FIX Global Technical Committee Updates 2019

FIX Trading Community EMEA Trading Conference 2019

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Topics

- FIX Application Layer Extensions
- FIX Versioning Concept
- User Defined Fields – Concept and Ranges
- FIX Technical Standards Update
Fix Application Layer Extensions – https://www.fixtrading.org/extension-packs/

- **EP241** – Average Pricing Enhancement (CME)
  Additions to give-up instruction, reporting and acknowledgement.

  Extension of SecurityIDSource(22) to support UMTF (Uniform Multilateral Trading Facility code) security identifier scheme. 

- **EP243** – Unit of Measure Extension (CME)
  New unit of measure (heat rate) for energy commodity trades. Heat rate is the number of million British Thermal Units (BTUs) required to produce one megawatt hour of electricity. Extension of UnitOfMeasure(996).

- **EP244** – Permanent Account Number (PAN) ID Extension (APAC Technical Subcommittee)
  Regulatory requirement in India for exchange participants to convey PAN ID. Extension of PartyIDSource(447). 
  [https://en.wikipedia.org/wiki/Permanent_account_number](https://en.wikipedia.org/wiki/Permanent_account_number)

- **EP245** – Automatic Claim Handling (CME)
  Ability to mark the trade to automatically claim the give-up when submitting the allocation. Extension of AllocHandlInst(209).

- **EP246** – Confirmation Extension (Bloomberg)
  Enhance workflow when a third-party facility provides the confirmation matching function between the dealer and the investment manager. Extension of MatchStatus(573) for a mismatch, addition of new repeating groups MatchExceptionGrp and MatchingDataPointGrp.

- **EP247** – FX Trade Aggregation Proposal (Global Post-Trade Working Group)
  New and specific messages to support trade aggregation: TradeAggregationRequest(35=DW) and TradeAggregationReport(35=DX).
**FIX Versioning Concept**

- A FIX version is a well-defined and static set of messages, components, fields and valid values for the application layer.

- FIX implementations often go beyond the static set and use elements from higher versions, e.g. to satisfy regulatory requirements or due to bilateral agreement to benefit from extensions provided after the chosen FIX version.

- FIX versions are now part of **FIX Legacy** and split into supported (FIX 4.2, 4.4, 5.0 SP2) and unsupported versions.

- The highest “version” of FIX is called **FIX Latest** and is growing with every official **Extension Pack**. EPs will not break backward compatibility but may deprecate elements that have been replaced to overcome limitations.

- The interface specification between parties, aka **Rules of Engagement**, defines the subset of messages, components, fields and valid values for the application layer that are supported by the given interface.

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**FIX Legacy**

- **FIX 4.0**: 29 messages, 140 fields
- **FIX 4.1**: 30 messages, 211 fields
- **FIX 4.2**: 49 messages, 446 fields
- **FIX 4.3**: 71 messages, 659 fields
- **FIX 4.4**: 96 messages, 956 fields
- **FIX 5.0**: EP1-EP40, 104 messages, 1139 fields
- **FIX 5.0 SP1**: EP41-EP75, 114 messages, 1426 fields
- **FIX 5.0 SP2**: EP76-EP97, 117 messages, 1505 fields

**FIX Latest**

- as of EP247: 142 messages, 5894 fields*

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* Includes tags 40000 – 43096 for OTC derivatives instruments
User Defined Fields – Concept and Ranges

- UDFs are officially supported by FIX to add flexibility between counterparties. At the same time, UDFs reduce standardization and should not be used extensively.

The Global Technical Committee’s policy with regards to user defined fields is for the community, where possible, to use tags, components or repeating groups from the latest Extension Pack in their legacy FIX implementation when these meet the requirements, as opposed to customised extensions through user defined fields, components repeating groups.

- UDFs should never be used to replace key fields, e.g. entity identification, workflow coordination, required fields

- Ranges for standard FIX fields and UDFs
  - 1-4999 is for standard FIX fields, i.e. no UDFs, owned by the FIX Global Technical Committee (GTC)
  - 5000-9999 (w/o 8000-8999) is owned by FIX members and published on the FIX website (https://www.fixtrading.org/standards/user-defined-fields/).
  - 8000-8499 is owned by FIX GTC to support regulatory requirements for legacy versions of FIX and is published.
  - 10000-19999 is not published and can only be used for internal communication, i.e. not between external counterparties
  - 20000-39999 is not published and can be used for external communication, including market conventions (multi-lateral agreement)
  - 40000-49999 is for standard FIX fields owned by FIX GTC and has been used for OTC derivative instrument descriptions
  - 50000+ are standard FIX fields owned by FIX GTC and has hardly been used so far (only for FIXML batch files)
  - All standard FIX fields are included and published in FIXimate (http://fiximate.fixtrading.org/index.html)
FIX Technical Standards Updates – https://www.fixtrading.org/standards/

- FIX offers a number of Technical Standards below the application layer for the encoding of messages and session protocols.

- FIX Generation 5 introduced the concept of Transport Independence, supporting a choice for the encoding and session protocol. A FIX Technical Standard has its own name and version number. Release Candidates represent work in progress leading up to an official new version.

- The following progress was made since early 2018:
  - Release Candidate 4 for FIX Performance Session Layer (FIXP) Version 1.0 published in May 2018
  - Draft Standard for FIX Performance Session Layer (FIXP) Version 1.0 published in August 2018
  - Release Candidate 1 of Simple Binary Encoding (SBE) Version 2.0 published in August 2018
  - Errata version of Simple Binary Encoding (SBE) Version 1.0 published in September 2018
  - Release Candidate 3 for Encoding FIX with Google Protocol Buffers (GPB) Version 1.0 published in January 2019
  - Release Candidate 1 for FIX Performance Session Layer (FIXP) Version 1.1 published in January 2019
  - Release Candidate 4 of FIX Orchestra Version 1.0 published in February 2019
Time for Q&A