STP Whitepaper

Straight-Through Processing Spotlight

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This whitepaper presents an innovative approach to achieving pre-matching across multiple products and markets, showing how true STP can be achieved using Rapid Addition's products.

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Introduction

The role of the FIX Protocol in the pre-trade and trading space is well-known. Less so are its capabilities in the post-trade environment. This paper aims to show how FIX can be used to deliver Straight-Through-Processing and how the experience can be enhanced with the use of Rapid Addition's software.

About Rapid Addition

With over 70 clients worldwide, including stock exchanges, Rapid Addition is the leading provider of FIX and FAST related software solutions to the global financial community.

Rapid Addition is a technology partner of Microsoft and founding member of the Intel Low Latency Labs. Rapid Addition is the only FIX vendor to continuously test their products in the labs. RA-Cheetah, the flagship FIX engine, gives a consistent low-latency performance and is the only FIX engine to provide this level of consistent measurement. RA-Cheetah™ and GRHub™ (our order routing software) run on our advanced low-latency GenerationZero™ technology, which, inter-alia ensures no garbage collection.

For further information, please visit www.rapidaddition.com

About the author, Simon-Leighton Porter

Simon Leighton-Porter is COO of Rapid Addition. Having worked in investment banking for over 18 years and has extensive experience of the front office both from a business and IT perspective. Prior to joining Rapid Addition, Simon spent over 10 years with Citigroup. His product experience covers equities, fixed income, and derivatives. He is a member of the FIX Global Technical Committee, is chairman of the FIX FX OTC Options Working Group, and represented FIX Protocol Limited on the MiFID Joint Working Group. In 2006 he received the ISITC Europe Personal Contribution to Operational Efficiency Award.

A New Approach to Straight-Through-Processing (STP)

For many institutions, even the largest, true STP remains an aspiration, rather than a reality. The complexities of cross-border, multi-asset class trading and a processing environment, frequently combined with legacy systems, often make the costs of achieving process automation prohibitive. However, the flexibility offered by RA-ShortCut™, Rapid Additions FIX Adaptor for Microsoft's BizTalk, unlike other workflow solutions, mean it can be used practically anywhere in the business process.

The diagrams presented in this paper follow the business flows between a customer of a broker (private banks; hedge funds; other brokers; asset managers; corporate treasury etc).
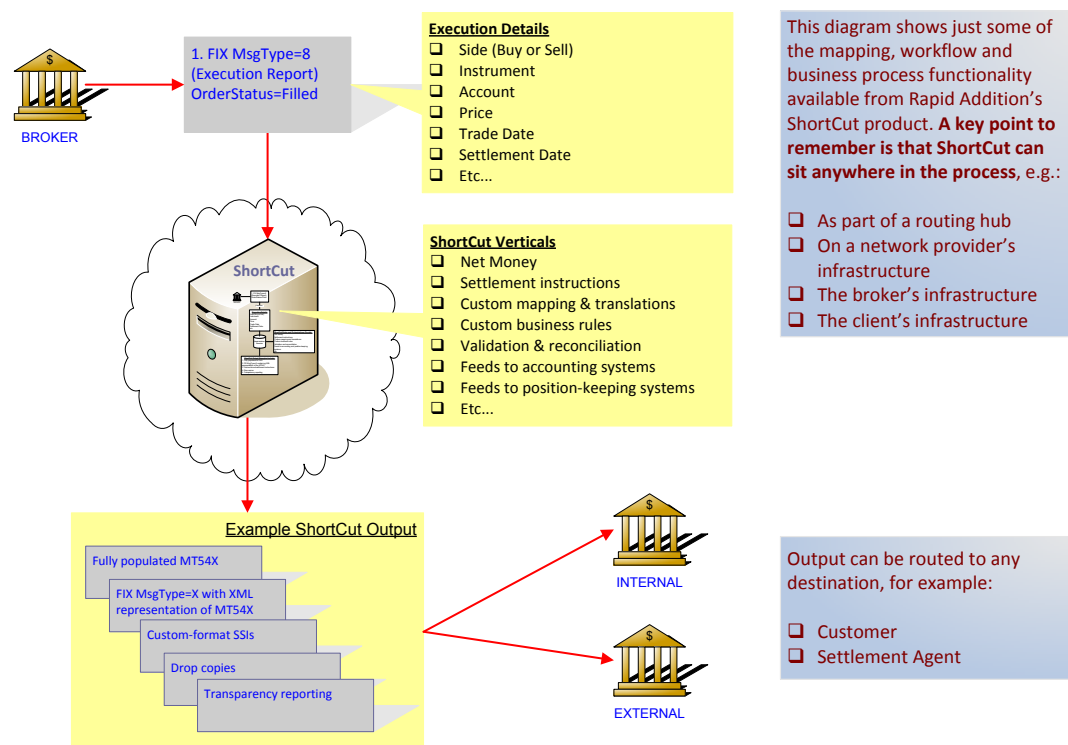
BROKER

1. FIX MsgType=8
(Execution Report)
OrderStatus=Filled

Execution Details
❑ Side (Buy or Sell)
❑ Instrument
❑ Account
❑ Price
❑ Trade Date
❑ Settlement Date
❑ Etc...

This diagram shows just some of the mapping, workflow and business process functionality available from Rapid Addition's ShortCut product. **A key point to remember is that ShortCut can sit anywhere in the process**, e.g.:

❑ As part of a routing hub
❑ On a network provider's infrastructure
❑ The broker's infrastructure
❑ The client's infrastructure

ShortCut

ShortCut Verticals
❑ Net Money
❑ Settlement instructions
❑ Custom mapping & translations
❑ Custom business rules
❑ Validation & reconciliation
❑ Feeds to accounting systems
❑ Feeds to position-keeping systems
❑ Etc...

Example ShortCut Output
Fully populated MT54X
FIX MsgType=X with XML representation of MT54X
Custom-format SSIs
Drop copies
Transparency reporting

INTERNAL

EXTERNAL

Output can be routed to any destination, for example:

❑ Customer
❑ Settlement Agent

Figure 1

Figure-1 shows the FIX conversation from the point where the broker sends a final Execution Report message indicating that the order is filled or done for the day. This message contains the information necessary to settle the trade, such as:

- Whether it was a Buy or a Sell;
- The instrument identifier;
- Price;
- Quantity;
- Trade date;

- Settlement date;
- Etc…

If not supplied on the Execution Report, RA-ShortCut™ can be used to:

- retrieve and derive settlement instructions for all parties;
- calculate net money and apply allocation/confirmation details.

RA-ShortCut in the Client's Environment

Figure 2 presents an example shows how RA-ShortCut can be used within the client's infrastructure.

1. MsgType=D
New Order Single

2. MsgType=8
Execution Report
OrderStatus=Filled

CUSTOMER

BROKER

Execution Details

ShortCut

Fully-populated
Settlement message:
MT54X/XML/Custom format

SETTLEMENT AGENT
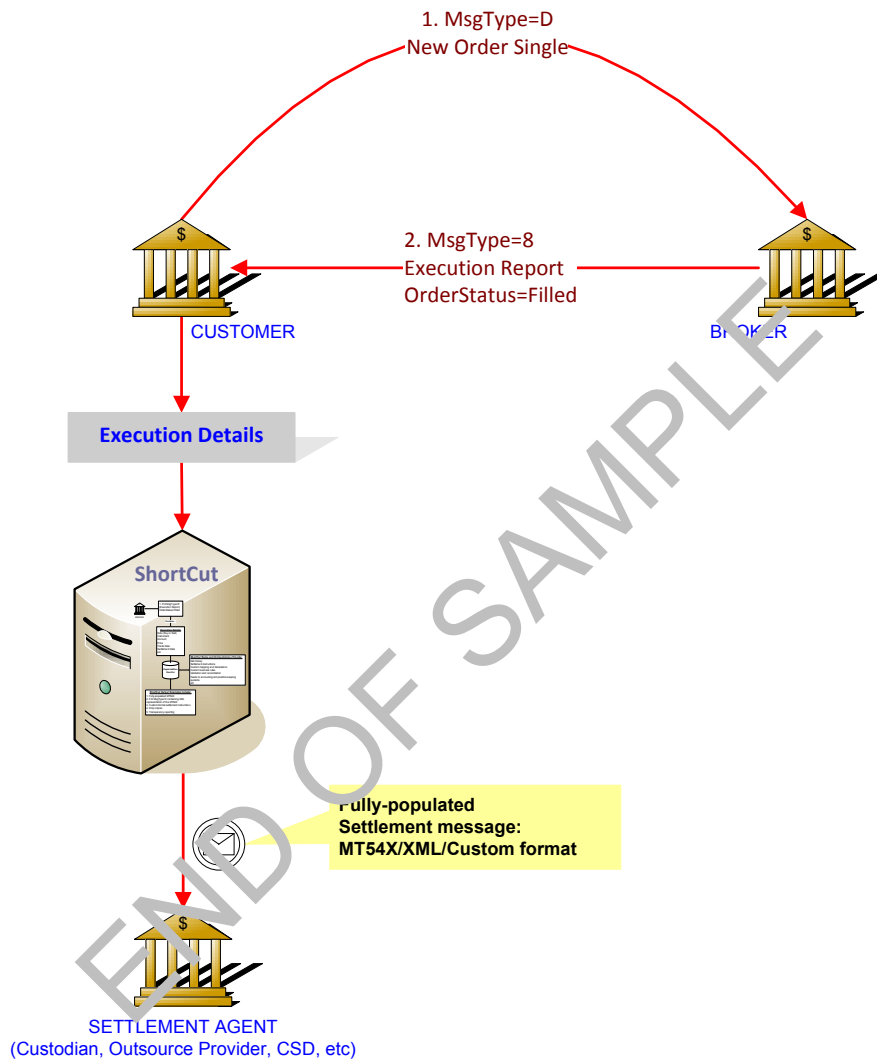(Custodian, Outsource Provider, CSD, etc)

Figure 2

In this instance, the execution details from the FIX message are consumed by RA-ShortCut which could, for example, carry out some of the following tasks:

- Reconciliation
- Posting to internal books and records
- Internal reporting
- Regulatory reporting
- Retrieval of standing settlement instructions
- Creation of a fully-populated SWIFT MT54X message for onward transmission to its settlement provider