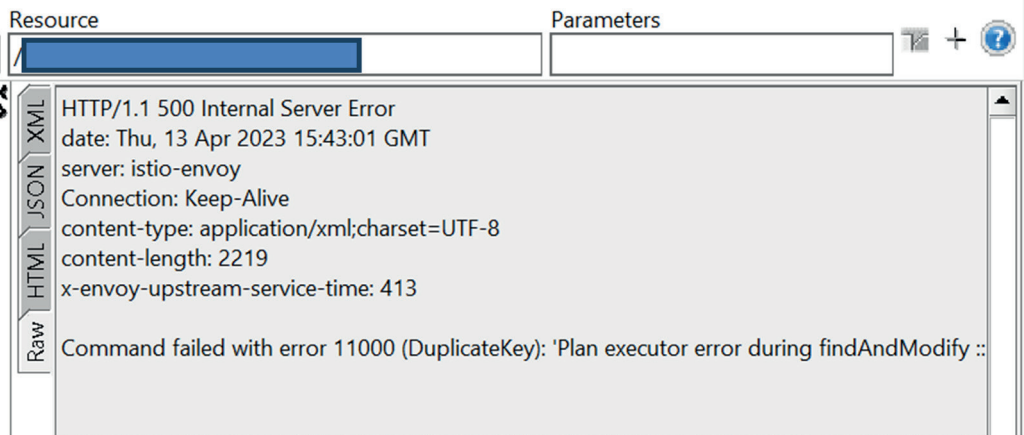


Figure 3: A2A Intake Acceptance Illustrative Response – 500 Internal Service Error



This request allows a transmitter to retrieve status and acknowledgement using A2A. Details and response messages are provided in Table 2.

Table 2: GetStatus/Ack

REQUEST			
Operation:	GetStatus/Ack API		
Description:	Endpoint that fetches Transmission Status and Acknowledgement Info		
Protocol:	REST		
Method:	POST		
Live Endpoint:	https://api.www4.irs.gov/IRIntakeAcceptanceA2A/1.0/		
Test Endpoint:	https://api.alt.www4.irs.gov/IRIntakeAcceptanceA2A/1.0		
Resource:	/iris/transstatusorack		
Headers:	<ul style="list-style-type: none">Authorization: Bearer <Access-Token>		
Body:	POST <ul style="list-style-type: none">JSON Payload per Schema		
RESPONSE			
CODE	POST	CONTENT TYPE	RESPONSE BODY
200	Transmission or Acknowledgement status response	application/json	Status object
404	Invalid Search Parameters	application/json	ErrorResponse object
500	Internal Server Error	application/json	ErrorResponse object

Figure 4: A2A GetStatus/Ack Illustrative Response – 200 Status Response

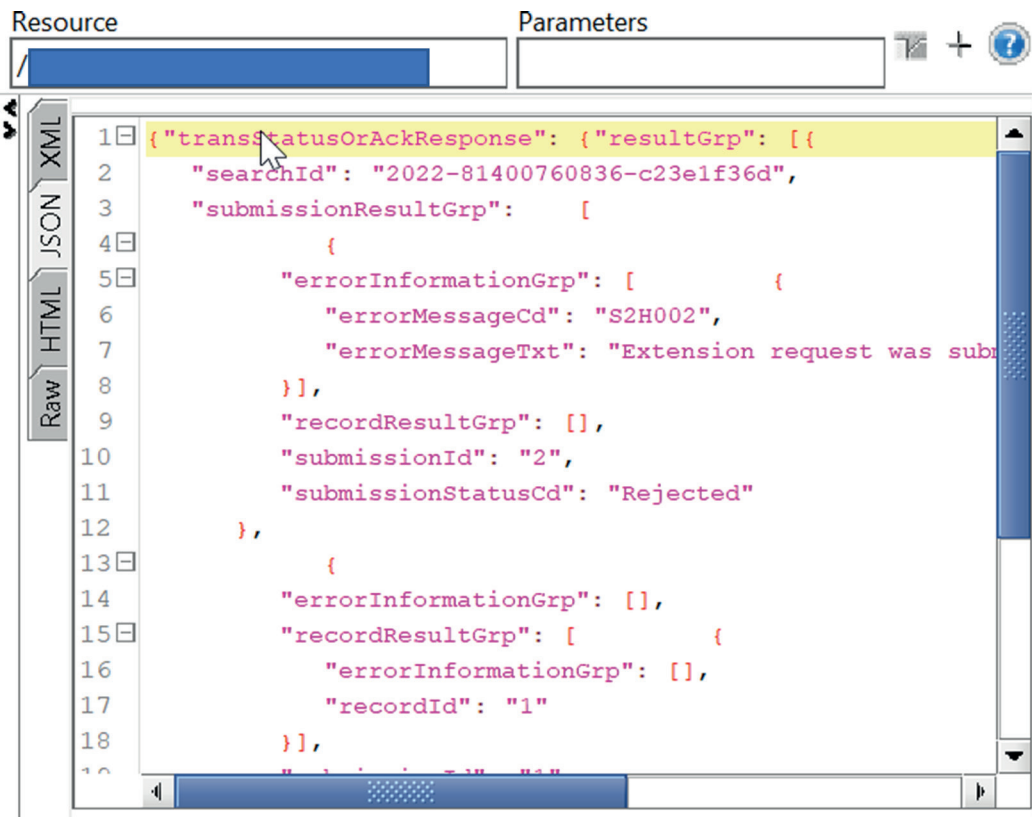
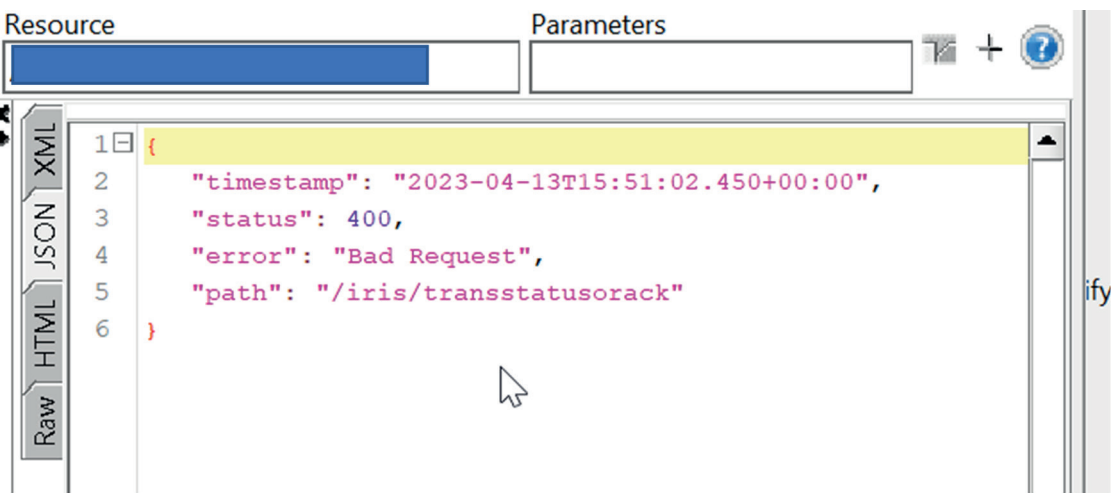


Figure 5: A2A GetStatus/Ack Illustrative Response – 400 Bad Request Response



3.2 XML Overview for IRIS

IRIS uses XML, a language that specifies the structure and content of electronic documents and files to define the electronic format of IRIS Information Returns. This section explains some of the elements of an XML document. For detailed information regarding the IRS Submission File structure, including the XML Schema containing the required Tag Names/Element Names and Namespaces, refer to the schema documentation file (IRS-IRIntakeTransmissionMessage.doc) in the IRIS schema package.

3.2.1 IRIS XML Schema Package Structure

This section describes the IRIS XML Schema file structure and how the schemas will be packaged as of the date this publication was issued.

The IRIS XML Library includes the following folders and files:

- COMMON
 - IRS-IRefileTypes.xsd defines simple and complex elements that are reused across the XML payload.
- FORM_TYPES
 - There is a file for each Information Return form, for example IRS-Form1099AType.xsd defines the schema for Form 1099.
- MSG
 - IRS-IRIntakeTransmissionMessage.xsd defines complex elements at the Transmission (manifest) and Submission levels. It also defines fields from Submission level forms like Form 1096.

In addition to the schema files, there are business rule files. To request IRIS schema and business rules, please see information at: www.irs.gov/irisschema

3.2.2 IRIS XML Structure

The IRIS XML payload is structured in three levels:

1. Transmission: A manifest with information on the transmitter and software used to prepare the package. Contains one or more submissions.
2. Submission: Details the type of form, transmittal form elements, and total of form values (if applicable). Contains one or more forms.
3. Form: Details the form data elements.

When entering character data into an XML document, it is important to ensure that the specified encoding supports the characters provided. By design, IRIS uses Unicode Transformation Format-8 (UTF-8), without Byte Order Mark (BOM). IRIS does not support any other encoding scheme (for example, UTF-16 and UTF-32).

3.2.3 Prohibited and Constrained Special Characters

Software Developers and Transmitters must not include certain special characters in any character data included in the XML of the REST message. The following special characters must not be included in any of the data fields:

Table 3-1: Special Characters Not to Be Included in Any Data

Character	Character Description
--	Double Dash
#	Hash Key

IRIS will reject a transmission that contains any of the special characters identified in Table 31.

- **Example 1:** If a record has a last name data field containing **MyCorp #10**, then the transmission must not include the hash key/pound sign, so that the data field instead contains **MyCorp 10**.
- **Example 2:** If a record has an address data field containing **NoPlaceWay--Suite 4**, then the transmission must not include the double dash, so that the data field instead contains **NoPlaceWay-Suite 4**.

The following special characters must be escaped before they are included in any data fields that allow the characters:

Table 3-2: Allowable Characters

Character	Character Description	Character Allowed?	Escape Characters	Escape Character Allowed
&	<i>Ampersand</i>	Rejected	&	Allowed
'	<i>Apostrophe</i>	Rejected	'	Allowed
<	<i>Less Than</i>	Rejected	<	Allowed
"	<i>Quotation Mark</i>	Rejected	"	Allowed
>	<i>Greater Than</i>	Allowed	>	Allowed

Additional elements may also be restricted by XML schema data element definitions. For example, “*PersonFirstNm*”, “*PersonMiddleNm*”, and “*PersonLastNm*” cannot contain any special characters except “-“. If a record being put into “*PersonLastNm*” has a last name containing an apostrophe, such as “**O’Malley**”, the transmission cannot include the apostrophe or the escaped apostrophe characters. The apostrophe must be stripped, and the last name data must be entered as “**OMalley**”. The transmission will be rejected if the apostrophe is used. As a rule, the schema definitions must be followed.

3.2.4 Tag Names

Each field in the transmission is identified using an XML tag name within the XML schema.

Tag names were created using the following conventions:

- A meaningful phrase with the first letter of each word capitalized and using no spaces (upper Camel case)
- A length of not more than 30 characters
- Standard abbreviations to meet the tag name 30-character limit

The Tag Names, also known as Element Names, were standardized by IRS for all information return forms. A notional example of a simple XML element that identifies the record number in a submission would be:

```
<xsd:element ref="UniqueRecordId" minOccurs="1" maxOccurs="unbounded"/>
```

For example, below is a notional example of a complex XML element that identifies all the data element groups allowed directly in a transmission.

Figure 3-1: IRTransmission Schema Structure

```
<xsd:complexType name="IRTransmissionType">
  <xsd:annotation>
    <xsd:documentation>
      <Component>
        <DictionaryEntryNm>IR Transmission Type</DictionaryEntryNm>
        <MajorVersionNum>1</MajorVersionNum>
        <MinorVersionNum>1</MinorVersionNum>
        <VersionEffectiveBeginDt>2021-07-03</VersionEffectiveBeginDt>
        <VersionDescriptionTxt>Initial Version</VersionDescriptionTxt>
        <DescriptionTxt>The elements associated with IR transmission</DescriptionTxt>
      </Component>
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="IRTransmissionManifest" type="IRTransmissionManifestType"/>
    <xsd:element name="IRSubmission1Grp" type="IRSubmission1GrpType" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element name="IRSubmission2Grp" type="IRSubmission2GrpType" minOccurs="0" maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```


3.2.5 Attributes

Attributes provide additional information or describe a constraint of a data element.

- The first letter of the first word of an attribute name is lower case; the first letter of each subsequent word is capitalized (lower camel case).

For instance, in the example of the complex XML element `IRSubmission1Grp` above, the attribute `maxOccurs="unbounded"` identifies that there is no limit to the number of `IRSubmission1Grp` (submissions including Form 1096) that can be included in the XML. (However, the maximum number of submissions is constrained by the payload size limit.)

3.2.6 Repeating Group

Repeating groups are specified in XML schema definitions using the `minOccurs` and `maxOccurs` facets on sequence or choice definitions. An example of a repeating group for Form 1096/1099 submissions is as follows:

```
<xsd:element name="IRSubmission1Grp" type="IRSubmission1GrpType"
minOccurs="0" maxOccurs="unbounded"/>
```

This element '`IRSubmission1Grp`' allows a minimum of 0 or maximum of unlimited groups. Beginning and ending tags are necessary for each group submitted. Since the minimum is 0 this element is optional and could be skipped, such as if the transmission includes only submissions belonging to '`IRSubmission2Grp`'.

The reference element is of Type `IRSubission1GrpType`. This is a complex data element that includes complex elements `IRSubmission1Header` and `IRSubmission1Detail`.

Figure 3-2: Example of the `IRSubmission1Grp` Repeating Group

```
<xsd:complexType name="IRSubmission1GrpType">
  <xsd:annotation>
    <xsd:documentation>
      <Component>
        <DictionaryEntryNm>Information Return (IR) Submission Group Type</DictionaryEntryNm>
        <MajorVersionNum>1</MajorVersionNum>
        <MinorVersionNum>0</MinorVersionNum>
        <VersionEffectiveBeginDt>2015-10-27</VersionEffectiveBeginDt>
        <VersionDescriptionTxt>Initial version</VersionDescriptionTxt>
        <DescriptionTxt>A group that wraps the data related to a (IR) information return submission</DescriptionTxt>
      </Component>
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="IRSubmission1Header" type="IRSubmission1HeaderType"/>
    <xsd:element name="IRSubmission1Detail" type="IRSubmission1DetailType" minOccurs="0"/>
  </xsd:sequence>
</xsd:complexType>
```

The ability to repeat information within the XML Schema is the electronic equivalent of attaching additional forms when there is insufficient space on the form to include all the information that must be filed (e.g., If there is more than one Form 1096/1099 submission, include a IRSubmission1Grp for each Form 1096).

3.2.7 IRIS Schema and Business Rules

A schema is an XML document that specifies the data elements, structure and rules for the transmission, submission, and form levels. In addition to formats defined by schemas, information returns must also adhere to business rules, which provide a second level of validation for information returns processed by the IRIS System. IRS created one XML schema for the Transmission and Submission levels and one XML schema for each form. Each schema also has a respective set of business rules that are used during IRIS validation.

Within the XML schema, data elements are the basic building blocks of an XML document. Schemas recognize two categories of element types: simple and complex. A simple type element contains only one data type and may only have documentation attributes, such as description or line number. A complex type element is an element that has one or more attributes or is the parent to one or more child elements.

The Transmitter and Issuer have the responsibility to provide information as specified by IRS forms, instructions and regulations. **Note:** The software used to transmit IRIS documents to IRS must be capable of putting the information in the specified schema while also abiding by all applicable business rules.

All data elements present by virtue of an opening and a closing tag should contain a value. **Do not** include tags for optional data elements that are empty.

Each year, new legislation and/or improvements to IRS programs impact IRS forms and processing procedures. IRS evaluates these changes to determine if updates to the XML schemas and business rules are necessary.

When the IRIS schemas and business rules are available, the IRIS schema and business rule page on irs.gov will explain how to request them through eServices. Software Developers are not required to retest when new schemas (minor or major) are posted. However, IRS strongly recommends the use of IRIS ATS to retest when Software Developers update their software in response to schema changes.

Note: If there are critical changes required due to late legislation changes, national disasters, or errors identified during testing or production, IRS may issue updated XML schemas and business rules after December and during the processing year.

General Information about Version Numbers follows:

Each version of the XML Schemas and the corresponding business rules has a unique version number assigned. It is important to note the following principles regarding version numbers:

- Each information return's schema version has an associated set of business rules with the same version number. This ensures that each updated schema version includes an updated set of business rules.
- The “Form $nnnn$ DetailType” complex element includes a documentation element and dictionary entry name that identifies the form including the major and minor version numbers of the schema for each return type as well as the effective begin date for the XML Schema. For example, the “Form1099NECDetailType” from *IRS-Form1099NECType.xsd* file shown below identifies the schema version as v1.0 with an effective date of 2021-10-21.

```
<xsd:complexType name="Form1099NECDetailType">
  <xsd:annotation>
    <xsd:documentation>
      <Component>
        <DictionaryEntryNm>Form 1099 NEC Detail Type</DictionaryEntryNm>
        <MajorVersionNum>1</MajorVersionNum>
        <MinorVersionNum>0</MinorVersionNum>
        <VersionEffectiveBeginDt>2021-10-21</VersionEffectiveBeginDt>
        <VersionDescriptionTxt>Initial version</VersionDescriptionTxt>
        <DescriptionTxt>The content model for the form 1099 NEC.</DescriptionTxt>
      </Component>
    </xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
```

Figure 3-3: IRIS Form 1099-NEC Detail Type Documentation

- Each business rule document's version number identifies the version and effective begin date of the business rules.
- The “Active Validating Schema Version” specifies the business rules and schema version that will be used to validate an information return that has been received by IRS during a timeframe. This provides a mechanism for different versions to be accepted at the same time. It also enables an older version to be validated against a newer version's set of schemas and business rules.

3.2.8 Validating Schema Versions

Throughout the year, multiple versions of XML Schemas and Business Rules may be available depending upon whether a change to the schema is major or minor. IRIS may not require that the schema version used to submit the return data match the schema version used by IRIS during validation. In general, there is one active validating schema version for each return type in a tax year. The Schema/Business Rules page will include the Start dates and End dates, if applicable, for ATS and Production. IRS strives to limit the number of schema and/or business rule revisions, especially after production opens.

Minor Schema Changes - When IRS issues revised schemas for an information return type and changes the increment for the minor number, IRIS continues to accept returns composed using previous schema versions. When the minor number is changed, IRS allows Software Developers to decide for themselves whether they need to use the latest version or not based on what is included in their tax preparation software and what changes were made to the schemas.

Returns may be composed using previously published schema versions, but IRS will only validate against the “active validating schema version” when the return is processed. For example:

If the current schema version is 1.0 and the schema change is minor, IRS will assign the new number 1.1. The active validating schema version is 1.1. IRIS will continue to accept returns composed using version 1.0. However, all returns (whether composed with version 1.0 or 1.1) will be validated with the latest version, 1.1.

Major Schema Change - When IRS issues revised schemas for an information return type and changes the increment for the major number, all returns must be composed by software using the latest version. If information returns are composed using previously published schema versions, they will not validate against the active validating schema version when the return is processed and will be rejected.

For example, if the current version is 1.1 and IRS determines it can no longer accept information returns composed using schema version 1.1 (or v1.0), it will assign the new major number 2.0. The active validating schema version is 2.0. Returns submitted with version 1.1 or earlier will be rejected for using an unsupported schema version.

Software Developers and Transmitters should select the applicable form type on the

IRIS Schemas and Business Rules page to get information about all active and prior year schemas and business rules used by IRIS Production and AATS.

3.2.9 Example of Schema Versioning

Below is a sample of the IRIS forms XML schema versioning information:

Figure 3-4: IRIS Form 1099-MISC Type Documentation

```
<xsd:annotation>
  <xsd:documentation>
    <FormDocumentation>
      <DescriptionTxt>IR (Information Return) Schema - Form 1099 MISC</DescriptionTxt>
      <PurposeTxt>Form 1099 MISC</PurposeTxt>
      <MaturityLevel>Release 1.0</MaturityLevel>
      <ReleaseVersionDt>2022-05-03</ReleaseVersionDt>
      <ReleaseVersionNum>2022v1.0</ReleaseVersionNum>
    </FormDocumentation>
  </xsd:documentation>
</xsd:annotation>
```

4. Validating the Transmission and Return Data

This section explains how the IRIS System will perform validations of the transmission and return data via Schema validations and business rule checks. When IRIS receives a transmission, the following tasks are executed in this order:

1. Verify that the UTID is unique for the Transmitter Control Code (TCC) – this happens before TCC is validated – done by intake service.
2. The transmission payload (xml data) is read and written to persistent storage
3. The Receipt ID and Timestamp are generated
4. The Receipt ID, Timestamp, and Unique Transmission ID are returned to the Transmitter
5. Schema Validation is executed on the Input payload
6. The Payload is queued for processing against the IRIS Business Rules
7. Basic Manifest validations such as TCC and SoftwareID validations are performed
8. Verify Transmission Type Code, Tax Year and Transmitter and Vendor Information
9. Submission and Form contents are validated as per IRIS Business Rules

10. Errors identified during processing against the IRIS Business Rules are written to the IRIS database and inserted into error messages an Error Data File that will be returned to the Transmitter in the Acknowledgement.

When errors are identified with the transmission or IRIS cannot read or write the payload to persistent storage, the transmission will be rejected, and the appropriate error code and description will be returned to the Transmitter in the REST Response message. If the payload fails Schema validation, the transmission will be rejected. The appropriate error code and description relevant to Schema validation will be returned when the Transmitter retrieves the Acknowledgement for the respective transmission. When business rule errors are identified during processing of the payload, IRIS will record the error codes and descriptions and return those errors when filer invokes the Acknowledgment Service as REST response message.

4.1 Transmission Validation

This section describes the checks that are made on the transmission and the errors that will be returned to the Transmitter if the transmission is rejected before it can be saved for further processing.

See [Section 6.2.1 for Pre-Receipt Validation Error List](#)

4.1.1 Missing or Multiple Attachments

Checks for missing or multiple attachments occur during the transmission synchronous process. IRIS first validates at least one submission is in a transmission payload. If there is no submission in a transmission, IRIS will reject the transmission and return the appropriate error code and error description.

4.1.2 Error Reading or Persisting the Transmission Payload

If IRIS cannot read, or persist the data, IRIS will reject the transmission and return an error code.

4.1.3 Manifest Verification Failure

Manifest verification checks occur after receipt processing (reading and persisting the XML payload).

IRIS will perform the following checks against the data included in the Manifest and return any errors found when the Transmitter retrieves the Acknowledgement for the transmission:

- Verify that the Test Code Indicator is set to “P” (PROD) or “T” (ATS)
- Verify that the Transmitter Control Code is valid and authorized to transmit the information returns included in the transmission
- Verify Transmission Type Code, Tax Year and Vendor Information
- Verify Foreign Entity Indicator if Foreign Address are present in payload
- Verify Software ID is authorized and set to production

4.1.4 Manifest and XML Payload Schema Validation Failure

Manifest schema validation occurs before the Transmitter has successfully submitted the transmission to IRS. Transmission Manifest, submission headers and form data will be validated against the schema after the Transmitter has successfully submitted the transmission to IRS. IRS recommends each return be run against a validating parser prior to being submitted to IRS. This pre-validation is intended to identify most potential error conditions and minimize the chance of receiving errors. A validating parser compares the XML document to the defined elements and attributes of the schemas to ensure a well-formed document that adheres to the XML Schema is transmitted to IRS. Schemas provide the basic definition for elements (i.e., field length, data type, prescribed patterns, enumerations, etc.). Data integrity depends on each data element complying with the data format specifications. If IRIS preparation software uses IRS-defined XML schemas to create the XML information return, there should be no data format errors in the return. The IRIS System verifies this by validating each return in the transmission payload against the schemas. The information return documents must conform to the version of the XML schema they specify. IRIS conducts XML schema validation on the payload before processing. Any schema validation failures are reported back to the originating entity. If the XML does not conform to the XML Schema (missing required elements or XML not well formed), IRIS will reject the transmission. The Acknowledgement Service REST Response contains the error codes, the error descriptions, and the XPath reference to the element found to be in error.

5. Acknowledgement Response

Once the transmission is received, the payload is read and written to persistent storage, and checks are made on the Transmission Manifest Data, then the Receipt ID, Timestamp, and Unique Transmission ID are returned to the Transmitter as part of the synchronous session. The XML payload is then queued for processing within IRIS. When IRIS receives a status request, an Acknowledgement response is generated indicating the status of the transmission (see below) and is available for the Transmitter to retrieve. If there are no errors found during validation, the Error response is not included in the Acknowledgement and the transmission processing status will be “Accepted”.

The status of the transmission includes one of the following:

- Accepted – IRS has successfully processed and accepted the transmission
- Rejected – IRS rejected the transmission as it could not be processed successfully. A list of errors is provided as part of the Acknowledgement Response
- Processing – IRS has not completed processing the transmission
- Partially Accepted – IRS has successfully processed the transmission (accepted and rejected one or more submissions contained in the transmission). A list of errors will be provided as part of the Acknowledgement Response.
 - No fatal errors were identified while processing the transmission metadata
 - At least one submission within the transmission was accepted (with or without errors)
 - At least one submission within the transmission was rejected as unusable data
- Accepted with Errors – IRS has successfully processed and accepted the transmission with some errors. A list of errors will be provided as part of the Acknowledgement Response
- Not Found – The Receipt ID or the UTID in the request was not found

The Transmission Acknowledgement will include:

- Transmitter Control Code

- Unique Transmission ID
- Form Type Code
- Timestamp
- Transmission Status Code: Accepted, Rejected, Processing, Partially Accepted, Accepted with Errors, Not Found
- Error Information Group (if errors are identified)

5.1 Acknowledgement Schema

The table below shows the structure of the Acknowledgement schema:

Table 6-1: IRIS Forms Acknowledgement Schema Elements

Element Name	Explanation
SearchId	The search term sent in the request to the Acknowledgement Service. Either the Receipt ID or Unique Transmission ID.
TransmissionResultGrp. TransmissionStatusCd	One of: Accepted, Rejected, Processing, Accepted with Errors, Partially Accepted, Not Found
TransmissionResultGrp. ErrorInformationGrp	A specific business rule number and description associated with a Transmission level error
SubmissionResultGrp. SubmissionStatusCd	One of: Accepted, Accepted with Errors, Rejected, Processing, Not Found
SubmissionResultGrp. ErrorInformationGrp	A specific business rule number and description associated with a Submission level error
SubmissionResultGrp. RecordResultGrp. ErrorInformationGrp	A specific business rule number and description associated with a Record level error

The following elements are included in the Error Information Group:

- Error Message Code (Business Rule number)
- Error Message Text (Business Rule description)
- Error Value Text (Value of element that caused the error)
- Element Path Text (Path identifying the specific data element)

Note: The XPath identifies the specific data element and instance in an enumerated group, if applicable, causing the violation.

6. Corrections and Replacements

Corrections can only be made to previous transmissions that have been “Accepted”, “Accepted with Errors” or “Partially Accepted”. Transmitters should file corrections with IRS as soon as possible and furnish a copy of the corrected return to the Recipient. File corrected returns to comply with filing requirements. Refer to General Instructions for Certain Information Returns for details.

Note: Errors on the Manifest and Submission Headers with “Report Error” severity may not be corrected. These are for informational purposes only. The missing data should be provided in subsequent transmissions, if possible.

6.1 Corrections Process

The correction process can be utilized when:

- IRS notifies the Transmitter of one or more errors on the information returns (Form1099ADetail) filed.
- The Transmitter identifies one or more errors on the information returns (Form1099ADetail) filed.
- The Recipient reports an error.

Corrections can only be made to previous transmissions that have been “Accepted”, “Accepted with Errors” or “Partially Accepted”.

Do not file an original again, as this may result in duplicate reporting.

The unique identifiers assigned by IRS allow corrections to the specific information return (Form1099ADetail).

For example: Form 1099-A data located in Submission 10, Record 2 of a transmission would have a UniqueRecordId as follows:

2022-63385508791-4a6c57eda|10|2

6.1.1 Transmitting Corrections

Guidelines for transmitting corrections:

- Do not submit original and corrected documents in the same transmission payload.
- If the transmission is identified as containing corrections in the Manifest

("TransmissionTypeCd" is "C"), then the "CorrectedInd" in the record detail (e.g., Form1099ADetail) must be set to "1" and the schema must include the "PrevSubmittedRecRecipientGrp" with the "UniqueRecordId", which references the record to be corrected.

- If, after submitting a correction, IRIS identifies a subsequent error, or if the Transmitter identifies a subsequent error, you must utilize the Unique IDs associated with the correction. File only one Correction per Unique Record Id.
- Note: The original record may only be corrected once.

Correction records will contain both a 'RecordId' to uniquely identify the correcting record, as well as the "UniqueRecordId" of the record (Form1099ADetail) to be corrected.

- Include the complete record for correction; do not supply only the corrected data.

Include the following elements to submit corrections to an Information Return record (see also schema and business rules):

- "CorrectedInd" in record should be "1".
- A "UniqueTransmissionId" for the transmission
- "TransmissionTypeCd" in the Manifest should be "C" for corrections
- A "SubmissionId" in the Submission Header
- A "RecordId" in the correction record
- A "PrevSubmittedRecRecipientGrp" with the required "UniqueRecordId" identifying the record that is being corrected.
- Include the other elements in the "PrevSubmittedRecRecipientGrp", TIN and choice of Person Name or Business Name, from the original record to be Corrected.

Note: These fields are optional but ensure the correction is associated with the original record.

6.2 Rejected Transmissions

Transmissions can be "Rejected" before or after a ReceiptId is issued. Transmissions rejected before ReceiptId is issued (pre-receipt validation) cannot be replaced by replacement process. Replacement only applies to Transmissions or Submissions rejected by IRIS after pre-receipt validation.

6.2.1 Transmissions Rejected in Pre-Receipt Validation

When a transmission is rejected by IRIS before a ReceiptId is issued, the Transmitter must fix the problem that caused the rejection and resend the transmission.

Note: When resubmitting, use the same “TransmissionTypeCd” that was used when the transmission was rejected by IRIS to resubmit the file. Verify the transmission size does not exceed the maximum size limit of 100mb.

Table 6.1

Error	General Description	Severity	Action
HTTP/1.1 400 Bad Request	Transmission includes Duplicate UTID Submitted	Request Rejected	Transmitter notified via the http response (Unable to process request, check for duplicate data) Transmitter Resolves
HTTP/1.1 400 Bad Request	Transmission includes ‘TestCd’: “T” to production environment	Request Rejected	Transmitter notified via the http response (Found invalid Test Code, found T, P is required) Transmitter Resolves
HTTP/1.1 400 Bad Request	Transmission includes ‘TestCd’ that’s not’: “T” or “P”	Request Rejected	Transmitter notified via the http response (Unable to process request, check Test Code) Transmitter Resolves
HTTP/1.1 400 Bad Request	Manifest is not present in transmission	Request Rejected	Transmitter notified via the http response (Unable to process request) Transmitter Resolves

Error	General Description	Severity	Action
HTTP/1.1 400 Bad Request	No submissions in the transmission	Request Rejected	Transmitter notified via the Acknowledgment (No Submissions Found) Transmitter Resolves
Schema Validation Error	Error occurred validating schema validation – data elements are missing or schema is not well formed	Transmission Rejected	Transmitter notified via the Acknowledgment (i.e. field is missing but is required) Transmitter Resolves

6.2.2 Transmissions/Submissions Rejected by IRIS

Additional business rule checks occur after the Transmitter has successfully submitted the transmission to IRIS.

Error details returned to Transmitters will show exactly which business rules were violated by the transmission.

- Manifest level: TMFSTXXX or FTMFSTXXX
- Shared Submission rules: SMFXXX
- Submission1Header rules: S1HXXX
- Submission2Header rules: S2HXXX
- Shared Form rules: F1099SharedXXX
- Individual Form rules: F1099AXXX, F1099BXXX, F1099CXXX, F1099CAPXXX, F1099DIVXXX, F1099GXXX, F1099HXXX, F1099INTXXX, F1099KXXX, F1099LSXXX, F1099LTCXXX, F1099MISCXXX, F1099NECXXX, F1099OIDXXX, F1099PATRXXX, F1099QXXX, F1099QAXXX, F1099RXXX, F1099SAXXX, F1099SBXXX, F1099SXXX

Note: The first “XXX” is sequential numbering of Business Rule.

Certain business rules (those with a severity of “Report Error and Reject if Over Threshold”) may cause a rejection of the entire submission, if violated in more

instances than the threshold allows. If this happens, the Transmitter will receive an Error File containing all the rules that were violated plus a generic “Threshold Rule” error for each threshold that was exceeded. It is the responsibility of the Transmitter to correct all business rule errors and retransmit a replacement.

Business rule validation provides Transmission level rejections along with submission level rejections. None of the records included in a transmission/submission that are rejected are maintained in IRS data stores. Thus, when a transmission or submission is rejected by IRIS, a replacement transmission or submission must be submitted.

A complete Transmission can be rejected for the following reasons:

- Business rule failures at the transmission level (Manifest error)
- All Submissions within the transmission are rejected.
- Note: The above situations require the Transmitters to replace the entire Transmission.

A Transmission can be Partially Accepted when one or more submissions, but not all, are rejected.

A submission can be rejected for the following reasons:

- Business Rule failures (e.g., Submission Header with Incorrect Tax Year), which will lead to that Submission rejection (Submission Header and information return records).
- Business Rule failure at form level (e.g. a value on a form must be present or threshold rule failure)

Note: These situations require the Transmitters to replace only the rejected Submission(s).

6.3 Replacing an Original Transmission that Rejected

A replacement transmission must contain all the records submitted to IRS for processing in the rejected Transmission or Submission that is being replaced.

Transmitters should submit an acceptable replacement transmission no later than 60 days after the date the rejected status of the original transmission was available. The 60-day adjustment applies whether the original transmission was received before or after the information return due date. When an acceptable replacement transmission is received within 60 days from the date the status was available, the file will be treated

as filed on the original transmission received date. If an acceptable replacement transmission is received after the 60 days, the file will be treated as filed on the date the replacement transmission is received. In this way, any applicable late-filing penalty is calculated based on the date the transmission was received.

Note: Transmitters should wait until a transmission is processed and the Acknowledgement status is either 'Rejected' or 'Partially Accepted' by IRS before submitting a replacement transmission or submission.

Transmitters can replace rejected Transmissions, as well as rejected Submissions. Replacements can only be transmitted for previously rejected Transmissions or Submissions. IRIS requires replacements to use specific identifiers to reference the original rejected transmission/submission. When replacing a transmission, the Manifest XML Schema includes an element "OriginalReceiptId" which references the Receipt ID of the original transmission that is being replaced.

When replacing a submission, the Submission Header element "*OriginalUniqueSubmissionId*" is used to reference the Submission ID of the original submission that is being replaced. When submissions are replaced, the Manifest data element "*OriginalReceiptId*" is not included in the schema. Only transmissions that contained original records ("*TransmissionTypeCd*" is 'O') that were rejected require a replacement transmission. When a transmission containing original records is rejected ("*TransmissionTypeCd*" is 'O'), the Transmitter must fix the problem that caused the rejection and resend the transmission as a replacement ("*TransmissionTypeCd*" is 'R'). If a transmission containing correction records is rejected ("*TransmissionTypeCd*" is 'C'), the Transmitter must fix the problem that caused the rejection and resend the transmission following correction procedures ("*TransmissionTypeCd*" remains 'C'). An individual original submission within a transmission can be rejected by IRS in a Partially Accepted transmission. The original submission should be fixed and retransmitted in a replacement transmission ("*TransmissionTypeCd*" is "R").

Exception: If a submission containing only Form 8809 is rejected, file an original again, not a replacement.

6.3.1 Replacing an Original Transmission that Rejected

If the original Transmission was “Rejected”, then replace the entire Transmission by using the Receipt ID from the Rejected Transmission to populate the Manifest Data element ‘*OriginalReceiptId*’ of the Replacement Transmission. Replacement transmissions must include the following requirements (see schema and business rules for additional details):

- A “**UniqueTransmissionId**” for the replacement transmission in the Manifest that should be unique for each transmission
- “**TransmissionTypeCd**” in the Manifest should be “R” for replacements

Include the “**OriginalReceiptId**” data element identifying the original transmission that is being replacedDo not:

- Include any additional or new submissions
- Include the “**OriginalUniqueSubmissionId**” in the Submission Header
- Try to replace individual submission within a rejected transmission
- Try to replace a transmission that was not rejected
- Try to replace a transmission that has been successfully replaced

6.3.2 Replacing a ‘Replacement’ Transmission that Rejected

If an original Transmission is rejected and the Replacement Transmission is also rejected, then replace the first (Earliest) rejected Transmission in the chain by populating the Manifest Data element ‘*OriginalReceiptId*’ with the Receipt Id that references the EARLIEST rejected Transmission in the chain.

Replacement Transmissions must include the following requirements (see schema and business rules for additional details):

- A “**UniqueTransmissionId**” for the replacement transmission in the Manifest that is unique for each transmission
- “**TransmissionTypeCd**” in the Manifest should be “R” for replacements
- Include the “**OriginalReceiptId**” data element identifying the Receipt Id that references the first rejected transmission in the chain, which contained a TransmissionTypeCd of “O”.
- Replacement transmission should not include any additional or new submissions

Do not:

- Include the “OriginalUniqueSubmissionId” in the Submission Header

- Try to replace a rejected replacement transmission
- Try to replace individual submissions within a rejected transmission
- Try to replace a transmission that was not rejected
- Try to replace a transmission that has been successfully replaced

6.4 Replacement Submissions

Replacement submissions must include the following requirements (see schema and business rules for additional details):

- A ***“UniqueTransmissionId”*** for the replacement transmission
- ***“TransmissionTypeCd”*** in the Manifest should be “R” for replacement
- Include the ***“OriginalUniqueSubmissionId”*** in the Submission Header identifying the submission that is being replaced
- Duplicate replacement Submission (s) included within the same transmission will be rejected
- Replacement transmission should not include any new submissions

Do not: Include the “OriginalReceiptId” data element in the Manifest

6.4.1 Replacing Submission Within a Partially Accepted Transmission

If the Original Transmission was Partially Accepted, then replace the individual Submission(s) that were rejected by populating the data element ***“OriginalUniqueSubmissionId”*** in each replacement Submission (SubmissionHeader) with the ***“UniqueSubmissionId”*** from the Submission Header of the rejected Submission(s). When filing replacement Submission(s) for submissions that were rejected within a Partially Accepted Transmission, adhere to the following requirements (see schema and business rules for additional details):

- A ***“UniqueTransmissionId”*** for the replacement transmission
- ***“TransmissionTypeCd”*** in the Manifest should be “R” for replacement
- Include the ***“OriginalUniqueSubmissionId”*** in the Form Data File identifying the submission that is being replaced from the original Partially Accepted transmission
- Duplicate replacement Submission ID(s) included within the same transmission will be rejected.
- Replacement transmission should not include any new submissions

Do not

- Include the “**OriginalReceiptId**” data element in the Manifest
- Submit a submission-level replacement for a transmission that was rejected

6.4.2 Replacing Submission from a Partially Accepted Original Transmission when the Replacements Transmission or Submission was Rejected

If the original Transmission is Partially Accepted, and the Transmission with the replacement submissions Rejected or Partially Accepted, then transmit another replacement transmission using the Submission IDs from the original rejected submissions. In either case always replace the first rejected submission in the chain of rejected submissions when one or more replacements are rejected.

Note: First rejected Submission(s) in the chain of rejections does not relate to the order of submission within an individual Transmission.

If filing a replacement Submission from a Partially Accepted Transmission where the replacement was rejected, adhere to the following requirements (see schema and business rules for additional details):

- “**UniqueTransmissionId**” for the replacement transmission
- “**TransmissionTypeCd**” in the Manifest should be “R” for replacement
- Include the “**OriginalUniqueSubmissionId**” in each replacement submission’s Submission Header with the Unique Submission ID from the Submission Header within the earliest rejected Submission in a sequence within a Partially Accepted Transmission that is being replaced
- Duplicate replacement Submission ID(s) included within the same transmission will be rejected.
- Replacement transmission should not include any new submissions

Do not:

- Include the “**OriginalReceiptId**” data element in the Manifest
- Replace a submission within a Submission Replacement Transmission that was rejected

7. Extension of Time to File

You may transmit a request for an automatic 30-day extension of time to file forms included in IRIS Phase 1 (see Section 1). The Form Data File should include “**IRSubmission2Grp**” with the required “**Form8809Detail**”. Extensions cannot be corrected or replaced. If an extension is rejected, it must be retransmitted as an original request.

7.1 Request for an Additional Extension of Time to File

Under certain hardship conditions you may apply for an additional 30-day extension if the initial extension of time to file is granted, and the additional extension is filed before the expiration of the automatic 30-day extension. The additional 30-day extension request can only be submitted by filing a paper Form 8809.

7.2 Extension of Time to Provide the Recipient Copy

The due date for furnishing the information returns to the recipient vary. The written request for an extension of time to provide the Recipient copy must be postmarked by the date on which the statements are due to the Recipients. The letter must contain the following: Issuer, Name, TIN, Address, Type of Return, Reason for Delay, statement saying the request is for Recipient copies, and signature of the Issuer or Authorized Agent. T

The request should be mailed to:

Internal Revenue Service Attn: Extension of Time Coordinator 240 Murall Drive, Mail Stop 4360 Kearneysville, WV 25430 If the extension is granted, it will allow a maximum of 30 additional days to furnish copies to the Recipients. No additional extensions are allowed.

8. Waiver from Filing Electronically

Final regulations were issued February 21, 2023, by the Department of the Treasury and the Internal Revenue Service. Treasury Decision (TD) 9972 amend the rules for filing returns and other documents electronically (e-file). These regulations reduce the 250-return threshold to generally require electronic filing by filers of 10 or more returns in a calendar year beginning in Tax Year 2023, Processing Year 2024. **For Tax Year**

2022 returns, the number remains at 250. Details on this regulation can be found here: [IRS and Treasury final regulations on e-file](#).

To determine if you meet the 10 or more threshold to electronically file:

- Identify how many returns of any type covered by TD 9972, you need to file during a calendar year
- If 10 or more, you **MUST** file electronically

Example of return types covered by TD 9972 (not all inclusive):

- Information returns (Forms W-2, Wage and Tax Statement and Form 1099 Series)
- Certain income tax returns (example, Form 1065, U.S. Return of Partnership Income, or Forms 1120-S, U.S. Income Tax Return for an S-Corporation)
- Employment tax returns (example, Forms 940, Employer's Annual Federal Unemployment (FUTA) Tax Return, Forms 941, Employer's Quarterly Federal Tax Return)
- Certain excise tax returns (example, Form 4720, Return of Certain Excise Taxes on Charities and Other Persons Under Chapters 41 and 42 of the IRC.)

Refer to [Treasury Decision \(TD\) 9972](#) for more information.

The electronic filing requirement does not apply if you apply for and receive a hardship waiver. If the filer is required to submit information returns electronically and fails to do so, and there is not an approved waiver on record, the filer may be subject to a penalty for failure-to-file electronically.

Form 8508 – Request for Waiver from Filing Information Returns Electronically, is used to request a waiver. A separate Form 8508 must be submitted for each issuer.

Form 8508 – May be filed beginning in January 2023 and should be submitted at least 45 days before the due date of the information return. The form cannot be filed electronically and must be submitted to the address shown in the instructions for Form 8508.

Refer to Form 8508 for detailed instructions on completing the form and Publication 1220 for more information.

9. **Combined Federal/State Filing (CF/SF) Program**

The Combined Federal/State Filing (CF/SF) Program was established to simplify information returns filing for issuers. Through the CF/SF Program, the IRS electronically sends information returns (original and corrected) to participating states.

If you participate in the IRS CF/SF Program, you may report withholdings and payments for as many states as needed. If you made a payment to a recipient that's reportable to more than one state, you must prorate the amounts for each state.

The following information returns are available for filing under the CF/SF Program:

Form 1099-B, Proceeds from Broker and Barter Exchange Transactions

Form 1099-DIV, Dividends and Distributions

Form 1099-G, Certain Government Payments

Form 1099-INT, Interest Income

Form 1099-K, Payment Card and Third-Party Network Transactions

Form 1099-MISC, Miscellaneous Information

Form 1099-NEC, Nonemployee Compensation

Form 1099-OID, Original Issue Discount

Form 1099-PATR, Taxable Distributions Received From Cooperatives

Form 1099-R, Distributions From Pensions, Annuities, Retirement or Profit-Sharing Plans, IRAs, Insurance Contracts, etc

The following table provides the participating states in the CF/SF Program. Each state's filing requirements are subject to change by the state. It's the filer's responsibility to contact the participating state(s) to verify their criteria and special data entry requirements.

Alabama	Indiana	Montana
Arizona	Kansas	Nebraska
Arkansas	Louisiana	New Jersey
California	Maine	New Mexico
Colorado	Maryland	North Carolina
Connecticut	Massachusetts	North Dakota
Delaware	Michigan	Ohio
Georgia	Minnesota	Oklahoma
Hawaii	Mississippi	South Carolina
Idaho	Missouri	Wisconsin

10. Other Helpful Information

10.1 Due Dates

Filing Form 1099 series occurs on a calendar year basis. For filing due dates for other information returns, please refer to the General Instructions for Certain Information Returns (forms 1096, 1097, 1098, 1099, 3921, 3922, 5498 and W-2G).

Form	IRS Electronic Filing	Furnish Copy to Recipient
1099 Series	March 31	January 31 and February 15 for forms 1099-B and 1099-S. This also applies to statements furnished as part of a consolidated reporting statement
1099-MISC	March 31	January 31 and February 15 for amounts reported in boxes 8 or 10
1099-NEC	January 31	January 31

NOTE: If any due date falls on a Saturday, Sunday, or legal holiday, the return or statement is considered timely if filed or furnished on the next business day,

10.2 Help with IRIS Transmissions

Contact the Help Desk Monday through Friday 7:30 a.m. – 7:00 p.m. ET. Listen to all options before making your selection.

866-937-4130 (toll-free)

470-769-5100 (international; not toll-free)

TTY/TDD: The IRS welcomes calls via your choice of relay. Deaf or hard of hearing taxpayers using a relay service may call any of our toll-free numbers

10.3 Verifying Issuer and Recipient Identity and TINS

It is important that the Issuer and Recipient name, name control and TIN match the IRS database. Incorrect TINs and associating the wrong name with a TIN are some of the most common causes of information return errors.

For guidance on names and name controls:

[General Instructions for Certain Information Returns \(Forms 1096, 1097, 1098, 1099, 3921, 3922, 5498, and W-2G\)](#)

Name Control for Businesses, see [Section 3.11 in Publication 4163, Modernized e-File \(MeF\) Information for Authorized IRS e-file Providers for Business Returns](#) and [Correct Name Control for Corporations](#) and [Correct Name Control for Partnerships](#)

Name Control for Individuals, see [Exhibit 5 in Publication 4164, Modernized e-File \(MeF\) Guide for Software Developers and Transmitters](#)

10.4 Additional Resources

[Subscribe for QuickAlerts](#)

E-File Forms with IRIS: www.irs.gov/iris



