



# J-GATE

**Alternative Data Service**  
**J-GATE ITCH Historical CSV Data**  
**Specification**

Version 1.0

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The contents of this document are subject to change without notice.

## Revision history to version 1.0

#	Date	Chapter	Change description	Remark
1	2021/9/21	-	Initial version.	-

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# 1 About This Specification

## 1.1 Introduction

This is a specification document for “J-GATE ITCH Historical CSV Data”, one of datasets of the Alternative Data Service (“the Service”). It mainly describes information necessary for users of the Service to handle the dataset.

It is prohibited to redistribute this document.

## 2 Service Details

### 2.1 Data Overview

J-GATE ITCH Historical CSV Data is a set of CSV files containing market data disseminated from ITCH Data Feed during the period of July 19, 2016 through September 16, 2021 when J-GATE2.0 system was running. However, for market data of Options on OSE Commodity Futures, the period is from July 27, 2020 to September 16, 2021. The data is only available as historical data, to be provided on-demand through the Spot Data Service.

## 3 Dataset Details

### 3.1 File Specification

File name	Format	Character code	Line feed code	Delimiter	Header
srnd-itich_yyyymmdd_A.csv	CSV	UTF-8-	LF	, (comma)	*1
srnd-itich_yyyymmdd_B.csv	CSV	UTF-8-	LF	, (comma)	*1
srnd-itich_yyyymmdd_C.csv	CSV	UTF-8-	LF	, (comma)	*1
srnd-itich_yyyymmdd_D.csv	CSV	UTF-8-	LF	, (comma)	*1
srnd-itich_yyyymmdd_E.csv	CSV	UTF-8-	LF	, (comma)	*1

“yyymmdd” in the file name indicates a business date. Business date here means “business date in J-GATE” spanning from J-GATE online open (system startup at 6:00 a.m. of the day) to J-GATE online close (night session close of the following day). One file records information received in this time range.

Data of each multicast group is provided in an individual file. For a mapping of files and multicast groups, please see “3.1.1 File Corresponding to Each Multicast Group”.

\*1: Texts below are printed at the beginning and end of the file respectively.

# Beginning of the file

```
java -cp '/opt/omex/ose/ose/df/cur/bin/*' genium.trading.itch.client.ItchReader binaryfile:///var/data/jpx/ap/store/itch/binary/RC-[1-5].VRD
connectionOpened
onStartOfSession
```

# End of the file

```
onEndOfSession
connectionLost
```

### 3.1.1 File Corresponding to Each Multicast Group

Multicast group	File name	Product
MCG001	srnd-itch_yyyymmdd_A.csv	Nikkei 225 Options, Nikkei 225 Options (Weekly)
MCG002	srnd-itch_yyyymmdd_B.csv	Individual Securities Options
MCG003	srnd-itch_yyyymmdd_C.csv	JGB products
MCG004	srnd-itch_yyyymmdd_D.csv	Nikkei 225 Futures, TOPIX Futures, JPX-Nikkei Index 400 Futures, OSE Commodity Futures, Other Futures, TOPIX Options, JPX-Nikkei Index 400 Options, Options on OSE Commodity Futures
MCG005	srnd-itch_yyyymmdd_E.csv	Nikkei 225 mini
MCG006	Not provided	TOCOM Commodity Futures

## 3.2 List of Columns

Please refer to J-GATE ITCH Connectivity Manual published by Osaka Exchange, Inc. for data items of each ITCH message.

However, data items described in the Connectivity Manual partially vary from items in the CSV file provided in the Service. Please see “3.2.1 List of Differences from ITCH Connectivity Manual” for the differences.

### 3.2.1 List of Differences from ITCH Connectivity Manual

#	Message type	Differences in record contents	
		ITCH Connectivity Manual	ITCH Historical CSV File
1	T (Seconds tag)	No difference.	No difference.
2	R (Series information basic tag)	Timestamp – Nanoseconds: Values below seconds only (i.e. milliseconds ~ nanoseconds).	Timestamp – Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
3		Symbol: Series name aligned to the left and padded with spaces on the right.	Symbol: Spaces on the right are trimmed.
4		Long Name: Aligned to the left and padded with spaces on the right.	Long Name: Spaces on the right are trimmed.
5	M (Series information basic tag: Combination trading instruments)	Timestamp – Nanoseconds: Below seconds, nanoseconds only.	Timestamp – Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
6		Leg Side: “B” or “C”.	Leg Side: “66” or “67”. (“66” means “B”, “67” means “C”.)
7	L (Tick size data tag)	Timestamp – Nanoseconds: Below seconds, nanoseconds only.	Timestamp – Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
8		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
9	S (System event data tag)	Timestamp – Nanoseconds: Below seconds, nanoseconds only.	Timestamp – Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)

10	O (Trading status data tag)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
11		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
12		State Name: Status information aligned to the left and padded with spaces on the right.	State Name: Spaces on the right are trimmed.
13	A (New order tag)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
14		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
15		Order Id: In hexadecimal.	Order Id: In decimal.
16	E (Execution notice tag)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
17		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
18		Order Id: In hexadecimal.	Order Id: In decimal.
19	C (Execution notice tag with trade information)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
20		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
21		Order Id: In hexadecimal.	Order Id: In decimal.
22	D (Deleted order tag)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
23		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
24		Order Id: In hexadecimal.	Order Id: In decimal.
25	P (Price notification tag)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time. E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
26		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)
27	Z (EP tag)	Timestamp - Nanoseconds: Below seconds, nanoseconds only.	Timestamp - Nanoseconds: Date, time (hours ~ nanoseconds), and their values expressed in UNIX time.

		only.	E.g.) 2015-09-01T20:54:19.269189015(1441140859269189015)
28		Order book ID: Series ID.	Order book ID: Series name + Series ID. E.g.) CAL_NK225_1606_16000(7406068)

### 3.3 Points to Note on Data Printed

Each file does not necessarily print records in the order of occurrence. Due to system reasons, the file may look as below:

- A record generated at 10:00:00 is printed before a record generated at 9:59:59.
- A record generated during a trading session is printed in the last record.