Financial Crimes Enforcement Network

Required Schemas for BSA XML Batch Reporting

Overview

In order to validate your BSA XML batch file to ensure it is formatted in accordance with the XML schema definition, you must utilize the following XML schemas below. Filers have the option to retain local copies of these schemas in the event that the XML validation software being used does not have the ability to reach the internet. Instructions for both methods of validation are documented below.

Required Schemas

The following list includes all required schema (xsd) files needed to validate your BSA XML batch file:

Base Schema

The BASE schema definition contains an inventory of all BSA data elements. The schema is also referred to as the "BSA Base" schema.

Schema Location:
https://www.fincen.gov/system/files/schema/base/

Schema*:*

- BSA_XML_2.0.xsd

Batch Schemas

Each form type schema definition contains an inventory of all BSA data elements defined in the BSA Base schema relevant to the specific form type.

Schema Location:
https://www.fincen.gov/system/files/schema/base/

Schemas:

- EFL_CTRXBatchSchema.xsd
- EFL_FBARXBatchSchema.xsd
- EFL_SARXBatchSchema.xsd
- EFL_8300XBatchSchema.xsd
- EFL_DOEPXBatchSchema.xsd

Supporting Schemas

The following schemas are needed to support the BSA Base schema.

FinCEN Reference Codes Schema

Schema Location:
https://www.fincen.gov/system/files/schema/code/

Schema:

- FinCENReferenceCodes.xsd

ISM Schema and Associated Sub-Schemas

ISM Schema

Schema Location:
https://www.fincen.gov/system/files/schema/base/Schema/ISM/

Schema:
IC-ISM.xsd

ISM Sub-Schemas

Schema Location:
https://www.fincen.gov/system/files/schema/base/Schema/ISM/CVEGenerated/

Schema:

- CVEnumISM25X.xsd
- CVEnumISMAtomicEnergyMarkings.xsd
- CVEnumISMAttributes.xsd
- CVEnumISMClassificationAll.xsd
- CVEnumISMClassificationUS.xsd
- CVEnumISMCompliesWith.xsd
- CVEnumISMDissem.xsd
- CVEnumISMExemptFrom.xsd
- CVEnumISMNonIC.xsd
- CVEnumISMNonUSControls.xsd
- CVEnumISMNotice.xsd
- CVEnumISMPocType.xsd
- CVEnumISMSAR.xsd
- CVEnumISMSCIControls.xsd

ISMCAT Schema and Associated Sub-Schemas

ISMCAT Schema

Schema Location:
https://www.fincen.gov/system/files/schema/base/Schema/ISMCAT/

Schema:
SchemaGuideSchema.xsd

ISMCAT Sub-Schemas

Schema Location:
https://www.fincen.gov/system/files/schema/base/Schema/ISMCAT/CVEGenerated/

Schema:

- CVEnumISMCATFGIOpen.xsd
- CVEnumISMCATFGIProtected.xsd
- CVEnumISMCATOwnerProducer.xsd
- CVEnumISMCATRelTo.xsd

Schema Validation

In order for the XML batch to execute schema validation, the XML batch file must reference the appropriate Batch Schema within the EFilingBatchXML element. For example, when attempting to validate a SAR XML batch file via a support XML validation tool, the xsi:schemaLocation must point to the EFL_SARXBatchSchema.xsd. The xsi:schemaLocation can reference the online location of the schema or if you are working offline, the location of your local copy of the schema.

Fincen.gov Schema Reference:

```
<fc2:EFilingBatchXML ActivityCount="3" TotalAmount="125050" PartyCount="4" AttachmentCount="1"
ActivityAttachmentCount="1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:fc2="www.fincen.gov/base"
xsi:schemaLocation="www.fincen.gov/base
https://www.fincen.gov/system/files/schema/base/EFL_SARXBatchSchema.xsd">
```

If you are able to connect to the internet with your XML validation tool, then you should be able to reference the URL location of the XML batch schema in your XML batch file and execute schema validation. However, if you are not able to connect to the internet with your XML validation tool, then please see the Local Schema Reference section below.

Local Schema Reference:

In the following example, the SAR XML batch schema (xsd) is located in the same local directory as the SAR XML batch file (xml). *NOTE: If the batch schema were to be located in another directory, the full path to that directory should be specified.*

```
<fc2:EFilingBatchXML ActivityCount="3" TotalAmount="125050" PartyCount="4" AttachmentCount="1"
ActivityAttachmentCount="1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:fc2="www.fincen.gov/base" xsi:schemaLocation="www.fincen.gov/base
file:///L:/LocalBSASchemas/EFL_SARXBatchSchema.xsd">
```

When using a local copy of the XML batch schema, you must also download local copies of the associated schemas required for the XML batch schema to validated your XML batch file. You must also update the source schema to include the path to the local copy of the supported schema. The following schemas should be saved in accordance with the following requirements:

1. Save the BSA_XML_2.0.xsd and FinCENReferenceCodes.xsd in the same directory as your batch schema (e.g. EFL_SARXBatchSchema.xsd)
2. Create the following sub-directory in the same location: Schema
3. In the “Schema” directory, create the following sub-directories:
    a. ISM
    b. ISMCAT
4. In the “ISM” directory:
    a. Navigate to https://www.fincen.gov/system/files/schema/base/Schema/ISM/IC-ISM.xsd, right-click on the page content and select View Source. Save the source schema to the “ISM” directory with the filename IC-ISM.xsd
    b. Create the following sub-directory: CVEGenerated
5. In the “ISM/CVEGenerated” directory, save a copy of the following schemas:
    a. CVEnumISM25X.xsd
    b. CVEnumISMAtomicEnergyMarkings.xsd
    c. CVEnumISMAttributes.xsd

d. CVEnumISMClassificationAll.xsd
e. CVEnumISMClassificationUS.xsd
f. CVEnumISMCompliesWith.xsd
g. CVEnumISMDissem.xsd
h. CVEnumISMExemptFrom.xsd
i. CVEnumISMNonIC.xsd
j. CVEnumISMNonUSControls.xsd
k. CVEnumISMNotice.xsd
l. CVEnumISMPocType.xsd
m. CVEnumISMSAR.xsd
n. CVEnumISMSCIControls.xsd

6. In the "ISMCAT" directory:
   a. Navigate to fincen.gov/system/files/schema/base/Schema/ISMCAT/SchemaGuideSchema.xsd, right-click on the page content and select View Source. Save the source schema to the "ISMCAT" directory with the filename SchemaGuideSchema.xsd
   b. Create the following sub-directory: CVEGenerated
7. In the "ISMCAT/CVEGenerated" directory, save a copy of the following schemas:
   a. CVEnumISMCATFGIOpen.xsd
   b. CVEnumISMCATFGIProtected.xsd
   c. CVEnumISMCATOwnerProducer.xsd
   d. CVEnumISMCATRelTo.xsd
8. Open your local copy of the specific form type schema (e.g. EFL_SARXBatchSchema.xsd) and update the xsi:schemaLocation to www.fincen.gov/base <full path to local BSA_XML_2.0.xsd> and the redefine schemaLocation location to "BSA_XML_2.0.xsd"
   For example:

```
xsi:schemaLocation="www.fincen.gov/base  file:///L:/LocalBSASchemas/BSA_XML_2.0.xsd">
        <xsd:redefine schemaLocation="BSA_XML_2.0.xsd">
```

9. Open your local copy of the BSA_XML_2.0.xsd and update the schemaLocation associated with the following namespaces to the full directory path on your local drive:
   a. urn:us:gov:ic:ism
   b. www.fincen.gov/codes
   For example:

```
<xsd:import namespace="urn:us:gov:ic:ism"
schemaLocation="file:///L:/LocalBSASchemas/Schema/ISM/IC-ISM.xsd"/>
<xsd:import namespace="www.fincen.gov/codes"
schemaLocation="file:///L:/LocalBSASchemas/FinCENReferenceCodes.xsd"/>
```

If you have local copies of the above schema files saved in the above directory hierarchy, with the appropriate references to the schema locations within each file, then you should be able to perform schema validation of your XML batch file offline.

If you have any questions regarding the above, please feel free to contact the BSA E-Filing Help Desk at https://bsaefiling.fincen.gov/HelpTicketForm. The Help Desk is available Monday through Friday from 8 a.m. to 6 p.m. EST. Please note that the Help Desk is closed on Federal holidays.