

Foreign Account Tax Compliance Act

FATCA

Metadata XML Schema v1.1

```
11
11
                00110
                        001010010110
                                              1010
                                              011
              10100110010010100101
                       0100101001011
                                               1
                  001
                       1001001010010
        100011101
                                                                                 10
                                                            10
                                                                     010111
               1010
                          0010100101
                                                          01
                                                                  10101110
              101001
                           101001011
                                                             01010101110100101
        01110 01
                            10010110
                    10
                            0100101
      1000111010
                                                           01101010101110100101010
100010001110101001
                           0100101
                                               01011010010110101010111101001010101
                                              010110100101101010101111010010101011
1000100011101010011
                           10010
                     0100
                                    101
00010001110101001
110001000111010
                                             010110100101101010101111010010101010
                       0
                              0
                                            01101011010010110101010111101001010101
    10001110101
                     0100
     0100011101010
       00111010100110010
                                          011101010011001
                                        001
                                                01101001011010101011101001010
        110101001100
                                                    001011010101011101001010
          1110101001
                                                     01001011010101011101001
           10101
                                       10010110101101001 110101010111101001
             101
                                      01010010110101 01001
                                                               010101011101
              1010
                                                                01
                                      101001011010110 001
                                                                     1110
                                      01010010110101101
                                                                10
                                                                      111
                  0
                     1001
                                       01001011010110100
                    100100
                                                                            0
                                                                      10 00101
                   100100101
                                             101011010
                   0010010100101
                                              1011010
                                                                       10
                                                                                0110
                                              1010110
                    10010010100
                      010010100
                                              0101101
                                                       01
                       00100101
                                                                           10010101
                                               110101
                                                       1
                                               101011
                                                       0
                       010010
                                                                           00101010:
                       001001
                                                1010
                                                                           100101010
                      001001
                                                01
                                                                           00
                                                                                 10:
                      0100
                      100
                                                                    User Guide
```

Table of Contents

1 Introduction	1
1.1 About FATCA	1
1.2 Purpose	2
1.3 IDES Enrollment Process Overview	2
1.4 Sender Metadata File	3
1.5 Comments	4
1.6 General Principles	4
1.6.1 Character Restrictions	5
1.7 How to Use Guide	6
2 FATCAIDESSenderFileMetadata	7
2.1 FATCAEntitySenderId	9
2.2 FATCAEntityReceiverId	9
2.3 FATCAEntCommunicationTypeCd	10
2.4 SenderFileId	10
2.5 FileFormatCd	11
2.6 BinaryEncodingSchemeCd	12
2.7 FileCreateTs	12
2.8 TaxYear	13
2.9 FileRevisionInd	13
2.10 OriginalIDESTransmissionId	14
2.11 SenderContactEmailAddressTxt	14
3 Appendix	15
3.1 Appendix A: FATCA XML Metadata Sample - FATCA Report (RPT)	15
3.2 Appendix B: FATCA XML Metadata Sample - Notifications	16
3.3 Appendix C: FATCA XML Metadata Sample - Competent Authority Request (CAR)	17

1 Introduction

1.1 | About FATCA

The Foreign Account Tax Compliance Act (FATCA) was enacted as part of the Hiring Incentives to Restore Employment (HIRE) Act in March 2010. FATCA was created to improve transparency and address tax non-compliance by US taxpayers.

FATCA requires certain foreign financial institutions (FFIs) to report certain information about its U.S. accounts (including U.S. owned foreign entities), accounts held by owner-documented FFIs (ODFFI), and certain aggregate information concerning account holders that are recalcitrant account holders and, for a transitional period, accounts held by nonparticipating FFIs. Generally, FFIs will commit to these reporting requirements by registering with the IRS and signing an agreement with the IRS; however, the FFI agreement does not apply to FFIs under a Model 1 IGA. In most cases, FFIs that do not register with the IRS will be subject to 30% withholding on certain U.S. source payments (unless an exception applies). Chapter 4 also generally requires a withholding agent to deduct and withhold tax equal to 30 percent of a withholdable payment made to a passive non-financial foreign entity (NFFE) unless the passive NFFE certifies to the withholding agent that it does not have any substantial U.S. owners or provides certain identifying information with respect to its substantial U.S. owners that the withholding agent reports to the IRS. Payments to NFFEs that report their substantial U.S. owners directly to the IRS (direct reporting NFFEs) are accepted from withholding and reporting by the withholding agent.

An approved financial institution (FI) (other than a limited FFI or a limited branch), direct reporting NFFE, or sponsoring entity that registers with the IRS under FATCA will receive a global intermediary identification number (GIIN) and appear on the published FFI list. The FFI List Search and Download tool allows users to search entities by GIIN, financial institution name, or country.

There are certain entities, such as U.S. withholding agents (USWA), territory financial institutions (TFI), third party preparers, and independent software vendors that do not need to have a GIIN (non-GIIN filers) but need to file FATCA reports through the International Data Exchange Service (IDES)... A non-GIIN filer has to get a FATCA identification number (FIN) in order to enroll in and report through IDES. Publication of a FIN on the FFI list does not change the filer's status for FATCA purposes, as it does not subject the filer to the requirements applicable to an FFI and does not serve any function related to withholding tax on payments under FATCA or reporting such tax. A FIN will be accompanied by a generic name (e.g., "U.S. Withholding Agent 1") on the FFI List. For more information on FINs, visit the FATCA Identification Number (FIN) Enrollment Process page.

Host Country Tax Authorities (HCTAs) receive a pre-assigned username and HCTA FATCA Entity ID and will be required to change their username and password upon the first login to IDES. For additional information on the HCTA FATCA Entity ID, contact the IDES help desk.

1.2 Purpose

This guide is intended to serve as a tool for FIs, direct reporting NFFEs, sponsoring entities, non-GIIN filers, and Host Country Tax Authorities (HCTAs) who transmit data through the International Data Exchange Service (IDES). It explains how to prepare and validate the IDES metadata file used in FATCA reporting. The document assumes that the reader is familiar with the FATCA regulations and is experienced with extensible markup language (XML) and schema technology.

Document	Description
FATCA XML Schema v1.1 User Guide (Publication 5124)	Explains the schema and elements of the electronic version of Form 8966
FATCA Reports Notification XML Schema v2.0 User Guide (Publication 5189)	Explains the schema and elements of FATCA notifications
FATCA IDES User Guide (Publication 5190) – Draft	Provides instructions on how to use the International Data Exchange Service to transmit FATCA reporting data
FATCA Online Registration User Guide (Publication 5118)	Provides instructions for the online system to complete an electronic Form 8957, FATCA Registration
FFI List Search and Download Tool User Guide (Publication 5147)	Provides instructions on how to use the FFI List Search and Download Tool to search for an approved GIIN

Table 1 - FATCA related documents list provides a list of related FATCA publications.

1.3 | IDES Enrollment Process Overview

The IDES web application is a secure managed file transfer service that is available to FIs, direct reporting NFFEs, sponsoring entities, non-GIIN filers, and HCTAs to facilitate FATCA reporting. IDES is accessible to enrolled users over the Internet via Hypertext Transfer Protocol Secure (HTTPS) or Secure File Transfer Protocol (SFTP). The system only accepts encrypted electronic submissions, and will allow for the transmission of FATCA reporting in the approved Intergovernmental FATCA XML Schema v1.1 (FATCA XML). IDES provides for an end-to-end controlled file transfer with enhanced monitoring and security features. For more information on FATCA regulations, Form 8966 and instructions, FATCA XML, and other related topics, visit the FATCA IDES home page.



Steps	Description
1	Obtain a digital certificate
2-4	Create and validate IDES account
5	Prepare & Upload FATCA XML file: Prepare, validate and digitally sign FATCA XML file Compress FATCA XML file with zip utility Encrypt FATCA XML file with AES-256 Key Encrypt AES Key with public key of each recipient Create sender metadata file Create the data packet (transmission archive)
6	Access IDES though web browser or SFTP client Transmit the data packet to IDES Receive transmission alerts and notifications

Figure 1: IDES Process Overview

1.4 | Sender Metadata File

Metadata is a collection of data about the content and characteristics contained in the FATCA reporting files. It is used to ensure the data packets are correctly processed. IDES metadata files should never be encrypted. An authorized user should create and validate a metadata file using the FATCA Metadata XML Schema v1.1.

An unencrypted metadata file must be included in the data packet (.ZIP). A metadata file can also be generated using a sender metadata template on the IDES Enrollment Site. For more information on FATCA XML and data file preparation, refer to the FATCA IDES User Guide.

File Format	Naming Convention	Description
XML File	FATCAEntitySenderId_Metadata.xml	The sender GIIN is an IRS-approved GIIN, FIN or HCTA FATCA Entity ID. Each HCTA will be assigned an entity ID in GIIN format: 000000.00000.TA. <iso>. The country identifier is the ISO 3166-1 standard numeric country code. The constant two-character code 'TA' identifies the entity type as the Tax Authority.</iso>

Table 2 - Sender Metadata Files

1.5 | Comments

We appreciate your feedback on the quality and usefulness of this publication. Please send comments, with a reference to chapter, section, and page number(s) to: lbi.fatca.ides@irs.gov.

1.6 | General Principles

The elements in the metadata schema are described by the definition, attribute, and constraints in **Table 3**.

Items	Description		
Element	■ Elements not described in the guide are not supported in the schema.		
Attribute(s)	■ The name(s) of the attribute(s). If blank, then there are no associated attributes		
Size/Pattern	The minimum and/or maximum character size of the element value.If size is not defined, assume a limitation default of 200 characters.		
Cardinality	 The number of times an element occurs in an XML file. If cardinality is not defined, then one and only one instance should be included. minOccurs=1 and maxOccurs=1 Where a data element is not used, then the associated attribute(s) are not used. 		
Namespace/Prefix	 A collection of elements and attribute names identified by a Uniform Resource Identifier (URI) reference in an XML file. Namespace differentiates between different sources and identifiers with the same name. 		
Datatype	 The datatype or classification of a data element value, such as numeric, string, Boolean, or time. XML supports custom datatypes and inheritance. 		
Encoding	■ The UTF-8 encoding standard must be used in all XML reports.		
Requirement(s):	The requirement field for each data element and its attribute indicates whether the element must be included in the XML file.		
Validation	■ The data element is required for schema validation and must be included.		
Mandatory	■ The data element is not used for schema validation but is required .		
Optional	 The data element is not required but may be provided if available. The use of optional field may be subject to an intergovernmental agreement, consult your applicable tax authority. 		
Description	■ The definitions for the message set or element.		

Table 3: Element Description

1.6.1 | Character Restrictions

All FATCA XML documents (Form 8966 data, metadata, etc.), should conform to recommended XML schema best practices. Certain characters are prohibited and if included will cause an error notification.

Non-Optional Entity Reference

If an XML document contains one of these characters in the XML text content, the data packet will be rejected and an error notification (XML not well-formed) will be generated. These characters are not allowed by XML syntax rules and must be replaced with the following predefined entity references. To prevent error notifications, do not include any of these characters in XML documents.

Characters	Character Description	Entity Reference
&	Ampersand	&
<	Less than	<

Optional Entity Reference

If an XML document contains one of these characters in the XML text content, it is not restricted and will not cause an error notification. The characters should be replaced by the following predefined entity references to conform to XML schema best practices.

Characters	Character Description	Entity Reference
>	Greater than	>
£	Apostrophe	'
"	Quotation mark	"

SQL Injection Validation

If an XML document contains one of these combinations of characters in the XML text content, the data packet will be rejected and a failed threat detection (error) notification will be generated. These characters are not allowed. To prevent error notifications, do not include any of these combinations of characters.

Characters	Character Description	Entity Reference
	Double dash	None
/*	Slash Asterisk	None
&#</th><th>Ampersand Hash</th><th>None</th></tr></tbody></table>		

1.7 | How to Use Guide

The FATCA Metadata XML Schema v1.1. supports FATCA reporting and expands each data element to describe business rules. The schema definition files take precedence over any information presented within the guide. The FATCA XML schema definition files or .xsd files may be downloaded from the FATCA XML Schema for Form 8966 page.

The schema was tested using XMLSpy and the diagrams shown illustrate the message structure and hierarchy relationship of elements. The schema and sample files can be viewed with an XML tool, such as XML Notepad. The table below describes the XMLSpy legend to interpret the diagrams. If you are using a different XML tool, the icons and images may vary.

Schema Icon	Description
™sgld	Box with full-line is a required report element
InitgPty 由	Box with dotted line is an optional report element
	The child elements must appear in the sequence mentioned
-(1)-(1)	Only one of the possible child elements may be present

Figure 2: Schema Legend

2 FATCAIDESSenderFileMetadata

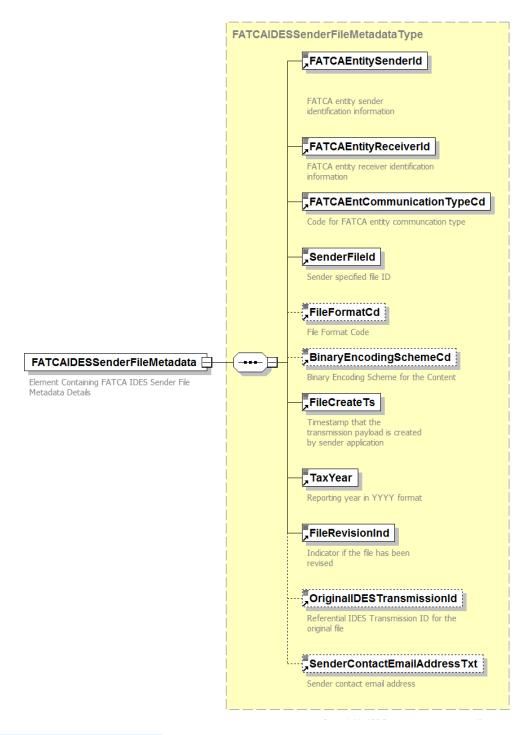


Figure 3: FATCA IDES Metadata Overview

The file name for the FATCA XML metadata file is FATCAEntitySenderld_Metadata.xml. See Section 1.4 Sender Metadata File for more information. The elements and values are summarized in Table 4.

Ref	Elements	Datatype	Cardinality	Requirement	Description
2.0	FATCAIDESSender FileMetadata	N/A	1	Mandatory	
2.1	FATCAEntitySenderId	String	1	Mandatory	Identifies GIIN or FIN of sender submitting data
2.2	FATCAEntityReceiverId	String	1	Mandatory	Identifies GIIN of recipient receiving data
2.3	FATCAEntCommunication TypeCd	String	1	Mandatory	Indicates the type of transmission
2.4	SenderFileId	String	1	Mandatory	References file name created by sender
2.5	FileFormatCd	String	01	Optional	Indicates file format type
2.6	BinaryEncodingSchemeCd	String	01	Optional	Indicates binary encoding scheme information
2.7	FileCreateTs	Timestamp With Milliseconds Type	1	Mandatory	References timestamp for the transmission payload
2.8	TaxYear	gYear	1	Mandatory	Indicates the tax year for FATCA reporting
2.9	FileRevisionInd	Boolean	1	Mandatory	Indicates if the FATCA report is a revised transmission
2.10	OriginalIDES TransmissionId	String	01	Optional	References for the original IDES transmission ID
2.11	SenderContactEmail AddressTxt	String	01	Optional	Sender email address

Table 4: IDES Metadata Schema Overview provides a summary for each element

2.1 | FATCAEntitySenderId

Element	FATCAEntitySenderId
Attribute(s)	N/A
Size/Pattern	19-character GIIN format
Namespace/ Prefix	N/A
Datatype	String
Requirement	Mandatory
	 Element contains the sender FATCA GIIN or FIN. The GIIN or FIN is a 19-character alphanumeric identifier entered with appropriate punctuation (period or decimal). If the sender is a reporting FI, direct reporting NFFE, or sponsoring entity, use the
Description:	approved GIIN. Example: 98Q96B.00000.LE.840 ■ If the sender is an HCTA, use the predefined HCTA FATCA Entity ID format.
	Example: 000000.00000.TA.840.
	If the sender is a USWA, TFI, third party preparer or independent software vendor, use the approved FIN. Example: G5ME2G.12100.ME.840

2.2 | FATCAEntityReceiverId

Element	FATCAEntityReceiverId
Attribute(s)	N/A
Size/Pattern	19-character GIIN format
Namespace/ Prefix	N/A
Datatype	String
Requirement	Mandatory
Description	 Element contains the recipient entity ID in GIIN format with punctuation (period or decimal). If the direct recipient is a tax authority (TA) or HCTA, use the HCTA FATCA Entity ID. Example: 000000.00000.TA.ISO If the direct recipient is the U.S. tax authority, use HCTA FATCA Entity ID for the United States (US). Example: 000000.00000.TA.840

2.3 | FATCAEntCommunicationTypeCd

Element	FATCAEntCommunicationTypeCd
Attribute(s)	N/A
Size/Pattern	RPT, NTF, CAR or REG
Namespace/ Prefix	N/A
Datatype	FATCAEntCommunicationTypeCdType
Requirement	Mandatory
Description:	 Element specifies the type of message transmitted. The only allowable entries are the entity communication type codes. Enumeration values: RPT - FATCA_Report NTF - FATCA_Notification CAR - FATCA Competent Authority Request REG - FATCA Registration Data (Reserved. Do not use)

2.4 | SenderFileId

Element	SenderFileId
Attribute(s)	N/A
Size	Maximum length 200 characters
Namespace/ Prefix	N/A
Datatype	String
Requirement	Mandatory
Description:	 Element is a free text field to capture the file name or ID created by the sender. The element helps both the sender and receiver to track and monitor a specific message. This element cannot be blank.

2.5 | FileFormatCd

Element	FileFormatCd
Attribute(s)	N/A
Size/Pattern	XML, PDF
Namespace/ Prefix	N/A
Datatype	FileFormatCdType
Requirement	Optional
Description	 Element specifies the file format of message transmitted. Currently, the only allowable entries are the file format type codes, XML and PDF. If sending a FATCA Report (RPT), the only allowable value is XML. If receiving a notification from US, the value will be XML. If receiving a competent authority request from the the US, the value will be PDF. Other format types have been reserved for future release and should not be used. Enumeration values: XML – Extensible markup language PDF – Portable document format (IRS use only) TXT – Plain text (Reserved. Do not use) RTF – Rich text format (Reserved. Do not use) JPG – Joint photographic group (Reserved. Do not use)

2.6 | BinaryEncodingSchemeCd

Element	BinaryEncodingSchemeCd
Attribute(s)	N/A
Size/Pattern	NONE or Base64
Namespace/ Prefix	N/A
Datatype	BinaryEncodingSchemeCdType
Requirement	Optional
Description:	 Element identifies the type of encoding scheme for the transmission payload. If sending an XML file, the only allowable value is 'NONE'. If receiving a CAR from IRS, the value will be 'Base64'. The element value indicates the payload has Base64 encoding. If receiving an IRS notification, the value will be 'the NONE'. Enumeration values: NONE – No special encoding Base64 – Base64 encoding (IRS use only)

2.7 | FileCreateTs

Element	FileCreateTs
Attribute(s)	N/A
Size/Pattern	YYYY-MM-DDTHH:MM:SS.msTZD
Namespace/ Prefix	N/A
Datatype	TimestampWithMillisecondsType
Requirement	Mandatory
Description:	 Element identifies the timestamp for the transmission payload created by the sender application. TZD represents the time zone. If Coordinated Universal Time (UTC), Z should be used. Recommend UTC. If local time, then the correct time zone should be included, such as -05:00.
Example:	2014-11-30T00:00:00Z 2014-11-30T00:00:00.123Z 2014-11-30T00:00:00.1234-05:00

2.8 | TaxYear

Element	TaxYear
Attribute(s)	N/A
Size/Pattern	YYYY
Namespace/ Prefix	N/A
Datatype	gYear
Requirement	Mandatory
Description:	 Element identifies the FATCA report tax year of the message YYYY format. Reporting information for the accounts or payments made in the tax year 2014, enter "2014."

2.9 | FileRevisionInd

Element	FileRevisionInd
Attribute(s)	N/A
Size/Pattern	true or false
Namespace/ Prefix	N/A
Datatype	Boolean
Requirement	Mandatory
Description:	Element is a Boolean field to indicate if the file is a revised message. The only allowable values are "true" or "false."

2.10 | OriginalIDESTransmissionId

Element	OriginalIDESTransmissionId
Attribute(s)	N/A
Size/Pattern	32 character unique ID
Namespace/ Prefix	N/A
Datatype	String
Requirement	Optional
Description:	 Element is a free text field to reference the unique original IDES transmission ID. The identifier helps both the sender and receiver to track and monitor messages. This field should be populated if the payload is a re-submission
	of a previously failed transmission due to network or file level errors.

$\textbf{2.11} \mid SenderContactEmailAddressTxt}$

Element	SenderContactEmailAddressTxt
Attribute(s)	N/A
Size/Pattern	Maximum length 200 characters
Namespace/ Prefix	N/A
Datatype	String
Requirement	Optional
Description:	Element is a free text field to identify the sender email address.

3 Appendix

Samples are for illustrative purposes only. Do not use during testing. For more information on schema files, visit FATCA XML Schemas for Form 8966 page.

3.1 | Appendix A: FATCA XML Metadata Sample - FATCA Report (RPT)

Figure 4: IDES Metadata Sample

Figure 4 Sample Details:

- HCTA sends a revised FATCA Report to the US and includes the original transmission ID.
- HCTA Sender: Canada
- HCTA Receiver: U.S.
- Tax reporting year: 2014
- Report: FATCA Report (RPT)

3.2 | Appendix B: FATCA XML Metadata Sample - Notifications

Figure 5 Sample Details:

Figure 5: IDES Metadata Sample - NTF

- HCTA receives a FATCA Report notification from the U.S. The file format is XML.
- HCTA Sender: U.S
- HCTA Receiver: Canada
- Tax reporting year: 2014
- Report: FATCA Report Notification (NTF)

3.3 | Appendix C: FATCA XML Metadata Sample - Competent Authority Request (CAR)

Figure 6: IDES Metadata Sample - CAR

Figure 6 Sample Details:

■ HCTA receives a CAR from the U.S. The file format is PDF format and the encoding value is 'Base64'.

HCTA Sender: U.S

HCTA Receiver: Bermuda

Tax reporting year: 2014

■ Report: Competent Authority Request (CAR)