

FIX TRADING COMMUNITY

France Trading Conference 2023

– Global Technical Committee Update –

Tuesday 14th November 2023

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FIX Technical Director

GTC EMEA Co-Chair

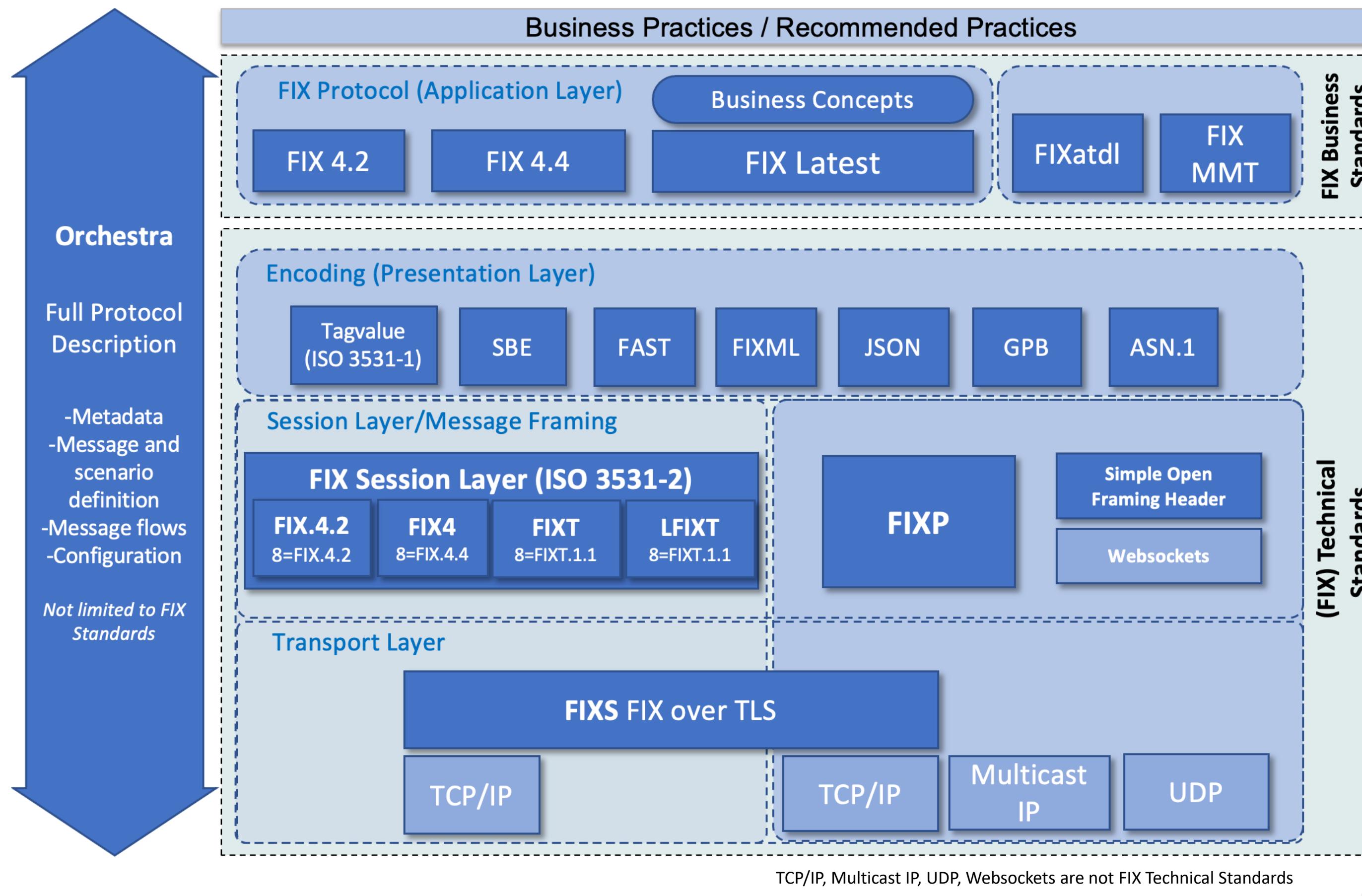
Senior Standards Advisor, FIXdom



Agenda

- GTC Strategy
 - GTC collaboration
 - New GTC Organisation
- FIX Business Standards
 - Digital Asset Trading
 - Settlement Status Management
 - Regulatory identifiers (UTI/USI, RTN) and post-trade flags
 - Miscellaneous (including work in progress)
- FIX Technical Standards
 - Orchestra v1.1
- FIX Tools
 - Orchestra Server
 - Playlist v1.2

FIX Standards



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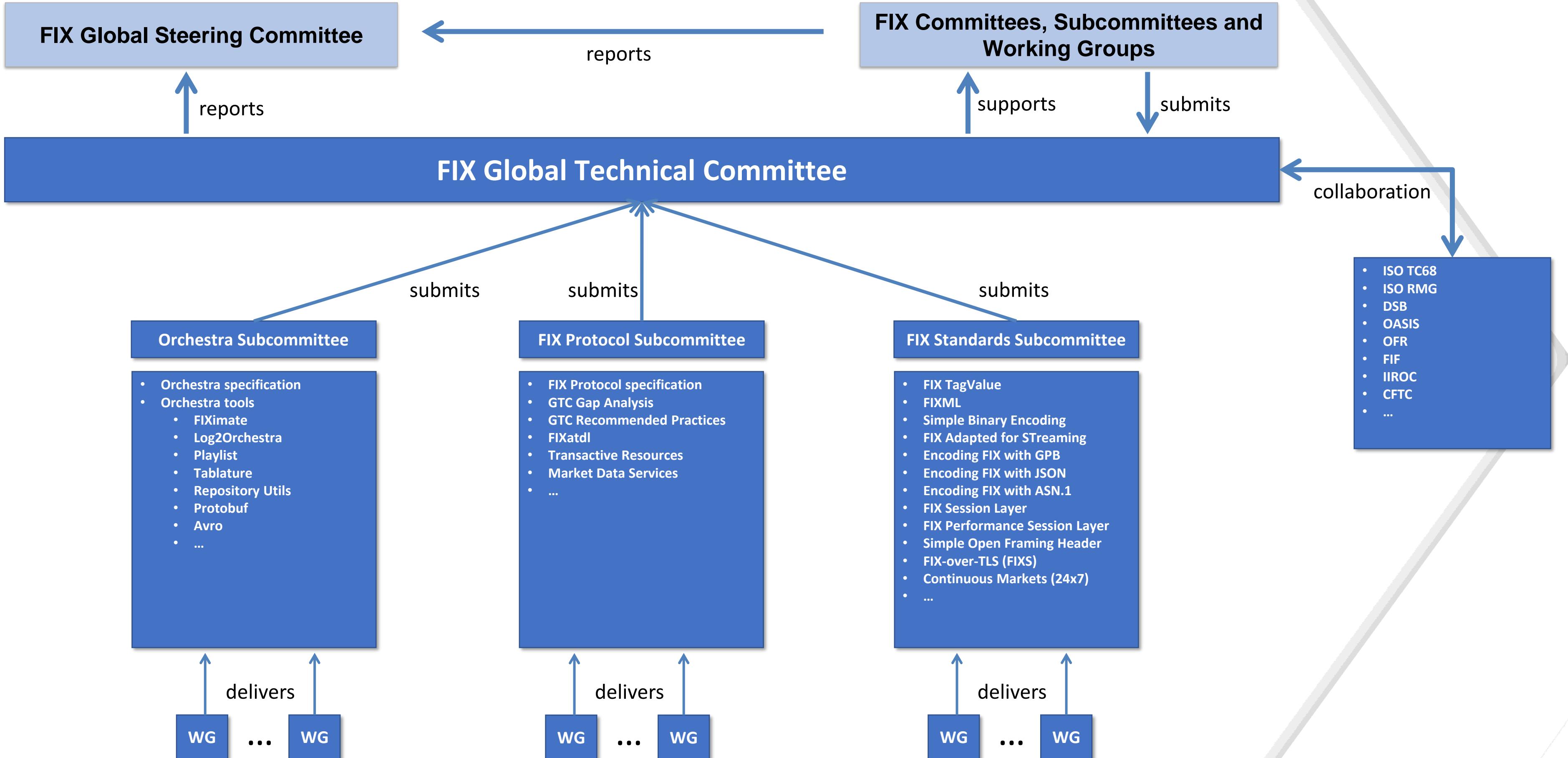
GTC Strategy



GTC Collaboration

- FIX has contacts to a number of (standards) organizations
 - ISO TC68 Financial Services (chaired by FIX Director Jim Northey <https://www.iso.org/committee/49650.html>)
 - ISO RMG (Registration Management Group, <https://www.iso20022.org/registration-management-group>)
 - ASC X9 (Accredited Standards Committee, <https://x9.org>)
 - DSB (Derivatives Services Bureau, <https://www.anna-dsb.com>)
 - OFR (Office of Financial Research, <https://www.financialresearch.gov>)
 - OMG (Object Management Group, <https://www.omg.org/>)
 - OASIS (Organization for the Advancement of Structured Information Standards, <https://www.oasis-open.org>)
- Industry collaboration activities
 - FIX is a Liaison A organization to ISO TC68/SC8 and SC9 and participates in multiple working groups
 - FIX participates in selected ISO RMG (Sub)SEGs (Standards Evaluation Groups) and is the secretary of the ISO RMG Derivatives SubSEG
 - FIX is a Category A member of ASC X9
 - FIX participates in the DSB Products Committee and is a member of the Technical Advisory Committee
 - FIX is collaborating with OASIS in the Transactive Resources WG to align the upcoming Common Transactive Services (CTS) standard with FIX

New GTC Organisation



GTC co-chairs manage GTC subcommittees; GTC subcommittee co-chairs monitor WGs; GTC resources drive WGs

New GTC Organisation

- Permanent subcommittees for key areas
 - 3 subcommittees: Orchestra, FIX Protocol, FIX Standards
 - A subcommittee has one or two co-chairs and one associated GTC co-chair
 - Subcommittees maintain (temporary) working groups to produce specific deliverables for GTC submission, supported by GTC resources
- Working Groups for the extension of FIX Standards
 - Created with the objective of a specific deliverable for a new version of a FIX Technical Standard or for a related recommended practice document.
 - Report into a GTC subcommittee on a regular basis
 - Only need to exist until the deliverable has been published

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FIX Business Standards



FIX Business Standards

- Digital Asset Trading (EP273) – published
 - Standardisation for trading of digital assets (cryptocurrencies like Bitcoin and any kind of digital tokens).
 - Support for two different trading styles:
 - FX-style – currency pairs (e.g. BTC/USD, BTC/ETH) of fiat and/or digital currencies
 - Securities-style – for trading any digital asset, priced and/or settling in either a fiat or digital currency
 - Security identifiers for digital assets
 - New SecurityIDSource(22)=Y (Digital Token Identifier – ISO 24165)
 - Use of SecAltIDGrp to identify the currencies for FX-style trading (new field SymbolPositionNumber(2957) to reference the first or second currency or digital asset in Symbol(55))
 - Currency source schemes
 - Addition of ISO 24165 to currency datatype (previously only ISO 4217)
 - New fields, e.g. CurrencyCodeSource(2897), to identify class or source of currency

FIX Business Standards

- Regulatory Trade Identifiers (EP275) – published
 - Update to the CFTC Parts 43 and 45 reporting technical specification requirements, where both the Unique Swap Identifier (USI) and Unique Transaction Identifier (UTI) can be used for reporting purposes to the CFTC.
 - Support for UTI (ISO 23897)
 - New value 1=UTI for RegulatoryTradeIDSource(1905) to explicitly indicate that RegulatoryTradeID(1903) contains a UTI
 - Continued support for USI (CFTC standard)
 - RegulatoryTradeID(1903) for the USI transaction identifier
 - RegulatoryTradeIDSource(1905) for the namespace of the entity creating the USI

FIX Business Standards

- Liquidity Indicator Extension(EP278) – published
 - Update and extension of FIX field LastLiquidityIndicator(851)
 - Clarification of value 0 = Neither removed nor added liquidity
 - May be used by venues where market rules do not define "add" or "remove" liquidity".
 - Additional values
 - 10 = Unknown – The liquidity indicator of the execution cannot be determined or was not provided upon execution.
 - 11 = Other – None of the existing liquidity indicators are applicable for the execution (e.g. due to a venue's new order type that does not fit existing values).

FIX Business Standards

- Settlement Status Management (EP281) – published
 - Introduction of new messages and workflows to support settlement status communication from a broker, custodian or an outsourcer (e.g. vendor system) back to the investment manager.
 - SettlementStatusRequest(Ack) messages
 - Request a snapshot or subscribe to a continuous flow of status messages
 - Optional message to acknowledge receipt or to reject the request
 - SettlementStatusReport(Ack) messages
 - Response to a status request or unsolicited report message to convey status
 - Carry through of ISO 15022 MT548 fields 25D (Status code) and 24B (Reason code)
 - Optional message to acknowledge receipt or to reject the report

FIX Business Standards

- Miscellaneous (published)
 - Recommended Practices for Digital Asset Trading
 - <https://www.fixtrading.org/packages/recommended-practices-for-digital-asset-trading/>
 - Contains a PDF document and a machine-readable version (Orchestra XML file)
 - EP274 – Anonymous Trade Indicator
 - New field AnonymousTradeIndicator(2961) to support CFTC regulatory requirement for trade reporting of swaps into a Swaps Data Repository (SDR)
 - EP276 – Securities Reference Data Supplement
 - New field SecurityReferenceDataSupplement(2962) to support the unique identification of derivative instruments where the security identifier and core reference data attributes are not sufficient
 - EP277 – MMT v4.0 Support
 - Support changes required after ESMA review of RTS 1 and RTS 2 (e.g. post-trade flags)
 - New field MultiJurisdictionReportingIndicator(2963), e.g. for reporting to ESMA and FCA
 - See <https://www.fixtrading.org/extension-packs/> for EP details

FIX Business Standards

- Miscellaneous (published)
 - EP279 – Eurex Clearing Enhancements
 - Support identification of initial broker executing the order prior to one or more give-ups
 - New value PartyDetailRoleQualifier(1674)=30 (Exchange order submitter)
 - EP280 – HKEx SMP Instruction Proposal
 - Enhancement of self-match prevention to convey action to be taken when self-match would occur
 - New field SelfMatchPreventionInstruction(2964) and new values for ExecRestatementReason(378)
 - EP282 – Errors & Omissions 2022
 - Correction of miscellaneous issues for supported FIX versions
 - FIX Latest as well as Orchestra XML files for FIX 4.2 and FIX 4.4
 - EP283 – UK Post-Trade Transparency
 - Equities post-trade transparency defined in the UK FCA's policy statement PS 23/4 of May 2023
 - New flags CLSE (trades at market closing price) and NETW (negotiated transactions)
 - See <https://www.fixtrading.org/extension-packs/> for EP details

FIX Business Standards

■ Miscellaneous

- EP284 – EMIR Report Tracking Number (published)
 - Unique number assigned to the execution and common among a group of reports related to the same execution (replacement of the Transaction Reference Number (TRN))
 - Different from the Trading Venue Transaction Identification Code (TVTIC): *individual transaction identification code for each transaction resulting from the full or partial execution of an order disseminated to both the buying and the selling parties.*
- EPxxx – Eurex Clearing Average Pricing Enhancements (work in progress)
 - Extension of allocation groups used for average pricing of cleared trades
 - Subgroups for allocation groups based on functional attributes such as trade or publication type
- EPxxx – Amendment MMT 4.0 and 4.1 (work in progress)
 - Distinction between trades on hybrid versus other systems for market data messages
 - Support for Frequent Batch Auctions (a.k.a. on-demand auctions triggered by orders)
- EPxxx – Algo Certification (work in progress)
 - Regulatory requirement to certify algos towards the execution venues (MiFIR RTS 7 Article 10(1))
 - New FIX messages to request and report certification information (algo/test system details)

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FIX Technical Standards



FIX Technical Standards

- Orchestra v1.1 under development
 - Orchestra is a meta-data standard and v1.0 was published in Feb 2021
 - FIX Latest published as XML file compliant with Orchestra v1.0 since EP255
 - Comprehensive set of features provided with Orchestra v1.0
 - Messages, groups, components, fields, code sets, code values, datatypes
 - Scenarios for messages all the way down to code sets
 - Conditional rules for field presence
 - Actors, workflows and state machines
 - Enhancements for Orchestra v1.1
 - Scenarios for datatypes, e.g. “int” with scenarios for short and long integers
 - Centralize declarations of scenarios as 1st level elements with unique IDs
 - Base field to identify a related field (e.g. non-encoded field related to encoded field)
 - Annotations for top-level elements, e.g. categories and sections
 - See GitHub (<https://github.com/FIXTradingCommunity/fix-orchestra>) for details

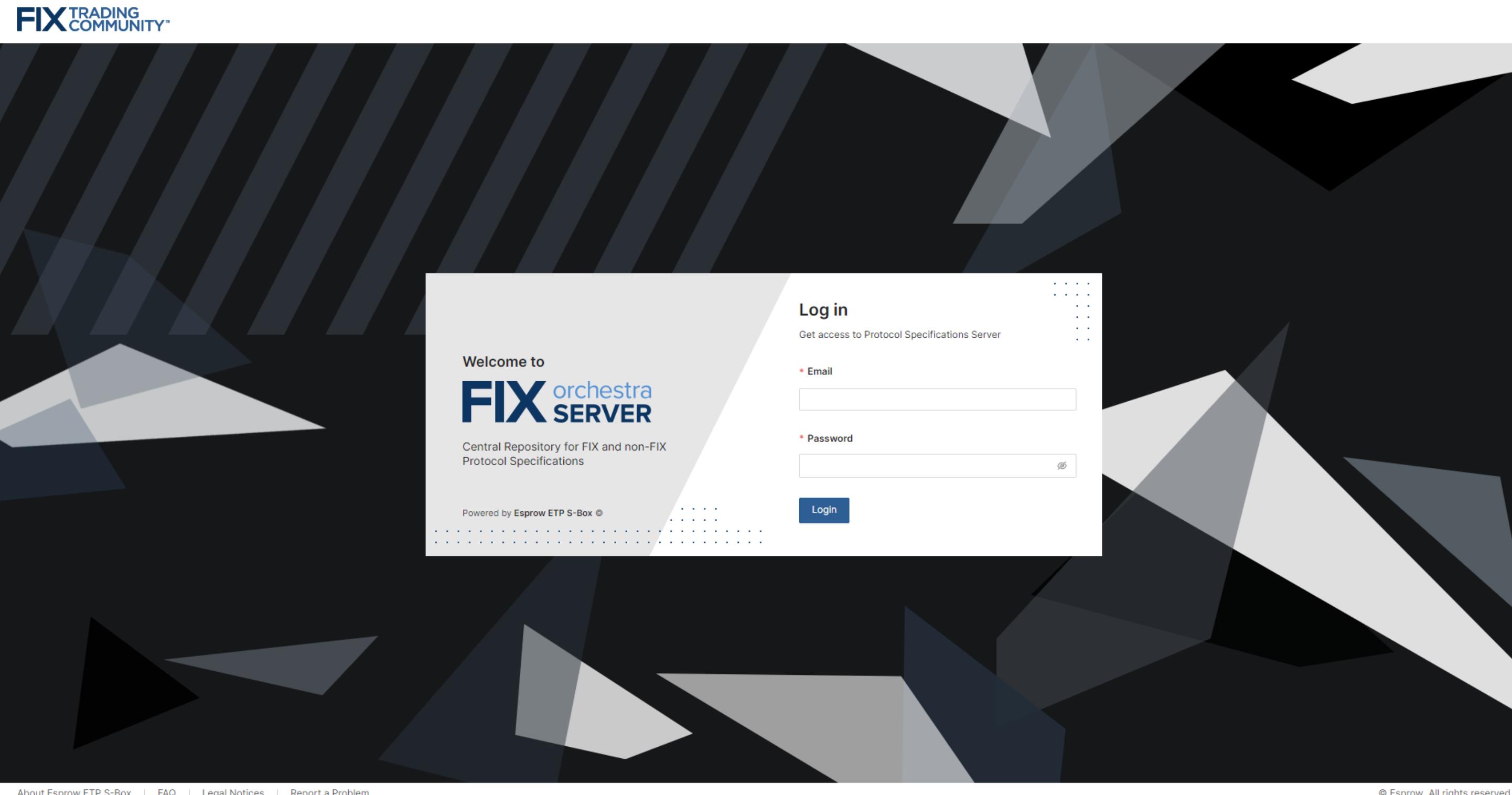
Contact the FIX Program Office (fix@fixtrading.org) if you would like to join!

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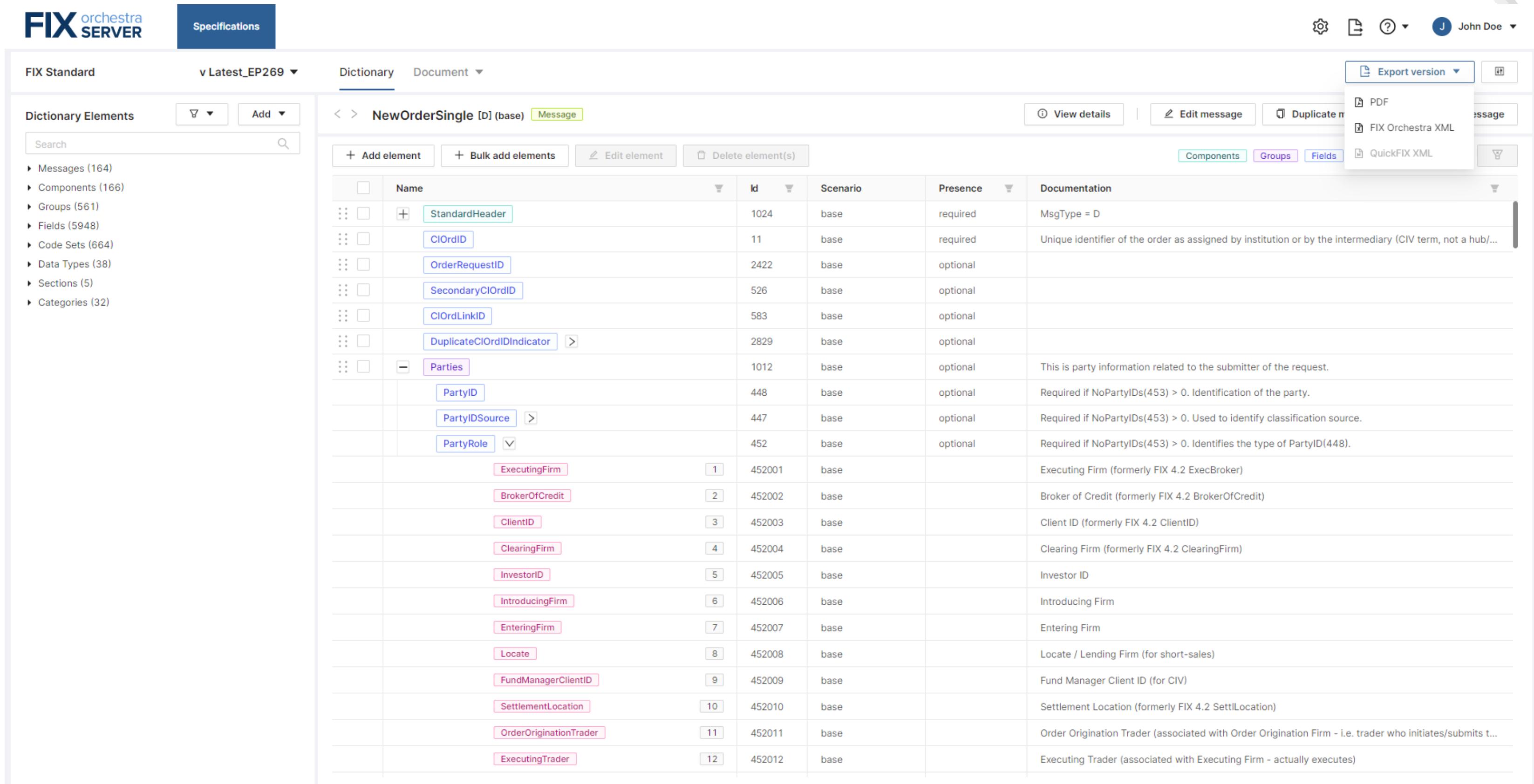
FIX Tools



FIX Tools – Orchestra Server



FIX Tools – Orchestra Server



The screenshot shows the FIX Orchestra Server interface for the FIX Standard. The current version is Latest_EP269. The 'Dictionary' tab is selected, displaying the structure of the NewOrderSingle message. The table lists various fields with their names, IDs, scenarios, presences, and documentation. Fields include StandardHeader, ClOrdID, OrderRequestID, SecondaryClOrdID, ClOrdLinkID, and multiple fields under the 'Parties' section such as PartyID, PartyIDSource, PartyRole, ExecutingFirm, BrokerOfCredit, ClientID, ClearingFirm, InvestorID, IntroducingFirm, EnteringFirm, Locate, FundManagerClientID, SettlementLocation, OrderOriginationTrader, and ExecutingTrader. The interface also includes a sidebar for Dictionary Elements, a toolbar with buttons for adding elements, and a top bar with user information and export options.

Name	Id	Scenario	Presence	Documentation
StandardHeader	1024	base	required	MsgType = D
ClOrdID	11	base	required	Unique identifier of the order as assigned by institution or by the intermediary (CIV term, not a hub/...
OrderRequestID	2422	base	optional	
SecondaryClOrdID	526	base	optional	
ClOrdLinkID	583	base	optional	
DuplicateClOrdIDIndicator	2829	base	optional	
Parties	1012	base	optional	This is party information related to the submitter of the request.
PartyID	448	base	optional	Required if NoPartyIDs(453) > 0. Identification of the party.
PartyIDSource	447	base	optional	Required if NoPartyIDs(453) > 0. Used to identify classification source.
PartyRole	452	base	optional	Required if NoPartyIDs(453) > 0. Identifies the type of PartyID(448).
ExecutingFirm	1	452001	base	Executing Firm (formerly FIX 4.2 ExecBroker)
BrokerOfCredit	2	452002	base	Broker of Credit (formerly FIX 4.2 BrokerOfCredit)
ClientID	3	452003	base	Client ID (formerly FIX 4.2 ClientID)
ClearingFirm	4	452004	base	Clearing Firm (formerly FIX 4.2 ClearingFirm)
InvestorID	5	452005	base	Investor ID
IntroducingFirm	6	452006	base	Introducing Firm
EnteringFirm	7	452007	base	Entering Firm
Locate	8	452008	base	Locate / Lending Firm (for short-sales)
FundManagerClientID	9	452009	base	Fund Manager Client ID (for CIV)
SettlementLocation	10	452010	base	Settlement Location (formerly FIX 4.2 SettlLocation)
OrderOriginationTrader	11	452011	base	Order Origination Trader (associated with Order Origination Firm - i.e. trader who initiates/submits t...
ExecutingTrader	12	452012	base	Executing Trader (associated with Executing Firm - actually executes)

FIX Tools – Orchestra Server

- Orchestra Server creates rules of engagement documentation (PDF) together with its Orchestra representation (XML)
 - Visualisation and maintenance of Orchestra XML files
 - Comprehensive interactive capabilities to easily define and annotate messages, repeating groups, components, fields, and values.
 - Use FIX Latest or your own Orchestra XML files as starting point
 - Add your user-defined elements
 - Included in the FIX membership
 - Based on the ETP S-Box service from Esprow

See <https://www.fixtrading.org/packages/orchestra-factsheet/> for details.

FIX Tools – Playlist v1.2

FIX Playlist

Creates a subset of an Orchestra file

Input

Source Orchestra file



Drag file to read or

Choose File

FIX Standard

OrchestraFIXLatest.xml

Use Selector File

Clear Input File

Output

Orchestra file to create (*.xml)

myorchestra.xml

Create Orchestra file

User Guide

Terms of Service

Version 1.2

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Select Your Content

(All elements sorted alphabetically. Greyed out items are deprecated)

- + MESSAGES
- + GROUPS
- + COMPONENTS
- FIELDS
 - + Tags 1-999
 - + Tags 1000-1999
 - + Tags 2000-2999
 - + Tags 40000-49999
- + CODESETS
- + DATATYPES

- NewOrderSingle(35=D)
 - Account(1) - Type String
 - AccountType(581) - Type AccountTypeCodeSet
 - AcctIDSource(660) - Type AcctIDSourceCodeSet
 - AffiliatedFirmsTradeIndicator(2525) - Type Boolean
 - AllocID(70) - Type String
 - AuctionAllocationPct(1804) - Type Percentage
 - AuctionInstruction(1805) - Type AuctionInstructionCodeSet
 - AuctionType(1803) - Type AuctionTypeCodeSet
 - BookingType(775) - Type BookingTypeCodeSet
 - BookingUnit(590) - Type BookingUnitCodeSet
 - CancellationRights(480) - Type CancellationRightsCodeSet
 - CashMargin(544) - Type CashMarginCodeSet
 - CIOrderID(11) - Type String
 - CIOrderLinkID(583) - Type String
 - ClearingAccountType(1816) - Type ClearingAccountTypeCodeSet
 - ClearingFeeIndicator(635) - Type ClearingFeeIndicatorCodeSet
 - CommissionData - Component
 - CommissionDataGrp - Group
 - ComplianceID(376) - Type String
 - ComplianceText(2404) - Type String
 - ContraOrderOrigination(2882) - Type OrderOriginationCodeSet
 - ContraRoutingArrangementIndicator(2884) - Type RoutingArrangementIndicatorCodeSet
 - CopyMsgIndicator(797) - Type Boolean
 - CoveredOrUncovered(203) - Type CoveredOrUncoveredCodeSet
 - Currency(15) - Type Currency

Select FIX Standard File

- FIX44Session.xml
- FIXTSession.xml
- OrchestraFIX42.xml
- OrchestraFIX44.xml
- OrchestraFIXLatest.xml

CANCEL

FIX Tools – Playlist

- Third release of Playlist (FIX members only)
 - Generates a base Orchestra XML file from an input Orchestra reference file loaded into your local browser
 - Web-based visualisation of input file with check boxes for selections of messages, groups, components, their fields and values of these fields
 - Selector file to preselect elements of reference file for minor extensions of an existing Orchestra XML file
 - New version 1.2 published October 2023
 - Display of base type and union datatypes for code sets
 - Display number of elements in resulting Orchestra XML file
 - Display and automatic selection of NumInGroup fields in FIELDS
 - Automatic selection of union datatypes in DATATYPES