MyStandards Base Libraries

Helping you implement standards

SWIFT

A coherent set of tools and resources for standards implementers

Benefits

- Reduce implementation costs
- Common XML approach for MT and MX
- Updated with each standards release

Implementation and maintenance of standards can be challenging. With constraints on resource and budgets, IT managers are on the lookout for smarter, more efficient ways to keep up with business demands. SWIFT's MyStandards Base Libraries (MBL) – previously known as the Standards Developer Kit (SDK) – helps customers and partners implement SWIFT and ISO standards easily and efficiently using up-to-date technology. This provides rich machine-readable definitions of the SWIFT MT and ISO 20022 standards.

The MyStandards Base Libraries extends the documentation of standards that SWIFT has always provided to include processable content that can help in many phases of standards implementation, from analysis through to design, build, document and test.

As part of the product suite of MyStandards, the MBL product is available under license on an annual subscription basis. Subscribers gain access to all content, updates and support. More details at www.mystandards.swift.com/mystandards-base-libraries

Release cycle

The MyStandards Base Libraries is updated and available for download with each SWIFT standards release. This typically means in any one year there is one major release covering MT and MX maintenance, and there might be additional updates, as published in SWIFT's release timeline on www.swift.com

MX Schema Library

Benefits

- Reference quality information
- Processable XML format
- Comprehensive, rich definitions
- Aligned to SWIFT standards releases

ISO 20022 messages are derived from a rich and detailed formal model. The model fully defines the structure and content of all messages and the meaning of the business concepts to which they refer. The MX Schema Library puts all this information into the hands of implementers in a form that is complete and easy to use.

Working with processable definitions, implementers gain significant technical advantages, leading to implementations that are quicker to build, more flexible and easier to maintain.

Components
MX Schemas (XSD) extend the standard validation schemas available for ISO 20022/MX messages to add definitions in schema annotations. The additional information includes the full ISO 20022 name for each element for easy cross-reference with ISO 20022 and SWIFT solution documentation, and the full text of the definition.

Spreadsheets for analysts
A library of spreadsheets is provided. Each file contains a full message definition based on the MX repository, including details of changes from previous releases and a full XML path reference. These files are compatible with MS Excel and other office automation applications.

MT-XML Schema Library

Benefits

- XML approach for both MT and MX
- Speeds up implementation
- Lowers implementation cost
- Reduces manual effort

The MT-XML Schema Library is a complete set of XML schema definitions for MT messages, and software which shows how to convert messages from an MT format to an MT XML representation and back. This approach allows XML integration between applications while the MT (FIN) format will continue to be transported over the SWIFT network.

The MT-XML Schema Library is delivered as both not-enriched and enriched versions. Both versions are technically equivalent.

The enriched schemas contain information including the full name and full text definition for each field and subfield for easy cross-reference with the MT User Handbook and SWIFT Solution documentation. Users of XML tools can view this additional information in context. Other standard and custom tools can be used to generate useful outputs from enriched schemas, such as custom documentation.

Note that the MT-XML format is not to be confused with ISO 20022 messages which are also expressed in the XML syntax.

Components
XML schemas that define the business content (block 4) of each message type and a schema that defines the header and trailer elements common to all message types (blocks 1, 2, 3 and 5).

MT-XML conversion reference
Working sample Java source code that converts a message in MT format to an XML instance and from an XML instance to a message in MT format.

The MT-XML Schema Library allows implementers to exploit powerful XML tools and leverage existing skills to implement MT messages. Schemas are updated for each standards release.

Why use the MT-XML Schema Library?
The MT-XML Schema Library eliminates the need for complex hand-coding of MT message processing and allows traditional MT messages to be processed using commodity XML tools and XML APIs which are often available in current programming platforms. Schemas conform to the SWIFT User Handbook and contain rich definitions qualifying message elements to the level of subfields. This makes it easy to find and extract specific data and ensures thorough syntax validation.

MBL implementation samples

Working samples are provided to illustrate how the MBL components can be exploited to address common use cases for analysis and development.

The samples are written in Java and XQuery. Use cases include generating custom documentation and extracting GUI definitions.

ISO 20022 developers' resources

Benefits

- Reference quality information
- Processable XML format that
- simplifies ISO 20022 implementation
- Comprehensive, rich definitions
- Aligned to SWIFT standards releases

Helping analysts with spreadsheets

A library of spreadsheets is provided. Each file contains a full message definition based on the MX repository, including details of changes from previous releases and a full XML path reference. These files are compatible with MS Excel and other office automation applications.

Enriched schemas

MX Schemas (XSD) extend the standard validation schemas available for ISO 20022/MX messages to add definitions in schema annotations. The additional information includes the full ISO 20022 name for each element for easy cross-reference with ISO 20022 and SWIFT solution documentation, and the full text of the definition.

What can the enriched MT/ ISO 20022 Schema Library be used for?

Extendable content

- Extend with custom information without compromising integrity e.g. message usage rules
- Additional meta-data for message models

Customised documentation

- For internal use: such as test cases
- For analysts as the basis for implementation specifications
- Ad hoc reporting e.g. extract allowed codes for a given code data type

Generate useful artefacts from the model, such as:

- GUI screens (e.g. JSP, JSF, ASP, smart-client)
- Data access or persistence code
- Interface definitions (e.g. WSDL)

For more information about MyStandards, visit mystandards.swift.com

MT/ISO 20022 Schema Libraries — <XML> — XML tools — Custom documentation, Deployable artefacts, Queries and reports, Canonical data models