



SIX Exfeed

SIX Timestamp Analytics (STA) Product Guide

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1 Introduction

1.1 Purpose and Scope

This Product Guide provides relevant information on SIX Timestamp Analytics (STA) according to the General Terms and Conditions for SIX Analytics Services.

This Product Guide does not take precedent over the Agreement on SIX Analytics Services (including the General Terms and Conditions for SIX Analytics Services).

2 Data Format

2.1 File Format

STA is provided in two parquet files.

2.2 File Name

The parquet files are called as follows.

Data Content	File Name
Private Messages File	File naming scheme: "six-timestamp-analytics-private-{participant-abbrev}-YYYYMMDD.parquet", where participant-abbrev indicates that the file is specific to an individual trading participant. Example: For participant "TEST1", the file containing data for 20 June 2025 would be named "six-timestamp-analytics-private-messages-TEST1-20250620.parquet"
Trade Messages File	File naming scheme: "six-timestamp-analytics-trades-YYYYMMDD.parquet" Example: The file containing data for 20 June 2025 would be named "six-timestamp-analytics-trade-messages-20250620.parquet"

Table 1 File Naming Convention

3 Data Content

STA provides insights into the message arrival on SIX Swiss Exchange for order messages in co-location through two files: The "Private Messages File" and the "Trade Messages File".

3.1 Sample Construction

3.1.1 Message Coverage

STA exclusively includes OTI messages from the Production Environment (P01), received through the available co-location connections.



For detailed information on access to the co-location connections, please contact SIX Exfeed.

3.1.2 Private Messages File

The Private Messages File shows the inbound timestamps of the specified Soup Code's for the following message types:

- Enter Order Message [O]
- Replace Order Message [U]
- Cancel Order Message [X]

The designated Soup Codes to be included in the Private Messages File have to be specified in the SIX Analytics Services - Order Form.

3.1.3 Trade Messages File

The Trade Messages File shows the earliest¹ inbound timestamps of the following message types:

- Enter Order Message [O]
- Replace Order Message [U]

for the following outbound messages:

- Executed Order Message [E] with book type "C" (CLOB) and liquidity flag "R" (Removed for the aggressor).²

3.2 Data Fields

3.2.1 Private Messages File

The Private Messages File shows the following fields:

Field Name	Format	Definition
date	str	Date in YYYY-MM-DD format
orderbook	int	SIX Swiss Exchange security identifier
isin	str	ISIN code
currency	str	Trading currency
group	str	ID for symbol grouping (board only)
trading_segment_id	int	ID for trading segment
inbound_time	long	Time recorded at the inbound (in nanoseconds since midnight)
inbound_message_type	str	The message type of the inbound message
soup_code	str	The soup code
src_ip	str	The IP address of the sender of the message
src_port	int	The port number of the sender of the message
dst_ip	str	The IP address of the receiver of the message

¹ The same SoupBinTCP user can be logged on twice by connecting each session to a different OTI server address, and that transactions can be sent over one single connection or both connections. In the latter case (hot-hot setup), only the inbound time of the message arriving first at the inbound will be shown in the Trade Messages File.

² Executions of the hidden resting part of iceberg orders are excluded from the sample, despite having liquidity flag "R". If an incoming aggressive order executes both against the visible and hidden portions of an iceberg order, the execution of the hidden portion is also marked as aggressive with liquidity flag "R", as the top-up event creates a new order with a new order id.

Field Name	Format	Definition
dst_port	int	The port number of the receiver of the message
client_order_token	int	The Order Token of the message
existing_order_token	int	The Existing Order Token of the replacement order
replacement_order_token	int	The Replacement Order Token of the replacement order
order_verb	str	The side of the order – “B” - Buy – “S” - Sell
order_price	int	The accepted price of the order ³
order_quantity	int	The total number of units accepted
order_number	str	The day unique original Order Number assigned by the exchange at order submission ⁴
existing_order_number	str	The day unique original Order Number of the existing order referenced at order replacement

Table 3 Data Fields of Private Messages File

3.2.2 Trade Messages File

The Trade Messages File shows the following fields:

Field Name	Format	Definition
date	str	Date in YYYY-MM-DD format
orderbook	int	SIX Swiss Exchange security identifier
isin	str	ISIN code
currency	str	Trading currency
group	str	ID for symbol grouping (board only)
trading_segment_id	int	ID for trading segment
inbound_time	long	Time recorded at the inbound (in nanoseconds since midnight)
outbound_message_type	str	The message type of the outbound message
order_verb	str	The side of the order – “B” - Buy – “S” - Sell
executed_price	int	The executed price ³
executed_quantity	int	The executed quantity
match_number	int	The day unique Match Number (generated by the exchange)

³ Prices are represented in the “Price” data type format as defined in the OUCH Trading Interface (OTI) Specification.

⁴ The order number refers to the original order id assigned at the time of order submission, also if a new order id has been subsequently assigned as a result of an Order Priority Update Change Message (T).

Field Name	Format	Definition
book_type	str	Orderbook of the execution - "C" - Central Limit Order Book - "E" - Swiss EBBO - "L" - Quote Driven Market - "M" - SwissAtMid - "N" - Central Limit Order Book non-displayed - "Q" - Quote on Demand
liquidity_flag	str	The liquidity flag of the execution - "A" - Added for the passive Principal (resting order) - "R" - Removed for the aggressor - "U" - Uncross for auction executions

Table 4 Data Fields of Trade Messages File

SIX Exfeed AG
Hardturmstrasse 201
8005 Zurich
Switzerland

T +41 58 399 2977