

Saven's client, HCM, Chicago, a high frequency trading firm, needed an Excel/ RTD interface for Risk monitoring and trading decision making. HCM's high frequency trading (HFT) strategy fund trades large list of equities at multiple exchanges, employing some unique strategies. Trading is done via multiple electronic venues and trade messages are dropped, real time, on the FIX DROPS.

Saven developed Excel/ RTD interface to let users subscribe and listen to position server message broadcasts that reads trading data from real time FIX DROP sessions. User has extensive flexibility to subscribe to real time updates from trading venues (NSDQ, ARCA, NYSE, BATS, EDGE), Trade Status Reports, Market data ( Quotes, Trades and 10 Deep Book) and position Server data ( position analytics).

RTD Server is a highly multi-threaded C++ application that maintains the user subscription topics and delivers to Excel at configured intervals( 1sec defaults). User can load data from MySQL on portfolios ( ETF Baskets) and any / all of 50+ fields data for each portfolio.

## Extensive Functionality

- Subscribe to topics on MPID, OMS, Symbol and any or all of 30+ position server fields.
- Real time snap shot reports of Trading activity – Open, Executed, Cancel, Replace, Rejects... etc.
- Subscribe to Market & Book data for any symbol in security master or trading lists symbol universe.
- Load trading engine symbol list from multiple OMS with single click.
- Subscribe to any of 800+ ETF Baskets and about 30+ fields with a single click.
- Aggregate or group data at Exchange, OMS, Strategy and Symbol level.
- Access ETF Universe and download Baskets data from NSCC/ Sponsors at Fund Company and Fund Objective.
- Predefined Query library to download ETF X Symbol matrix filter on Fund Company & Fund objective as parameters.
- Pull in any of 30+ ETF Fund level fields – Cash Component, Shares, Creation Unit, Basket Market value & Basket shares etc.
- Display fields list include – Buy/Sell Order quantity pending at exchange, executed Buy/Sells, Ave Buy/ Sell prices.
- Access 30+ fields real time – Realized PL, Un Realized PL, MV, Long/ Short Exposures, Average Buy/ Sell Price, Open Positions, Net Exposure, Avg Prices of Open Orders, Open Buy/ Sell Ord Qty at the Exchange,... etc.
- Subscribe to real time updates on symbol list/ group by filtering on Exchange, Strategy, Sector, MPID and Venue basis.

## Flexible Configuration

- XML file layout defines complete field list from DB to Excel.
- Assign Trading venues and Market Data map files.
- Define pre-selected fields in various screens to reduce trader clicks.
- Restrict symbol universe to trading engine list instead of securities master.
- Configure to read Book depth from 1-10 level
- Configure to group symbols on GICS sector / Industry/ Sub Industry level
- Configure to control update frequency to Excel Cell for optimal performance
- RTD Server DLLs allow instant data access on the excel opening
- Latest Snapshot on Positions and Market Quotes is obtained from server instantaneously to synch with current image
- Tested with 1200 live symbols on 3 exchanges

**Report Configuration**

ETF Reports | Trade Reports

Configuration

Fund Company: State Street ETF/US

Fund Object: Growth & Income-Lar

Query Lists: All NSCC ETFs

Token Configuration

List Token  Select All

Selected Token  Select All

security\_symbol  
security\_symbol\_bb  
cuspip  
foreign\_indicator  
exchange  
etf\_unit\_index\_ticker  
etf\_underlying\_index\_name  
fund\_objective  
fund\_long\_name  
fund\_company\_name  
fund\_management\_company  
fund\_trade\_status

trade\_date  
component\_count  
units\_per\_inde  
est\_cash\_per\_creation\_unit  
est\_cash\_per\_index\_receipt  
nav  
nav\_index  
total\_cash\_per\_unit  
total\_shares\_outstanding  
dividends\_per\_index\_receipt  
total\_assets  
basket\_market\_value  
basket\_shares  
nav\_div  
interest  
last\_updated  
Today\_etf\_div  
Ew\_fraction  
Volume\_Avg\_5d

Show Report Cancel

**Report Configuration**

ETF Reports | Trade Reports

Configuration

Venue: NSDQ

Report Type: 1 - Partial Fill Orders

MPID: ETCG

Strategy/DMS: 10

WorkerID:

Token Configuration

List Token  Select All

Selected Token  Select All

side  
order\_type  
fill\_price  
fill\_qty  
order\_price  
order\_qty  
message

exchange  
symbol  
oms  
moderend  
mpid  
execution\_type  
client\_order\_id  
orig\_order\_id

Show Report Cancel

**ETF\_BASKET\_Configuration**

ETFConfiguration | ETFTokenConfiguration

Basket Selection

List: ETFMaster

Fund Company: State Street ETF/USA

Basket: SPY -SPDR S&P 500

Venue: NSDQ

MPID: ETCG

Strategy/DMS: 10

WorkerID: 10

Show Header  Sponsor

Override WorkerID

Symbol Configuration

List Symbols  Select All

Selected Symbols  Select All

AH(AHEILANT TECHNOLOGIES INC COM)  
AA(ALCOA INC COM)  
AAPL(APPLE INC COM)  
ABC(AMERISOURCEBERGEN CORP COM)  
ABT(ABBOTT LABS COM)  
ADBE(ADOBE SYS INC COM)  
ADI(ANALOG DEVICES INC COM)  
ADM(ARCHER DANIELS MIDLAND CO COM)  
ADP(AUTOMATIC DATA PROCESSING INC CO)  
ADSK(AUTODESK INC COM)  
AEE(AMEREN CORP COM)  
AEP(AMERICAN ELEC PWR INC COM)  
AES(AES CORP COM)  
AET(AETNA INC NEW COM)  
AFL(AFLAC INC COM)  
AGN(ALLERGAN INC COM)  
AIG(AMERICAN INTL GROUP INC COM NEW)  
AIV(APARTMENT INVT & MGMT CO CLA)  
AIZ(ASSURANT INC COM)  
AKAM(AKAMAI TECHNOLOGIES INC COM)  
AKS(AK STL HLDG CORP COM)  
ALL(ALLSTATE CORP COM)  
ALTR(ALTERA CORP COM)

ADD CLEAR

Exchange.Sector.Strategy.Core	Edit	Delete
*		

**ETF\_BASKET\_Configuration**

ETFConfiguration | ETFTokenConfiguration

List Token

OpqPos  
PrevClose  
PctChg  
BuyOrderQty  
SellOrderQty  
AvgBuyOrdPrc  
AvgSellOrdPrc  
OpenPrc  
PosAvgPrc  
QtyBot  
QtySold  
TotalShares  
AvgBuyPrice  
AvgSellPrice  
\$LongExp  
\$ShortExp  
\$NetExp  
\$TotalExp  
\$Unreal  
\$Real  
\$TotalPL  
\$Stk  
\$Sold  
QtyLong  
\$LongNetL  
QtyShort  
\$ShortExpL  
TotalPosL  
PosPL  
TotalFLI  
Add  
Remove  
Route  
AddHidden  
RemoveHidden  
Last  
LastSize  
Ask

Selected Token

oms  
security\_symbol  
cuspip  
basket\_shares  
close\_price  
market\_value  
security\_description  
sedol  
isin  
industry  
exchange  
security\_symbol\_bb  
gics\_sector  
gics\_sector\_name  
gics\_industry\_group  
gics\_industry\_group\_name  
gics\_industry  
gics\_industry\_name  
gics\_sub\_industry  
gics\_sub\_industry\_name  
today\_trade\_status  
borrow\_status\_etc

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