

NIBRS XML Frequently Asked Questions (FAQ)

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I have the IEPD package, where do I start?

The documentation folder inside the zip file is the starting point for understanding how to create a National Incident-Based Reporting System (NIBRS) Extensible Markup Language (XML) submission.

- The nibrs_MasterDocument provides an overview of the Information Exchange Package Documentation (IEPD) contents and a listing of the XML elements.
- The nibrs_XMLMapping_Spreadsheet should be the source for building an XML file. It defines each NIBRS element (name and number), the expected cardinality, the XML Path Language for each element, and a description. The description also includes special formatting and other special instructions for each element.
- The nibrs_CodesTables file lists all code tables and descriptions that are expected in an XML submission. For some elements, it also contains a reference to the corresponding legacy NIBRS code.
- The nibr_UML file illustrates the relational model of the XML objects.

The XML mapping spreadsheet is different than the NIBRS Technical Specification (Tech Spec), how do I know what to use?

The NIBRS Tech Spec was originally written to the positional-based flat file record, which means it does not fully apply to the XML specification. Refer to the nibrs_CodesTables spreadsheet for the code values expected in an XML submission. This may be different than the values in the Tech Spec.

Refer to the nibrs_XMLMappingSpreadsheet for expected cardinality, data format, and other guidance on XML elements.

Why are some of the XML codes different than the official NIBRS codes?

The NIBRS XML exchange uses the National Information Exchange Model (NIEM). Some of the code values are identical to the legacy NIBRS code values; however, many are not. Since there are no fixed-length field restrictions, code values are not required to be padded with zeros. Additionally, some of the code sets are moving toward a self-describing code design. The code values listed in the `nibrs_CodesTables` spreadsheet should be used in an XML submission. The new NIBRS system will account for this change for XML submissions when performing business rule validation checks.

Why are indicators used in the XML for some NIBRS elements?

In the NIEM design, some of the NIBRS elements are more suitable for Boolean indicators, rather than the codes or other data collection in the legacy NIBRS specification. For example, NIEM defined an `OffenseAttemptedIndicator` to represent the NIBRS element "Offense Attempted Completed." The NIEM element would have a value of `True` if the offense were merely attempted or `False` if the offense were completed. The new NIBRS system will account for this change for XML submissions when performing checks of business rule validation.

The element cardinality in the XML schema does not match the business rules. What do I do?

Due to various technical limits and design decisions, element cardinality in the XML schema is sometimes less limiting than in the Tech Spec and mapping spreadsheet. Though the schema may be more open, follow the cardinality defined in the `nibrs_XMLMapping_Spreadsheet`.

If a file validates against the NIBRS XML schema, does that make it a valid NIBRS record?

No. The XML schema does not validate all NIBRS business rules. The FBI has developed the XML Conformance Testing Assistant (XCOTA) to assist in validating XML records against the majority of the NIBRS business rules. However, there are still some checks, such as checks against the database, that still cannot be performed by XCOTA. Additionally, having files that validate against XCOTA does not constitute NIBRS certification.

Why is the person data not inside their respective roles?

As a concept of the NIEM model, entities are defined in a modular fashion. This design eliminates duplication of type definitions and data in an XML instance. Therefore, the common person data (age, sex, race, etc.) is represented in one common object. The supplemental information for each role is defined separately with a pointer back to the actual person.

Furthermore, while this design may seem overly complicated for a NIBRS submission, it is consistent with the National Data Exchange (N-DEx) system and helps to harmonize the two exchanges.

Why are associations used?

As a concept of the NIEM model, entities are defined in a modular fashion. These independent entities are then linked back together using associations.

Furthermore, while this design may seem overly complicated for a NIBRS submission, it is consistent with the N-DEx system and helps to harmonize the two exchanges.

Where is the property segment?

Property information is modeled differently in the XML specification than previously reported in the legacy format. The legacy NIBRS format provided a single property segment, consisting of one property loss type code (e.g., Stolen), with up to 10 property descriptions (i.e., property categories). Users could report a maximum of three types of property segments.

Using XML, property items are reported in a more real-world, NIEM concept. Each item is listed separately. A combination of ItemStatusCode and ItemCategoryNIBRSPropertyCategoryCode will constitute a unique occurrence of an item. For example, if you have five stolen vehicles, you would provide one nc:Item element with an nc:ItemQuantity of "5". Similarly, drugs are reported under the nc:Substance element.

How do I use the new "Replace" record action type?

The record action type of "R" for Replace was added for XML submissions. Rather than submitting a Delete followed by an Insert, you may choose to submit a Replace to perform the same action. In the case of a Group B arrest, you must provide a sequence number to perform a Replace.