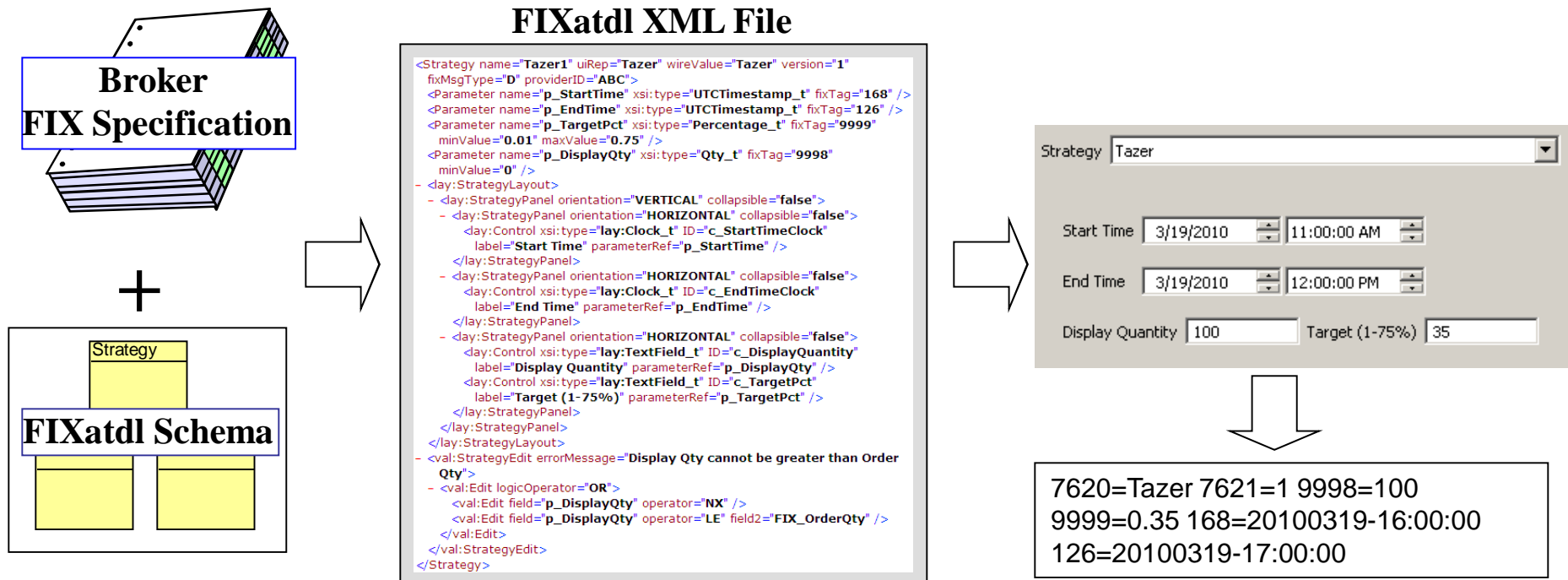


FIXatdISM – Revolutionizing the Algorithmic Trading Deployment Process

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American Century Investments

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Introducing FIXatdlSM: FIX Protocol standard XML mark-up language used to define the interface for an algorithmic order



Broker creates a FIXatdl XML file describing its algorithms, parameters, FIX tag mappings, validation rules, and how the algorithms should be rendered in any 3rd party application

OMS vendors parse these FIXatdl XML files & render them in their application eliminating the need for custom programming

FIXatdl – GUI Widget Library

Clock

Start of Day
 9 : 30 PM

TextField

Volume Limit (1-100%): 15

SingleSpinner

Duration: 5 secs

DoubleSpinner

Limit Price: 18.5

CheckBox

Pegging

CheckBoxList

Exclude Auctions

Open Close

RadioButton

Price Level:

RadioButtonList

VWAP
 TWAP
 Watch

DropDownList

Limit Price:

Limit Price:

Relative Limit Price:

Slider

Lowest Neutral Highest

Label

It is the trader's responsibility to select the appropriate end time for the buy back strategy per each security as defined by Rule 10b-18.

EditableDropDownList

XYZ

- ABC
- AXP
- BIIB
- C
- CSCO
- INTC
- MSFT

SingleSelectList

VWAP

TWAP

IceBerg

Sweep

MultiSelectList

ARCA

BATS

BIDS

CBX

EDGE

FIXatdl - Key Points

- Revolutionizes the algorithmic trading Deployment Process
- Complements the FIX Protocol messaging standard
 - Specifies how algo orders should be expressed on client desktop apps
 - Can specify validation rules to enforce
 - Specifies how order strategy and parameters should be expressed “on the wire” within FIX Protocol (tag=value) message
 - No changes required to underlying FIX infrastructure (engine & network)
- A “Triple Win” providing key benefits to:
 - Buyside
 - Sellside
 - Vendors

FIXatdl – A Win, Win, Win for the Industry

Sellside Algo Providers

- Get their algos “on the shelf” and in the hands of customers faster
- Better return on large investment in algo development

OMS/EMS Vendors

- Able to include new algorithms within their systems more quickly and at reduced cost
- Significantly less re-programming effort to support changes

Buyside Firms

- Faster access to new and innovative trading strategies enabling more timely and effective response to dynamic market conditions

End Result: Faster time-to-market with less effort and lower cost

FIXatdl – Multi-language support (ex English/Japanese)

FIXatdl – Multi-language support

(ex English/Japanese)

Simply substitute non-English for the values displayed on screen to user

```

- <Strategy name="A_WITHVOLUME" uiRep="With Volume (Asia)" wireValue="2" version="2.0.0"
  fixMsgType="D" providerID="Nomura">
  <Description>市場の累積出来高に対して、ユーザが設定した参加率を守りながら発注していくストラテジーです。
  </Description>
  <!-- Asia With Volume: Supported Regions -->
  <Regions>
  <Region name="AsiaPacificJapan" inclusion="Include" />
  </Regions>
  <!-- Asia With Volume: Supported Asset-Classes -->
  <SecurityTypes>
  <SecurityType name="CS" inclusion="Include" />
  </SecurityTypes>
  <!-- Asia With Volume: FIX Parameters -->
  <Parameter name="TargetSubID" xsi:type="String_t" use="required" mutableOnCxlRpl="false"
    revertOnCxlRpl="true" fixTag="57" definedByFIX="true" constValue="MODELEX">
  <Description>ModelExに回送する為のインストラクション</Description>
  </Parameter>
  <Parameter name="HandInst" xsi:type="Char_t" use="required" mutableOnCxlRpl="false"
    revertOnCxlRpl="true" fixTag="21" definedByFIX="true" constValue="1">
  <Description>電子取引の為のインストラクション</Description>
  </Parameter>
  <Parameter name="ExecInst" xsi:type="MultipleCharValue_t" use="optional"
    mutableOnCxlRpl="true" revertOnCxlRpl="false" fixTag="18" definedByFIX="true">
  <Description>Nomura NXでのクロスや他リクイティへのアクセス。</Description>
  <EnumPair enumID="e_OKToCross" wireValue="B">
  <Description>クロスあり</Description>
  </EnumPair>
  <EnumPair enumID="e_NoCross" wireValue="A">
  <Description>クロスなし</Description>
  </EnumPair>
  </Parameter>
  <Parameter name="EffectiveTime" xsi:type="UTCTimestamp_t" use="optional"
    mutableOnCxlRpl="true" revertOnCxlRpl="false" fixTag="168" definedByFIX="true">
  <Description>初期設定では、開始時刻はそれぞれマーケットの寄りの時間が設定されています。
  </Description>
  </Parameter>
  <!-- Asia With Volume: Layout - Optional Parameters -->
  <lay:StrategyPanel orientation="VERTICAL" border="Line" title="任意項目"
    collapsible="true">
  <lay:StrategyPanel orientation="VERTICAL" border="None" collapsible="false">
  <lay:Control ID="c_TighterToTargetSchedule" xsi:type="lay:CheckBox_t"
    parameterRef="TighterToTargetSchedule" label="厳密にスケジュールに沿って発注"
    tooltip="このオプションを使用すれば、より厳密にターゲット・ベンチマークに従った執行をさせることが出来ます。" checkedEnumRef="e_TTP" uncheckedEnumRef="e_Normal" />
  </lay:StrategyPanel>
  <lay:StrategyPanel orientation="VERTICAL" border="Line" title="寄付きと引けを除く"
    collapsible="false">
  <lay:Control ID="c_ExcludeAuctions" xsi:type="lay:CheckBoxList_t"
    parameterRef="ExcludeAuctions" tooltip="寄付きと引けのオークションに参加するか
    否かを指定することが出来ます。">
  <lay:ListItem enumID="e_AMOpen" uiRep="前場寄り" />
  <lay:ListItem enumID="e_PMOpen" uiRep="後場寄り" />
  <lay:ListItem enumID="e_PMClose" uiRep="大引け" />
  </lay:Control>
  </lay:StrategyPanel>
  </lay:StrategyPanel>
  <!-- Asia With Volume: Validations -->
  <val:StrategyEdit errorMessage="終了時刻より開始時刻が前になっています。">
  <val:Edit logicOperator="OR">
  <val:Edit field="EffectiveTime" operator="NX" />
  <val:Edit field="ExpireTime" operator="NX" />
  <val:Edit logicOperator="AND">
  <val:Edit field="EffectiveTime" operator="EX" />
  <val:Edit field="ExpireTime" operator="EX" />
  <val:Edit field="ExpireTime" operator="GT" field2="EffectiveTime" />
  </val:Edit>
  </val:Edit>
  </val:StrategyEdit>

```

FIXatdl - Summary

- Revolutionizes the algorithmic trading Deployment Process
- Complements the FIX Protocol messaging standard
- A “Triple Win” providing key benefits to:
 - Buyside
 - Sellside
 - Vendors
- End result is **Faster Time-to-Market** for the algo provider with **Less Effort and Lower Cost** for the customer and customer’s vendors

www.fixprotocol.org/FIXatdl