

Revision History

Effective Date	Version	Description
2023-05-08	1.0	Create document: Support SET's new trading system

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1. Introduction

1.1 Overview

The "Market Data API Service" is used for members to query real-time data including stocks and indices of SET and mai market. This service will facilitate clients who do not need to receive and manipulate all market data feed but just calling RESTful API to retrieve only the real-time price information in JSON format. This service is available on Monday to Friday, between 6:30 a.m. and 22:30 p.m. BKK time.

1.2 Authentication

1. Go to www.set.or.th/smartmarketplace.
2. Go to "API Key" in the left menu panel and login with username/password which assigned by SET.
3. Create your API key.
4. Use the created API key as a parameter to retrieve data via API.

2. Stock Quotation API

Description	<ul style="list-style-type: none"> To get latest quotation of specific stock list. <ul style="list-style-type: none"> Price, volume and value fields: provided with minimum 2 and up to 5 decimal digits. If there is no trade, price fields will be null and volume/value fields will be zero.
URL	Real-time: https://marketplace.set.or.th/api/public/realtime-data/stock Delay: https://marketplace.set.or.th/api/public/delay-data/stock
Method	GET
Header	api-key

Parameter	
1. market	<ul style="list-style-type: none"> List of market separated by comma without space. (SET,mai) This API will return all stocks in the specified market.
2. indexSector	<ul style="list-style-type: none"> List of index, industry or sector separated by comma without space. (ex. SET50,FINCIAL,BANK,INDUS-M) This API will return all stocks in the specified index, industry or sector.
3. securityType	<ul style="list-style-type: none"> List of security type separated by comma without space. (ex. CS,DWC,DWP) This API will return all stocks in the specified security type.
4. stockSymbol	<ul style="list-style-type: none"> List of stock symbol separated by comma without space. (ex. PTT,AOT,EGCO)
5. oddLotFlag	<ul style="list-style-type: none"> There are 2 possible values of oddLotFlag including "true" and "false" <ul style="list-style-type: none"> true = This API will return stocks in both main an odd-lot market false = This API will return only stocks in main market This parameter is optional. If this parameter is not specified, the default value is "false".
Remark	<ul style="list-style-type: none"> All possible values of market, index, industry, sector and security type can be found in appendix section. Price, AOM & trade report volume & value:

Properties

No.	Properties	Type	Format / Max Length	Description
1	time	String	YYYY-MM-DD "T" hh:mm:ss.SSSZ	Updated time (A date-time with a time-zone in the ISO-8601 calendar system, such as 2020-12-03T10:15:30.284+07:00)
2	symbol	String	20	Security symbol
3	fullName	String	255	Security full name
4	market	String	3	Market
5	securityType	String	3	Security type (Financial products) for the instrument - CS = Common Stock - CSF = Foreign Stock - PS =Preferred Stock - PSF = Preferred Foreign Stock - W = Warrant - TSR = Transferable Subscription Rights - DWC = Derivative Call Warrants - DWP = Derivative Put Warrants - DR = Depository Receipts - ETF = Exchange Traded Fund - UT = Unit Trust
6	industry	String	20	Industry symbol
7	sector	String	20	Sector symbol
8	prior	Numeric	Double	Prior closing price (If there is no trades yesterday, it will carry latest closing price)
9	open	Numeric	Double	Opening price of the day
10	project1	Numeric	Double	Projected open price (Morning session)
11	project2	Numeric	Double	Projected open price (Afternoon session)
12	high	Numeric	Double	Highest price of the day
13	low	Numeric	Double	Lowest price of the day

14	last	Numeric	Double	Last executed price
15	average	Numeric	Double	Average price
16	aomVolume	Numeric	Double	Accumulated auto-matching volume
17	aomValue	Numeric	Double	Accumulated auto-matching value
18	trVolume	Numeric	Double	Accumulated trade report volume
19	trValue	Numeric	Double	Accumulated trade report value
20	totalVolume	Numeric	Double	Accumulated total trading volume (this field always include both main and odd-lot market)
21	totalValue	Numeric	Double	Accumulated total trading value (this field always include both main and odd-lot market)
22	inav	Numeric	Double	Indicative NAV of ETF INAV information is available only for ETF securities
23	changeInav	Numeric	Double	- The difference between latest INAV and NAV of the previous day - INAV information is available only for ETF securities
24	percentChangeInav	Numeric	Double	- The percentage of difference between latest INAV and NAV of the previous day - INAV information is available only for ETF securities
25	timeInav	String	YYYY-MM-DD "T" hh:mm:ss.SSSZ	- INAV calculation time which is stamped from the AMC side (A date-time with a time-zone in the ISO-8601 calendar system, such as 2020-12-03T10:15:30.284+07:00) - INAV information is available only for ETF securities
26	bid	Array		#bid
27	offer	Array		#offer

#bid & #offer

No.	Properties	Type	Format / Max Length	Description
1	rank	Numeric	Integer	Rank number (rank 1-5)
2	price	Numeric	Double	Bid price or offer price (if this price is null, it means ATO or ATC order which not specify price)
3	volume	Numeric	Double	Bid of offer volume

Remark

- ATO (At-The-Open) is the buy or sell at the opening price orders during Pre-open period of both morning and afternoon session.
- ATC (At-The-Close) is the buy or sell at the closing price orders during Call market period.

3. Index Quotation API

Description	<ul style="list-style-type: none"> To get latest quotation of specific index Price, volume and value fields: provided up to 2 decimal digits. Each index is updated around every 15 seconds. There are some special cases as follows: <ul style="list-style-type: none"> For index without constituents such as MINE, <ul style="list-style-type: none"> Price fields will be null, volume/value fields will be zero. Time will be null during the day and will be updated after market closed. For index without trade, price fields will be null, volume/value fields will be zero.
URL	Real-time: https://marketplace.set.or.th/api/public/realtime-data/index Delay: https://marketplace.set.or.th/api/public/delay-data/index
Method	GET
Header	api-key

Parameter	
1. market	<ul style="list-style-type: none"> List of indices separated by comma without space. (SET,mai) This API will return all indices in the specified market.
2. indexSector	<ul style="list-style-type: none"> List of indices separated by comma without space <ul style="list-style-type: none"> Index (ex. SET,SET50,SETHD,mai) Industry/Sector (ex. FINCIAL,BANK,INDUS-M) - All possible values of index, industry/sector can be found in appendix section.

Specification

No.	Properties	Type	Format / Max Length	Description
1	time	String	YYYY-MM-DD "T" hh:mm:ss.SSSZ	Index time (A date-time with a time-zone in the ISO-8601 calendar system, such as 2020-12-03T10:15:30.284+07:00)
2	symbol	String	32	Index symbol
3	fullName	String	100	Index full name
4	prior	Numeric	Double	Prior closing index
5	open	Numeric	Double	Opening index of the day
6	high	Numeric	Double	Highest index of the day
7	low	Numeric	Double	Lowest index of the day
8	last	Numeric	Double	Last index
9	volume	Numeric	Double	Last volume
10	value	Numeric	Double	Last value
11	totalVolume	Numeric	Double	Accumulated volume
12	totalValue	Numeric	Double	Accumulated value

4. Appendix

All possible values of market, index, industry, sector and security type

List	Code
Market	- SET - mai
Index	- SET50 = SET50 Index - SET100 = SET100 Index - sSET = sSET Index - SETCLMV = SET CLMV Exposure Index - SETHD = SET High Dividend 30 Index - SETTHSI = SET THSI Index - SETWB = SET Well-Being Index
Industry/Sector	- AGRO = Agro & Food Industry - AGRI = Agribusiness - FOOD = Food & Beverage - CONSUMP = Consumer Products - FASHION = Fashion - HOME = Home & Office Products - PERSON = Personal Products & Pharmaceuticals - FINCIAL = Financials - BANK = Banking - FIN = Finance & Securities - INSUR = Insurance - INDUS = Industrials - AUTO = Automotive - IMM = Industrial Materials & Machinery - PAPER = Paper & Printing Materials - PETRO = Petrochemicals & Chemicals - PKG = Packaging - STEEL = Steel and Metal Products - PROPCON = Property & Construction - CONMAT = Construction Materials - PROP = Property Development - PF&REIT = Property Fund & REITs - CONS = Construction Services - RESOURC = Resources - ENERG = Energy & Utilities - MINE = Mining - SERVICE = Services - COMM = Commerce - HEALTH = Health Care Services - MEDIA = Media & Publishing - PROF = Professional Services - TOURISM = Tourism & Leisure - TRANS = Transportation & Logistics - TECH = Technology - ETRON = Electronic Components - ICT = Information & Communication Technology - AGRO-M = Agro & Food Industry (mai) - CONSUMP-M = Consumer Products (mai) - FINCIAL-M = Financials (mai) - INDUS-M = Industrials (mai) - PROPCON-M = Property & Construction (mai) - RESOURC-M = Resources (mai) - SERVICE-M = Services (mai) - TECH-M = Technology (mai)
Security Type	- CS = Common Stock - CSF = Foreign Stock

	<ul style="list-style-type: none">- PS =Preferred Stock- PSF = Preferred Foreign Stock- W = Warrant- TSR = Transferable Subscription Rights- DWC = Derivative Call Warrants- DWP = Derivative Put Warrants- DR = Depository Receipts- ETF = Exchange Traded Fund- UT = Unit Trust
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