Asset Types in FundsXML

Which instruments the standard supports, how they differ, and the key data carried per type — from AssetMasterData to Position

FundsXML 4.2.10 | Business & Technical Overview | August 2026

Where Asset Data Lives in a FundsXML Document

Assets are described once in AssetMasterData and referenced from every portfolio position — one description, many holdings.

FundsXML4 | ControlData | **Funds / Fund** | **AssetMasterData** | RegulatoryReportings | CountrySpecificData

AssetMasterData › Asset (1..n)

“What the instrument is” — static reference data

- **UniqueID** — xs:ID — unique key in the document
- **Name · Currency · AssetType** — core identification
- **Identifiers** — ISIN, LEI, Bloomberg, …
- **AssetDetails** — 1 of 23 type-specific blocks

references by UniqueID

FundDynamicData › Portfolio › Position (1..n)

“What the fund holds and what it is worth” — per NAV date

- **UniqueID** — xs:IDREF — points to the Asset
- **TotalValue** — position value in fund currency
- **Type-specific details** — 1 of 21 branches
- **Prices · FX · Exposures · Risk** — valuation context

Also referencing assets: Transactions (AssetUniqueID), Earnings, derivative Underlyings and Repo collateral all point to the same AssetMasterData entry.

One Pattern for Every Asset: Envelope + Details

Every asset and every position share the same common envelope — only the detail block changes with the asset type. ● required ○ optional

Asset — common fields

- ● **UniqueID** — xs:ID — document-wide unique key
- ● **Name** — instrument name (vital for OTC)
- ● **Currency** — nominal currency (ISO 4217)
- ● **AssetType** — 2-letter type code (EQ, BO, …)
- ○ **Identifiers** — ISIN, LEI, Bloomberg, CUSIP, SEDOL, WKN, RIC, FIGI, …
- ○ **Country** — country of asset (ISO 3166)
- ○ **AssetDetails** — type-specific detail block (choice of 23)
- ○ **Ratings / Classifications** — ratings & classification schemes
- ○ **CustomAttributes** — bilateral extension fields

Position — common fields

- ● **UniqueID** — xs:IDREF → Asset in AssetMasterData
- ● **TotalValue** — total position value — fund-currency amounts must sum to fund NAV
- ● **Type-specific details** — exactly one of 21 branches (choice)
- ○ **TotalPercentage** — % of total asset value
- ○ **Currency** — valuation currency
- ○ **FXRates / PriceDate / PricingSource** — valuation context
- ○ **Exposures** — exposure per approach (commitment, AIFMD, …)
- ○ **RiskCodes** — VaR, duration, beta, …
- ○ **Underlyings** — underlying details incl. delta for derivatives

23 Asset Types in 6 Families

Two-letter AssetType codes group into six business families. Each type gets its own slide in this deck.

Traditional Securities
3 types

- **EQ** Equity
- **BO** Bond
- **CP** Commercial Paper / CD

Funds & Fund-like
2 types

- **SC** Share Class (Target Fund)
- **RT** REIT

Derivatives
7 types

- **OP** Option
- **FU** Future
- **FX** FX Forward
- **SW** Swap
- **WA** Warrant
- **CE** Certificate
- **RI** Right

Cash, Deposits & Lending
5 types

- **AC** Account
- **FT** Fixed Time Deposit
- **CM** Call Money
- **RP** Repo
- **LO** Loan

Real & Alternative Assets
4 types

- **RE** Real Estate
- **PE** Private Equity
- **CO** Commodity
- **CR** Crypto Asset

Reference & Technical
2 types

- **IX** Index
- **FE** Fee

EQ Equity EquityType

Traditional Securities

Ordinary and preference shares of listed or unlisted companies — the classic building block of most portfolios.

Reference data · AssetMasterData

- ○ **Issuer** — issuing company (LEI, sector)
- ○ **StockMarket** — listing venues (MIC codes)
- ○ **Industries** — industry classification codes
- ○ **MarketCapitalization** — market cap of the issuer
- ○ **ParValue** — nominal par value per share
- ○ **WithholdingTaxRate** — dividend withholding tax

Holding data · Position

- ● **Units** — number of shares held
- ○ **Price** — market price, multi-currency
- ○ **MarketValue** — value excluding dividends
- ○ **DividendsDue** — declared but unpaid dividends
- ○ **LendedFlag / LendedUnits** — securities-lending status

● required ○ optional

BO Bond BondType

Traditional Securities

Fixed-income securities from government bonds to corporate and convertible bonds — the most detailed asset type in FundsXML.

Reference data · AssetMasterData

- ● **ConvertibleFlag** — convertible yes/no
- ○ **Issuer / Guarantor** — issuing & guaranteeing entity
- ○ **IssueDate / MaturityDate** — lifetime of the bond
- ○ **Coupon** — fix, float, zero; frequency, rate, base index + spread
- ○ **Redemption** — bullet or sinkable, call/put options
- ○ **Yields / Durations** — yield & duration figures
- ○ **DayCountConvention** — ACT/360, 30/360, …
- ○ **ConvertibleBond** — conversion terms (nested)

Holding data · Position

- ● **Nominal** — nominal value held
- ○ **Price / DirtyPrice** — clean and dirty price
- ○ **MarketValue** — value excluding interest
- ○ **InterestClaimNet / Gross** — accrued interest claims
- ○ **AccruedInterestDays** — days of accrued interest
- ○ **Poolfactor / Indexfactor** — amortisation & indexation
- ○ **CollateralValue** — collateral given/received

● required ○ optional

CP Commercial Paper / CD CommercialPaperType

Traditional Securities

Short-term money-market paper: commercial paper and certificates of deposit — a slimmed-down bond.

Reference data · AssetMasterData

- ● **Issuer** — issuing entity
- ● **MaturityDate** — maturity of the paper
- ○ **Coupon** — same structure as Bond coupon
- ○ **RedemptionRate** — redemption rate
- ○ **IsAssetBacked** — asset-backed indicator
- ○ **DayCountConvention** — interest day-count basis

Holding data · Position

- ● **Nominal** — nominal value held
- ○ **Price / DirtyPrice** — clean and dirty price
- ○ **MarketValue** — value excluding interest
- ○ **InterestClaimNet / Gross** — accrued interest claims
- ○ **AccruedInterestDays** — days of accrued interest

● required ○ optional

SC Share Class (Target Fund) ShareClassDetailsType

Funds & Fund-like

Units of another fund's share class — used for fund-of-fund holdings and ETF positions.

Reference data · AssetMasterData

- ○ **Issuer** — fund management company
- ○ **ShareClassType** — distribution/accumulation, ...
- ○ **ExchangeTradedFundFlag** — ETF indicator
- ○ **Listing / StockMarket** — listing information
- ○ **IssueDate / MaturityDate** — lifecycle dates

Holding data · Position

- ● **Shares** — number of fund shares held
- ○ **Price** — NAV / market price
- ○ **PurchaseValue** — historic purchase value
- ○ **DividendsDue** — distributions due

Note: ***Fund-of-fund holdings can be decomposed via PositionsDecomposed (look-through).***

● required ○ optional

RT REIT REITType

Funds & Fund-like

Real Estate Investment Trusts — listed real-estate vehicles traded like equities.

Reference data · AssetMasterData

- ○ **Issuer** — REIT company
- ○ **Listing** — exchange listing indicator

Holding data · Position

- ○ **Units** — number of units held
- ○ **Price** — market price
- ○ **MarketValue** — value excluding dividends
- ○ **DividendsDue** — dividends due
- ○ **PurchaseValue** — historic purchase value

Note: ***Deliberately thin master data — identification comes from the common asset envelope.***

● required ○ optional

OP

Option

OptionType

Derivatives

Exchange-traded and OTC options on stocks, indices, currencies, bonds and futures.

Reference data · AssetMasterData

- ● **Type** — SO, IO, IRO, CO, BO, ...FO variants
- ● **ContractSize** — units per contract
- ● **MaturityDate** — expiry date
- ● **CallPutIndicator** — call or put
- ● **StrikePrice** — strike with currency
- ○ **ExecutionStyle** — European / American
- ○ **Underlyings** — underlying assets (linkable)

Holding data · Position

- ● **Contracts** — number of contracts
- ○ **Price** — option premium/price
- ○ **HedgeRatio** — hedging ratio %
- ○ **Underlyings/.../Delta** — per-position delta

● required ○ optional

FU Future FutureType

Derivatives

Exchange-traded futures and forward rate agreements on bonds, equities, indices, currencies and interest rates.

Reference data · AssetMasterData

- ● **Type** — BF, CF, EF, FRA, IF, IRF, MMF
- ● **ContractSize** — units per contract
- ● **MaturityDate** — expiry / delivery date
- ○ **MarginMethod** — margining methodology
- ○ **Underlyings** — underlying assets (linkable)

Holding data · Position

- ● **Contracts** — count — negative = short
- ○ **PrelProfitLoss** — preliminary P&L of the position
- ○ **VariationMarginDaily / Overall** — margin flows
- ○ **HedgeRatio** — hedging ratio %

● required ○ optional

FX

FX Forward ForeignExchangeTradeType

Derivatives

OTC currency forwards — the standard instrument for currency hedging of share classes and portfolios.

Reference data · AssetMasterData

- ● **CurrencyBuy + AmountBuy** — bought leg
- ● **CurrencySell + AmountSell** — sold leg
- ● **MaturityDate** — settlement date
- ● **Counterparty** — OTC counterparty (LEI)
- ○ **AgreedFxRate** — contracted forward rate
- ○ **Deliverable** — deliverable vs NDF

Holding data · Position

- ○ **HedgeRatio** — hedging ratio %
- ○ **FxRateForEvaluation** — valuation FX rate

Note: ***Both currency legs live in AssetMasterData; the position's Currency field carries the base currency.***

● required ○ optional

SW Swap SwapType

Derivatives

OTC swaps of every flavour: interest rate, credit default, total return, currency, inflation and commodity swaps.

Reference data · AssetMasterData

- ● **Type** — IRS, CDS, TRS, currency, inflation, …
- ● **MaturityDate** — end of the swap
- ● **Counterparty** — OTC counterparty (LEI)
- ● **Legs (1..n)** — BUY/SELL, currency, notional per leg
- ○ **Leg details** — spread, fixed rate, frequencies, underlying
- ○ **CreditEvents** — CDS credit events

Holding data · Position

- ○ **LegValues (BUY/SELL)** — current value per leg
- ○ **PresentValueOfPayments** — PV of future payments
- ○ **CurrentSpread** — current spread
- ○ **HedgeRatio** — hedging ratio %

● required ○ optional

WA Warrant

WarrantType

Derivatives

Securitised options (Optionsscheine) issued by banks — structurally close to options but traded as securities.

Reference data · AssetMasterData

- ● **ContractSize** — units per warrant
- ● **MaturityDate** — expiry date
- ● **CallPutIndicator** — call or put
- ● **StrikePrice** — strike with currency
- ○ **Issuer** — issuing bank
- ○ **Underlyings** — underlying assets

Holding data · Position

- ● **Units** — number of warrants held
- ○ **Price** — market price
- ○ **PurchaseValue** — historic purchase value

● required ○ optional

CE Certificate CertificateType

Derivatives

Structured certificates on indices, commodities, currencies or baskets of securities.

Reference data · AssetMasterData

- ● **Type** — Commodity, Currency, Future, Index, Interest Rate, Security, Other
- ○ **Underlyings** — underlying assets
- ○ **Issuer** — issuing bank
- ○ **IssueDate / MaturityDate** — lifecycle dates

Holding data · Position

- ● **Units** — number of certificates held
- ○ **Price** — market price
- ○ **LendedFlag / LendedUnits** — securities-lending status

● required ○ optional

RI Right (inline type)

Derivatives

Subscription rights and similar entitlements from corporate actions.

Reference data · AssetMasterData

- ○ **Type** — type of the right
- ○ **Issuer** — issuing company

Holding data · Position

- ○ **Units** — number of rights held
- ○ **Price** — market price
- ○ **MarketValue** — value excluding dividends

● required ○ optional

AC Account AccountType

Cash, Deposits & Lending

Cash, margin and collateral accounts at custodians and brokers — including receivables and liabilities.

Reference data · AssetMasterData

- ● **Counterparty** — bank / custodian (LEI)
- ○ **IBAN / AccountNumber** — account identification
- ○ **AccountType** — Cash, Margins, Collaterals, Receivables, Liabilities
- ○ **InterestRateCredit / Debit** — interest conditions

Holding data · Position

- ○ **MarketValue** — account balance
- ○ **Interests** — accrued interest

● required ○ optional

FT Fixed Time Deposit FixedTimeDepositType

Cash, Deposits & Lending

Term deposits with a fixed maturity placed with a bank counterparty.

Reference data · AssetMasterData

- ● **MaturityDate** — end of the deposit
- ● **Counterparty** — deposit-taking bank
- ○ **StartDate** — start of the deposit
- ○ **InterestRate** — agreed rate
- ○ **DayCountConvention** — interest day-count basis

Holding data · Position

- ○ **MarketValue** — value excluding interest
- ○ **Interests** — accrued interest

● required ○ optional

CM Call Money

CallCapitalType

Cash, Deposits & Lending

Overnight / call money placed or taken, terminable on demand.

Reference data · AssetMasterData

- ● **MaturityDate** — (notional) maturity
- ● **Counterparty** — bank counterparty
- ○ **InterestRate** — agreed rate
- ○ **CollateralFlag / Direction** — collateralisation

Holding data · Position

- ○ **MarketValue** — value excluding interest
- ○ **Interests** — accrued interest
- ○ **CollateralValue** — collateral paid (−) / received (+)

● required ○ optional

RP Repo ReposType

Cash, Deposits & Lending

Sale-and-repurchase agreements: classic repo, reverse repo, buy/sell-back and sell/buy-back.

Reference data · AssetMasterData

- ● **RepoType** — REPO, REVERSE, BSB, SBB
- ● **MaturityDate + Counterparty** — term & counterparty
- ● **InitialMargin / MarginCallType / PledgeType** — margining terms
- ○ **MarginHaircut** — haircut on collateral
- ○ **TriPartyAgent / CCP** — settlement infrastructure
- ○ **Legs (max 3)** — cash amounts, rates per leg

Holding data · Position

- ○ **MarketValue** — current market value
- ○ **InterestAccruals** — far-leg interest amount
- ○ **VariationMargin** — margin posted / received
- ○ **CollateralAllocation** — collateral items with nominal + IDREF link

● required ○ optional

LO Loan LoanType

Cash, Deposits & Lending

Bilateral loans where the fund acts as lender or borrower — including real-estate financing.

Reference data · AssetMasterData

- ● **FundRole** — LENDER or BORROWER
- ● **Counterparty** — loan counterparty
- ● **MaturityDate** — end of the loan
- ○ **Collateralization** — collateralised yes/no
- ○ **InterestHedgedBy / FxHedgedBy** — IDREF links to hedging derivatives
- ○ **CorrespondingRealEstate** — financed property

Holding data · Position

- ○ **Price** — valuation price
- ○ **MarketValue** — current market value
- ○ **InterestAccruals** — accrued interest

● required ○ optional

RE

Real Estate RealEstateType

Real & Alternative Assets

Directly held properties of open- and closed-ended real-estate funds, with full cost and rental economics.

Reference data · AssetMasterData

- ○ **InvestmentCosts** — purchase price + construction costs
- ○ **ConstructionYear / TotalRefurbishmentYear** — building history
- ○ **TypeOfUse / Zoning** — usage classification
- ○ **UsableArea** — usable area
- ○ **Address / LocationType** — location details

Holding data · Position

- ○ **MarketValue** — appraised value
- ○ **RentIncome / RentAccruals** — rental economics
- ○ **MaintenanceReserve / Provision** — maintenance funds
- ○ **VacancyCosts** — cost of vacancy
- ○ **TaxLiabilities / OtherAssets / OtherLiabilities** — balance-sheet items

● required ○ optional

PE

Private Equity PrivateEquityType

Real & Alternative Assets

Unlisted company stakes and SPV investments with optional look-through to the SPV's own holdings.

Reference data · AssetMasterData

- ● **Company** — portfolio company (LEI, sector)
- ○ **PrivateEquityID** — link to separate look-through file for SPV assets

Holding data · Position

- ○ **OwnershipPercentage** — % of the company / SPV owned

● required ○ optional

CO Commodity (inline type)

Real & Alternative Assets

Physical commodity holdings: precious metals, energy, agricultural products and more.

Reference data · AssetMasterData

- ● **Group** — AG, EN, EV, EX, FR, IN, ME
- ○ **SubGroup** — e.g. coal, gold, livestock
- ○ **Description** — e.g. “Gold”, “Copper”
- ○ **WeightSize** — Gram, Kilogram, Ounce, Carat
- ○ **StockMarket / Listing** — trading venue

Holding data · Position

- ○ **No type-specific fields** — value carried entirely by TotalValue

● required ○ optional

CR

Crypto Asset CryptoType

Real & Alternative Assets

Crypto assets classified according to the EU MiCA regulation (EIOPA-BoS-22/216).

Reference data · AssetMasterData

- ● **Type** — e-money token, asset-referenced token, utility token, other

Holding data · Position

- ○ **No position branch** — asset side only in 4.2.10

Note: ***Crypto exists as an asset type but has no matching Position branch yet.***

● required ○ optional

IX Index IndexType

Reference & Technical

Market indices as reference data — used as benchmarks, coupon base indices and derivative underlyings.

Reference data · AssetMasterData

- ○ **IndexProvider** — index provider company
- ○ **Category** — Equity, Fixed Income, ESG, Multi-Asset, ...
- ○ **Region** — Developed / Emerging Markets
- ○ **Size** — large / mid / small cap

Holding data · Position

- ○ **No position branch** — indices are referenced, not held

Note: *Indices are pure reference data — linked from benchmarks, floating coupons and underlyings.*

● required ○ optional

FE Fee FeeType

Reference & Technical

Fee and cost positions (management fees, custody fees, ...) carried in the portfolio as bookkeeping entries.

Reference data · AssetMasterData

- ● **Counterparty** — fee recipient
- ○ **Type** — kind of fee

Holding data · Position

- ○ **No type-specific fields** — amount carried by TotalValue (usually negative)

● required ○ optional

Valuation Mechanics (Technical)

TotalValue — the one hard rule

Every position must carry a TotalValue. The fund-currency amounts of all positions must add up to the fund's total NAV.

Includes accrued interest; that is why bond MarketValue is reported excluding interest, with interest claims separate.

Multi-currency amounts

FundAmountType repeats the same value once per currency, flagged with isFundCcy / isShareClassCcy:

```
<Amount ccy="USD">105.20</Amount>
<Amount ccy="EUR" isFundCcy="true">97.05</Amount>
```

Valuation context

- **PriceDate** — date of the price used for NAV
- **PricingSource** — Bloomberg, Reuters, … or free-text OTC source
- **FXRates** — rates used, with from/to currency

Risk & exposure per position

- **Exposures** — one value per approach (commitment, AIFMD, …)
- **RiskCodes** — VaR, duration, beta, sharpe ratio, …
- **Underlyings** — per-underlying delta, price, weight for derivatives

Cross-References & Validation (Technical)

ID / IDREF linkage	Asset/UniqueID is xs:ID; positions, transactions, earnings, underlyings and repo collateral reference it via xs:IDREF. AssetMasterData must therefore travel in the same document as the portfolio.
23 asset branches vs 21 position branches	Index (IX) and Crypto (CR) exist in AssetMasterData only — they have no type-specific position branch in 4.2.10.
AssetType code vs. detail block	The 2-letter AssetType code and the chosen AssetDetails branch must match 1:1 — a business rule, not enforced by the schema.
XSD 1.1 required	FundsXML4.xsd uses XSD 1.1. Validate with Saxon-EE or Altova XMLSpy — xmllint and other XSD 1.0 validators will not work.
Empty position branches	Fee (FE) and Commodity (CO) position details are deliberately empty markers — the value is carried entirely by TotalValue.

Key Takeaways

1	**One standard, 23 asset types**	From plain equities and bonds to swaps, repos, real estate and crypto — grouped in six business families.
2	**Clean separation of concerns**	AssetMasterData answers “what is it?”, Position answers “how much do we hold and what is it worth?” — linked by UniqueID.
3	**Same envelope everywhere**	Common identification, valuation, exposure and risk fields for every type; only the detail block differs.
4	**Multi-currency by design**	Every amount can be reported in the asset, fund and share-class currency simultaneously.
5	**Extensible**	CustomAttributes and OtherID fields cover bilateral extensions without breaking the standard.

Resources & Contact

FundsXML website	www.fundsxml.org — specification, news, working groups
Schema	FundsXML4.xsd version 4.2.10 (XSD 1.1) with modular sources in include_files/
Branding & templates	branding.status20.net — logos, colors, presentation and whitepaper templates
Contact	www.fundsxml.org/contact