Dispatcher

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Contents

Chapter 1

muTrade Market Data Disptacher documentation

1.1 Introduction

It is subscription based market data event provider. Developer need to subsribe the symbol from our subscription server. Once symbol is subscribed user will get the event as snapshot for every tick update of respective symbol.

Code Flow

1) Developer need to subscribe the symbol using SubscriptionServMsg with TCP based connection.

2) Once subscription is done appliaction will get event as MDQuote on the same socket.

Currently market data feed server supports four types of event.

1) Event as symbol Id for every snapshot update.

2) Event as symbol Id for every TBT update.

3) Event as top 5 snapshot market depth for every snapshot update.

4) Snapshot of consolidated order depth of two or more symbols.

Sanpshot for single symbol is available as MDQuote where as consolidated feed is available as MDQuote-Consolidated .

Chapter 2

Namespace Index

2.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

Chapter 5

Namespace Documentation

5.1 CMD Namespace Reference

Classes

- class ScripMasterDataRequest
- class InstrumentRequest

  Instrument search request.
- class MDSubscribeRequest

  MarketData Subscribe/Unsubscribe Request.
- class MDQuote

  MarketData Quote.
- class MDQuoteConsolidated

  MarketData Quote Consolidated.

Enumerations

- enum ExchangeId {
  ExchangeId_BSE = 1, ExchangeId_NSE, ExchangeId_ESMNSE, ExchangeId_SGX,
  ExchangeId_NSECDS, ExchangeId_BSEETI, ExchangeId_CFH, ExchangeId_MAX }
- enum CommandCategory {
  CommandCategory_SINGLE_ORDER, CommandCategory_DUMMY_TWO_LEG_STRATEGY, CommandCategory_TWO_LEG_ARBITRAGE_STRATEGY, CommandCategory_MARKET_MAKING_STRATEGY, CommandCategory_STRATEGY_COMMAND, CommandCategory_PAUSE_STRATEGY, CommandCategory_RUN_STRATEGY, CommandCategory_TERMINATE_STRATEGY, CommandCategory_TERMINATE_SQUAREOFF, CommandCategory_LOGIN, CommandCategory_LOGOUT, CommandCategory_RMS_UPDATE, CommandCategory_REQUEST_RMS_CONFIGURATION, CommandCategory_REQUEST_OFFLINE_DATA, CommandCategory_HEART_BEAT_MESSAGE, CommandCategory_THREE_LEG_ARBITRAGE_STRATEGY, CommandCategory_DUMMY_THREE_LEG_ARBITRAGE_STRATEGY, CommandCategory_BSE_DISCONNECTED, CommandCategory_NSECM_DISCONNECTED, CommandCategory_NSEFO_DISCONNECTED, CommandCategory_TBTCM_DISCONNECTED, CommandCategory_TBTFO_DISCONNECTED, CommandCategory_BSE_SNAPSHOTFEED_DISCONNECTED, CommandCategory_NSEFO_SNAPSHOTFEED_DISCONNECTED, CommandCategory_NSECM_SNAPSHOTFEED_DISCONNECTED, CommandCategory_MARKET_MAKING_TURNOVER_STRATEGY, CommandCategory_TBT_MARKET_DATA, CommandCategory_FOUR_LEG_BUTTERFLY_STRATEGY, CommandCategory_BOX_STRATEGY, CommandCategory_TWO_LEG_THREE_LEG_ARBITRAGE_STR-

ATEGY, CommandCategory_MODIFY_STRATEGY, CommandCategory_RMS_LOGIN_PARAMETERS, CommandCategory_RMS_ORDER_LIMITS, CommandCategory_RMS_GLOBAL_PARAMETERS, CommandCategory_RMS_RISK_PERMISSIONS, CommandCategory_GET_RMS_PARAMETERS, CommandCategory_CHANGE_PASSWORD, CommandCategory_SEND_SCRIP_MASTER_DATA, CommandCategory_GET_TOTAL_RECORDS_SCRIP_MASTER, CommandCategory_GET_TOTAL_ORDER_CONFIRMATIONS, CommandCategory_GET_CONNECTIVITY_STATUS, CommandCategory_RMS_SECURITY_WISE_LIMITS, CommandCategory_IMPLIED_VOLATILITY_STRATEGY, CommandCategory_CASH_CASH_STRATEGY, CommandCategory_GET_CLIENT_CONNECTIVITY_STATUS, CommandCategory_FORCE_LOG_OFF_CLIENT, CommandCategory_PAIRS_STRATEGY, CommandCategory_PAIRS_CLOSE_POSITIONS_NO_TERMINATE, CommandCategory_TBTCDS_DISCONNECTED, CommandCategory_NSECDS_DISCONNECTED, CommandCategory_BSEETI_DISCONNECTED, CommandCategory_SGX_DISCONNECTED, CommandCategory_INSTRUMENT_SEARCH_REQUEST, CommandCategory_MARKET_DATA_SUBSCRIPTION, CommandCategory_API_TRADED_SYMBOLS_COUNT_REQUEST, CommandCategory_API_REPLAY_TRADED_SYMBOLS_REQUEST, CommandCategory_MAX }

5.1.1 Enumeration Type Documentation

5.1.1.1 enum CMD::CommandCategory

Enumerator:

CommandCategory_SINGLE_ORDER

CommandCategory_DUMMY_TWO_LEG_STRATEGY

CommandCategory_TWO_LEG_ARBITRAGE_STRATEGY

CommandCategory_MARKET_MAKING_STRATEGY

CommandCategory_STRATEGY_COMMAND

CommandCategory_PAUSE_STRATEGY

CommandCategory_RUN_STRATEGY

CommandCategory_TERMINATE_STRATEGY

CommandCategory_TERMINATE_SQUAREOFF

CommandCategory_LOGIN

CommandCategory_LOGOUT

CommandCategory_RMS_UPDATE

CommandCategory_REQUEST_RMS_CONFIGURATION

CommandCategory_REQUEST_OFFLINE_DATA

CommandCategory_HEART_BEAT_MESSAGE

CommandCategory_THREE_LEG_ARBITRAGE_STRATEGY

CommandCategory_DUMMY_THREE_LEG_ARBITRAGE_STRATEGY

CommandCategory_BSE_DISCONNECTED

CommandCategory_NSECM_DISCONNECTED

CommandCategory_NSEFO_DISCONNECTED

CommandCategory_TBTCM_DISCONNECTED

CommandCategory_TBTFO_DISCONNECTED

CommandCategory_BSE_SNAPSHOTFEED_DISCONNECTED

CommandCategory_NSEFO_SNAPSHOTFEED_DISCONNECTED

CommandCategory_NSECM_SNAPSHOTFEED_DISCONNECTED

CommandCategory_MARKET_MAKING_TURNOVER_STRATEGY

CommandCategory_TBT_MARKET_DATA

CommandCategory_FOUR_LEG_BUTTERFLY_STRATEGY

CommandCategory_BOX_STRATEGY

CommandCategory_TWO_LEG_THREE_LEG_ARBITRAGE_STRATEGY

CommandCategory_MODIFY_STRATEGY

CommandCategory_RMS_LOGIN_PARAMETERS

CommandCategory_RMS_ORDER_LIMITS

CommandCategory_RMS_GLOBAL_PARAMETERS

CommandCategory_RMS_RISK_PERMISSIONS

CommandCategory_GET_RMS_PARAMETERS

CommandCategory_CHANGE_PASSWORD

CommandCategory_SEND_SCRIP_MASTER_DATA

CommandCategory_GET_TOTAL_RECORDS_SCRIP_MASTER

CommandCategory_GET_TOTAL_ORDER_CONFIRMATIONS

CommandCategory_GET_CONNECTIVITY_STATUS

CommandCategory_RMS_SECURITY_WISE_LIMITS

CommandCategory_IMPLIED_VOLATILITY_STRATEGY

CommandCategory_CASH_CASH_STRATEGY

CommandCategory_GET_CLIENT_CONNECTIVITY_STATUS

CommandCategory_FORCE_LOG_OFF_CLIENT

CommandCategory_PAIRS_STRATEGY

CommandCategory_PAIRS_CLOSE_POSITIONS_NO_TERMINATE

CommandCategory_TBTCDS_DISCONNECTED

CommandCategory_NSECDS_DISCONNECTED

CommandCategory_BSEETI_DISCONNECTED

CommandCategory_SGX_DISCONNECTED

CommandCategory_INSTRUMENT_SEARCH_REQUEST

CommandCategory_MARKET_DATA_SUBSCRIPTION

CommandCategory_API_TRADED_SYMBOLS_COUNT_REQUEST

CommandCategory_API_REPLAY_TRADED_SYMBOLS_REQUEST

CommandCategory_MAX

5.1.1.2 enum CMD::ExchangeId

Enumerator:

ExchangeId_BSE

ExchangeId_NSE

ExchangeId_ESMNSE

ExchangeId_SGX

ExchangeId_NSECDS

ExchangeId_BSEETI

ExchangeId_CFH

ExchangeId_MAX

5.2 MarketData Namespace Reference

Classes

- class FdDispatcher

  FdDispatcher Class.
- class MDStorage

  MDStorage Class.
- struct FdState
- class SubscriptionServer
- class SubscriptionServMsg

  This class is responsible for serialization of request data to the server.
- class SymbolIdFdMap

  SymbolIdFdMap class This is the data structure which is used by tbt to send event on each subscriber for each symbol id.
- class SymbolNameIdMap
- class SymbolIdParser
- class ThreadPool

Typedefs

- typedef std::unordered_map
  < int, std::deque< std::pair
  < int, int > > > IdFdMap
- typedef std::unordered_map
  < int, std::deque< std::pair
  < int, int > > >::iterator IdFdMapItr
- typedef std::unordered_map
  < int, std::vector< int > > FdIdMap
- typedef std::unordered_map
  < int, std::deque< int > > ConsolidatedIdFdMap

Enumerations

- enum FeedType { TBT = 0, MCL = 1 }

Functions

- template<class T >
  int findIndex (T &vec, int id)
- void getCurrentLocalTimeStamp ()

5.2.1 Typedef Documentation

5.2.1.1 typedef std::unordered_map<int, std::deque<int> > MarketData::ConsolidatedIdFdMap

5.2.1.2 typedef std::unordered_map<int, std::vector<int> > MarketData::FdIdMap

5.2.1.3 typedef std::unordered_map<int, std::deque<std::pair<int, int> > > MarketData::IdFdMap

5.2.1.4 typedef std::unordered_map<int, std::deque<std::pair<int, int> > >::iterator MarketData::IdFdMapItr

5.2.2 Enumeration Type Documentation

5.2.2.1 enum MarketData::FeedType

Enumerator:

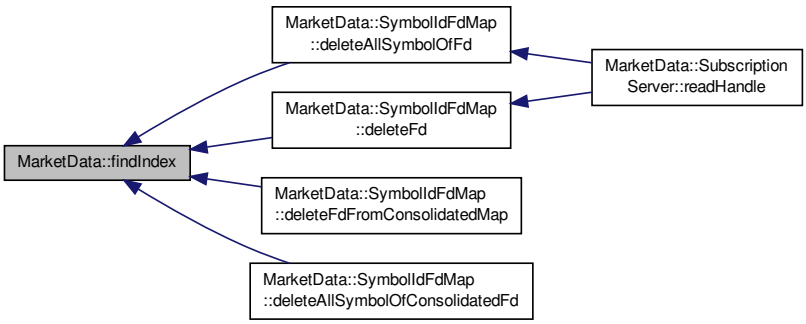
TBT

MCL

5.2.3 Function Documentation

5.2.3.1 template<class T > int MarketData::findIndex (T & *vec,* int *id*)

Here is the caller graph for this function:



5.2.3.2 void MarketData::getCurrentLocalTimeStamp ( ) [inline]

Chapter 6

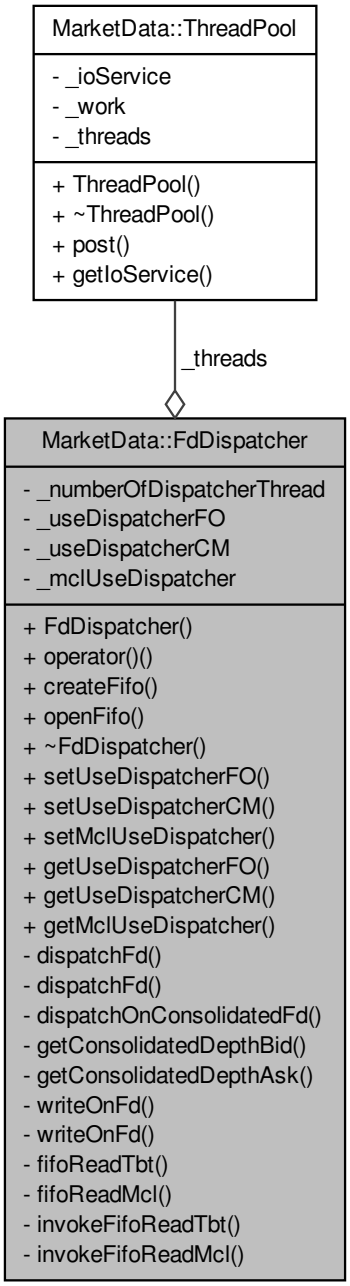
Class Documentation

6.1 MarketData::FdDispatcher Class Reference

FdDispatcher Class.

`#include <fdDispatcher.h>`

Collaboration diagram for MarketData::FdDispatcher:



Public Member Functions

- FdDispatcher (int num=5)

  Constructor.
- void operator() ()

  Overloaded function operator.
- int createFifo (const char *fifo)

Function to create fifo if dispather and client both are on the same system.

- int openFifo (const char *fifo)

  Function to open fifo if dispather and client both are on the same system.

- ~FdDispatcher ()

  Destructor.

Static Public Member Functions

- static void setUseDispatcherFO (bool val)

  Internally used function to set whether to use TBT FO dispatcher or not. Value is updated from setting file.

- static void setUseDispatcherCM (bool val)

  Internally used function to set whether to use TBT CM dispatcher or not. Value is updated from setting file.

- static void setMclUseDispatcher (bool val)

  Internally used function to set whether to use MCL dispatcher or not. Value is updated from setting file.

- static bool getUseDispatcherFO ()

  Internally used function to check whether to use TBT FO dispatcher or not. Value is updated from setting file.

- static bool getUseDispatcherCM ()

  Internally used function to check whether to use TBT CM dispatcher or not. Value is updated from setting file.

- static bool getMclUseDispatcher ()

  Internally used function to check whether to use MCL dispatcher or not. Value is updated from setting file.

Private Member Functions

- void dispatchFd (int, int)

  Feed Dispatcher Function Function Called whene there is an event for market data feed.

- void dispatchFd (int, int, CMD::MDQuote &)

  Feed Dispatcher Function Function Called whene there is an event for market data feed.

- void dispatchOnConsolidatedFd (int, CMD::MDQuote &)

  Feed Dispatcher Function Function Called whene there is an event for market data feed.

- void getConsolidatedDepthBid (std::map< int, int > &symbolIdDepthMap, std::vector< CMD::MDQuote > &mdq, CMD::MDQuoteConsolidated &mdqConsolidated)
- void getConsolidatedDepthAsk (std::map< int, int > &symbolIdDepthMap, std::vector< CMD::MDQuote > &mdq, CMD::MDQuoteConsolidated &mdqConsolidated)
- void writeOnFd (int, int, int, int)

  Write event on fd Function responsible for writing the event with symbol id on socket/fd.

- void writeOnFd (int, int, int, int, CMD::MDQuote &)

  Write event on fd Function responsible for writing the event with symbol id and snapshot on socket/fd.

- void fifoReadTbt (evutil_socket_t, short, void *)

  Read Tbt Data From Fifo Function is called to reed the feed when there is an event for tbt feed.

- void fifoReadMcl (evutil_socket_t, short, void *)

  Fifo Read Mcl Function is called to reed the feed when there is an event for mcl feed.

Static Private Member Functions

- static void invokeFifoReadTbt (evutil_socket_t, short, void *)

  Invoke Fifo Read Tbt Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

- static void invokeFifoReadMcl (evutil_socket_t, short, void *)

  Invoke Fifo Read Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

Private Attributes

- int _numberOfDispatcherThread
- ThreadPool _threads

Static Private Attributes

- static bool _useDispatcherFO = true
- static bool _useDispatcherCM = true
- static bool _mclUseDispatcher = true

6.1.1 Detailed Description

FdDispatcher Class.

This class is responcible for writing event on every subscribed symbols.

6.1.2 Constructor & Destructor Documentation

6.1.2.1 MarketData::FdDispatcher::FdDispatcher (int *num* = 5)

Constructor.

Parameters

num	number of dispatcher threads

6.1.2.2 MarketData::FdDispatcher::~FdDispatcher ( )

Destructor.

6.1.3 Member Function Documentation

6.1.3.1 int MarketData::FdDispatcher::createFifo (const char * *fifo*)

Function to create fifo if dispather and client both are on the same system.

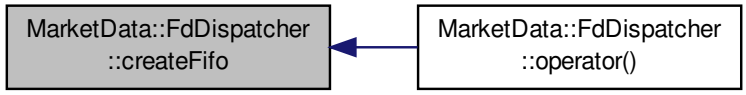
Parameters

fifo	name

Returns

0/-1 Success/Failure

Here is the caller graph for this function:



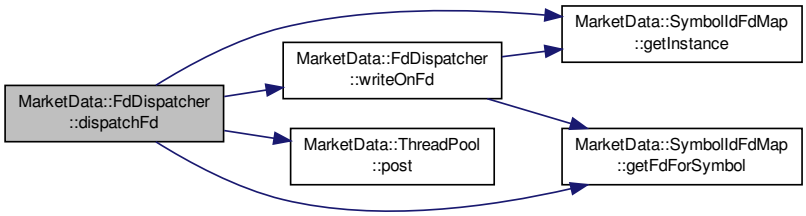
6.1.3.2 void MarketData::FdDispatcher::dispatchFd (int *symbolId,* int *feedType*) [private]

Feed Dispatcher Function Function Called whene there is an event for market data feed.

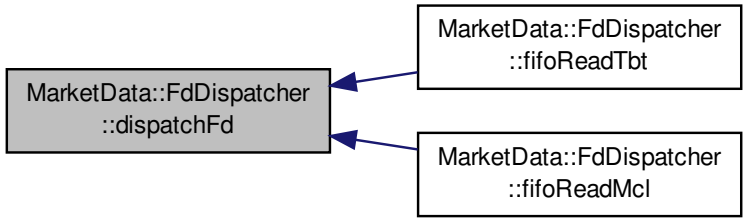
Parameters

int	Symbol Id
int	Feed Type(TBT/Snapshot)

Here is the call graph for this function:



Here is the caller graph for this function:



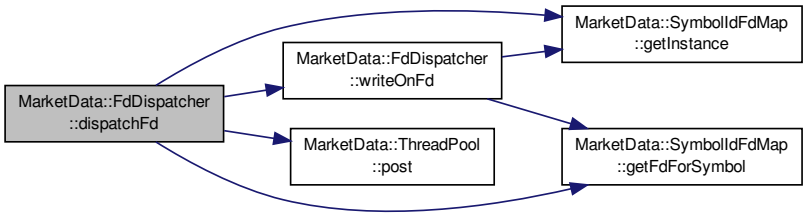
6.1.3.3 void MarketData::FdDispatcher::dispatchFd (int *symbolId,* int *feedType,* CMD::MDQuote & *mdq*) [private]

Feed Dispatcher Function Function Called whene there is an event for market data feed.

Parameters

int	Symbol Id
int	Feed Type(TBT/Snapshot)
MDQuote	reference

Here is the call graph for this function:



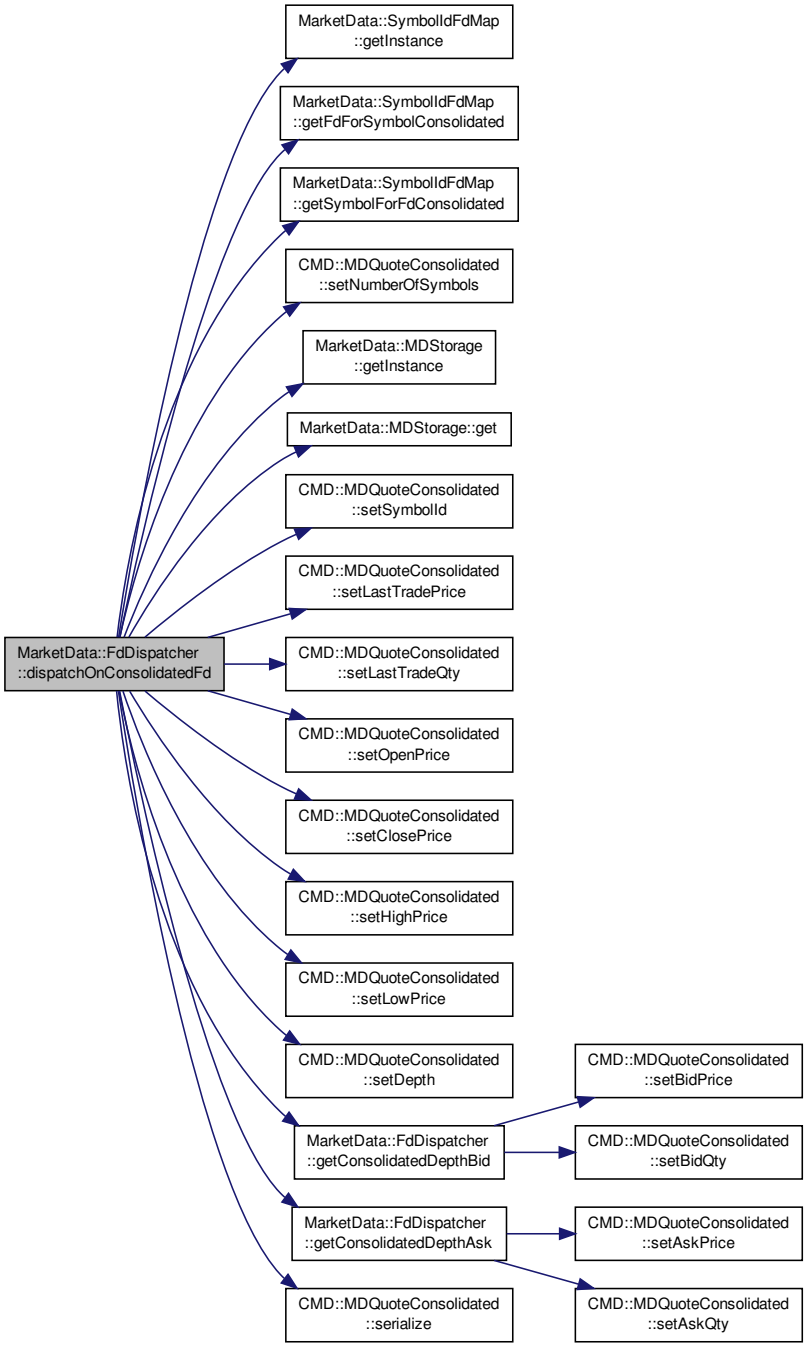
6.1.3.4 void MarketData::FdDispatcher::dispatchOnConsolidatedFd (int *symbolId,* CMD::MDQuote & *mdq*) [private]

Feed Dispatcher Function Function Called whene there is an event for market data feed.

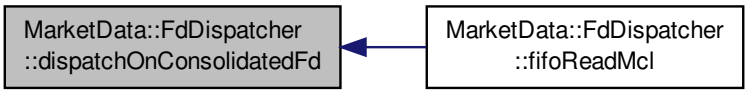
Parameters

int	Symbol Id
MDQuote	reference

Here is the call graph for this function:



Here is the caller graph for this function:



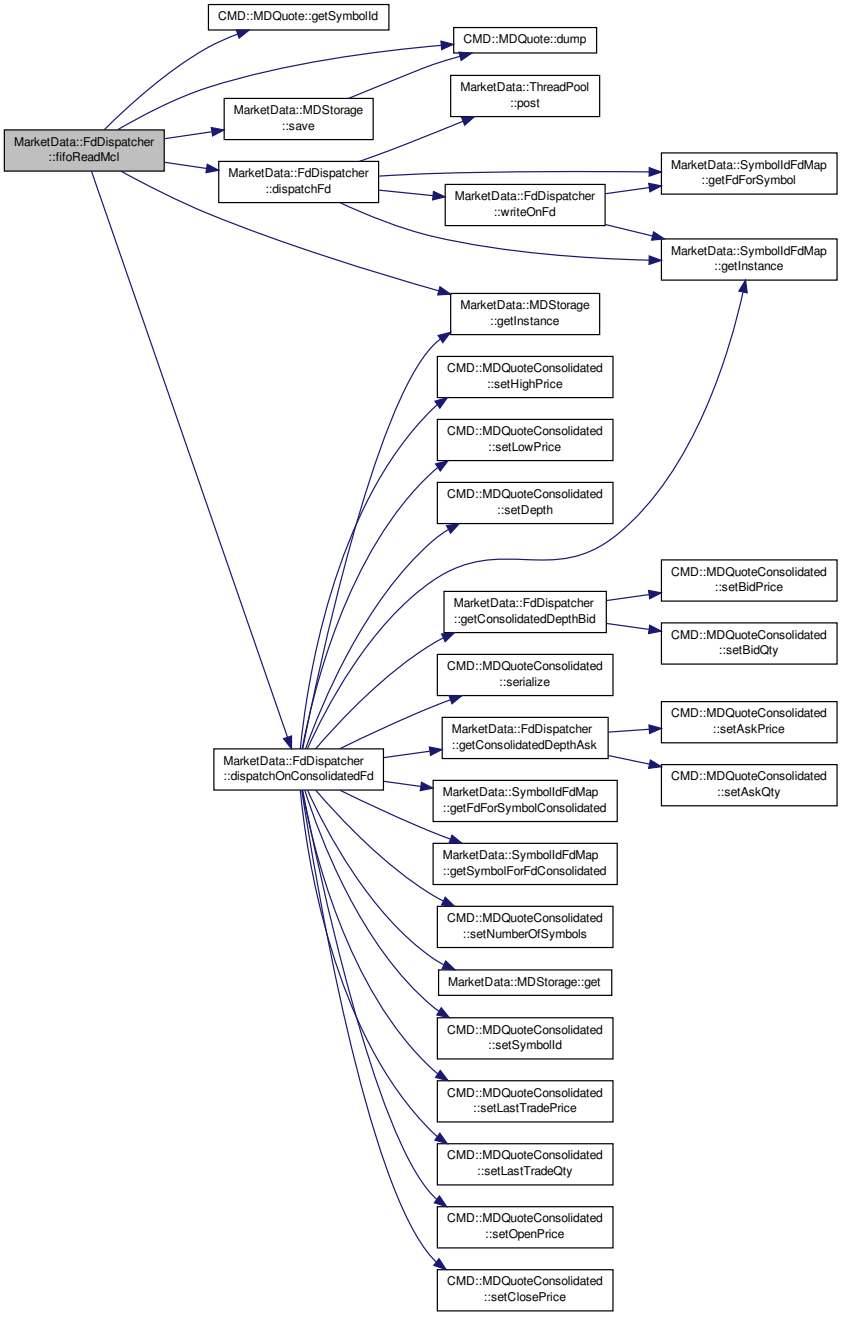
6.1.3.5 void MarketData::FdDispatcher::fifoReadMcl (evutil_socket_t *fd*, short *event*, void * *arg*) [private]

Fifo Read Mcl Function is called to reed the feed when there is an event for mcl feed.

Parameters

evutil_socket_t	fd
short	event
void	pointer (struct event)

Here is the call graph for this function:



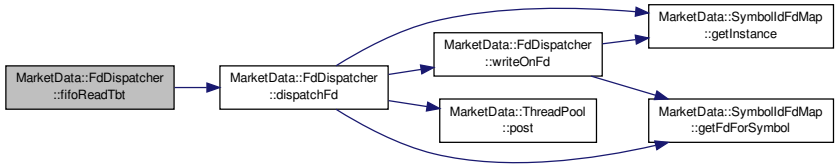
6.1.3.6 void MarketData::FdDispatcher::fifoReadTbt (evutil_socket_t *fd*, short *event*, void * *arg*) [private]

Read Tbt Data From Fifo Function is called to reed the feed when there is an event for tbt feed.

Parameters

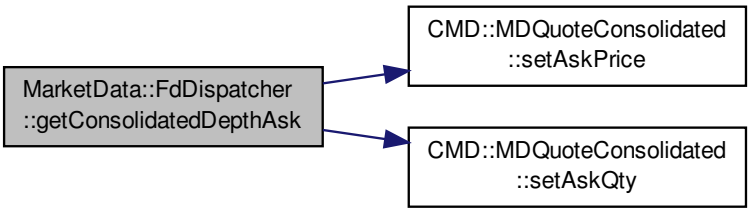
evutil_socket_t	
short	
@return	

Here is the call graph for this function:

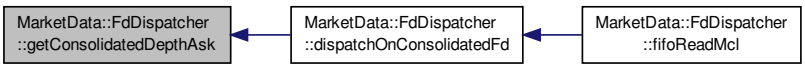


6.1.3.7 void MarketData::FdDispatcher::getConsolidatedDepthAsk (std::map< int, int > & *symbolIdDepthMap,* std::vector< CMD::MDQuote > & *mdq,* CMD::MDQuoteConsolidated & *mdqConsolidated*) [private]

Here is the call graph for this function:

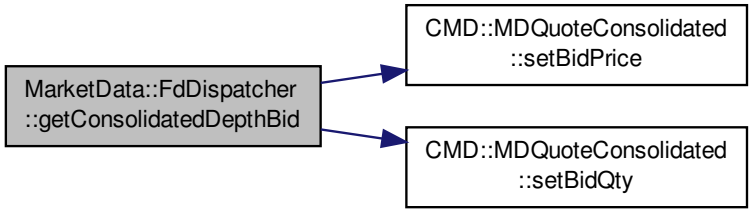


Here is the caller graph for this function:

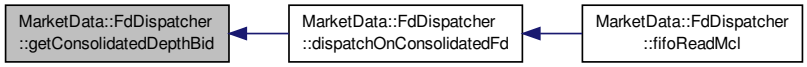


6.1.3.8 void MarketData::FdDispatcher::getConsolidatedDepthBid (std::map< int, int > & *symbolIdDepthMap,* std::vector< CMD::MDQuote > & *mdq,* CMD::MDQuoteConsolidated & *mdqConsolidated*) [private]

Here is the call graph for this function:



Here is the caller graph for this function:



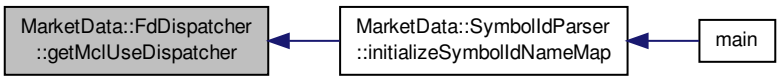
6.1.3.9 static bool MarketData::FdDispatcher::getMclUseDispatcher ( ) [inline], [static]

Internally used function to check whether to use MCL dispatcher or not. Value is updated from setting file.

Parameters

val	True/False

Here is the caller graph for this function:



6.1.3.10 static bool MarketData::FdDispatcher::getUseDispatcherCM ( ) [inline], [static]

Internally used function to check whether to use TBT CM dispatcher or not. Value is updated from setting file.

Parameters

val	True/False

6.1.3.11 static bool MarketData::FdDispatcher::getUseDispatcherFO ( ) [inline], [static]

Internally used function to check whether to use TBT FO dispatcher or not. Value is updated from setting file.

Parameters

val	True/False

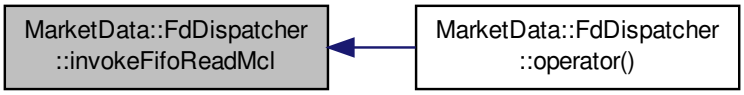
6.1.3.12 void MarketData::FdDispatcher::invokeFifoReadMcl (evutil_socket_t *fd,* short *events,* void * *arg*) [static], [private]

Invoke Fifo Read Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

Parameters

evutil_socket_t	fd
short	event
void	pointer(struct event)

Here is the caller graph for this function:



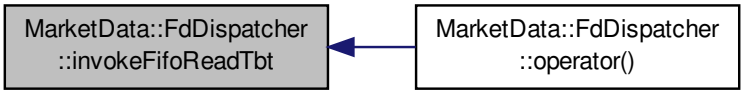
6.1.3.13 void MarketData::FdDispatcher::invokeFifoReadTbt (evutil_socket_t *fd,* short *events,* void * *arg*) [static], [private]

Invoke Fifo Read Tbt Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

Parameters

evutil_socket_t	fd
short	event
void	pointer(struct event)

Here is the caller graph for this function:



6.1.3.14 int MarketData::FdDispatcher::openFifo (const char * *fifo*)

Function to open fifo if dispather and client both are on the same system.

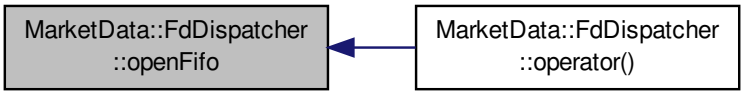
Parameters

fifo	fifo name.

Returns

0/-1 Success/Failure

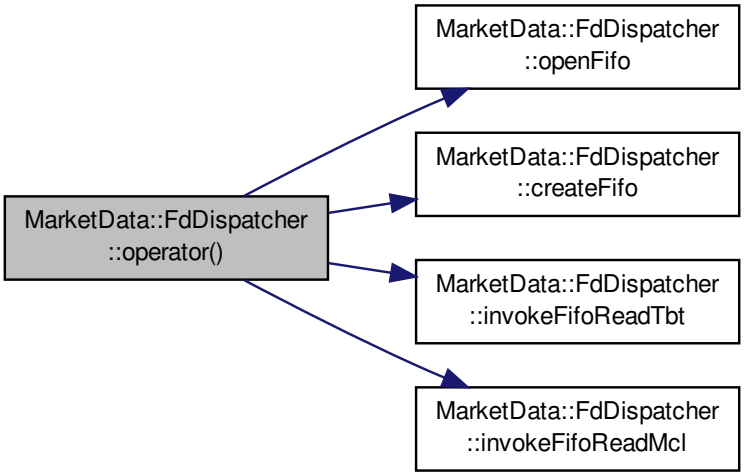
Here is the caller graph for this function:



6.1.3.15 void MarketData::FdDispatcher::operator() ( )

Overloaded function operator.

Here is the call graph for this function:



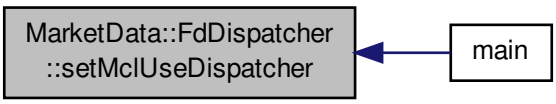
6.1.3.16 static void MarketData::FdDispatcher::setMclUseDispatcher (bool *val*) [inline], [static]

Internally used function to set whether to use MCL dispatcher or not. Value is updated from setting file.

Parameters

val	True/False

Here is the caller graph for this function:



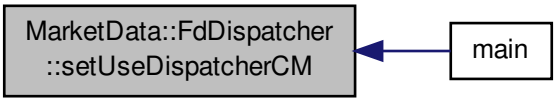
6.1.3.17 static void MarketData::FdDispatcher::setUseDispatcherCM (bool *val*) [inline], [static]

Internally used function to set whether to use TBT CM dispatcher or not. Value is updated from setting file.

Parameters

val	True/False

Here is the caller graph for this function:



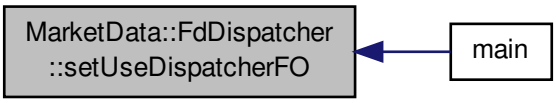
6.1.3.18 static void MarketData::FdDispatcher::setUseDispatcherFO (bool *val*) [inline], [static]

Internally used function to set whether to use TBT FO dispatcher or not. Value is updated from setting file.

Parameters

val	True/False

Here is the caller graph for this function:



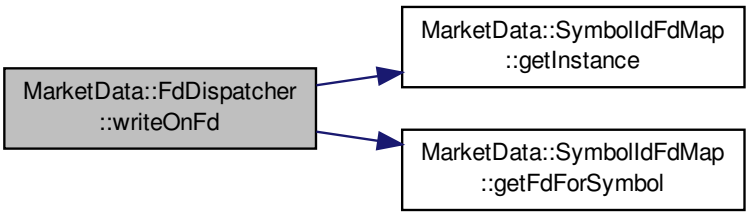
6.1.3.19 void MarketData::FdDispatcher::writeOnFd (int *from,* int *to,* int *symbolId,* int *feedType*) [private]

Write event on fd Function responsible for writing the event with symbol id on socket/fd.

Parameters

int	from
int	to
int	Symbol Id
int	Feed Type

Here is the call graph for this function:



Here is the caller graph for this function:

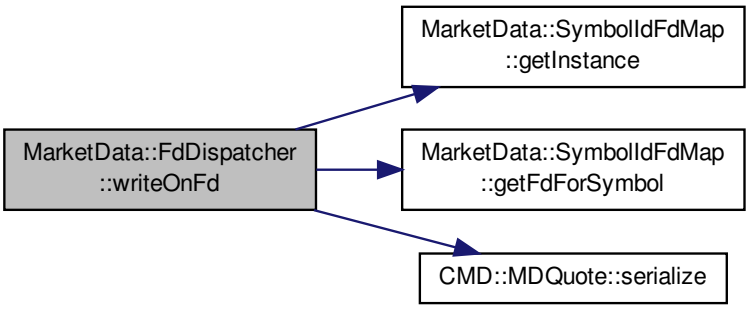
6.1.3.20 void MarketData::FdDispatcher::writeOnFd (int *from,* int *to,* int *symbolId,* int *feedType,* CMD::MDQuote & *mdq*) [private]

Write event on fd Function responsible for writing the event with symbol id and snapshot on socket/fd.

Parameters

int	from
int	to
int	Symbol Id
int	Feed Type
MDQuote	

Here is the call graph for this function:



6.1.4 Member Data Documentation

6.1.4.1 bool MarketData::FdDispatcher::_mclUseDispatcher = true [static], [private]

6.1.4.2 int MarketData::FdDispatcher::_numberOfDispatcherThread [private]

6.1.4.3 ThreadPool MarketData::FdDispatcher::_threads [private]

6.1.4.4 bool MarketData::FdDispatcher::_useDispatcherCM = true [static], [private]

6.1.4.5 bool MarketData::FdDispatcher::_useDispatcherFO = true [static], [private]

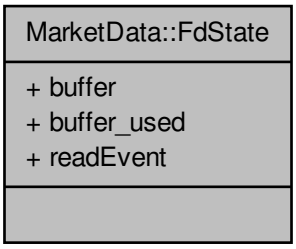
The documentation for this class was generated from the following files:

- fdDispatcher.h
- fdDispatcher.cpp

6.2 MarketData::FdState Struct Reference

```
#include <subscriptionServer.h>
```

Collaboration diagram for MarketData::FdState:



Public Attributes

- char buffer [MAXLINE]
- size_t buffer_used
- struct event * readEvent

6.2.1 Member Data Documentation

6.2.1.1 char MarketData::FdState::buffer[MAXLINE]

6.2.1.2 size_t MarketData::FdState::buffer_used

6.2.1.3 struct event* MarketData::FdState::readEvent

The documentation for this struct was generated from the following file:

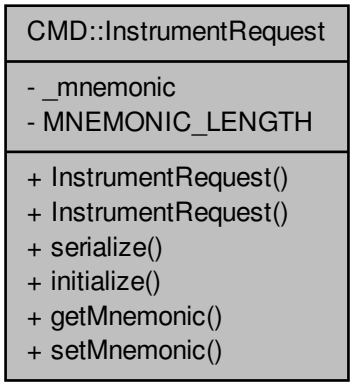
- subscriptionServer.h

6.3 CMD::InstrumentRequest Class Reference

Instrument search request.

`#include <commands.h>`

Collaboration diagram for CMD::InstrumentRequest:



Public Member Functions

- InstrumentRequest ()
- InstrumentRequest (const char ∗buf)
- int serialize (char ∗buf)
- void initialize ()
- const char ∗ getMnemonic () const
- void setMnemonic (const char ∗m)

Private Attributes

- char _mnemonic [MNEMONIC_LENGTH]

Static Private Attributes

- static const int MNEMONIC_LENGTH = 100

6.3.1 Detailed Description

Instrument search request.

In response, the server will send SymbolStaticData if the instrument was successfully found, otherwise it will just return a FAILURE message.

6.3.2 Constructor & Destructor Documentation

6.3.2.1 CMD::InstrumentRequest::InstrumentRequest ( )

6.3.2.2 CMD::InstrumentRequest::InstrumentRequest (const char ∗ *buf*)

6.3.3 Member Function Documentation

6.3.3.1 const char* CMD::InstrumentRequest::getMnemonic ( ) const [inline]

6.3.3.2 void CMD::InstrumentRequest::initialize ( )

6.3.3.3 int CMD::InstrumentRequest::serialize (char * *buf*)

6.3.3.4 void CMD::InstrumentRequest::setMnemonic (const char * *m*) [inline]

6.3.4 Member Data Documentation

6.3.4.1 char CMD::InstrumentRequest::_mnemonic[MNEMONIC_LENGTH] [private]

6.3.4.2 const int CMD::InstrumentRequest::MNEMONIC_LENGTH = 100 [static], [private]

The documentation for this class was generated from the following file:

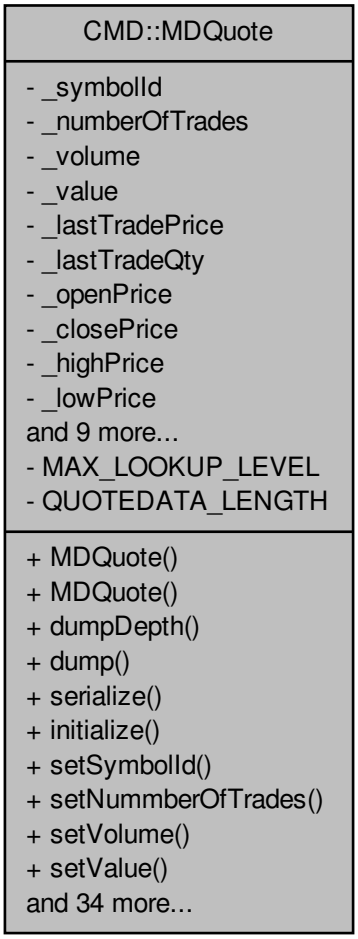
- commands.h

6.4 CMD::MDQuote Class Reference

MarketData Quote.

`#include <commands.h>`

Collaboration diagram for CMD::MDQuote:



Public Member Functions

- MDQuote ()
- MDQuote (const char *buf)
- void dumpDepth (UNSIGNED_LONG *data, UNSIGNED_CHARACTER depth)
- void dump ()
- int serialize (char *buf)
- void initialize ()
- void setSymbolId (UNSIGNED_LONG val)
- void setNummberOfTrades (UNSIGNED_LONG val)
- void setVolume (UNSIGNED_LONG val)
- void setValue (UNSIGNED_LONG val)
- void setLastTradePrice (UNSIGNED_LONG val)
- void setLastTradeQty (UNSIGNED_LONG val)
- void setOpenPrice (UNSIGNED_LONG val)
- void setClosePrice (UNSIGNED_LONG val)
- void setHighPrice (UNSIGNED_LONG val)

- void setLowPrice (UNSIGNED_LONG val)
- void setTotalBidQty (UNSIGNED_LONG val)
- void setTotalAskQty (UNSIGNED_LONG val)
- void setLowerCktLimit (UNSIGNED_LONG val)
- void setUpperCktLimit (UNSIGNED_LONG val)
- void setDepth (UNSIGNED_CHARACTER val)
- void setBidPrice (UNSIGNED_LONG val[])
- void setBidQty (UNSIGNED_LONG val[])
- void setAskPrice (UNSIGNED_LONG val[])
- void setAskQty (UNSIGNED_LONG val[])
- UNSIGNED_LONG getSymbolId ()
- UNSIGNED_LONG getNumberOfTrades ()
- UNSIGNED_LONG getVolume ()
- UNSIGNED_LONG getValue ()
- UNSIGNED_LONG getLastTradePrice ()
- UNSIGNED_LONG getLastTradeQty ()
- UNSIGNED_LONG getOpenPrice ()
- UNSIGNED_LONG getClosePrice ()
- UNSIGNED_LONG getHighPrice ()
- UNSIGNED_LONG getLowPrice ()
- UNSIGNED_LONG getTotalBidQty ()
- UNSIGNED_LONG getTotalAskQty ()
- UNSIGNED_LONG getLowerCktLimit ()
- UNSIGNED_LONG getUpperCktLimit ()
- UNSIGNED_CHARACTER getDepth ()
- UNSIGNED_LONG * getBidPrice ()
- UNSIGNED_LONG * getBidQty ()
- UNSIGNED_LONG * getAskPrice ()
- UNSIGNED_LONG * getAskQty ()

Private Attributes

- UNSIGNED_LONG _symbolId
- UNSIGNED_LONG _numberOfTrades
- UNSIGNED_LONG _volume
- UNSIGNED_LONG _value
- UNSIGNED_LONG _lastTradePrice
- UNSIGNED_LONG _lastTradeQty
- UNSIGNED_LONG _openPrice
- UNSIGNED_LONG _closePrice
- UNSIGNED_LONG _highPrice
- UNSIGNED_LONG _lowPrice
- UNSIGNED_LONG _totalBidQty
- UNSIGNED_LONG _totalAskQty
- UNSIGNED_LONG _lowerCktLimit
- UNSIGNED_LONG _upperCktLimit
- UNSIGNED_CHARACTER _depth
- UNSIGNED_LONG _bidPrice [MAX_LOOKUP_LEVEL]
- UNSIGNED_LONG _bidQty [MAX_LOOKUP_LEVEL]
- UNSIGNED_LONG _askPrice [MAX_LOOKUP_LEVEL]
- UNSIGNED_LONG _askQty [MAX_LOOKUP_LEVEL]

Static Private Attributes

- static const int MAX_LOOKUP_LEVEL = 10
- static const int QUOTEDATA_LENGTH = 80

6.4.1 Detailed Description

MarketData Quote.

Server will send the quote to the subscribed members.

6.4.2 Constructor & Destructor Documentation

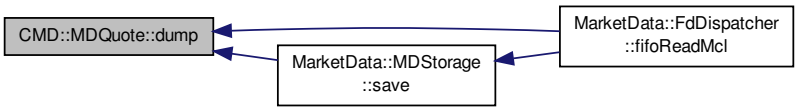
6.4.2.1 CMD::MDQuote::MDQuote ( )

6.4.2.2 CMD::MDQuote::MDQuote (const char * *buf*)

6.4.3 Member Function Documentation

6.4.3.1 void CMD::MDQuote::dump ( )

Here is the caller graph for this function:



6.4.3.2 void CMD::MDQuote::dumpDepth (UNSIGNED_LONG * *data*, UNSIGNED_CHARACTER *depth*)

6.4.3.3 UNSIGNED_LONG* CMD::MDQuote::getAskPrice ( ) [inline]

6.4.3.4 UNSIGNED_LONG* CMD::MDQuote::getAskQty ( ) [inline]

6.4.3.5 UNSIGNED_LONG* CMD::MDQuote::getBidPrice ( ) [inline]

6.4.3.6 UNSIGNED_LONG* CMD::MDQuote::getBidQty ( ) [inline]

6.4.3.7 UNSIGNED_LONG CMD::MDQuote::getClosePrice ( ) [inline]

6.4.3.8 UNSIGNED_CHARACTER CMD::MDQuote::getDepth ( ) [inline]

6.4.3.9 UNSIGNED_LONG CMD::MDQuote::getHighPrice ( ) [inline]

6.4.3.10 UNSIGNED_LONG CMD::MDQuote::getLastTradePrice ( ) [inline]

6.4.3.11 UNSIGNED_LONG CMD::MDQuote::getLastTradeQty ( ) [inline]

6.4.3.12 UNSIGNED_LONG CMD::MDQuote::getLowerCktLimit ( ) [inline]

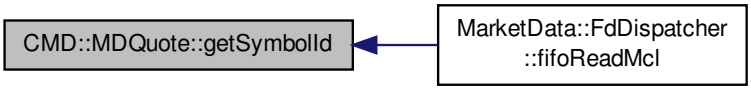
6.4.3.13 **UNSIGNED_LONG CMD::MDQuote::getLowPrice ( ) [inline]**

6.4.3.14 **UNSIGNED_LONG CMD::MDQuote::getNumberOfTrades ( ) [inline]**

6.4.3.15 **UNSIGNED_LONG CMD::MDQuote::getOpenPrice ( ) [inline]**

6.4.3.16 **UNSIGNED_LONG CMD::MDQuote::getSymbolId ( ) [inline]**

Here is the caller graph for this function:



6.4.3.17 **UNSIGNED_LONG CMD::MDQuote::getTotalAskQty ( ) [inline]**

6.4.3.18 **UNSIGNED_LONG CMD::MDQuote::getTotalBidQty ( ) [inline]**

6.4.3.19 **UNSIGNED_LONG CMD::MDQuote::getUpperCktLimit ( ) [inline]**

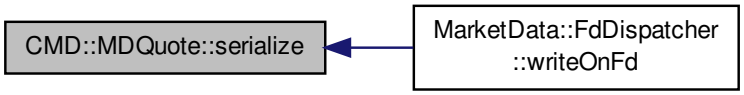
6.4.3.20 **UNSIGNED_LONG CMD::MDQuote::getValue ( ) [inline]**

6.4.3.21 **UNSIGNED_LONG CMD::MDQuote::getVolume ( ) [inline]**

6.4.3.22 **void CMD::MDQuote::initialize ( )**

6.4.3.23 **int CMD::MDQuote::serialize (char * *buf*)**

Here is the caller graph for this function:



6.4.3.24 **void CMD::MDQuote::setAskPrice (UNSIGNED_LONG *val[]*) [inline]**

6.4.3.25 **void CMD::MDQuote::setAskQty (UNSIGNED_LONG *val[]*) [inline]**

6.4.3.26 **void CMD::MDQuote::setBidPrice (UNSIGNED_LONG *val[]*) [inline]**

6.4.3.27 void CMD::MDQuote::setBidQty (UNSIGNED_LONG *val[]*) [inline]

6.4.3.28 void CMD::MDQuote::setClosePrice (UNSIGNED_LONG *val*) [inline]

6.4.3.29 void CMD::MDQuote::setDepth (UNSIGNED_CHARACTER *val*) [inline]

6.4.3.30 void CMD::MDQuote::setHighPrice (UNSIGNED_LONG *val*) [inline]

6.4.3.31 void CMD::MDQuote::setLastTradePrice (UNSIGNED_LONG *val*) [inline]

6.4.3.32 void CMD::MDQuote::setLastTradeQty (UNSIGNED_LONG *val*) [inline]

6.4.3.33 void CMD::MDQuote::setLowerCktLimit (UNSIGNED_LONG *val*) [inline]

6.4.3.34 void CMD::MDQuote::setLowPrice (UNSIGNED_LONG *val*) [inline]

6.4.3.35 void CMD::MDQuote::setNummberOfTrades (UNSIGNED_LONG *val*) [inline]

6.4.3.36 void CMD::MDQuote::setOpenPrice (UNSIGNED_LONG *val*) [inline]

6.4.3.37 void CMD::MDQuote::setSymbolId (UNSIGNED_LONG *val*) [inline]

6.4.3.38 void CMD::MDQuote::setTotalAskQty (UNSIGNED_LONG *val*) [inline]

6.4.3.39 void CMD::MDQuote::setTotalBidQty (UNSIGNED_LONG *val*) [inline]

6.4.3.40 void CMD::MDQuote::setUpperCktLimit (UNSIGNED_LONG *val*) [inline]

6.4.3.41 void CMD::MDQuote::setValue (UNSIGNED_LONG *val*) [inline]

6.4.3.42 void CMD::MDQuote::setVolume (UNSIGNED_LONG *val*) [inline]

6.4.4 Member Data Documentation

6.4.4.1 UNSIGNED_LONG CMD::MDQuote::_askPrice[MAX_LOOKUP_LEVEL] [private]

6.4.4.2 UNSIGNED_LONG CMD::MDQuote::_askQty[MAX_LOOKUP_LEVEL] [private]

6.4.4.3 UNSIGNED_LONG CMD::MDQuote::_bidPrice[MAX_LOOKUP_LEVEL] [private]

6.4.4.4 UNSIGNED_LONG CMD::MDQuote::_bidQty[MAX_LOOKUP_LEVEL] [private]

6.4.4.5 UNSIGNED_LONG CMD::MDQuote::_closePrice [private]

6.4.4.6 UNSIGNED_CHARACTER CMD::MDQuote::_depth [private]

6.4.4.7 UNSIGNED_LONG CMD::MDQuote::_highPrice [private]

6.4.4.8 UNSIGNED_LONG CMD::MDQuote::_lastTradePrice [private]

6.4.4.9 UNSIGNED_LONG CMD::MDQuote::_lastTradeQty [private]

6.4.4.10 UNSIGNED_LONG CMD::MDQuote::_lowerCktLimit [private]

6.4.4.11 UNSIGNED_LONG CMD::MDQuote::_lowPrice [private]

6.4.4.12 UNSIGNED_LONG CMD::MDQuote::_numberOfTrades [private]

6.4.4.13 UNSIGNED_LONG CMD::MDQuote::_openPrice [private]

6.4.4.14 UNSIGNED_LONG CMD::MDQuote::_symbolId [private]

6.4.4.15 UNSIGNED_LONG CMD::MDQuote::_totalAskQty [private]

6.4.4.16 UNSIGNED_LONG CMD::MDQuote::_totalBidQty [private]

6.4.4.17 UNSIGNED_LONG CMD::MDQuote::_upperCktLimit [private]

6.4.4.18 UNSIGNED_LONG CMD::MDQuote::_value [private]

6.4.4.19 UNSIGNED_LONG CMD::MDQuote::_volume [private]

6.4.4.20 const int CMD::MDQuote::MAX_LOOKUP_LEVEL = 10 [static], [private]

6.4.4.21 const int CMD::MDQuote::QUOTEDATA_LENGTH = 80 [static], [private]

The documentation for this class was generated from the following file:

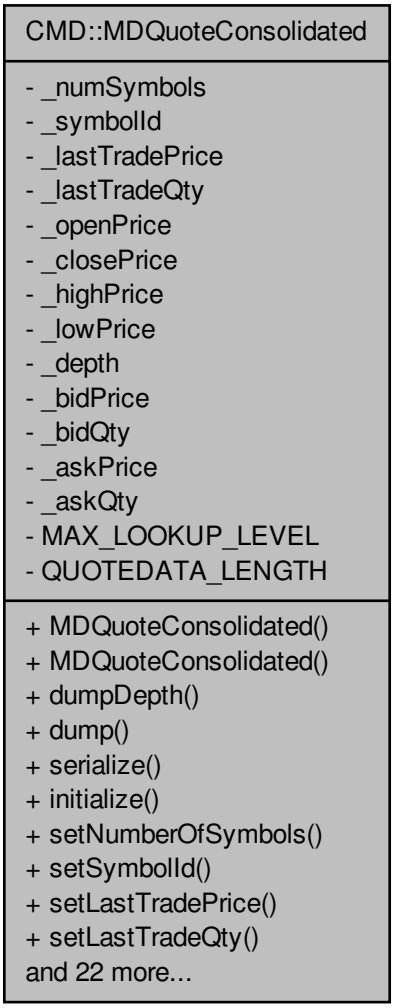
- commands.h

6.5 CMD::MDQuoteConsolidated Class Reference

MarketData Quote Consolidated.

`#include <commands.h>`

Collaboration diagram for CMD::MDQuoteConsolidated:



Public Member Functions

- MDQuoteConsolidated ()
- MDQuoteConsolidated (const char ∗buf)
- void dumpDepth (std::vector< UNSIGNED_LONG > &data, UNSIGNED_CHARACTER depth)
- void dump ()
- int serialize (char ∗buf)
- void initialize ()
- void setNumberOfSymbols (UNSIGNED_SHORT val)
- void setSymbolId (UNSIGNED_SHORT index, UNSIGNED_LONG val)
- void setLastTradePrice (UNSIGNED_SHORT index, UNSIGNED_LONG val)
- void setLastTradeQty (UNSIGNED_SHORT index, UNSIGNED_LONG val)
- void setOpenPrice (UNSIGNED_SHORT index, UNSIGNED_LONG val)
- void setClosePrice (UNSIGNED_SHORT index, UNSIGNED_LONG val)
- void setHighPrice (UNSIGNED_SHORT index, UNSIGNED_LONG val)

- void setLowPrice (UNSIGNED_SHORT index, UNSIGNED_LONG val)
- void setDepth (UNSIGNED_CHARACTER val)
- void setBidPrice (UNSIGNED_SHORT index, UNSIGNED_LONG val[])
- void setBidQty (UNSIGNED_SHORT index, UNSIGNED_LONG val[])
- void setAskPrice (UNSIGNED_SHORT index, UNSIGNED_LONG val[])
- void setAskQty (UNSIGNED_SHORT index, UNSIGNED_LONG val[])
- UNSIGNED_SHORT getNumberOfSymbols ()
- UNSIGNED_LONG getSymbolId (UNSIGNED_SHORT index)
- UNSIGNED_LONG getLastTradePrice (UNSIGNED_SHORT index)
- UNSIGNED_LONG getLastTradeQty (UNSIGNED_SHORT index)
- UNSIGNED_LONG getOpenPrice (UNSIGNED_SHORT index)
- UNSIGNED_LONG getClosePrice (UNSIGNED_SHORT index)
- UNSIGNED_LONG getHighPrice (UNSIGNED_SHORT index)
- UNSIGNED_LONG getLowPrice (UNSIGNED_SHORT index)
- UNSIGNED_CHARACTER getDepth ()
- std::vector< UNSIGNED_LONG > & getBidPrice (UNSIGNED_SHORT index)
- std::vector< UNSIGNED_LONG > & getBidQty (UNSIGNED_SHORT index)
- std::vector< UNSIGNED_LONG > & getAskPrice (UNSIGNED_SHORT index)
- std::vector< UNSIGNED_LONG > & getAskQty (UNSIGNED_SHORT index)

Private Attributes

- UNSIGNED_SHORT _numSymbols
- std::vector< UNSIGNED_LONG > _symbolId
- std::vector< UNSIGNED_LONG > _lastTradePrice
- std::vector< UNSIGNED_LONG > _lastTradeQty
- std::vector< UNSIGNED_LONG > _openPrice
- std::vector< UNSIGNED_LONG > _closePrice
- std::vector< UNSIGNED_LONG > _highPrice
- std::vector< UNSIGNED_LONG > _lowPrice
- UNSIGNED_CHARACTER _depth
- std::vector< std::vector < UNSIGNED_LONG > > _bidPrice
- std::vector< std::vector < UNSIGNED_LONG > > _bidQty
- std::vector< std::vector < UNSIGNED_LONG > > _askPrice
- std::vector< std::vector < UNSIGNED_LONG > > _askQty

Static Private Attributes

- static const int MAX_LOOKUP_LEVEL = 10
- static const int QUOTEDATA_LENGTH = 80

6.5.1 Detailed Description

MarketData Quote Consolidated.

Server will send the consolidated quote to the subscribed members.

6.5.2 Constructor & Destructor Documentation

6.5.2.1 CMD::MDQuoteConsolidated::MDQuoteConsolidated ( )

6.5.2.2 CMD::MDQuoteConsolidated::MDQuoteConsolidated (const char * *buf*)

6.5.3 Member Function Documentation

6.5.3.1 void CMD::MDQuoteConsolidated::dump ( )

6.5.3.2 void CMD::MDQuoteConsolidated::dumpDepth (std::vector< UNSIGNED_LONG > & *data*, UNSIGNED_CHARACTER *depth*)

6.5.3.3 std::vector<UNSIGNED_LONG>& CMD::MDQuoteConsolidated::getAskPrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.4 std::vector<UNSIGNED_LONG>& CMD::MDQuoteConsolidated::getAskQty (UNSIGNED_SHORT *index*) [inline]

6.5.3.5 std::vector<UNSIGNED_LONG>& CMD::MDQuoteConsolidated::getBidPrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.6 std::vector<UNSIGNED_LONG>& CMD::MDQuoteConsolidated::getBidQty (UNSIGNED_SHORT *index*) [inline]

6.5.3.7 UNSIGNED_LONG CMD::MDQuoteConsolidated::getClosePrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.8 UNSIGNED_CHARACTER CMD::MDQuoteConsolidated::getDepth ( ) [inline]

6.5.3.9 UNSIGNED_LONG CMD::MDQuoteConsolidated::getHighPrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.10 UNSIGNED_LONG CMD::MDQuoteConsolidated::getLastTradePrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.11 UNSIGNED_LONG CMD::MDQuoteConsolidated::getLastTradeQty (UNSIGNED_SHORT *index*) [inline]

6.5.3.12 UNSIGNED_LONG CMD::MDQuoteConsolidated::getLowPrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.13 UNSIGNED_SHORT CMD::MDQuoteConsolidated::getNumberOfSymbols ( ) [inline]

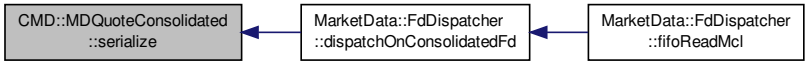
6.5.3.14 UNSIGNED_LONG CMD::MDQuoteConsolidated::getOpenPrice (UNSIGNED_SHORT *index*) [inline]

6.5.3.15 UNSIGNED_LONG CMD::MDQuoteConsolidated::getSymbolId (UNSIGNED_SHORT *index*) [inline]

6.5.3.16 void CMD::MDQuoteConsolidated::initialize ( )

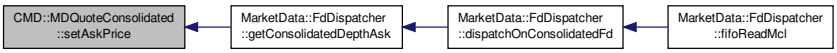
6.5.3.17 int CMD::MDQuoteConsolidated::serialize (char * *buf*)

Here is the caller graph for this function:



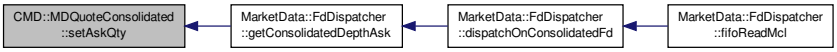
6.5.3.18 void CMD::MDQuoteConsolidated::setAskPrice (UNSIGNED_SHORT *index,* UNSIGNED_LONG *val[]*) [inline]

Here is the caller graph for this function:



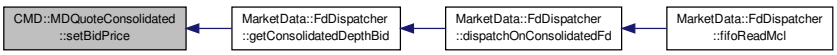
6.5.3.19 void CMD::MDQuoteConsolidated::setAskQty (UNSIGNED_SHORT *index,* UNSIGNED_LONG *val[]*) [inline]

Here is the caller graph for this function:



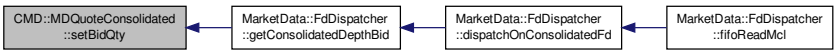
6.5.3.20 void CMD::MDQuoteConsolidated::setBidPrice (UNSIGNED_SHORT *index,* UNSIGNED_LONG *val[]*) [inline]

Here is the caller graph for this function:



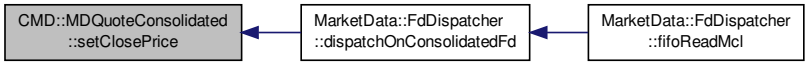
6.5.3.21 void CMD::MDQuoteConsolidated::setBidQty (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val[]*) [inline]

Here is the caller graph for this function:



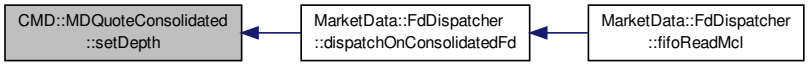
6.5.3.22 void CMD::MDQuoteConsolidated::setClosePrice (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



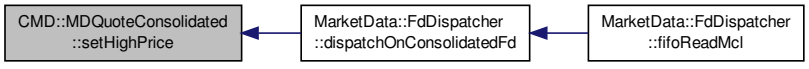
6.5.3.23 void CMD::MDQuoteConsolidated::setDepth (UNSIGNED_CHARACTER *val*) [inline]

Here is the caller graph for this function:



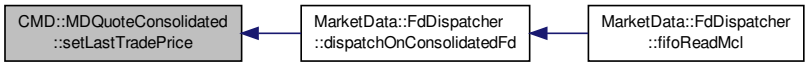
6.5.3.24 void CMD::MDQuoteConsolidated::setHighPrice (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



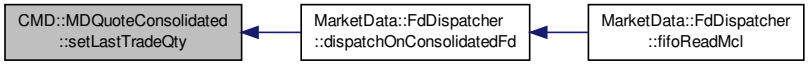
6.5.3.25 void CMD::MDQuoteConsolidated::setLastTradePrice (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



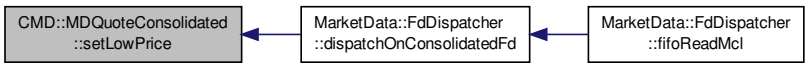
6.5.3.26 void CMD::MDQuoteConsolidated::setLastTradeQty (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



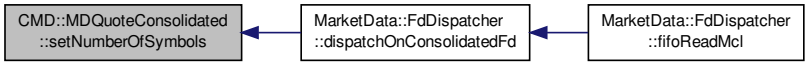
6.5.3.27 void CMD::MDQuoteConsolidated::setLowPrice (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



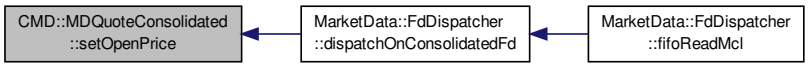
6.5.3.28 void CMD::MDQuoteConsolidated::setNumberOfSymbols (UNSIGNED_SHORT *val*) [inline]

Here is the caller graph for this function:



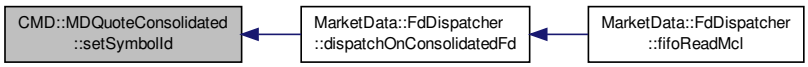
6.5.3.29 void CMD::MDQuoteConsolidated::setOpenPrice (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



6.5.3.30 void CMD::MDQuoteConsolidated::setSymbolId (UNSIGNED_SHORT *index*, UNSIGNED_LONG *val*) [inline]

Here is the caller graph for this function:



6.5.4 Member Data Documentation

6.5.4.1 std::vector< std::vector<UNSIGNED_LONG> > CMD::MDQuoteConsolidated::_askPrice [private]

6.5.4.2 std::vector< std::vector<UNSIGNED_LONG> > CMD::MDQuoteConsolidated::_askQty [private]

6.5.4.3 std::vector< std::vector<UNSIGNED_LONG> > CMD::MDQuoteConsolidated::_bidPrice [private]

6.5.4.4 std::vector< std::vector<UNSIGNED_LONG> > CMD::MDQuoteConsolidated::_bidQty [private]

6.5.4.5 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_closePrice [private]

6.5.4.6 UNSIGNED_CHARACTER CMD::MDQuoteConsolidated::_depth [private]

6.5.4.7 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_highPrice [private]

6.5.4.8 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_lastTradePrice [private]

6.5.4.9 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_lastTradeQty [private]

6.5.4.10 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_lowPrice [private]

6.5.4.11 UNSIGNED_SHORT CMD::MDQuoteConsolidated::_numSymbols [private]

6.5.4.12 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_openPrice [private]

6.5.4.13 std::vector<UNSIGNED_LONG> CMD::MDQuoteConsolidated::_symbolId [private]

6.5.4.14 const int CMD::MDQuoteConsolidated::MAX_LOOKUP_LEVEL = 10 [static], [private]

6.5.4.15 const int CMD::MDQuoteConsolidated::QUOTEDATA_LENGTH = 80 [static], [private]

The documentation for this class was generated from the following file:

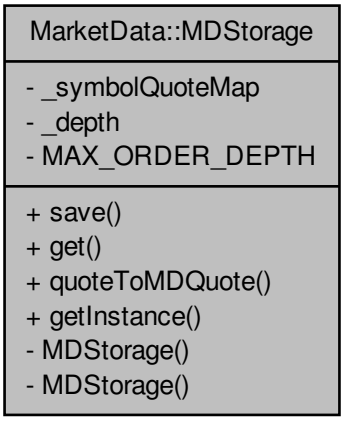
- commands.h

6.6 MarketData::MDStorage Class Reference

MDStorage Class.

`#include <mdStorage.h>`

Collaboration diagram for MarketData::MDStorage:



Public Member Functions

- void save (const long, const CMD::MDQuote *)
  Function to save market quote for every symbol.
- CMD::MDQuote get (const long symbolId)
  Function to get market quote for given symbol.
- CMD::MDQuote * quoteToMDQuote (const long symbolId, const CMD::MDQuote *quote)

Static Public Member Functions

- static MDStorage * getInstance ()
  MDStorage is a Singleton class, which will have only one instance. This instance can be accessed using the getInstance method.

Private Types

- typedef boost::unordered_map
  < long, CMD::MDQuote * > SymbolQuoteMap

Private Member Functions

- MDStorage ()
- MDStorage (const MDStorage &)

Private Attributes

- SymbolQuoteMap _symbolQuoteMap
- int _depth

Static Private Attributes

- static const int MAX_ORDER_DEPTH = 5

6.6.1 Detailed Description

MDStorage Class.

This class is responcible for storing the quote. This is useful for getting consolidated feed for multiple symbols.

6.6.2 Member Typedef Documentation

6.6.2.1 typedef boost::unordered_map< long, CMD::MDQuote* > MarketData::MDStorage::SymbolQuoteMap [private]

6.6.3 Constructor & Destructor Documentation

6.6.3.1 MarketData::MDStorage::MDStorage ( ) [inline], [private]

6.6.3.2 MarketData::MDStorage::MDStorage (const MDStorage &) [private]

6.6.4 Member Function Documentation

6.6.4.1 CMD::MDQuote MarketData::MDStorage::get (const long *symbolId*)

Function to get market quote for given symbol.

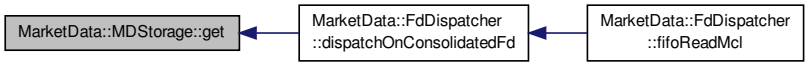
Parameters

symbol	Id

Returns

MDQuote

Here is the caller graph for this function:



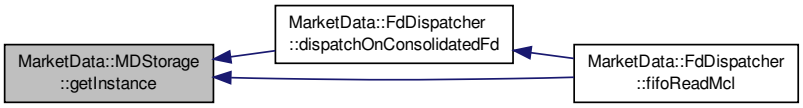
6.6.4.2 static MDStorage* MarketData::MDStorage::getInstance ( ) [inline], [static]

MDStorage is is a Singleton class, which will have only one instance. This instance can be accessed using the getInstance method.

Returns

MDStorage*

Here is the caller graph for this function:



6.6.4.3 CMD::MDQuote* MarketData::MDStorage::quoteToMDQuote (const long *symbolId,* const CMD::MDQuote * *quote*)

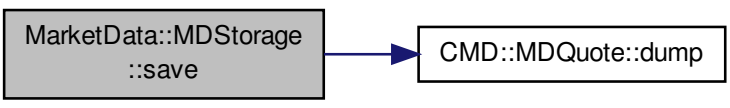
6.6.4.4 void MarketData::MDStorage::save (const long *symbolId,* const CMD::MDQuote * *quote*)

Function to save market quote for every symbol.

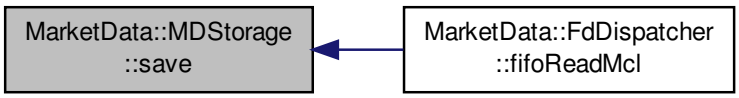
Parameters

symbol	Id
MDQuote	

Here is the call graph for this function:



Here is the caller graph for this function:



6.6.5 Member Data Documentation

6.6.5.1 int MarketData::MDStorage::_depth [private]

6.6.5.2 SymbolQuoteMap MarketData::MDStorage::_symbolQuoteMap [private]

6.6.5.3 const int MarketData::MDStorage::MAX_ORDER_DEPTH = 5 [static], [private]

The documentation for this class was generated from the following files:

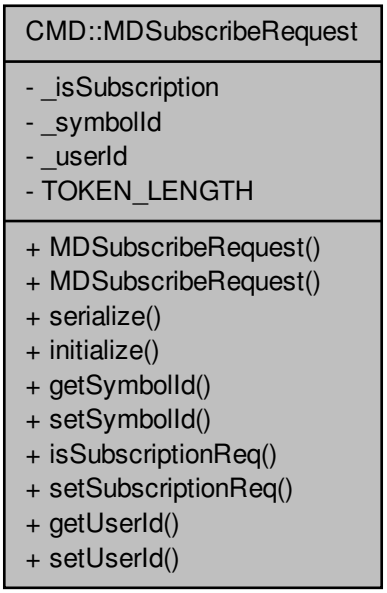
- mdStorage.h
- mdStorage.cpp

6.7 CMD::MDSubscribeRequest Class Reference

MarketData Subscribe/Unsubscribe Request.

`#include <commands.h>`

Collaboration diagram for CMD::MDSubscribeRequest:



Public Member Functions

- MDSubscribeRequest ()
- MDSubscribeRequest (const char ∗buf)
- int serialize (char ∗buf)
- void initialize ()
- UNSIGNED_LONG getSymbolId () const
- void setSymbolId (UNSIGNED_LONG val)
- UNSIGNED_CHARACTER isSubscriptionReq () const
- void setSubscriptionReq (UNSIGNED_CHARACTER val)
- UNSIGNED_SHORT getUserId () const
- void setUserId (UNSIGNED_SHORT val)

Private Attributes

- UNSIGNED_SHORT _isSubscription
- UNSIGNED_LONG _symbolId
- UNSIGNED_SHORT _userId

Static Private Attributes

- static const int TOKEN_LENGTH = 100

6.7.1 Detailed Description

MarketData Subscribe/Unsubscribe Request.

Server will send a successful response if the subscription was successful, otherwise it send a unsuccessful response.

6.7.2 Constructor & Destructor Documentation

6.7.2.1 CMD::MDSubscribeRequest::MDSubscribeRequest ( ) [inline]

6.7.2.2 CMD::MDSubscribeRequest::MDSubscribeRequest (const char * *buf*)

6.7.3 Member Function Documentation

6.7.3.1 UNSIGNED_LONG CMD::MDSubscribeRequest::getSymbolId ( ) const [inline]

6.7.3.2 UNSIGNED_SHORT CMD::MDSubscribeRequest::getUserId ( ) const [inline]

6.7.3.3 void CMD::MDSubscribeRequest::initialize ( )

6.7.3.4 UNSIGNED_CHARACTER CMD::MDSubscribeRequest::isSubscriptionReq ( ) const [inline]

6.7.3.5 int CMD::MDSubscribeRequest::serialize (char * *buf*)

6.7.3.6 void CMD::MDSubscribeRequest::setSubscriptionReq (UNSIGNED_CHARACTER *val*) [inline]

6.7.3.7 void CMD::MDSubscribeRequest::setSymbolId (UNSIGNED_LONG *val*) [inline]

6.7.3.8 void CMD::MDSubscribeRequest::setUserId (UNSIGNED_SHORT *val*) [inline]

6.7.4 Member Data Documentation

6.7.4.1 UNSIGNED_SHORT CMD::MDSubscribeRequest::_isSubscription [private]

6.7.4.2 UNSIGNED_LONG CMD::MDSubscribeRequest::_symbolId [private]

6.7.4.3 UNSIGNED_SHORT CMD::MDSubscribeRequest::_userId [private]

6.7.4.4 const int CMD::MDSubscribeRequest::TOKEN_LENGTH = 100 [static], [private]

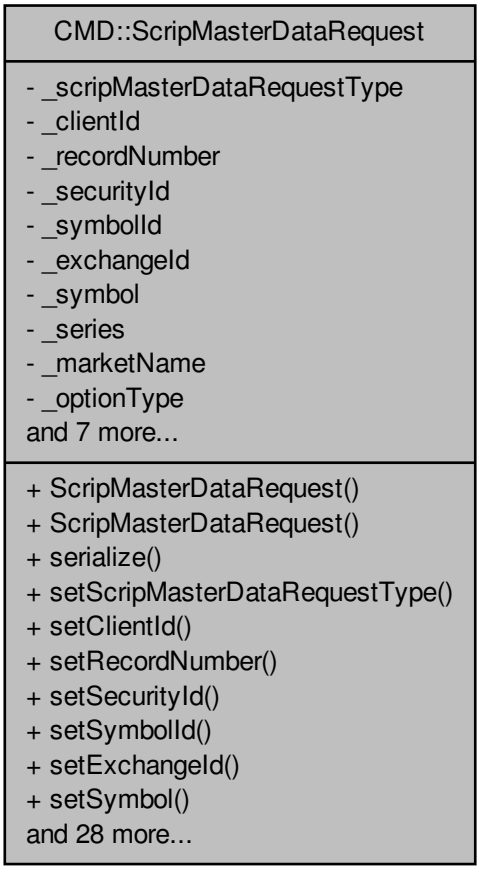
The documentation for this class was generated from the following file:

- commands.h

6.8 CMD::ScripMasterDataRequest Class Reference

```
#include <commands.h>
```

Collaboration diagram for CMD::ScripMasterDataRequest:



Public Member Functions

- ScripMasterDataRequest ()
- ScripMasterDataRequest (const char ∗buf)
- int serialize (char ∗buf)
- void setScripMasterDataRequestType (UNSIGNED_CHARACTER scripMasterDataRequestType)
- void setClientId (UNSIGNED_INTEGER clientId)
- void setRecordNumber (UNSIGNED_LONG recordNumber)
- void setSecurityId (UNSIGNED_LONG securityId)
- void setSymbolId (UNSIGNED_LONG symbolId)
- void setExchangeId (UNSIGNED_SHORT exchangeId)
- void setSymbol (const char ∗symbol)
- void setSeries (const char ∗series)
- void setMarketName (const char ∗marketName)
- void setSymbolAlias (const char ∗symbolAlias)
- void setOptionType (UNSIGNED_CHARACTER optionType)
- void setOptionMode (UNSIGNED_CHARACTER optionMode)
- void setSecurityType (UNSIGNED_CHARACTER securityType)
- void setStrikePrice (UNSIGNED_LONG strikePrice)

- void setExpiryYearMon (UNSIGNED_INTEGER expiryYearMon)
- void setExpiryDate (UNSIGNED_INTEGER expiryDate)
- void setNumberOfRecords (UNSIGNED_INTEGER numberOfRecords)
- UNSIGNED_CHARACTER getScripMasterDataRequestType ()
- UNSIGNED_INTEGER getClientId ()
- UNSIGNED_LONG getRecordNumber ()
- UNSIGNED_LONG getSecurityId ()
- UNSIGNED_LONG getSymbolId ()
- UNSIGNED_SHORT getExchangeId ()
- char * getSymbol ()
- char * getSeries ()
- char * getMarketName ()
- char * getSymbolAlias ()
- UNSIGNED_CHARACTER getOptionType ()
- UNSIGNED_CHARACTER getOptionMode ()
- UNSIGNED_CHARACTER getSecurityType ()
- UNSIGNED_LONG getStrikePrice ()
- UNSIGNED_INTEGER getExpiryYearMon ()
- UNSIGNED_INTEGER getExpiryDate ()
- UNSIGNED_INTEGER getNumberOfRecords ()
- void dump ()

Private Attributes

- UNSIGNED_CHARACTER _scripMasterDataRequestType
- UNSIGNED_INTEGER _clientId
- UNSIGNED_LONG _recordNumber
- UNSIGNED_LONG _securityId
- UNSIGNED_LONG _symbolId
- UNSIGNED_SHORT _exchangeId
- char _symbol [SYMBOL_SIZE]
- char _series [SERIES_SIZE]
- char _marketName [MARKET_NAME_SIZE]
- UNSIGNED_CHARACTER _optionType
- UNSIGNED_CHARACTER _optionMode
- UNSIGNED_CHARACTER _securityType
- UNSIGNED_LONG _strikePrice
- UNSIGNED_INTEGER _expiryYearMon
- UNSIGNED_INTEGER _expiryDate
- UNSIGNED_INTEGER _numberOfRecords
- char _symbolAlias [SYMBOL_ALIAS_SIZE]

6.8.1 Constructor & Destructor Documentation

6.8.1.1 CMD::ScripMasterDataRequest::ScripMasterDataRequest ( ) [inline]

6.8.1.2 CMD::ScripMasterDataRequest::ScripMasterDataRequest (const char * *buf*)

6.8.2 Member Function Documentation

6.8.2.1 void CMD::ScripMasterDataRequest::dump ( )

6.8.2.2 UNSIGNED_INTEGER CMD::ScripMasterDataRequest::getClientId ( ) [inline]

6.8.2.3 **UNSIGNED_SHORT CMD::ScripMasterDataRequest::getExchangeId ( ) [inline]**

6.8.2.4 **UNSIGNED_INTEGER CMD::ScripMasterDataRequest::getExpiryDate ( ) [inline]**

6.8.2.5 **UNSIGNED_INTEGER CMD::ScripMasterDataRequest::getExpiryYearMon ( ) [inline]**

6.8.2.6 **char* CMD::ScripMasterDataRequest::getMarketName ( ) [inline]**

6.8.2.7 **UNSIGNED_INTEGER CMD::ScripMasterDataRequest::getNumberOfRecords ( ) [inline]**

6.8.2.8 **UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::getOptionMode ( ) [inline]**

6.8.2.9 **UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::getOptionType ( ) [inline]**

6.8.2.10 **UNSIGNED_LONG CMD::ScripMasterDataRequest::getRecordNumber ( ) [inline]**

6.8.2.11 **UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::getScripMasterDataRequestType ( ) [inline]**

6.8.2.12 **UNSIGNED_LONG CMD::ScripMasterDataRequest::getSecurityId ( ) [inline]**

6.8.2.13 **UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::getSecurityType ( ) [inline]**

6.8.2.14 **char* CMD::ScripMasterDataRequest::getSeries ( ) [inline]**

6.8.2.15 **UNSIGNED_LONG CMD::ScripMasterDataRequest::getStrikePrice ( ) [inline]**

6.8.2.16 **char* CMD::ScripMasterDataRequest::getSymbol ( ) [inline]**

6.8.2.17 **char* CMD::ScripMasterDataRequest::getSymbolAlias ( ) [inline]**

6.8.2.18 **UNSIGNED_LONG CMD::ScripMasterDataRequest::getSymbolId ( ) [inline]**

6.8.2.19 **int CMD::ScripMasterDataRequest::serialize (char * *buf*)**

6.8.2.20 **void CMD::ScripMasterDataRequest::setClientId (UNSIGNED_INTEGER *clientId*) [inline]**

6.8.2.21 **void CMD::ScripMasterDataRequest::setExchangeId (UNSIGNED_SHORT *exchangeId*) [inline]**

6.8.2.22 **void CMD::ScripMasterDataRequest::setExpiryDate (UNSIGNED_INTEGER *expiryDate*) [inline]**

6.8.2.23 **void CMD::ScripMasterDataRequest::setExpiryYearMon (UNSIGNED_INTEGER *expiryYearMon*) [inline]**

6.8.2.24 **void CMD::ScripMasterDataRequest::setMarketName (const char * *marketName*) [inline]**

6.8.2.25 **void CMD::ScripMasterDataRequest::setNumberOfRecords (UNSIGNED_INTEGER *numberOfRecords*) [inline]**

6.8.2.26 **void CMD::ScripMasterDataRequest::setOptionMode (UNSIGNED_CHARACTER *optionMode*) [inline]**

6.8.2.27 **void CMD::ScripMasterDataRequest::setOptionType (UNSIGNED_CHARACTER *optionType*) [inline]**

6.8.2.28 **void CMD::ScripMasterDataRequest::setRecordNumber (UNSIGNED_LONG *recordNumber*) [inline]**

6.8.2.29 **void CMD::ScripMasterDataRequest::setScripMasterDataRequestType (UNSIGNED_CHARACTER *scripMasterDataRequestType*) [inline]**

6.8.2.30 void CMD::ScripMasterDataRequest::setSecurityId (UNSIGNED_LONG *securityId*) [inline]

6.8.2.31 void CMD::ScripMasterDataRequest::setSecurityType (UNSIGNED_CHARACTER *securityType*) [inline]

6.8.2.32 void CMD::ScripMasterDataRequest::setSeries (const char * *series*) [inline]

6.8.2.33 void CMD::ScripMasterDataRequest::setStrikePrice (UNSIGNED_LONG *strikePrice*) [inline]

6.8.2.34 void CMD::ScripMasterDataRequest::setSymbol (const char * *symbol*) [inline]

6.8.2.35 void CMD::ScripMasterDataRequest::setSymbolAlias (const char * *symbolAlias*) [inline]

6.8.2.36 void CMD::ScripMasterDataRequest::setSymbolId (UNSIGNED_LONG *symbolId*) [inline]

6.8.3 Member Data Documentation

6.8.3.1 UNSIGNED_INTEGER CMD::ScripMasterDataRequest::_clientId [private]

6.8.3.2 UNSIGNED_SHORT CMD::ScripMasterDataRequest::_exchangeId [private]

6.8.3.3 UNSIGNED_INTEGER CMD::ScripMasterDataRequest::_expiryDate [private]

6.8.3.4 UNSIGNED_INTEGER CMD::ScripMasterDataRequest::_expiryYearMon [private]

6.8.3.5 char CMD::ScripMasterDataRequest::_marketName[MARKET_NAME_SIZE] [private]

6.8.3.6 UNSIGNED_INTEGER CMD::ScripMasterDataRequest::_numberOfRecords [private]

6.8.3.7 UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::_optionMode [private]

6.8.3.8 UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::_optionType [private]

6.8.3.9 UNSIGNED_LONG CMD::ScripMasterDataRequest::_recordNumber [private]

6.8.3.10 UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::_scripMasterDataRequestType [private]

6.8.3.11 UNSIGNED_LONG CMD::ScripMasterDataRequest::_securityId [private]

6.8.3.12 UNSIGNED_CHARACTER CMD::ScripMasterDataRequest::_securityType [private]

6.8.3.13 char CMD::ScripMasterDataRequest::_series[SERIES_SIZE] [private]

6.8.3.14 UNSIGNED_LONG CMD::ScripMasterDataRequest::_strikePrice [private]

6.8.3.15 char CMD::ScripMasterDataRequest::_symbol[SYMBOL_SIZE] [private]

6.8.3.16 char CMD::ScripMasterDataRequest::_symbolAlias[SYMBOL_ALIAS_SIZE] [private]

6.8.3.17 UNSIGNED_LONG CMD::ScripMasterDataRequest::_symbolId [private]

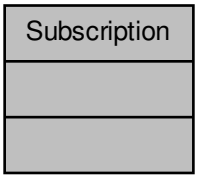
The documentation for this class was generated from the following file:

- commands.h

6.9 Subscription Class Reference

It accepts request for symbol subscription from the client and updates symbol-fds map. Which is used by disppatcher to send event for every tick update.

Collaboration diagram for Subscription:



6.9.1 Detailed Description

It accepts request for symbol subscription from the client and updates symbol-fds map. Which is used by disppatcher to send event for every tick update.

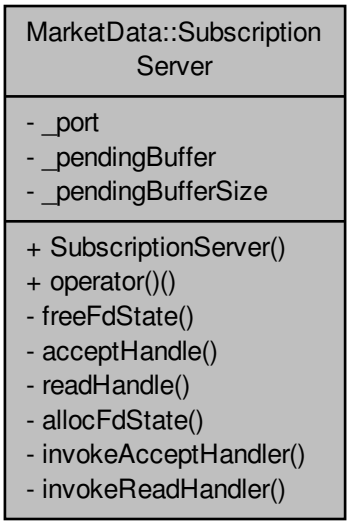
The documentation for this class was generated from the following file:

- subscriptionServer.h

6.10 MarketData::SubscriptionServer Class Reference

```
#include <subscriptionServer.h>
```

Collaboration diagram for MarketData::SubscriptionServer:



Public Member Functions

- SubscriptionServer (int)
- void operator() ()

  overloaded function operator.

Private Member Functions

- void freeFdState (FdState ∗state)

  Free allocated state memory.
- void acceptHandle (evutil_socket_t listener, short event, event_base ∗base)

  Accept Handle.
- void readHandle (evutil_socket_t fd, short events, FdState ∗state)

  Read Handle.
- FdState ∗ allocFdState (struct event_base ∗base, evutil_socket_t fd)

  Allocate FdState.

Static Private Member Functions

- static void invokeAcceptHandler (evutil_socket_t fd, short events, void ∗arg)

  Invoke Accept Handler Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.
- static void invokeReadHandler (evutil_socket_t fd, short events, void ∗arg)

  Invoke Read Handler Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

Private Attributes

- int _port
- char _pendingBuffer [MAXDATABUFFER]
- int _pendingBufferSize

6.10.1 Constructor & Destructor Documentation

6.10.1.1 MarketData::SubscriptionServer::SubscriptionServer (int *port*)

6.10.2 Member Function Documentation

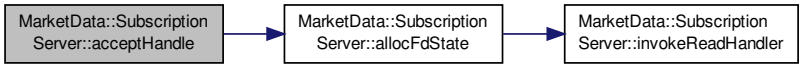
6.10.2.1 void MarketData::SubscriptionServer::acceptHandle (evutil_socket_t *listener*, short *event*, event_base * *base*) [private]

Accept Handle.

Parameters

listener	Socket fd
event	Flags
*base	Pointer to event base

Here is the call graph for this function:



6.10.2.2 FdState * MarketData::SubscriptionServer::allocFdState (struct event_base * *base*, evutil_socket_t *fd*) [private]

Allocate FdState.

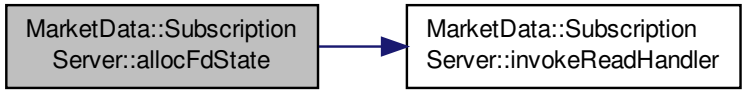
Parameters

base	
fd	

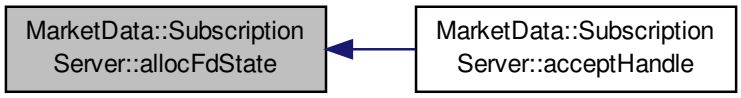
Returns

FdState

Here is the call graph for this function:



Here is the caller graph for this function:



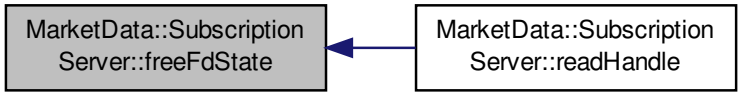
6.10.2.3 void MarketData::SubscriptionServer::freeFdState (FdState * *state*) [private]

Free allocated state memory.

Parameters

state	

Here is the caller graph for this function:



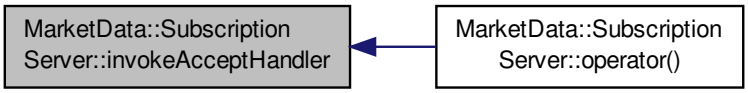
6.10.2.4 void MarketData::SubscriptionServer::invokeAcceptHandler (evutil_socket_t *fd*, short *events*, void * *arg*) [static], [private]

Invoke Accept Handler Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

Parameters

fd	Socket fd
events	Flags
∗arg	Pointer to event base

Here is the caller graph for this function:



6.10.2.5 void MarketData::SubscriptionServer::invokeReadHandler (evutil_socket_t *fd*, short *events*, void ∗ *arg*)

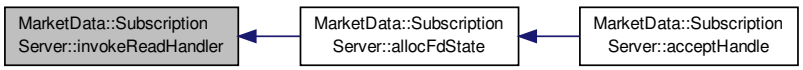
`[static], [private]`

Invoke Read Handler Since libevent is a C library, it doesn't directly provide a mechanism to associate an instance and an instance method, so we need to do it ourself.

Parameters

fd	Socket fd
events	Flags
∗arg	Pointer to event base

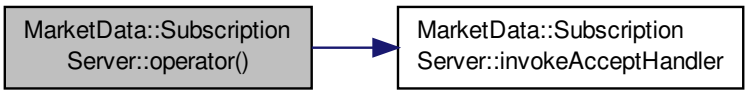
Here is the caller graph for this function:



6.10.2.6 void MarketData::SubscriptionServer::operator() ( )

overloaded function operator.

Here is the call graph for this function:



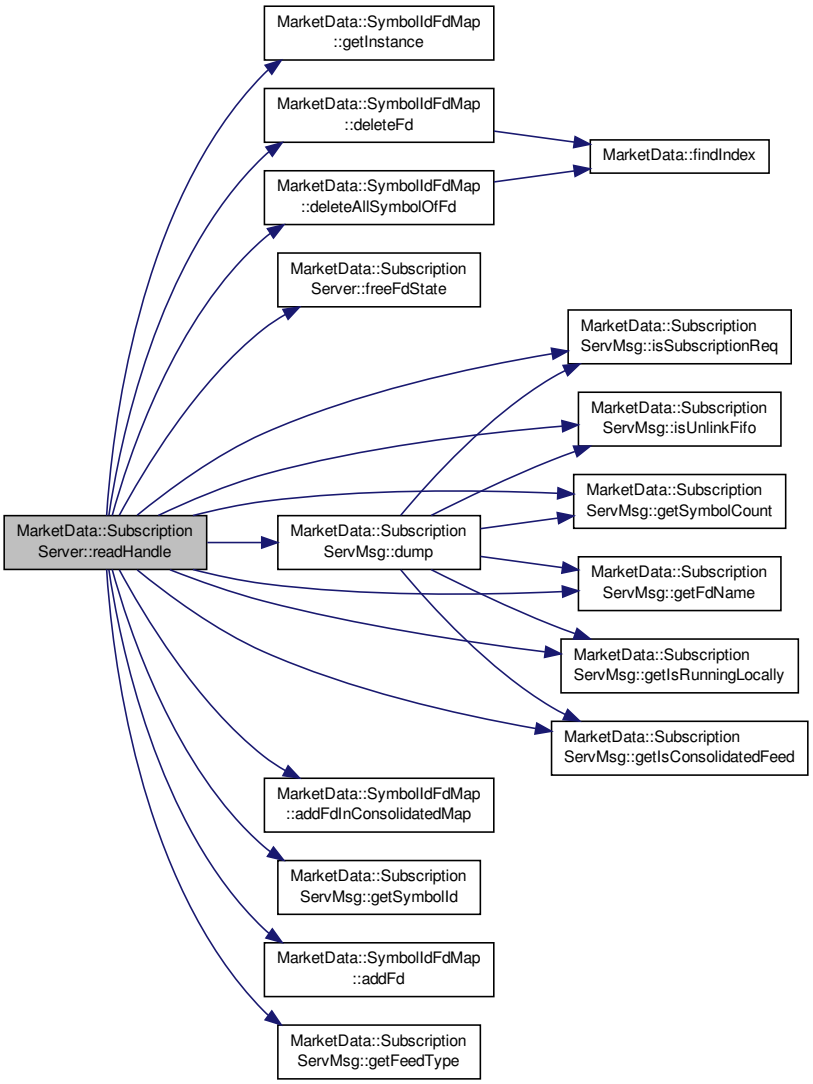
6.10.2.7 void MarketData::SubscriptionServer::readHandle (evutil_socket_t *fd*, short *events*, FdState * *state*) [private]

Read Handle.

Parameters

fd	Socket fd
events	Flags
**state*	

Here is the call graph for this function:



6.10.3 Member Data Documentation

6.10.3.1 char MarketData::SubscriptionServer::_pendingBuffer[MAXDATABUFFER] [private]

6.10.3.2 int MarketData::SubscriptionServer::_pendingBufferSize [private]

6.10.3.3 int MarketData::SubscriptionServer::_port [private]

The documentation for this class was generated from the following files:

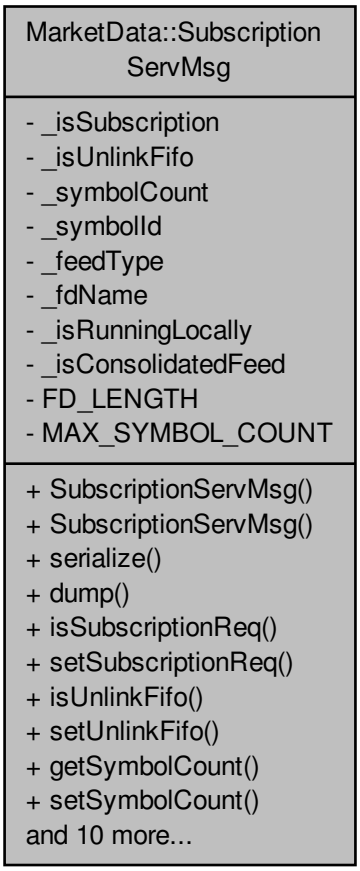
- subscriptionServer.h
- subscriptionServer.cpp

6.11 MarketData::SubscriptionServMsg Class Reference

This class is responsible for serialization of request data to the server.

`#include <subscriptionServMsg.h>`

Collaboration diagram for MarketData::SubscriptionServMsg:



Public Member Functions

- SubscriptionServMsg ()
- SubscriptionServMsg (const char *buf)
- int serialize (char *buf)

  Serialize data.

- void dump ()

  Dump data.
- UNSIGNED_CHARACTER isSubscriptionReq () const

  To check whether the request is to subscribe or unsusbscribe.
- void setSubscriptionReq (UNSIGNED_CHARACTER val)

  To check whether the request is to subscribe or unsusbscribe.
- UNSIGNED_CHARACTER isUnlinkFifo () const
- void setUnlinkFifo (UNSIGNED_CHARACTER val)
- UNSIGNED_SHORT getSymbolCount () const
- void setSymbolCount (UNSIGNED_SHORT val)
- UNSIGNED_LONG getSymbolId (int subs)
- void setSymbolId (int subs, int val)
- UNSIGNED_CHARACTER getFeedType (int subs)
- void setFeedType (int subs, UNSIGNED_CHARACTER val)
- const char * getFdName () const
- void setFdName (const char *m)
- UNSIGNED_SHORT getIsRunningLocally ()
- void setIsRunningLocally (UNSIGNED_SHORT val=1)
- UNSIGNED_SHORT getIsConsolidatedFeed ()
- void setIsConsolidatedFeed (UNSIGNED_SHORT val=0)

Private Types

- typedef std::map
  < UNSIGNED_LONG, UNSIGNED_LONG > SymbolIdMap
- typedef std::map
  < UNSIGNED_LONG, UNSIGNED_LONG > FeedTypeMap

Private Attributes

- UNSIGNED_SHORT _isSubscription
- UNSIGNED_SHORT _isUnlinkFifo
- UNSIGNED_SHORT _symbolCount
- SymbolIdMap _symbolId
- FeedTypeMap _feedType
- char _fdName [FD_LENGTH]
- UNSIGNED_SHORT _isRunningLocally
- UNSIGNED_SHORT _isConsolidatedFeed

Static Private Attributes

- static const int FD_LENGTH = 100
- static const int MAX_SYMBOL_COUNT = 10

6.11.1 Detailed Description

This class is responsible for serialization of request data to the server.

6.11.2 Member Typedef Documentation

6.11.2.1 typedef std::map<UNSIGNED_LONG, UNSIGNED_LONG> MarketData::SubscriptionServMsg::FeedTypeMap [private]

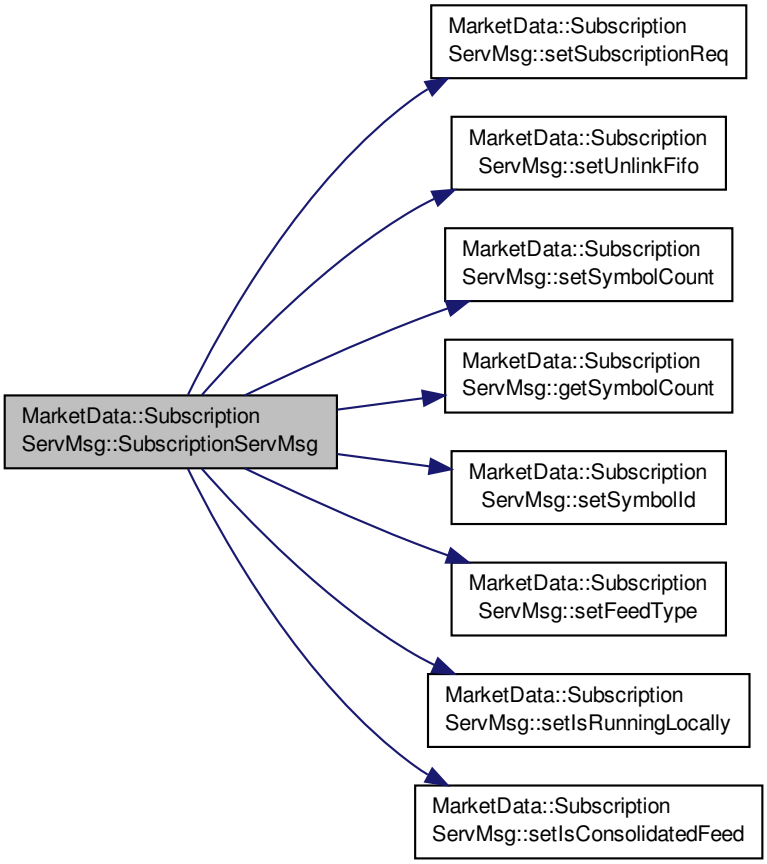
6.11.2.2 typedef std::map<UNSIGNED_LONG, UNSIGNED_LONG> MarketData::SubscriptionServMsg::SymbolIdMap [private]

6.11.3 Constructor & Destructor Documentation

6.11.3.1 MarketData::SubscriptionServMsg::SubscriptionServMsg ( ) [inline]

6.11.3.2 MarketData::SubscriptionServMsg::SubscriptionServMsg (const char * *buf*)

Here is the call graph for this function:

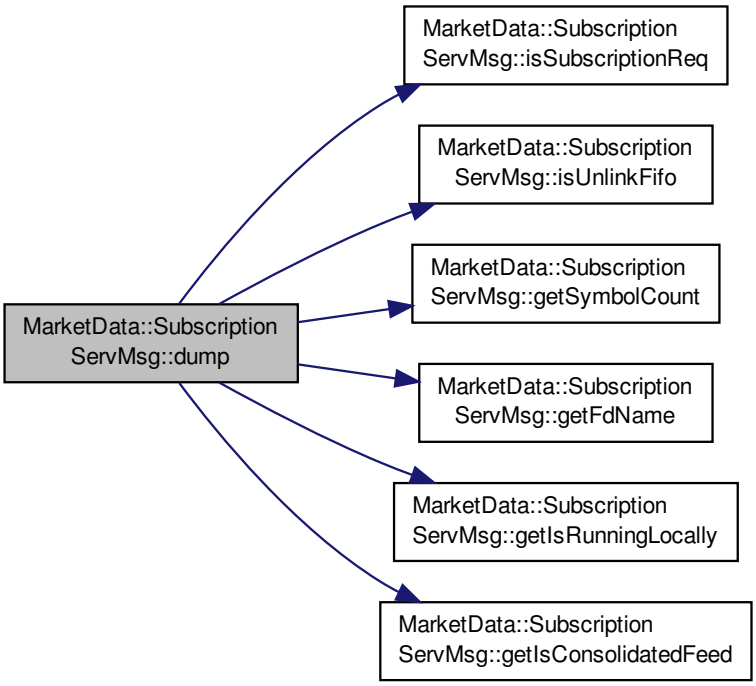


6.11.4 Member Function Documentation

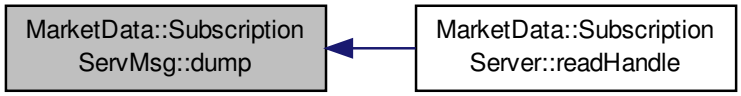
6.11.4.1 void MarketData::SubscriptionServMsg::dump ( )

Dump data.

Here is the call graph for this function:

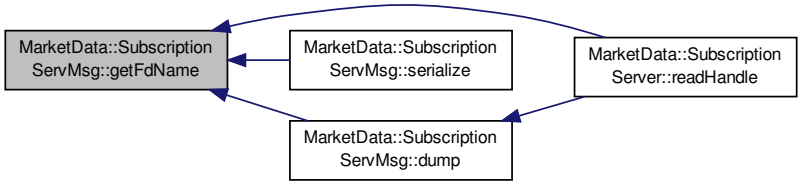


Here is the caller graph for this function:



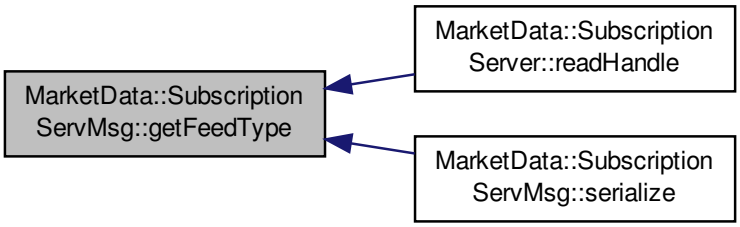
6.11.4.2 const char* MarketData::SubscriptionServMsg::getFdName ( ) const [inline]

Here is the caller graph for this function:



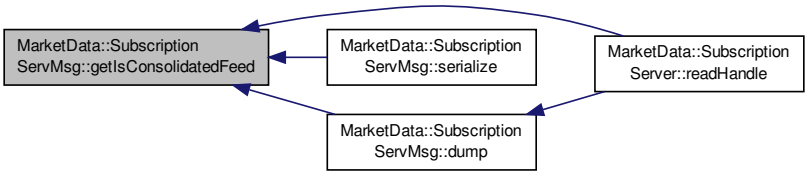
6.11.4.3 UNSIGNED_CHARACTER MarketData::SubscriptionServMsg::getFeedType (int *subs*) [inline]

Here is the caller graph for this function:



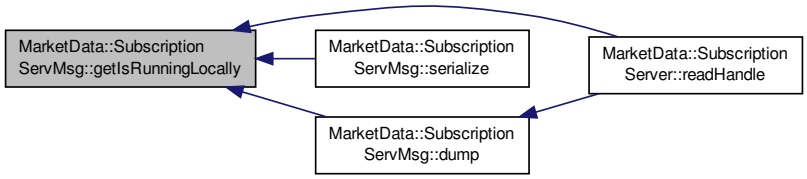
6.11.4.4 UNSIGNED_SHORT MarketData::SubscriptionServMsg::getIsConsolidatedFeed ( ) [inline]

Here is the caller graph for this function:



6.11.4.5 UNSIGNED_SHORT MarketData::SubscriptionServMsg::getIsRunningLocally ( ) [inline]

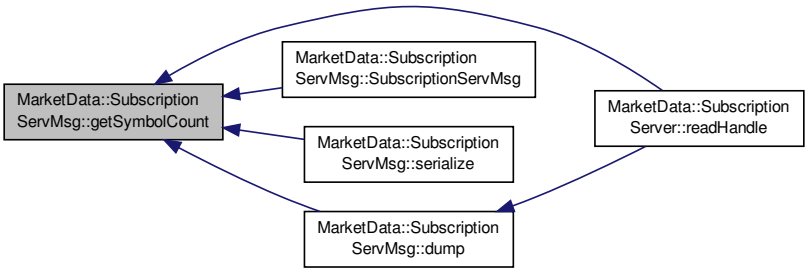
Here is the caller graph for this function:



6.11.4.6 UNSIGNED_SHORT MarketData::SubscriptionServMsg::getSymbolCount ( ) const [inline]

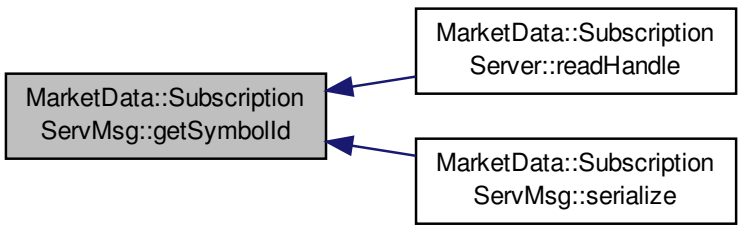
Returns

Here is the caller graph for this function:



6.11.4.7 UNSIGNED_LONG MarketData::SubscriptionServMsg::getSymbolId (int *subs*) [inline]

Here is the caller graph for this function:



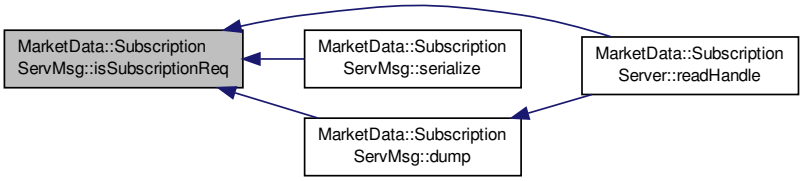
6.11.4.8 UNSIGNED_CHARACTER MarketData::SubscriptionServMsg::isSubscriptionReq ( ) const [inline]

To check whether the request is to subscribe or unsusbscribe.

Returns

1 to Subscribe 0 to Unsubscribe

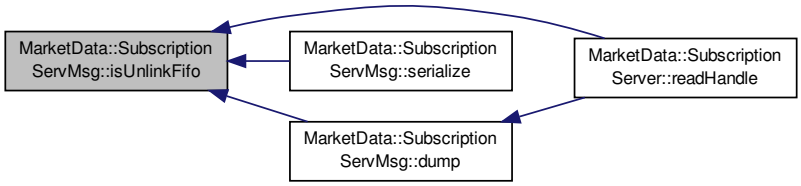
Here is the caller graph for this function:



6.11.4.9 UNSIGNED_CHARACTER MarketData::SubscriptionServMsg::isUnlinkFifo ( ) const [inline]

Returns

Here is the caller graph for this function:



6.11.4.10 int MarketData::SubscriptionServMsg::serialize (char * *buf*)

Serialize data.

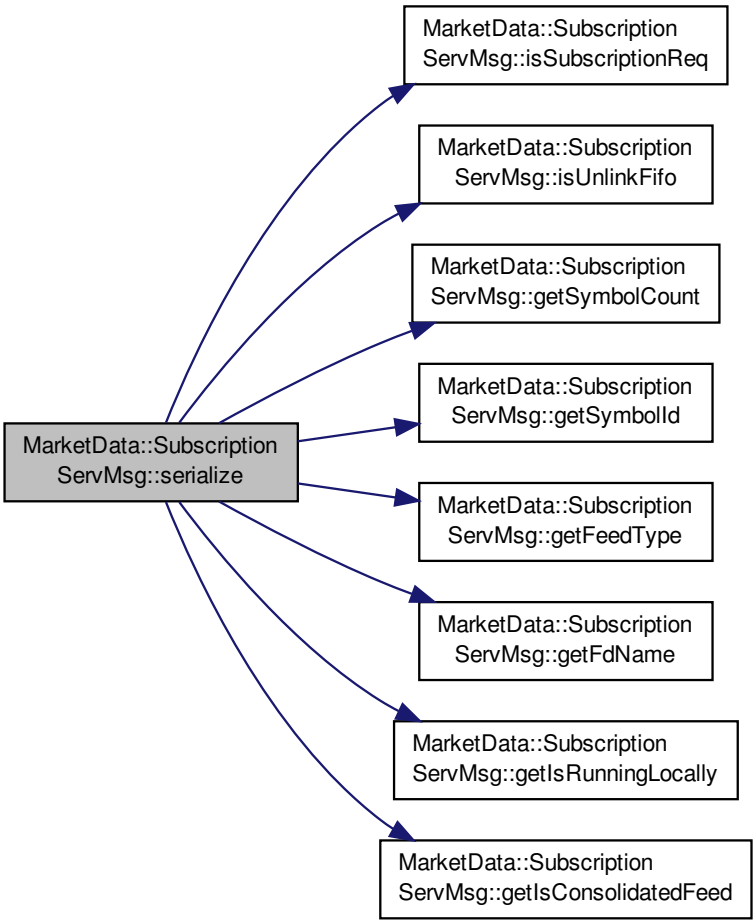
Parameters

buf	

Returns

Size of serialized data

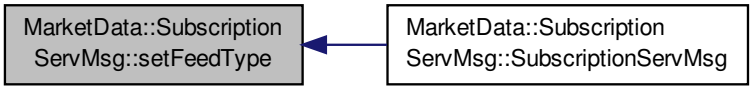
Here is the call graph for this function:



6.11.4.11 void MarketData::SubscriptionServMsg::setFdName (const char * *m*) [inline]

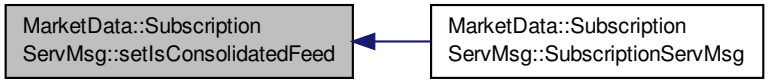
6.11.4.12 void MarketData::SubscriptionServMsg::setFeedType (int *subs,* UNSIGNED_CHARACTER *val*) [inline]

Here is the caller graph for this function:



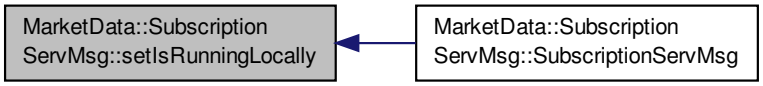
6.11.4.13 void MarketData::SubscriptionServMsg::setIsConsolidatedFeed (UNSIGNED_SHORT *val* = 0) [inline]

Here is the caller graph for this function:



6.11.4.14 void MarketData::SubscriptionServMsg::setIsRunningLocally (UNSIGNED_SHORT *val* = 1) [inline]

Here is the caller graph for this function:



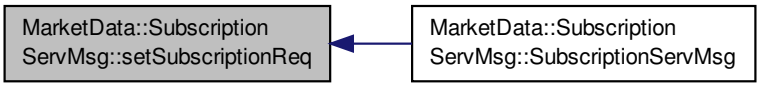
6.11.4.15 void MarketData::SubscriptionServMsg::setSubscriptionReq (UNSIGNED_CHARACTER *val*) [inline]

To check whether the request is to subscribe or unsusbscribe.

Parameters

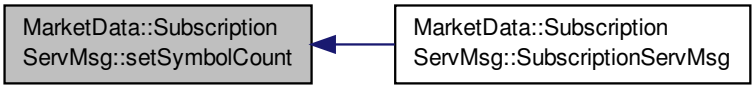
val	

Here is the caller graph for this function:



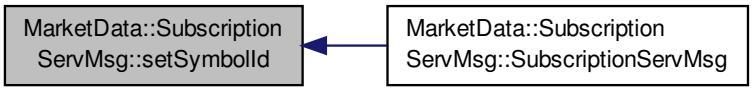
6.11.4.16 void MarketData::SubscriptionServMsg::setSymbolCount (UNSIGNED_SHORT *val*) [inline]

Here is the caller graph for this function:



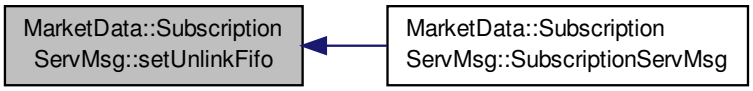
6.11.4.17 void MarketData::SubscriptionServMsg::setSymbolId (int *subs,* int *val*) [inline]

Here is the caller graph for this function:



6.11.4.18 void MarketData::SubscriptionServMsg::setUnlinkFifo (UNSIGNED_CHARACTER *val*) [inline]

Here is the caller graph for this function:



6.11.5 Member Data Documentation

6.11.5.1 char MarketData::SubscriptionServMsg::_fdName[FD_LENGTH] [private]

6.11.5.2 FeedTypeMap MarketData::SubscriptionServMsg::_feedType [private]

6.11.5.3 UNSIGNED_SHORT MarketData::SubscriptionServMsg::_isConsolidatedFeed [private]

value 1 - Request Consolidated Data value 0 - Normal Data

6.11.5.4 UNSIGNED_SHORT MarketData::SubscriptionServMsg::_isRunningLocally [private]

value 1 - Both are on same system(Default value) value 0 - Differeent

6.11.5.5 UNSIGNED_SHORT MarketData::SubscriptionServMsg::_isSubscription [private]

value 0 - unsusbscribe request value 1 - susbscribe request

6.11.5.6 UNSIGNED_SHORT MarketData::SubscriptionServMsg::_isUnlinkFifo [private]

value 0 - Leave value 1 - Unlink

6.11.5.7 UNSIGNED_SHORT MarketData::SubscriptionServMsg::_symbolCount [private]

6.11.5.8 SymbolIdMap MarketData::SubscriptionServMsg::_symbolId [private]

6.11.5.9 const int MarketData::SubscriptionServMsg::FD_LENGTH = 100 [static], [private]

6.11.5.10 const int MarketData::SubscriptionServMsg::MAX_SYMBOL_COUNT = 10 [static], [private]

The documentation for this class was generated from the following files:

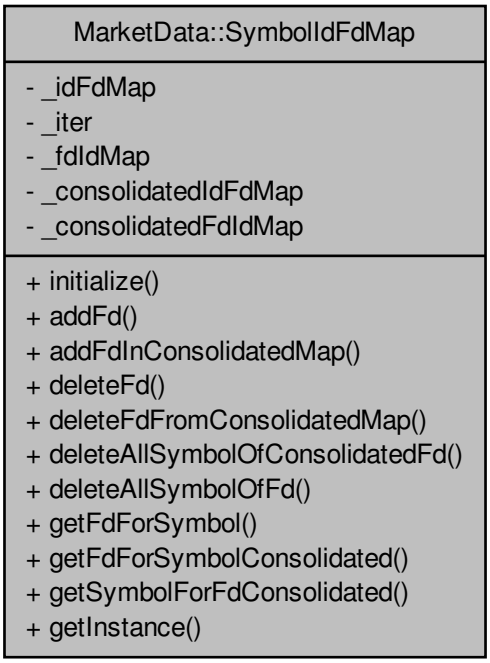
- subscriptionServMsg.h
- subscriptionServMsg.cpp

6.12 MarketData::SymbolIdFdMap Class Reference

SymbolIdFdMap class This is the data structure which is used by tbt to send event on each subscriber for each symbol id.

`#include <symbolIdFdMap.h>`

Collaboration diagram for MarketData::SymbolIdFdMap:



Public Member Functions

- void initialize (int symbolId)

  Inizlize symbol id map. This function will be called when tbt will start.
- void addFd (int symbolId, int feedType, int fd)

  Add member in the subscribed list.
- void addFdInConsolidatedMap (int symbolId, int fd)

  Add member in the subscribed list.
- void deleteFd (int symbolId, int fd, int feedType)

  Delete member from subscribed list.
- void deleteFdFromConsolidatedMap (int symbolId, int fd)

  Delete member from subscribed list.
- void deleteAllSymbolOfConsolidatedFd (int fd)
- void deleteAllSymbolOfFd (int fd)
- std::deque< std::pair< int, int > > & getFdForSymbol (int symbolId) throw (std::domain_error)

  Get Fds associated to symbol id.
- std::deque< int > & getFdForSymbolConsolidated (int symbolId) throw (std::domain_error)
- std::deque< int > & getSymbolForFdConsolidated (int fd) throw (std::domain_error)

Static Public Member Functions

- static SymbolIdFdMap * getInstance ()

  SymbolIdFdMap is is a Singleton class, which will have only one instance. This instance can be accessed using the getInstance method.

Private Attributes

- IdFdMap _idFdMap
- IdFdMapItr _iter
- FdIdMap _fdIdMap
- ConsolidatedIdFdMap _consolidatedIdFdMap
- ConsolidatedIdFdMap _consolidatedFdIdMap

6.12.1 Detailed Description

SymbolIdFdMap class This is the data structure which is used by tbt to send event on each subscriber for each symbol id.

6.12.2 Member Function Documentation

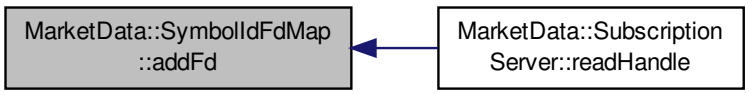
6.12.2.1 void MarketData::SymbolIdFdMap::addFd (int *symbolId,* int *feedType,* int *fd*)

Add member in the subscribed list.

Parameters

symbolId	
fd	

Here is the caller graph for this function:



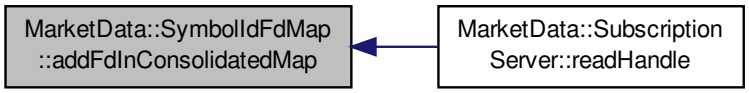
6.12.2.2 void MarketData::SymbolIdFdMap::addFdInConsolidatedMap (int *symbolId,* int *fd*)

Add member in the subscribed list.

Parameters

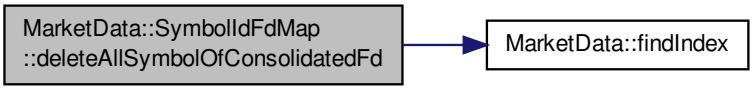
symbolId	
fd	

Here is the caller graph for this function:



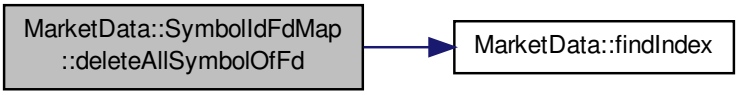
6.12.2.3 void MarketData::SymbolIdFdMap::deleteAllSymbolOfConsolidatedFd (int *fd*)

Here is the call graph for this function:

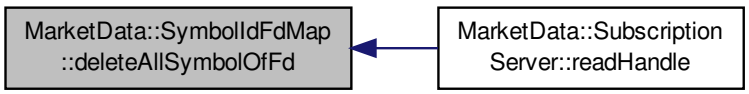


6.12.2.4 void MarketData::SymbolIdFdMap::deleteAllSymbolOfFd (int *fd*)

Here is the call graph for this function:



Here is the caller graph for this function:



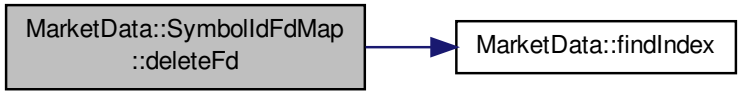
6.12.2.5 void MarketData::SymbolIdFdMap::deleteFd (int *symbolId,* int *fd,* int *feedType*)

Delete member from subscribed list.

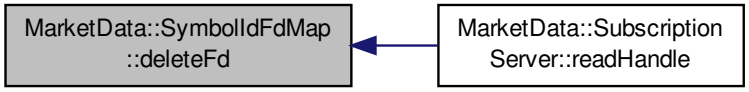
Parameters

symbolId	
fd	

Here is the call graph for this function:



Here is the caller graph for this function:



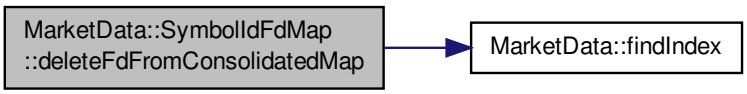
6.12.2.6 void MarketData::SymbolIdFdMap::deleteFdFromConsolidatedMap (int *symbolId,* int *fd*)

Delete member from subscribed list.

Parameters

symbolId	
fd	

Here is the call graph for this function:



6.12.2.7 std::deque< std::pair< int, int > > & MarketData::SymbolIdFdMap::getFdForSymbol (int *symbolId*) throw (std::domain_error)

Get Fds associated to symbol id.

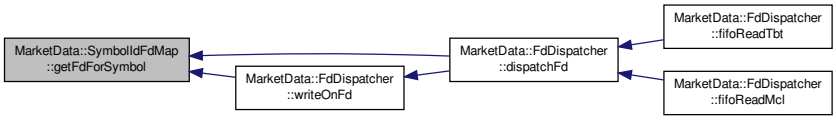
Parameters

symbolId	

Returns

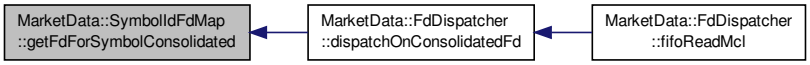
queue having fds associated to specific symbolId.

Here is the caller graph for this function:



6.12.2.8 std::deque< int > & MarketData::SymbolIdFdMap::getFdForSymbolConsolidated (int *symbolId*) throw (std::domain_error)

Here is the caller graph for this function:



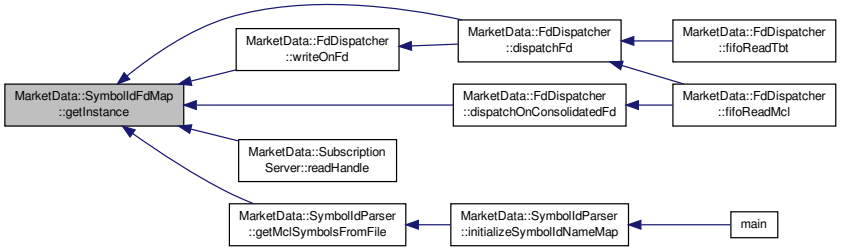
6.12.2.9 static SymbolIdFdMap* MarketData::SymbolIdFdMap::getInstance ( ) [inline], [static]

SymbolIdFdMap is is a Singleton class, which will have only one instance. This instance can be accessed using the getInstance method.

Returns

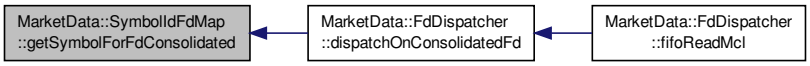
SymbolIdFdMap*

Here is the caller graph for this function:



6.12.2.10 std::deque< int > & MarketData::SymbolIdFdMap::getSymbolForFdConsolidated (int *fd*) throw (std::domain_error)

Here is the caller graph for this function:



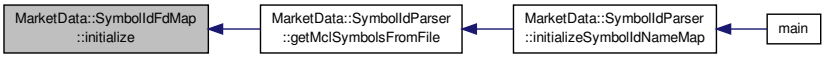
6.12.2.11 void MarketData::SymbolIdFdMap::initialize (int *symbolId*)

Inizlize symbol id map. This function will be called when tbt will start.

Parameters

symbolId	

Here is the caller graph for this function:



6.12.3 Member Data Documentation

6.12.3.1 ConsolidatedIdFdMap MarketData::SymbolIdFdMap::_consolidatedFdIdMap [private]

6.12.3.2 ConsolidatedIdFdMap MarketData::SymbolIdFdMap::_consolidatedIdFdMap [private]

6.12.3.3 FdIdMap MarketData::SymbolIdFdMap::_fdIdMap [private]

6.12.3.4 IdFdMap MarketData::SymbolIdFdMap::_idFdMap [private]

6.12.3.5 IdFdMapItr MarketData::SymbolIdFdMap::_iter [private]

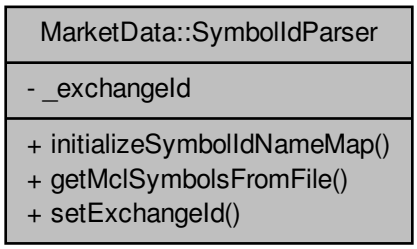
The documentation for this class was generated from the following files:

- symbolIdFdMap.h
- symbolIdFdMap.cpp

6.13 MarketData::SymbolIdParser Class Reference

`#include <symbolIdParser.h>`

Collaboration diagram for MarketData::SymbolIdParser:



Public Member Functions

- void initializeSymbolIdNameMap ()
- void getMclSymbolsFromFile (std::string file)

Static Public Member Functions

- static void setExchangeId (int val)

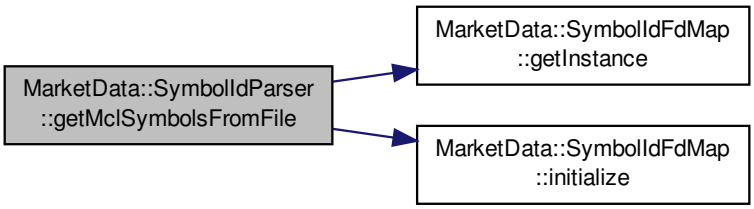
Static Private Attributes

- static int _exchangeId = 0

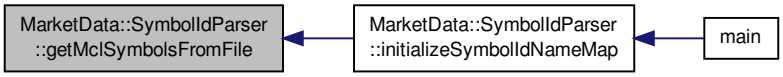
6.13.1 Member Function Documentation

6.13.1.1 void MarketData::SymbolIdParser::getMclSymbolsFromFile (std::string *file*)

Here is the call graph for this function:

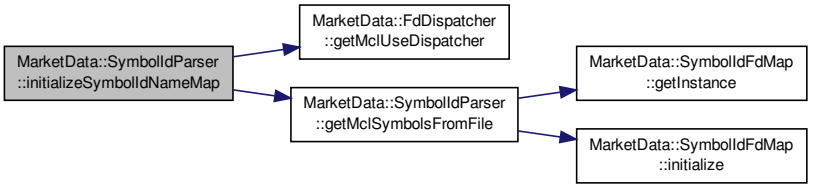


Here is the caller graph for this function:

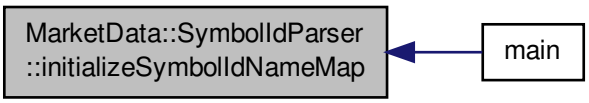


6.13.1.2 void MarketData::SymbolIdParser::initializeSymbolIdNameMap ( )

Here is the call graph for this function:

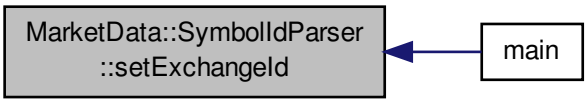


Here is the caller graph for this function:



6.13.1.3 static void MarketData::SymbolIdParser::setExchangeId (int *val*) [inline], [static]

Here is the caller graph for this function:



6.13.2 Member Data Documentation

6.13.2.1 int MarketData::SymbolIdParser::_exchangeId = 0 [static], [private]

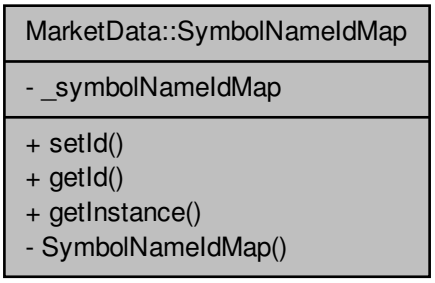
The documentation for this class was generated from the following files:

- symbolIdParser.h
- symbolIdParser.cpp

6.14 MarketData::SymbolNameIdMap Class Reference

`#include <symbolIdFdMap.h>`

Collaboration diagram for MarketData::SymbolNameIdMap:



Public Member Functions

- void setId (std::string &name, int &id)
- int getId (std::string &name)

Static Public Member Functions

- static SymbolNameIdMap * getInstance ()

Private Member Functions

- SymbolNameIdMap ()

Private Attributes

- std::map< std::string, int > _symbolNameIdMap

6.14.1 Constructor & Destructor Documentation

6.14.1.1 MarketData::SymbolNameIdMap::SymbolNameIdMap ( ) [inline], [private]

6.14.2 Member Function Documentation

6.14.2.1 int MarketData::SymbolNameIdMap::getId (std::string & *name*)

6.14.2.2 static SymbolNameIdMap* MarketData::SymbolNameIdMap::getInstance ( ) [inline], [static]

6.14.2.3 void MarketData::SymbolNameIdMap::setId (std::string & *name,* int & *id*)

6.14.3 Member Data Documentation

6.14.3.1 std::map<std::string, int> MarketData::SymbolNameIdMap::_symbolNameIdMap [private]

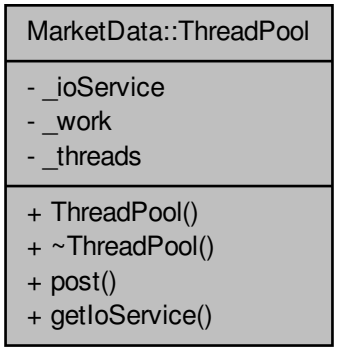
The documentation for this class was generated from the following files:

- symbolIdFdMap.h
- symbolIdFdMap.cpp

6.15 MarketData::ThreadPool Class Reference

`#include <threadPool.h>`

Collaboration diagram for MarketData::ThreadPool:



Public Member Functions

- ThreadPool (int noOfThreads=1)
- ~ThreadPool ()
- template<class func >
  void post (func f)
- boost::asio::io_service & getIoService ()

Private Attributes

- boost::asio::io_service _ioService
- boost::asio::io_service::work _work
- boost::thread_group _threads

6.15.1 Constructor & Destructor Documentation

6.15.1.1 MarketData::ThreadPool::ThreadPool (int *noOfThreads* = 1) [inline]

6.15.1.2 MarketData::ThreadPool::~ThreadPool ( ) [inline]

6.15.2 Member Function Documentation

6.15.2.1 boost::asio::io_service & MarketData::ThreadPool::getIoService ( ) [inline]

6.15.2.2 template<class func > void MarketData::ThreadPool::post (func *f*)

Here is the caller graph for this function:

6.15.3 Member Data Documentation

6.15.3.1 boost::asio::io_service MarketData::ThreadPool::_ioService [private]

6.15.3.2 boost::thread_group MarketData::ThreadPool::_threads [private]

6.15.3.3 boost::asio::io_service::work MarketData::ThreadPool::_work [private]

The documentation for this class was generated from the following file:

- threadPool.h

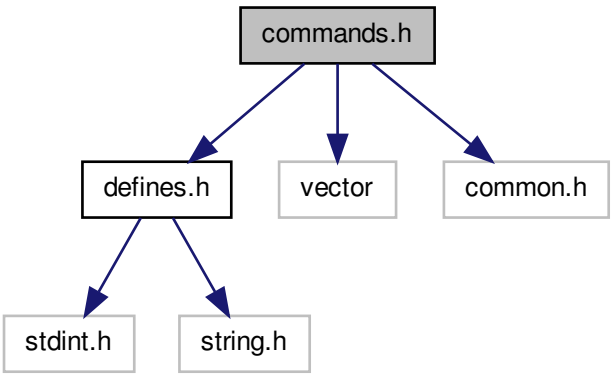
Chapter 7

File Documentation

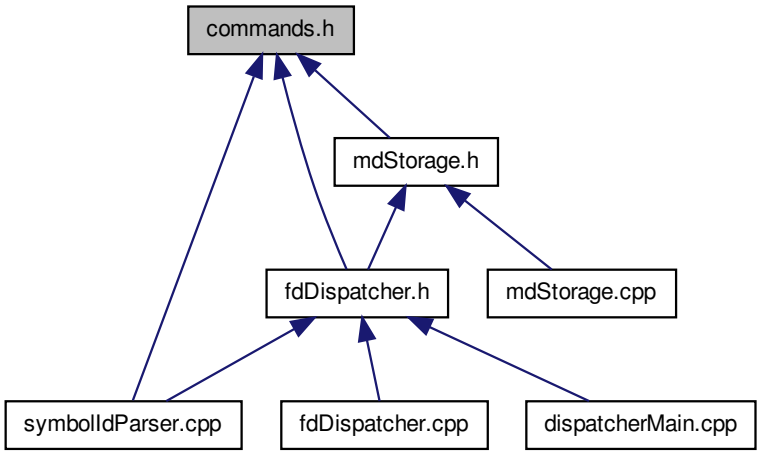
7.1 commands.h File Reference

```
#include "defines.h"
#include <vector>
#include "common.h"
```

Include dependency graph for commands.h:



This graph shows which files directly or indirectly include this file:



Classes

- class CMD::ScripMasterDataRequest
- class CMD::InstrumentRequest

  Instrument search request.
- class CMD::MDSubscribeRequest

  MarketData Subscribe/Unsubscribe Request.
- class CMD::MDQuote

  MarketData Quote.
- class CMD::MDQuoteConsolidated

  MarketData Quote Consolidated.

Namespaces

- namespace CMD

Macros

- #define EXCHANGE_ID_BASE 10000000
- #define GET_SYMBOL_ID(scripCode, exchangeId) ((exchangeId)∗EXCHANGE_ID_BASE + scripCode)
- #define GET_SCRIP_CODE(symbolId) (symbolId % EXCHANGE_ID_BASE)
- #define GET_EXCHANGE_ID(symbolId) ((CMD::ExchangeId)(symbolId/EXCHANGE_ID_BASE))

Enumerations

- enum CMD::ExchangeId {
  CMD::ExchangeId_BSE = 1, CMD::ExchangeId_NSE, CMD::ExchangeId_ESMNSE, CMD::ExchangeId_S-
  GX,
  CMD::ExchangeId_NSECDS, CMD::ExchangeId_BSEETI, CMD::ExchangeId_CFH, CMD::ExchangeId_MA-
  X }

- enum CMD::CommandCategory {
  CMD::CommandCategory_SINGLE_ORDER, CMD::CommandCategory_DUMMY_TWO_LEG_STRATEGY, CMD::CommandCategory_TWO_LEG_ARBITRAGE_STRATEGY, CMD::CommandCategory_MARKET_MAKING_STRATEGY,
  CMD::CommandCategory_STRATEGY_COMMAND, CMD::CommandCategory_PAUSE_STRATEGY, CMD::CommandCategory_RUN_STRATEGY, CMD::CommandCategory_TERMINATE_STRATEGY,
  CMD::CommandCategory_TERMINATE_SQUAREOFF, CMD::CommandCategory_LOGIN, CMD::CommandCategory_LOGOUT, CMD::CommandCategory_RMS_UPDATE,
  CMD::CommandCategory_REQUEST_RMS_CONFIGURATION, CMD::CommandCategory_REQUEST_OFFLINE_DATA, CMD::CommandCategory_HEART_BEAT_MESSAGE, CMD::CommandCategory_THREE_LEG_ARBITRAGE_STRATEGY,
  CMD::CommandCategory_DUMMY_THREE_LEG_ARBITRAGE_STRATEGY, CMD::CommandCategory_BSE_DISCONNECTED, CMD::CommandCategory_NSECM_DISCONNECTED, CMD::CommandCategory_NSEFO_DISCONNECTED,
  CMD::CommandCategory_TBTCM_DISCONNECTED, CMD::CommandCategory_TBTFO_DISCONNECTED, CMD::CommandCategory_BSE_SNAPSHOTFEED_DISCONNECTED, CMD::CommandCategory_NSEFO_SNAPSHOTFEED_DISCONNECTED,
  CMD::CommandCategory_NSECM_SNAPSHOTFEED_DISCONNECTED, CMD::CommandCategory_MARKET_MAKING_TURNOVER_STRATEGY, CMD::CommandCategory_TBT_MARKET_DATA, CMD::CommandCategory_FOUR_LEG_BUTTERFLY_STRATEGY,
  CMD::CommandCategory_BOX_STRATEGY, CMD::CommandCategory_TWO_LEG_THREE_LEG_ARBITRAGE_STRATEGY, CMD::CommandCategory_MODIFY_STRATEGY, CMD::CommandCategory_RMS_LOGIN_PARAMETERS,
  CMD::CommandCategory_RMS_ORDER_LIMITS, CMD::CommandCategory_RMS_GLOBAL_PARAMETERS, CMD::CommandCategory_RMS_RISK_PERMISSIONS, CMD::CommandCategory_GET_RMS_PARAMETERS,
  CMD::CommandCategory_CHANGE_PASSWORD, CMD::CommandCategory_SEND_SCRIP_MASTER_DATA, CMD::CommandCategory_GET_TOTAL_RECORDS_SCRIP_MASTER, CMD::CommandCategory_GET_TOTAL_ORDER_CONFIRMATIONS,
  CMD::CommandCategory_GET_CONNECTIVITY_STATUS, CMD::CommandCategory_RMS_SECURITY_WISE_LIMITS, CMD::CommandCategory_IMPLIED_VOLATILITY_STRATEGY, CMD::CommandCategory_CASH_CASH_STRATEGY,
  CMD::CommandCategory_GET_CLIENT_CONNECTIVITY_STATUS, CMD::CommandCategory_FORCE_LOG_OFF_CLIENT, CMD::CommandCategory_PAIRS_STRATEGY, CMD::CommandCategory_PAIRS_CLOSE_POSITIONS_NO_TERMINATE,
  CMD::CommandCategory_TBTCDS_DISCONNECTED, CMD::CommandCategory_NSECDS_DISCONNECTED, CMD::CommandCategory_BSEETI_DISCONNECTED, CMD::CommandCategory_SGX_DISCONNECTED,
  CMD::CommandCategory_INSTRUMENT_SEARCH_REQUEST, CMD::CommandCategory_MARKET_DATA_SUBSCRIPTION, CMD::CommandCategory_API_TRADED_SYMBOLS_COUNT_REQUEST, CMD::CommandCategory_API_REPLAY_TRADED_SYMBOLS_REQUEST,
  CMD::CommandCategory_MAX }

7.1.1 Macro Definition Documentation

7.1.1.1 #define EXCHANGE_ID_BASE 10000000

7.1.1.2 #define GET_EXCHANGE_ID(*symbolId*) ((CMD::ExchangeId)(symbolId/EXCHANGE_ID_BASE))

7.1.1.3 #define GET_SCRIP_CODE(*symbolId*) (symbolId % EXCHANGE_ID_BASE)

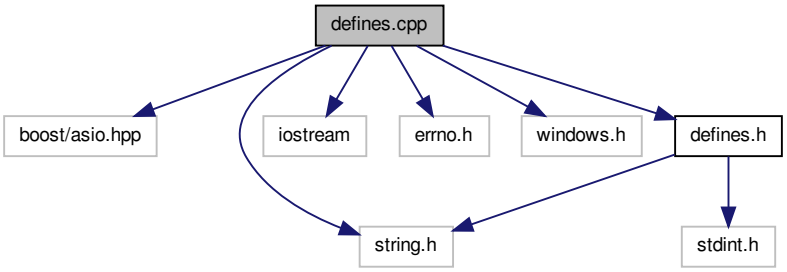
7.1.1.4 #define GET_SYMBOL_ID(*scripCode, exchangeId*) ((exchangeId)∗EXCHANGE_ID_BASE + scripCode)

7.2 defines.cpp File Reference

```
#include <boost/asio.hpp>
```

```
#include <string.h>
#include <iostream>
#include <errno.h>
#include <windows.h>
#include "defines.h"
```

Include dependency graph for defines.cpp:



Macros

- #define _WINSOCKAPI_

Functions

- UNSIGNED_SHORT htons_16 (uint16_t x)
- UNSIGNED_SHORT ntohs_16 (uint16_t x)
- UNSIGNED_INTEGER htonl_32 (uint32_t x)
- UNSIGNED_INTEGER ntohl_32 (uint32_t x)
- UNSIGNED_LONG htonl_64 (uint64_t x)
- UNSIGNED_LONG ntohl_64 (uint64_t x)
- SIGNED_LONG signed_htonl_64 (int64_t x)
- SIGNED_LONG signed_ntohl_64 (int64_t x)
- long generateUniqueOrderId (int strategyId)

Variables

- static pthread_mutex_t uniqueOrderIdMutex = PTHREAD_MUTEX_INITIALIZER

7.2.1 Macro Definition Documentation

7.2.1.1 #define _WINSOCKAPI_

7.2.2 Function Documentation

7.2.2.1 long generateUniqueOrderId (int *strategyId*)

7.2.2.2 UNSIGNED_INTEGER htonl_32 (uint32_t *x*)

7.2.2.3 UNSIGNED_LONG htonl_64 (uint64_t *x*)

7.2.2.4 UNSIGNED_SHORT htons_16 (uint16_t *x*)

7.2.2.5 UNSIGNED_INTEGER ntohl_32 (uint32_t *x*)

7.2.2.6 UNSIGNED_LONG ntohl_64 (uint64_t *x*)

7.2.2.7 UNSIGNED_SHORT ntohs_16 (uint16_t *x*)

7.2.2.8 SIGNED_LONG signed_htonl_64 (int64_t *x*)

7.2.2.9 SIGNED_LONG signed_ntohl_64 (int64_t *x*)

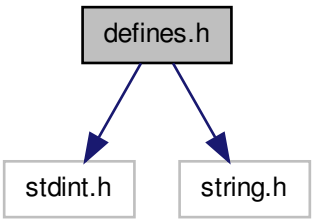
7.2.3 Variable Documentation

7.2.3.1 pthread_mutex_t uniqueOrderIdMutex = PTHREAD_MUTEX_INITIALIZER [static]

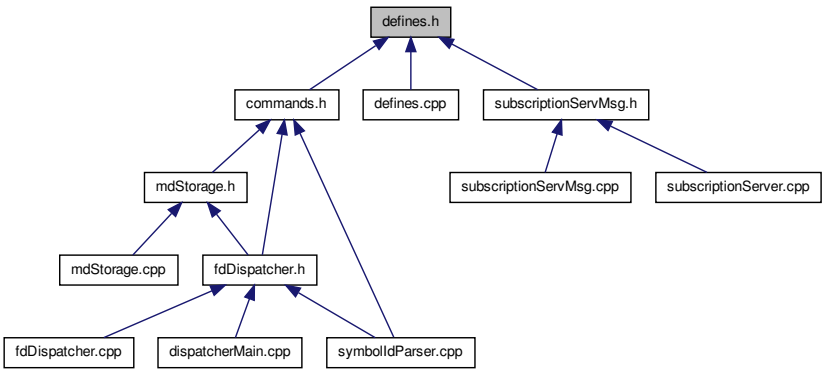
7.3 defines.h File Reference

```
#include <stdint.h>
#include <string.h>
```

Include dependency graph for defines.h:



This graph shows which files directly or indirectly include this file:



Macros

- #define SYMBOL_SIZE 24
- #define SCRIP_NAME_SIZE 100
- #define SYMBOL_ALIAS_SIZE 50
- #define ISIN_SIZE 50
- #define MARKET_PICTURE_BROADCAST_FLAG_SIZE 10
- #define PRODUCT_CODE_SIZE 20
- #define MARKET_NAME_SIZE 24
- #define SERIES_SIZE 8
- #define PASSWORD_SIZE 100
- #define PASSWORD_SALT_SIZE 100
- #define CHARACTER_FIELD_SIZE 100
- #define ACCOUNT_FIELD_SIZE 12
- #define IS_BIG_ENDIAN (*(uint16_t *)"\0\xff" < 0x100)
- #define SWAP16(a)
- #define SWAP32(a)
- #define SWAP64(a)
- #define SERIALIZE_8(tmp, getMethod, buf, bytes)
- #define SERIALIZE_16(tmp, getMethod, buf, bytes)
- #define SERIALIZE_32(tmp, getMethod, buf, bytes)
- #define SERIALIZE_64(tmp, getMethod, buf, bytes)
- #define SERIALIZE_SIGNED_64(tmp, getMethod, buf, bytes)
- #define DESERIALIZE_8(tmp, setMethod, buf, offset)
- #define DESERIALIZE_16(tmp, tmpData, setMethod, buf, offset)
- #define DESERIALIZE_32(tmp, tmpData, setMethod, buf, offset)
- #define DESERIALIZE_64(tmp, tmpData, setMethod, buf, offset)
- #define DESERIALIZE_SIGNED_64(tmp, tmpData, setMethod, buf, offset)

Typedefs

- typedef uint8_t UNSIGNED_CHARACTER
- typedef uint16_t UNSIGNED_SHORT
- typedef uint32_t UNSIGNED_INTEGER
- typedef uint64_t UNSIGNED_LONG
- typedef int64_t SIGNED_LONG

Functions

- UNSIGNED_SHORT htons_16 (uint16_t x)
- UNSIGNED_SHORT ntohs_16 (uint16_t x)
- UNSIGNED_INTEGER htonl_32 (uint32_t x)
- UNSIGNED_INTEGER ntohl_32 (uint32_t x)
- UNSIGNED_LONG htonl_64 (uint64_t x)
- SIGNED_LONG signed_htonl_64 (int64_t x)
- UNSIGNED_LONG ntohl_64 (uint64_t x)
- SIGNED_LONG signed_ntohl_64 (int64_t x)
- char * getPacket (int socketFd, char recvbuf[], int bufSize, int &bytesAvailable, int &bytesProcessed, bool &noMoreBytes, bool &clientDisconnected)

7.3.1 Macro Definition Documentation

7.3.1.1 #define ACCOUNT_FIELD_SIZE 12

7.3.1.2 #define CHARACTER_FIELD_SIZE 100

7.3.1.3 #define DESERIALIZE_16(*tmp, tmpData, setMethod, buf, offset*)

Value:

```
memcpy(&tmp, buf + offset, sizeof(tmp));\
    tmp = ntohs_16(tmp);\
    memcpy(&tmpData, &tmp, sizeof(tmpData));\
    setMethod;\
    offset  += sizeof(tmp);
```

7.3.1.4 #define DESERIALIZE_32(*tmp, tmpData, setMethod, buf, offset*)

Value:

```
memcpy(&tmp, buf + offset, sizeof(tmp));\
    tmp = ntohl_32(tmp);\
    memcpy(&tmpData, &tmp, sizeof(tmpData));\
    setMethod;\
    offset  += sizeof(tmp);
```

7.3.1.5 #define DESERIALIZE_64(*tmp, tmpData, setMethod, buf, offset*)

Value:

```
memcpy(&tmp, buf + offset, sizeof(tmp));\
    tmp = ntohl_64(tmp);\
    memcpy(&tmpData, &tmp, sizeof(tmpData));\
    setMethod;\
    offset  += sizeof(tmp);
```

7.3.1.6 #define DESERIALIZE_8(*tmp, setMethod, buf, offset*)

Value:

```
memcpy(&tmp, buf + offset, sizeof(tmp));\
    setMethod;\
    offset  += sizeof(tmp);
```

7.3.1.7 #define DESERIALIZE_SIGNED_64(*tmp, tmpData, setMethod, buf, offset*)

Value:

```
memcpy(&tmp, buf + offset, sizeof(tmp));\
    tmp = signed_ntohl_64(tmp);\
    memcpy(&tmpData, &tmp, sizeof(tmpData));\
    setMethod;\
    offset  += sizeof(tmp);
```

7.3.1.8 #define IS_BIG_ENDIAN (*(uint16_t *)"\0\xff" < 0x100)

7.3.1.9 #define ISIN_SIZE 50

7.3.1.10 #define MARKET_NAME_SIZE 24

7.3.1.11 #define MARKET_PICTURE_BROADCAST_FLAG_SIZE 10

7.3.1.12 #define PASSWORD_SALT_SIZE 100

7.3.1.13 #define PASSWORD_SIZE 100

7.3.1.14 #define PRODUCT_CODE_SIZE 20

7.3.1.15 #define SCRIP_NAME_SIZE 100

7.3.1.16 #define SERIALIZE_16(*tmp, getMethod, buf, bytes*)

Value:

```
tmp = htons_16(getMethod);\
    memcpy(buf+bytes, &tmp, sizeof(tmp));\
    bytes += sizeof(tmp);
```

7.3.1.17 #define SERIALIZE_32(*tmp, getMethod, buf, bytes*)

Value:

```
tmp = htonl_32(getMethod);\
    memcpy(buf+bytes, &tmp, sizeof(tmp));\
    bytes += sizeof(tmp);
```

7.3.1.18 #define SERIALIZE_64(*tmp, getMethod, buf, bytes*)

Value:

```
tmp = htonl_64(getMethod);\
    memcpy(buf+bytes, &tmp, sizeof(tmp));\
    bytes += sizeof(tmp);
```

7.3.1.19 #define SERIALIZE_8(*tmp, getMethod, buf, bytes*)

Value:

```
tmp = getMethod; \
    memcpy(buf+bytes, &tmp, sizeof(tmp)); \
    bytes += sizeof(tmp);
```

7.3.1.20 #define SERIALIZE_SIGNED_64(*tmp, getMethod, buf, bytes*)

Value:

```
tmp = signed_htonl_64(getMethod);\
    memcpy(buf+bytes, &tmp, sizeof(tmp));\
    bytes += sizeof(tmp);
```

7.3.1.21 #define SERIES_SIZE 8

7.3.1.22 #define SWAP16(*a*)

Value:

```
( \
    ((a & 0x00FF) << 8) | ((a & 0xFF00) >> 8))
```

7.3.1.23 #define SWAP32(*a*)

Value:

```
( \
  ((a & 0x000000FF) << 24) | \
  ((a & 0x0000FF00) <<  8) | \
  ((a & 0x00FF0000) >>  8) | \
  ((a & 0xFF000000) >> 24))
```

7.3.1.24 #define SWAP64(*a*)

Value:

```
( \
    ((a & 0x00000000000000FFULL) << 56) | \
    ((a & 0x000000000000FF00ULL) << 40) | \
    ((a & 0x0000000000FF0000ULL) << 24) | \
    ((a & 0x00000000FF000000ULL) <<  8) | \
    ((a & 0x000000FF00000000ULL) >>  8) | \
    ((a & 0x0000FF0000000000ULL) >> 24) | \
    ((a & 0x00FF000000000000ULL) >> 40) | \
    ((a & 0xFF00000000000000ULL) >> 56))
```

7.3.1.25 #define SYMBOL_ALIAS_SIZE 50

7.3.1.26 #define SYMBOL_SIZE 24

7.3.2 Typedef Documentation

7.3.2.1 typedef int64_t SIGNED_LONG

7.3.2.2 typedef uint8_t UNSIGNED_CHARACTER

7.3.2.3 typedef uint32_t UNSIGNED_INTEGER

7.3.2.4 typedef uint64_t UNSIGNED_LONG

7.3.2.5 typedef uint16_t UNSIGNED_SHORT

7.3.3 Function Documentation

7.3.3.1 char* getPacket (int *socketFd,* char *recvbuf[],* int *bufSize,* int & *bytesAvailable,* int & *bytesProcessed,* bool & *noMoreBytes,* bool & *clientDisconnected*)

7.3.3.2 UNSIGNED_INTEGER htonl_32 (uint32_t *x*)

7.3.3.3 UNSIGNED_LONG htonl_64 (uint64_t *x*)

7.3.3.4 UNSIGNED_SHORT htons_16 (uint16_t *x*)

7.3.3.5 UNSIGNED_INTEGER ntohl_32 (uint32_t *x*)

7.3.3.6 UNSIGNED_LONG ntohl_64 (uint64_t *x*)

7.3.3.7 UNSIGNED_SHORT ntohs_16 (uint16_t *x*)

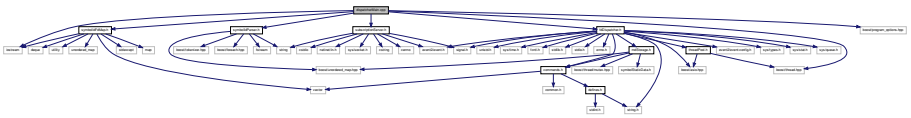
7.3.3.8 SIGNED_LONG signed_htonl_64 (int64_t *x*)

7.3.3.9 SIGNED_LONG signed_ntohl_64 (int64_t *x*)

7.4 dispatcherMain.cpp File Reference

```
#include <iostream>
#include "symbolIdParser.h"
#include "symbolIdFdMap.h"
#include <boost/thread.hpp>
#include <boost/program_options.hpp>
#include "subscriptionServer.h"
#include "fdDispatcher.h"
```

Include dependency graph for dispatcherMain.cpp:



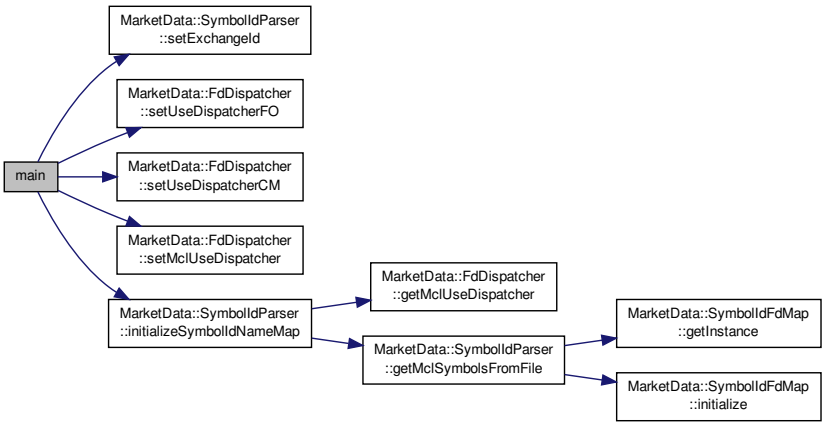
Functions

- int main ()

7.4.1 Function Documentation

7.4.1.1 int main ( )

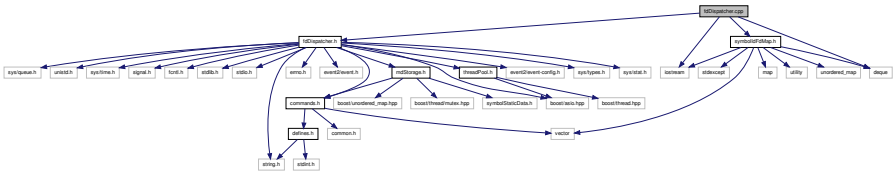
Here is the call graph for this function:



7.5 fdDispatcher.cpp File Reference

```
#include <iostream>
#include "fdDispatcher.h"
#include "symbolIdFdMap.h"
#include <deque>
```

Include dependency graph for fdDispatcher.cpp:



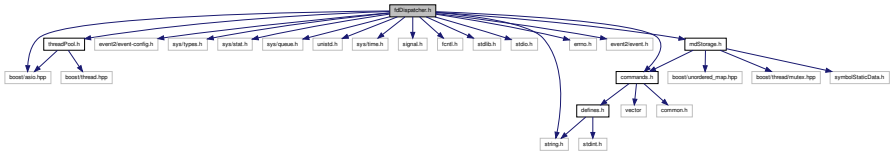
Namespaces

- namespace MarketData

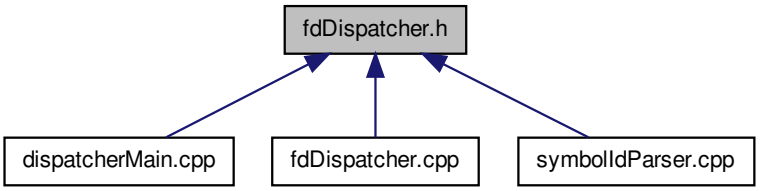
7.6 fdDispatcher.h File Reference

```
#include <boost/asio.hpp>
#include "threadPool.h"
#include <event2/event-config.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <sys/queue.h>
#include <unistd.h>
#include <sys/time.h>
#include <signal.h>
#include <fcntl.h>
#include <stdlib.h>
#include <stdio.h>
#include <string.h>
#include <errno.h>
#include <event2/event.h>
#include <commands.h>
#include "mdStorage.h"
```

Include dependency graph for fdDispatcher.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MarketData::FdDispatcher

  FdDispatcher Class.

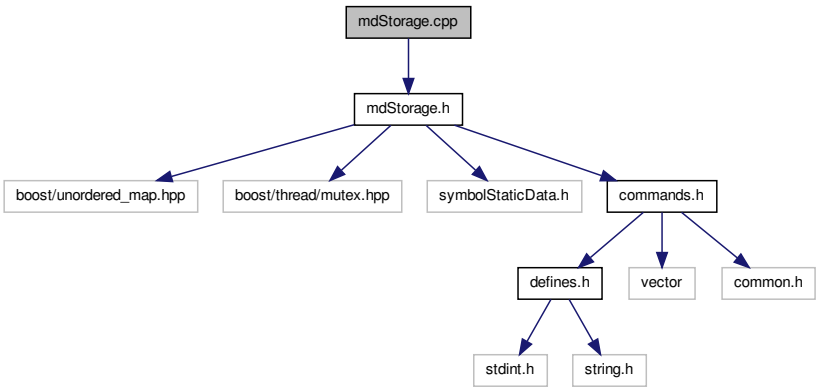
Namespaces

- namespace MarketData

7.7 mdStorage.cpp File Reference

```
#include "mdStorage.h"
```

Include dependency graph for mdStorage.cpp:



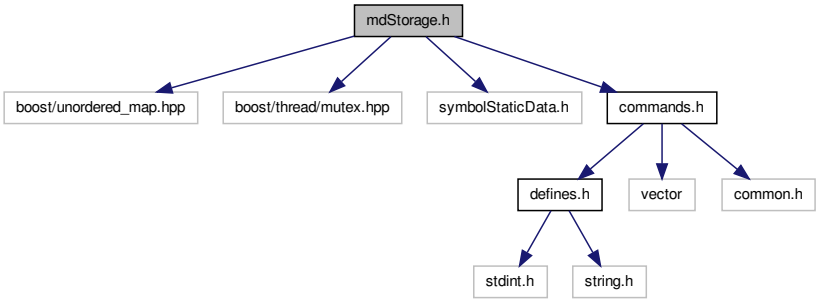
Namespaces

- namespace MarketData

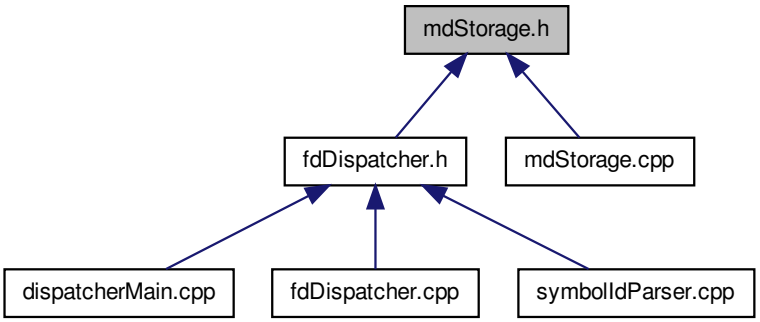
7.8 mdStorage.h File Reference

```
#include <boost/unordered_map.hpp>
#include <boost/thread/mutex.hpp>
#include <symbolStaticData.h>
#include <commands.h>
```

Include dependency graph for mdStorage.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MarketData::MDStorage

  MDStorage Class.

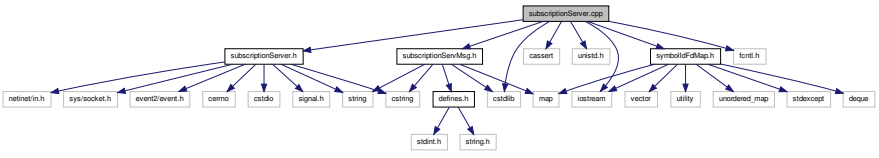
Namespaces

- namespace MarketData

7.9 subscriptionServer.cpp File Reference

```
#include "subscriptionServer.h"
#include <iostream>
#include <cstdlib>
#include <cassert>
#include <unistd.h>
#include "subscriptionServMsg.h"
#include "symbolIdFdMap.h"
#include <fcntl.h>
```

Include dependency graph for subscriptionServer.cpp:



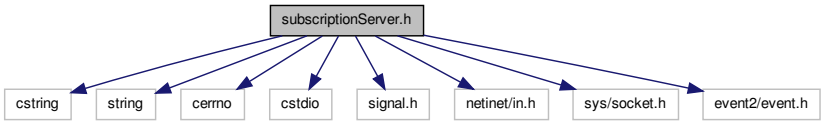
Namespaces

- namespace MarketData

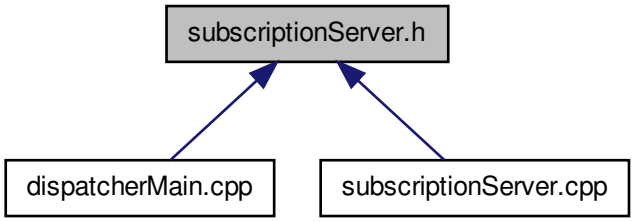
7.10 subscriptionServer.h File Reference

```
#include <cstring>
#include <string>
#include <cerrno>
#include <cstdio>
#include <signal.h>
#include <netinet/in.h>
#include <sys/socket.h>
#include <event2/event.h>
```

Include dependency graph for subscriptionServer.h:



This graph shows which files directly or indirectly include this file:



Classes

- struct MarketData::FdState
- class MarketData::SubscriptionServer

Namespaces

- namespace MarketData

Macros

- #define MAXLINE 1024
- #define MAXDATABUFFER 16000

7.10.1 Macro Definition Documentation

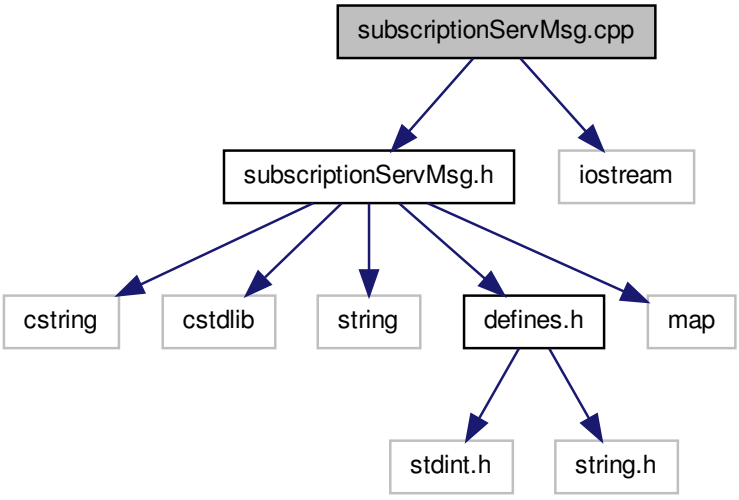
7.10.1.1 #define MAXDATABUFFER 16000

7.10.1.2 #define MAXLINE 1024

7.11 subscriptionServMsg.cpp File Reference

```
#include "subscriptionServMsg.h"
#include <iostream>
```

Include dependency graph for subscriptionServMsg.cpp:



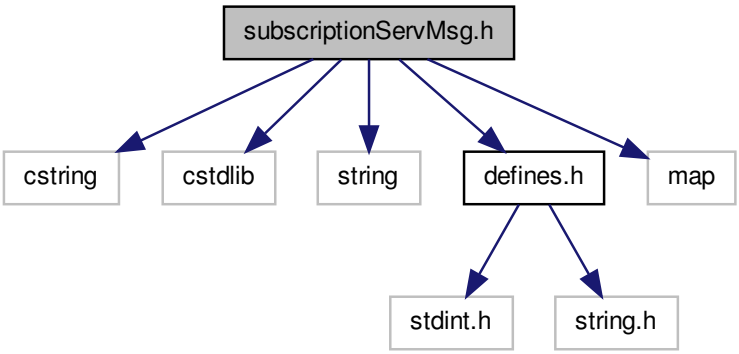
Namespaces

- namespace MarketData

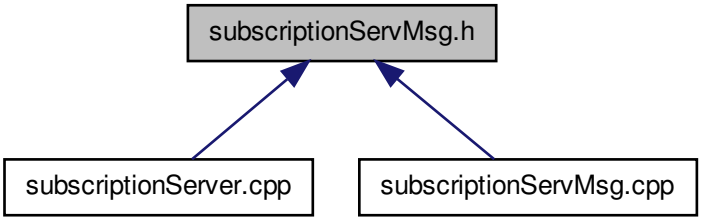
7.12 subscriptionServMsg.h File Reference

```
#include <cstring>
#include <cstdlib>
#include <string>
#include <defines.h>
#include <map>
```

Include dependency graph for subscriptionServMsg.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MarketData::SubscriptionServMsg

  This class is responsible for serialization of request data to the server.

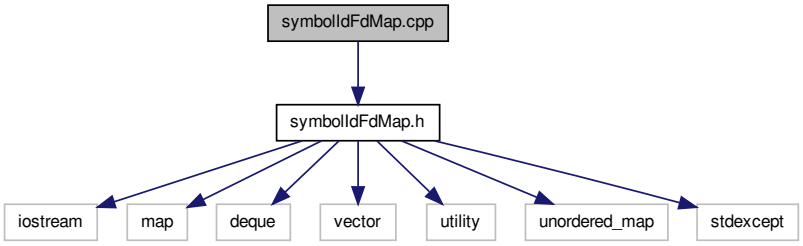
Namespaces

- namespace MarketData

7.13 symbolIdFdMap.cpp File Reference

```
#include "symbolIdFdMap.h"
```

Include dependency graph for symbolIdFdMap.cpp:



Namespaces

- namespace MarketData

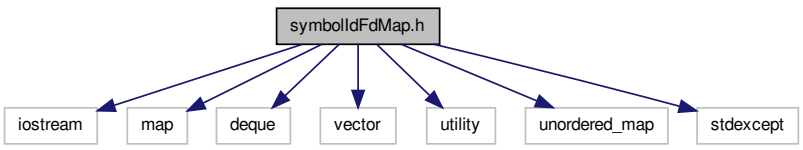
Functions

- template<class T >
  int MarketData::findIndex (T &vec, int id)

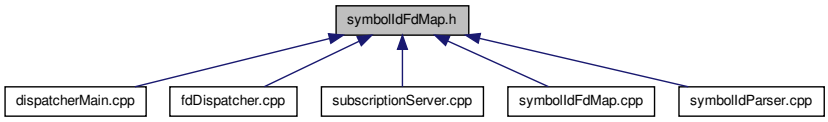
7.14 symbolIdFdMap.h File Reference

```
#include <iostream>
#include <map>
#include <deque>
#include <vector>
#include <utility>
#include <unordered_map>
#include <stdexcept>
```

Include dependency graph for symbolIdFdMap.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MarketData::SymbolIdFdMap

  SymbolIdFdMap class This is the data structure which is used by tbt to send event on each subscriber for each symbol id.
- class MarketData::SymbolNameIdMap

Namespaces

- namespace MarketData

Typedefs

- typedef std::unordered_map < int, std::deque< std::pair < int, int > > > MarketData::IdFdMap
- typedef std::unordered_map < int, std::deque< std::pair < int, int > > >::iterator MarketData::IdFdMapItr
- typedef std::unordered_map < int, std::vector< int > > MarketData::FdIdMap
- typedef std::unordered_map < int, std::deque< int > > MarketData::ConsolidatedIdFdMap

Enumerations

- enum MarketData::FeedType { MarketData::TBT = 0, MarketData::MCL = 1 }

7.15 symbolIdParser.cpp File Reference

```
#include <boost/unordered_map.hpp>
#include <boost/tokenizer.hpp>
#include <boost/foreach.hpp>
#include <string>
#include <fstream>
#include "symbolIdParser.h"
#include "symbolIdFdMap.h"
#include <commands.h>
#include <boost/lexical_cast.hpp>
#include "fdDispatcher.h"
```

Include dependency graph for symbolIdParser.cpp:

Namespaces

- namespace MarketData

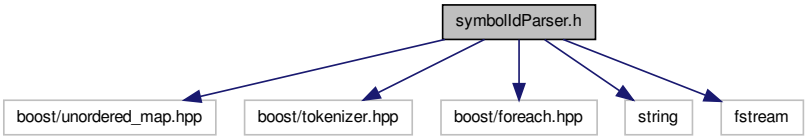
Functions

- void MarketData::getCurrentLocalTimeStamp ()

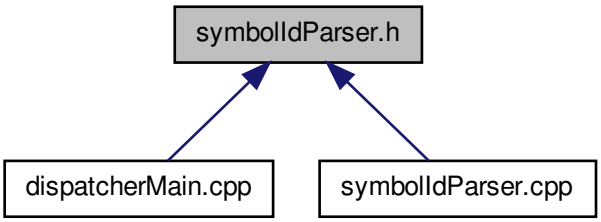
7.16 symbolIdParser.h File Reference

```
#include <boost/unordered_map.hpp>
#include <boost/tokenizer.hpp>
#include <boost/foreach.hpp>
#include <string>
#include <fstream>
```

Include dependency graph for symbolIdParser.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MarketData::SymbolIdParser

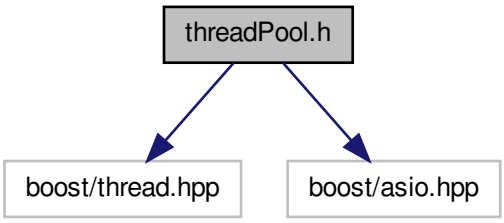
Namespaces

- namespace MarketData

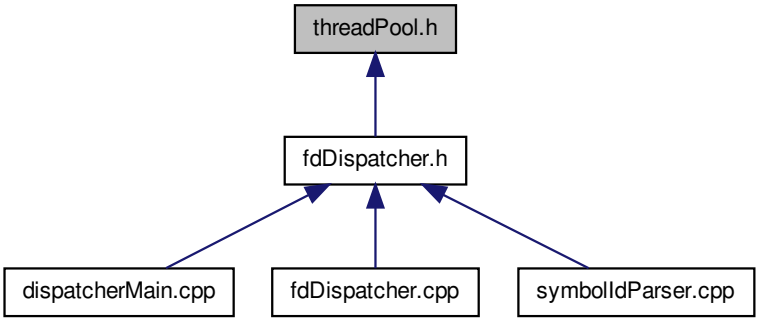
7.17 threadPool.h File Reference

```
#include <boost/thread.hpp>
#include <boost/asio.hpp>
```

Include dependency graph for threadPool.h:



This graph shows which files directly or indirectly include this file:



Classes

- class MarketData::ThreadPool

Namespaces

- namespace MarketData

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