



Market Replay User Guide

Version 6.0

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Change Notices

The following change notices are provided to assist users of the CBOE[®]direct market replay system in determining the impact of changes to their processing.

If you have any questions or review comments about this document, please contact Odalys Castro at (312) 786-8817.

Date	Version	Description of Change
1/11/08	6.0	Web based version of Market Replay
11/02/05	5.10b	Modified to include displays for single acronym and automated auctions
6/17/05	5.08	Updated all display to reflect current data.
2/6/04	5.01b	Removed the Customizing Windows section Added RFQs and Composite displays
1/23/04	5.01b	First draft.

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Introduction


Purpose This user guide was written to assist users in utilizing all of the features of the Market Replay system using a web browser.


Intended Audience This user guide is intended for Help Desk Administrators, System Operators or any person interested in Market Replay functions for CBOE[®]direct[™].

Conventions Used in this Guide The Market Replay system for CBOE[®]direct[™] was designed so that you can perform all of your Market Replay activities by trading session. More than one Market Replay window can be active at the same time.

There are several conventions used throughout this guide to help trigger important information:

Bolding Used to highlight menu selections (e.g., **Login**) and button names (e.g., **Update**)

 **Note:** This notation is used to indicate important information you should note when performing the associated function.

 This graphic will appear in the margin when there is information relating to valid system codes and definitions.

Valid Codes & Definitions



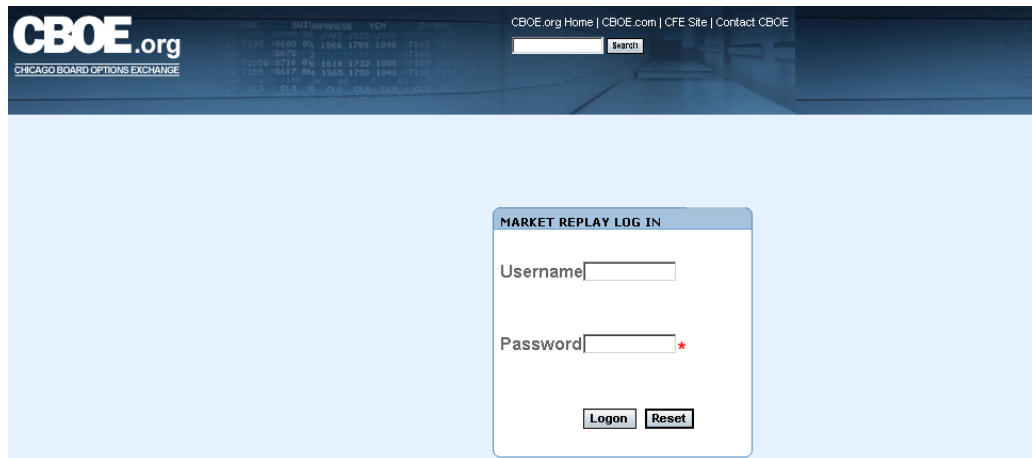
Section 1: Market Replay

This section of the user guide will direct you through all the functions of CBOE's Market Replay system using a web browser.

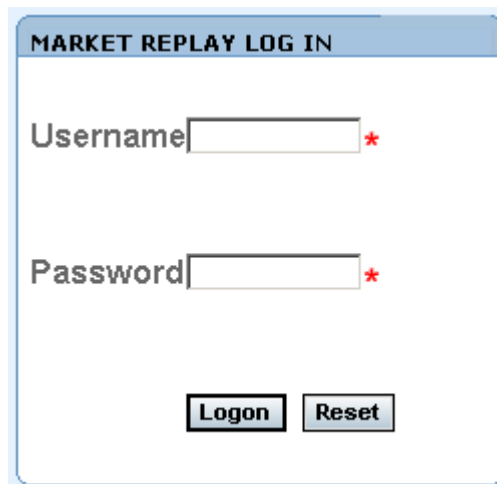
Getting Started

To launch the Market Replay application, enter the URL: <http://marketreplay.cboe.com/> on your web browser.

The following Login window will display.

The screenshot shows the CBOE.org website header with the logo and navigation links. Below the header is a large blue area containing a white login box titled "MARKET REPLAY LOG IN". The box has two input fields: "Username" and "Password" (with a red asterisk). Below the fields are "Logon" and "Reset" buttons. The background of the page shows a blurred image of a trading floor.

Login Enter your **Username** and **Password**.

This is a close-up of the login box from the previous image. It shows the "MARKET REPLAY LOG IN" title, the "Username" and "Password" input fields (both with red asterisks), and the "Logon" and "Reset" buttons.

If you incorrectly typed in your Username or Password, click **Reset**. The login window will clear. Re-enter your User name and Password.

Click **Logon**. Market Replay's main window will display.

From this window you can query both real-time and historical trading information for CBOE[®]direct, change passwords and search Help functions.

Change Password

Once you have logged into the Market Replay application, the system allows you to change your password.

Click on the **Change Password** link at the top right-hand corner of the main page. The **Change Password** window will display.

- Enter your **Old Password** in the text field provided.
- Enter your **New Password** in the corresponding text field.
- Re-enter your new password in the **Confirm New Password** text box. If you make a mistake, click **Reset**. The Change Password window will clear so you can re-enter your passwords.
- Click **Change Password**.

You are now ready to use Market Replay's functionality.

Display Options Trade Information

The Market Replay system allows you to retrieve both real-time and historical trading information for CBOE[®]direct. Historical information is maintained for three years.

The screenshot displays the CBOE.org Market Replay web application. The interface includes a header with the CBOE logo and navigation links. The main content area is divided into several sections:

- Market Replay Main Search Criteria:**
 - Session: Options
 - Trade Date: 9/12/2007
 - Refresh button
 - Near Real Time: ☒
 - Start Time: 15:00 - 15:05
 - End Time: 15:05 - 15:10
 - P/B: All
 - Underly: AAPL
 - Class: *ALL*
 - All Series: ☒ Strategies: ☐
 - Result: All series selected.
- User Search Criteria:**
 - Firms: List of firms including AB Financial LLC, AG Edwards & Sons Inc, AK Capital, LLC, Allston Trading, LLC, Andrie Trading LLC, AOS, Inc, Archelon LLC, and Arclight Securities, LLC.
 - User: List of users including CD718(OPTIVER US)(C), ... (Bates, Jason P.)(M), ... (Boyle, Terrance G.)(M), ... (TEST USER 1)(M), ... (TEST USER 2)(M), O(Weber, Daniel M.)(M), and O(Rothman, Howard H.)(M).
 - Clear Firm button
- Market Replay Screen Selection:**
 - Export To: None
 - Orders, Quotes, Assignments, Trades, Market Conditions, Alerts
 - Retrieve button

The footer contains a Privacy Statement link and copyright information for the Chicago Board Options Exchange, Incorporated.

At this point, you can obtain current trading information for any CBOE[®]direct trading session.

Selection Parameters

The Market Replay window allows you to specify the type of trading data you wish to view by session. The window defaults to the Options session and the current business day.

To easily understand the data represented in Market Replay, the window displays are presented as single data types (i.e. Trades) rather than combination displays (i.e. Trades & Orders).

The screenshot displays the Market Replay window interface, which is divided into three main sections:

- Market Replay Main Search Criteria:**
 - Session:** Options (dropdown)
 - Trade Date:** 9/12/2007 (calendar icon) **Refresh**
 - Near Real Time:** ☒
 - Start Time:** 13:15:55.000
 - End Time:** 13:35:55.000
 - P/S:** All (dropdown) ☒
 - Underly:** AAPL (dropdown) **Class:** *ALL* (dropdown)
 - All Series:** ☒ **Strategies:** ☐
 - Results:** All series selected.
- User Search Criteria:**
 - Firms:** All, AB Financial LLC, AG Edwards & Sons Inc, AK Capital, LLC, Allston Trading, LLC, Andrie Trading LLC, AOS, Inc., Archelon LLC, Archlight Securities, LLC
 - User:** All, CD718(OPTIVER US)(C), ---(Bates, Jason P.)(M), ...1(Boyle, Terrance G.)(M), ...1(Boyle, Terrance G.)(M), ...X1(TEST USER 1)(M), ...Y1(TEST USER 2)(M), 0(Weber, Daniel M.)(M), 000(Rothman, Howard M.)(M)
 - Clear Firm:** All, 001(Cboe Billing/Accounting), 005(Goldman Sachs & Co.), 009(Goldman Sachs Execution & Clearing L.P.), 012(Swiss American Securities Inc (012)), 013(Sanford C Bernstein & Co Inc), 015(Morgan Stanley DW Inc/Alt 1), 017(Interactive Brokers LLC), 019(Jefferies & Company, Inc.)
- Market Replay Screen Selection:**
 - Export To:** None (dropdown)
 - Orders:** ☒ **Trades:** ☐
 - B/S:** All (dropdown)
 - Order Type:** All (dropdown)
 - Auct Type:** All (dropdown)
 - Cntg:** All (dropdown)
 - TIF:** All (dropdown)
 - Order Entry:** All (dropdown)
 - Origin Type Code:** All (dropdown)
 - Quotes:** ☐ **Market Conditions:** ☐
 - Assignments:** ☐ **Alerts:** ☐
 - Retrieve** button

The Market Replay window is split into three panels: Market Replay Main Search Criteria, User Search Criteria and Market Replay Screen Selections. This window is used to set limitations for your data request.

The Market Replay Main Search Criteria section of the window allows you to select:

- The session and trade date
- Near real-time monitoring or a fixed time range
- Underlying and Class selections or select classes by Post and Station (P/S)

The User Search Criteria section allows you to filter your Market Replay requests by Firm, Market Maker, or Clearing Firm. The window defaults to display all Firms, Market Makers and Clearing Firms for the Options session.

If you select only one Firm from the Firm list, only the Market Makers for that Firm will display in the MM list box.

User Search Criteria

Firms:

- All
- AB Financial LLC
- AG Edwards & Sons Inc
- AK Limited Partnership
- Allagash Trading, LLC
- Allston Trading, LLC
- Andrie Trading LLC
- AOS, Inc.
- Archelon LLC

MM:

- All
- 000(Berman, Stephen G.)
- ALG(Allagash Trading RMM, ALG)

If you select only one Market Maker from the MM list, only the Clearing Firm for that Market Maker will display in the Clear Firm list box.

User Search Criteria

Firms:

- All
- AB Financial LLC
- AG Edwards & Sons Inc
- AK Limited Partnership
- Allagash Trading, LLC
- Allston Trading, LLC
- Andrie Trading LLC
- AOS, Inc.
- Archelon LLC

MM:

- All
- (Bates, Jason P.)
- ...(Boyle, Terrance G.)
- ...1(Boyle, Terrance G.)
- ..X1(TEST USER 1)
- ..Y1(TEST USER 2)
- 0(Weber, Daniel M.)
- 000(Berman, Stephen G.)
- 068(Laravia, Nicole)

Clear Firm:

- All
- 551(Merrill Lynch Professional Clearing Corp.)

The Market Replay Screen Selection section allows you to filter your Market Replay requests by Orders, Trades, Quotes, Market Conditions, Assignments and Alerts.

↳ **Note:** The search for Assignments is only available for Data Warehouse archive Trade dates.

You can also export the data to Excel or PDF formats.

 **Market Replay Screen Selection**

Export To: None ▾

☐ **Orders**

☐ **Trades**

☐ **Quotes**

☐ **Market Conditions**

☐ **Assignments**

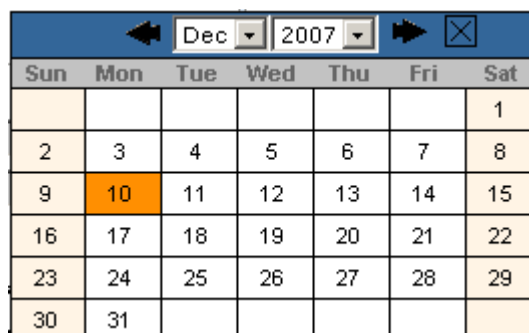
☐ **Alerts**

Retrieve

Orders Market Replay allows you to retrieve current order information. Make your selections from the **Market Replay Main Search Criteria** section of the window.

- Select the Options trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

🔗 **Note:** The data warehouse maintains trade information for three years.




Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Class/Series selection by post and station (**P/S**)
 - To query all the class and series at every post/station, select the **P/S** checkbox. The **P/S** drop down list will gray out, defaulting to query **ALL** post/stations.
 - If you wish to generate data for all the class and series activity for a specific Post and Station, select the Post/Station from the **P/S** drop down list box.
- Class/Series selection
 - Select the underlying security from the **Underly** drop down list box or select a class from the **Class** drop down list box. Select **ALL** for both to retrieve all class and series information.
 - Specify the series you are interested in viewing by clicking on the corresponding checkbox.

🔗 **Note:** You must select a series, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	Options	Firms:	All AB Financial LLC AG Edwards & Sons Inc AK Capital, LLC Allston Trading, LLC Andrie Trading LLC AOS, Inc. Archelon LLC Arclight Securities, LLC
Trade Date:	12/10/2007 <input type="button" value="Refresh"/>	User:	All CD718(OPTIVER US)(C) ---(Bates, Jason P.)(M) ...(Boyle, Terrance G.)(M) ...J(Boyle, Terrance G.)(M) ..X1(TEST USER 1)(M) ..Y1(TEST USER 2)(M) 0(Weber, Daniel M.)(M) 000(Rothman, Howard M.)(M)
Near Real Time:	<input checked="" type="checkbox"/>	Clear Firm:	All 001(Cboe Billing/Accounting) 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing L.P.) 012(Swiss American Securities Inc (012)) 013(Sanford C Bernstein & Co Inc) 015(Morgan Stanley DW Inc/Alt 1) 017(Interactive Brokers LLC) 019(Jefferies & Company, Inc.)
Start Time:	13 : 28 : 58 . 000		
End Time:	13 : 48 : 58 . 000		
P/S:	All <input checked="" type="checkbox"/>		
Underly:	AAPL		
Class:	*ALL*		
All Series	<input checked="" type="checkbox"/>		
Strategies	<input type="checkbox"/>		
<div>All series selected.</div>			
<div>Market Replay Screen Selection</div> <div>Export To: None</div> <div> <input checked="" type="checkbox"/> Orders <input type="checkbox"/> Trades </div> <div> <div>B/S: All</div> <div>Order Type: All</div> <div>Auct Type: All</div> <div>Cntg: All</div> <div>TIF: All</div> <div>Order Entry: All</div> <div>Origin Type Code: All</div> </div> <div> <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions </div> <div> <input type="checkbox"/> Assignments <input type="checkbox"/> Alerts </div> <div><input type="button" value="Retrieve"/></div>			

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, Assignments** or **Alerts**. Select **Orders**.
 -  **Note:** The search for Assignments is only available for Data Warehouse archive trade dates.
- You can further filter your order requests by: Buy/Sell (B/S), Order Type, Order Entry or Origin Type Code. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Orders** window will display with the requested data.

Market Replay

User ID : castroo

Help

Orders for Trade Date: 12/10/2007

Trade Date: 12/10/2007

Session: Options

Start Time: 13:28:58.000

End Time: 13:48:58.000

P/S: All

UnderL: AAPL

Class: *ALL*

All Series: Y

Firm: All

MM: All

C. Firm: All

Refresh

Order Type: All

Auct Type: All

Cntg: All

TIF: All

Status: All

Origin: All

Export PDF

Export XLS

Recv Time	E Firm	CTA	E Brkr	S Acct	DR	OC	B/S	Qty	Price	TIF	Cntg	Status	Trade Qty	Trade Price	Corr Firm	ORSID	B Code	B Seq	Auct
Series: AAPL APV																			
13:29:43.131	338		OPX5		C	N	O	2	\$-2.90	DAY	NONE	Active				KNB836	OXU	3585	
12:52:01.349	338		OPX5		C	N	O	2	\$-2.80	DAY	NONE	Cancelled				HEL444	OXU	3441	
13:35:08.165	164	164	SCW		C	N	D	2	\$1.30	DAY	NONE	Filled	2	\$1.31		KOA182	CYC	808	Ended
13:18:01.817	164	164	SCW		C	N	D	2	\$1.50	DAY	NONE	Cancelled				KCY741	CYC	786	Ended
13:35:08.635	690		FLG		M	N	O	20	\$-1.31	DAY	Auction Response	Cancelled	2	\$-1.31		Order	FLG	2152	
13:36:53.977	226		NTF		C	N	D	10	\$-1.90	DAY	NONE	Active				KOG630	EZO	1359	Ended
12:08:44.198	226		NTF		C	N	D	10	\$-1.70	DAY	NONE	Cancelled				JVO051	EZO	1091	
13:36:54.501	551		MOZ		M	N	D	20	\$-1.66	DAY	Auction Response	Cancelled				Order	MOZ	9999	
13:36:54.561	009		HXA	QIA00	M	O	D	10	\$-1.76	DAY	Auction Response	Cancelled				Order	AGE	3967	
13:36:54.565	050		MSA		M	N	D	10	\$-1.59	DAY	Auction Response	Cancelled				Order	MSC	1091	
Series: AAPL APV DEC07 135.00 C P/S: 03/04																			
13:31:03.332	501		WOO		N	O	B	10	\$59.85	DAY	NONE	Cancelled				WEX	KNH665	IBK	6567
Series: AAPL APV DEC07 145.00 P P/S: 03/04																			
13:39:26.822	017	534	IBB		C	O	B	10	\$0.12	DAY	NONE	Cancelled				IB	KOG970	IBC	4387
13:40:13.989	017	534	IBB		C	O	B	10	\$0.08	DAY	NONE	Active				IB	KOU318	IBC	4410
Series: AAPL APV DEC07 150.00 C P/S: 03/04																			
13:31:03.849	009		HXA	QIA00	M	N	B	3	\$45.00	DAY	IOC	Cancelled				KNH836	VZP	8167	
Series: AAPL APV DEC07 155.00 P P/S: 03/04																			
13:47:07.083	551		C7F		P	O	R	11	\$0.77	DAY	IOC	Filled	11	\$0.77		Order	C7A	871	

Export PDF

Export XLS

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction

Order Status: Green=HD Cancelled, Black=Other

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction
Order Status: Green=HD Cancelled, Black=Other

The example above displays all the order activity that occurred in the W_MAIN session on December 10, 2007 from 13:28:58 to 13:48:58 for all the Call and Put series in the AAPL class. Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Click **Refresh** at anytime to update the query.

Most of the fields in the Orders display are descriptive. The following table describes valid system codes found in the orders display.


Valid Codes &
Definitions

Column	Description
OR	Role of the Originating User: CUSTOMER = C, CTI Equivalent - Non Member, Customer Segregated Account FIRM = F CTI Equivalent - Firm Trader, House Account BROKER_DEALER = B CUSTOMER_BROKER_DEALER= X MARKET_MAKER = M MARKET_MAKER_AWAY = N CTI1Origin1 = V - Member, Customer Segregated Account CTI1Origin2 = E - Member, House Account CTI1Origin5 = Q - Member, SIPC Protected Account CTI3Origin1 = G - User Proxy for trader, Customer Segregated Account CTI3Origin2 = H - User Proxy for trader, House Account CTI3Origin5 = R - User Proxy for trader, SIPC Protected Account CTI4Origin2 = O - Non Member, House Account CTI4Origin5 = T - Non Member, SIPC Protected Account PRINCIPAL = P PRINCIPAL_ACTING_AS_AGENT = A SATISFACTION = S
OC	O=Open, C=Close

TIF	D=Day, G=Good until cancelled, T=Good until expire time
------------	---

To view order details, click on the corresponding value in the ORSID column for the selected data row. The order history window will display.

Market Replay

User ID : castroo

Help

Order History for Order UID:354499675274810

Trade Date: 12/10/2007

Received Time: 12/10/2007 13:29:43: 131

Series: AAPL APV

B/S: O

TIF: D

ORSID: KNB836

Branch Code: OXU

Branch Seq#: 3585

Source: S

Cntg: NONE

Original Size: 2

Traded Vol: 0

Cncl Vol: 0

Book Vol: 0

Cncl Req. Vol: 0

Opt Text:

Extension Text: 21=1□60=20071210-19:29:43

User Assigned ID: 155746596

Class	Exer	Expr.	P/C	B/S	Order Qty	O/C	C.Firm	T.Qty
APV	\$200.00	12/2007	C	S	2	C		0
APV	\$195.00	12/2007	C	B	2	C		0
APV	\$185.00	12/2007	P	B	2	C		0
APV	\$180.00	12/2007	P	S	2	C		0

Export PDF Export XLS

Series	Event Time	Event Type	Sub Event Type	Price	Acct	T. Price	T. Qty	Remainder	Booked	Busted	Mismtchd	Canceled	Cancel Reason
180P	13:29:43: 131	NEW ORDER STRATEGY LEG	0										
185P	13:29:43: 131	NEW ORDER STRATEGY LEG	0										
195C	13:29:43: 131	NEW ORDER STRATEGY LEG	0										
200C	13:29:43: 131	NEW ORDER STRATEGY LEG	0										
	13:29:43: 131	NEW ORDER	0		\$-2.90								
	13:29:43: 614	BOOK ORDER	0		\$-2.90					2			

If the order is an Auction order, the Auction order details display in the lower portion of the window.

Column	Description
Start Time	When auction starts and RFQ is sent
End Time	When auction processing completes, including fill allocation (time when finished expiring the auction)
Expr Time	When auction processing completes, including fill allocation (time when CBOE starts processing the auction expiration.
Time to Live (sec)	Configured and calculated auction timeout period in milliseconds. It is the time period in milliseconds for which the auction will be live/active. Once the time to live expires, the auction order will get traded.
Auct Price	Auction starting price
Auct Qty	Auction quantity
State	State of the auction: Ended or Active
Auct Type	Internalization, strategy, regular single, HAL, SAL, unspecified



Terminate Reason	Auction terminate reason: UNSPECIFIED = 0 ORDER_MARKETABLE_AGAINST_BOOK = 1 ORDER_MARKETABLE_AGAINST_AUCTION = 2 QUOTE_BID_LOCK = 3 QUOTE_ASK_LOCK = 4 QUOTE_BID_TRIGGER = 5 QUOTE_ASK_TRIGGER = 6 QUOTE_MARKETABLE_AGAINST_AUCTION = 7 Q_ORDER_LOCK = 8 Q_ORDER_TRIGGER = 9 Q_ORDER_MARKETABLE_AGAINST_AUCTION = 10 AUCTION_RESPONSE = 11 NEW_AUCTION = 12 AUCTIONED_ORDER_CANCEL = 13 PRODUCT_STATE_CHANGE = 14
-------------------------	--

Quotes Market Replay allows you to retrieve quote information for the current business day. Select the Options trading session from the **Session** drop down list.

- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

<div> ◀ Dec 2007 ▶ ✕ </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Class/Series selection by post and station (**P/S**)
 - To query all the class and series at every post/station, select the **P/S** checkbox. The **P/S** drop down list will gray out, defaulting to query **ALL** post/stations.
 - If you wish to generate data for all the class and series activity for a specific Post and Station, select the Post/Station from the **P/S** drop down list box.
- Class/Series selection
 - Select the underlying security from the **Underly** drop down list box or select a class from the **Class** drop down list box. Select **ALL** for both to retrieve all class and series information.
 - Specify the series you are interested in viewing by clicking on the corresponding checkbox.

📅 **Note:** You must select a series, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria

Session: Options
Trade Date: 12/10/2007

Near Real Time: ☒

Start Time: 13 : 36 : 59 . 000
End Time: 13 : 56 : 59 . 000

P/S: All ☒

Underly: AAPL Class: *ALL*
All Series ☐ Strategies ☐

Series Class	Call Exer. Price	Put Exer. Price
	210.00	210.00
	220.00	220.00
	230.00	230.00
APV DEC07	240.00	240.00
	250.00	250.00
AAQ JAN08	<input checked="" type="checkbox"/>	
	20.00	20.00
	25.00	25.00
	30.00	30.00

User Search Criteria

Firms: All
AB Financial LLC
AG Edwards & Sons Inc
AK Capital, LLC
Allston Trading, LLC
Andrie Trading LLC
AOS, Inc.
Archelon LLC
Archlight Securities, LLC

User: All
CD718(OPTIVER US)(C)
---(Bates, Jason P.)(M)
...(Boyle, Terrance G.)(M)
...1(Boyle, Terrance G.)(M)
...X1(TEST USER 1)(M)
...Y1(TEST USER 2)(M)
0(Weber, Daniel M.)(M)
000(Rothman, Howard M.)(M)

Clear Firm: All
001(Cboe Billing/Accounting)
005(Goldman Sachs & Co.)
009(Goldman Sachs Execution & Clearing L.P.)
012(Swiss American Securities Inc (012))
013(Sanford C Bernstein & Co Inc)
015(Morgan Stanley DW Inc/Alt 1)
017(Interactive Brokers LLC)
019(Jefferies & Company, Inc.)

Market Replay Screen Selection

Export To: None

☐ Orders ☐ Trades
☒ Quotes ☐ Market Conditions
☐ Assignments ☐ Alerts

Quote Event Type: All
All
New/Update
Fill
Cancel
Cancel All
System Cancel
UTM Cancels
Bust

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- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, Assignments or Alerts**. Select **Quotes**.
 - Note:** The search for Assignments is only available for Data Warehouse archive trade dates.
- You can further filter your quote requests by **Quote Event Type**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Quotes** window will display with the requested data.

Market Conditions Market Replay allows you to retrieve market condition information for the current business day. Select the Options trading session from the **Session** drop down list.

- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

↳ **Note:** The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶ ✕						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Class/Series selection by post and station (**P/S**)
 - To query all the class and series at every post/station, select the **P/S** checkbox. The **P/S** drop down list will gray out, defaulting to query **ALL** post/stations.
 - If you wish to generate data for all the class and series activity for a specific Post and Station, select the Post/Station from the **P/S** drop down list box.
- Class/Series selection
 - Select the underlying security from the **Underly** drop down list box or select a class from the **Class** drop down list box. Select **ALL** for both to retrieve all class and series information.
 - Specify the series you are interested in viewing by clicking on the corresponding checkbox.

↳ **Note:** You must select a series, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria				User Search Criteria																															
Session: Options Trade Date: 12/10/2007 <input type="button" value="Refresh"/>				Firms: All AB Financial LLC AK Capital, LLC Allston Trading, LLC Andrie Trading LLC AOS, Inc. Archelon LLC Arclight Securities, LLC Arjent Capital Markets LLC																															
Hear Real Time: <input checked="" type="checkbox"/> Start Time: 14:40:07.000 End Time: 15:00:07.000 P/S: All <input checked="" type="checkbox"/> Underly: AAPL Class: *ALL* All Series <input type="checkbox"/> Strategies <input type="checkbox"/>				User Role: All User: All CD718(OPTIVER US)(C) ---(Bates, Jason P.)(M) ... (Boyle, Terrance G.)(M) ...1(Boyle, Terrance G.)(M) ..X1(TEST USER 1)(M) ..Y1(TEST USER 2)(M) 0(Weber, Daniel M.)(M) 000(Asselta, Michael J.)(B)																															
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	20.00	20.00																																	
	25.00	25.00																																	
	30.00	30.00																																	
Market Replay Screen Selection Export To: None <input type="checkbox"/> Orders <input type="checkbox"/> Trades <input type="checkbox"/> Quotes <input checked="" type="checkbox"/> Market Conditions <input type="checkbox"/> Assignments <input type="checkbox"/> Alerts MKT Product State: All All Condensed Closed Pre Open Opening Rotation Open Halted Fast Market No Session On Hold Ending Hold																																			
<input type="button" value="Retrieve"/>																																			

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- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, Assignments or Alerts**. Select **Market Conditions**.
 - Note:** The search for Assignments is only available for Data Warehouse archive trade dates.
- You can further filter your market conditions request by **Market (Mkt) Product State**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
 - Note:** Choosing **Condensed** will display a smaller subset of columns and automatically export the query results to Excel. Refer to the Exporting Data section, page 76.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Market Conditions** window will display with the requested data.

Market Conditions for Trade Date: 12/10/2007

Trade Date:12/10/2007

Sessions:Options

Start Time:13:41:36.000

End Time:14:01:36.000

P/S:All

Underl:AAPL

Class:*ALL*

All Series:

Firm:All

MM:All

C. Firm:All

Refresh

MKT Product State:All

We couldn't display all the results for the requested time interval.

Displaying the initial 2744 results from time 13:41:36.000 to 13:42:58.999

Please perform the query again by choosing a new start time from the list to see remaining results.

Start Time:13:43:00.000

Retrieve

Export PDF

Export XLS

Entry Time	Entry Type	Bid Qty	Bid Price	Ask Price	Ask Qty	L/Sale Price	L/Sale Qty	NBBO B/Pr	NBBO A/Pr	BOTR B/Pr	BOTR A/Pr	Best B/Sz	Best B/Pr	Best A/Pr	Best A/Sz	Imbal Qty	Prod Stat	Est Open Price St
Series: AAPL AAO JAN08 20.00 C P/S: 03/04																		
13:41:37.551	Quote	65	\$174.25	\$174.80	58			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:41:41.541	Quote	65	\$174.25	\$174.00	69			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:41:42.230	Quote	65	\$174.25	\$174.00	50			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:41:43.720	Quote	65	\$174.25	\$174.80	89			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:41:47.471	Quote	65	\$174.25	\$174.80	58			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:41:47.891	Quote	53	\$174.25	\$174.00	42			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:41:48.311	Quote	68	\$174.25	\$174.80	58			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:41:49.411	Quote	68	\$174.25	\$174.80	69			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:41:49.621	Quote	53	\$174.25	\$174.00	53			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:41:50.321	Quote	68	\$174.25	\$174.00	73			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:41:50.531	Quote	64	\$174.25	\$174.80	66			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:41:50.760	Quote	67	\$174.25	\$174.80	72			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:42:07.673	Quote	56	\$174.25	\$174.00	61			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:42:08.090	Quote	67	\$174.25	\$174.80	72			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:42:14.560	Quote	67	\$174.25	\$174.80	61			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:42:16.100	Quote	67	\$174.25	\$174.00	72			\$174.25	\$174.00	\$174.25	\$174.00						Open	
13:42:41.760	Quote	67	\$174.25	\$174.80	61			\$174.25	\$174.80	\$174.25	\$174.80						Open	
13:42:42.730	Quote	67	\$174.25	\$174.00	67			\$174.25	\$174.00	\$174.25	\$174.00						Open	

Export PDF

Export XLS

Details are provided for all the market events that occurred in the W_MAIN session from 13:41:36 to 14:01:36 for all the Put/Call series in the AAPL class. Columns that are specific to Market Replay for market conditions are defined in the picture above.

Scroll down on your scroll bar to view all the events for each series.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Trades Market Replay allows you to retrieve trade information for the current business day. Select the Options trading session from the **Session** drop down list.

- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.



📅 **Note:** The data warehouse maintains trade information for three years.

<div> ◀ Dec 2007 ▶ ✕ </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
 - Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
 - Class/Series selection by post and station (**P/S**)
 - To query all the class and series at every post/station, select the **P/S** checkbox. The **P/S** drop down list will gray out, defaulting to query **ALL** post/stations.
 - If you wish to generate data for all the class and series activity for a specific Post and Station, select the Post/Station from the **P/S** drop down list box.
 - Class/Series selection
 - Select the underlying security from the **Underly** drop down list box or select a class from the **Class** drop down list box. Select **ALL** for both to retrieve all class and series information.
 - Specify the series you are interested in viewing by clicking on the corresponding checkbox.
- 📅 **Note:** You must select a series, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria			User Search Criteria																															
Session:	Options		Firms:	All																														
Trade Date:	12/10/2007	Refresh		AB Financial LLC AG Edwards & Sons Inc AK Capital, LLC Allston Trading, LLC Andrie Trading LLC AOS, Inc. Archelon LLC Arclight Securities, LLC																														
Near Real Time:	<input checked="" type="checkbox"/>		User:	All																														
Start Time:	13 : 41 : 36	000		CD718(OPTIVER US)(C) ---(Bates, Jason P.)(M) ...(Boyle, Terrance G.)(M) ...1(Boyle, Terrance G.)(M) ..X1(TEST USER 1)(M) ..Y1(TEST USER 2)(M) 0(Weber, Daniel M.)(M) 000(Rothman, Howard M.)(M)																														
End Time:	14 : 01 : 36	000	Clear Firm:	All																														
P/S:	All	<input checked="" type="checkbox"/>		001(Cboe Billing/Accounting) 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing L.P.) 012(Swiss American Securities Inc (012)) 013(Sanford C Bernstein & Co Inc) 015(Morgan Stanley DW Inc/Alt 1) 017(Interactive Brokers LLC) 019(Jefferies & Company, Inc.)																														
Underly:	AAPL	Class: *ALL*																																
All Series	<input type="checkbox"/>																																	
Strategies	<input type="checkbox"/>																																	
<table border="1"> <thead> <tr> <th>Series Class</th> <th>Call Exer. Price</th> <th>Put Exer. Price</th> </tr> </thead> <tbody> <tr> <td></td> <td>210.00</td> <td>210.00</td> </tr> <tr> <td></td> <td>220.00</td> <td>220.00</td> </tr> <tr> <td></td> <td>230.00</td> <td>230.00</td> </tr> <tr> <td>APV DEC07</td> <td>240.00</td> <td>240.00</td> </tr> <tr> <td></td> <td>250.00</td> <td>250.00</td> </tr> <tr> <td>AAQ JAN08</td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td></td> <td>20.00</td> <td>20.00</td> </tr> <tr> <td></td> <td>25.00</td> <td>25.00</td> </tr> <tr> <td></td> <td>30.00</td> <td>30.00</td> </tr> </tbody> </table>			Series Class	Call Exer. Price	Put Exer. Price		210.00	210.00		220.00	220.00		230.00	230.00	APV DEC07	240.00	240.00		250.00	250.00	AAQ JAN08	<input checked="" type="checkbox"/>			20.00	20.00		25.00	25.00		30.00	30.00	<div>Market Replay Screen Selection</div> <div>Export To: None</div> <div> <input type="checkbox"/> Orders <input checked="" type="checkbox"/> Trades <div>Trade Type: All</div> </div> <div> <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <div>All Cross Prod Cross Prod Leg Cross Prod Spread Stats Summary</div> </div> <div> <input type="checkbox"/> Assignments <input type="checkbox"/> Alerts </div> <div>Retrieve</div>	
Series Class	Call Exer. Price	Put Exer. Price																																
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- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, Assignments or Alerts**. Select **Trades**.
 - Note:** The search for Assignments is only available for Data Warehouse archive trade dates.
- You can further filter your trade request by **Trade Type**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Trades** window will display with the requested data.

Order History for Order UID:354499675281981													
Trade Date:	12/10/2007	Received Time:	12/10/2007 14:00:22: 903	Series:	AAPL APV JAN08 165.00 C	B/S:	S	TIF:	D				
ORSID:	KTES72	Branch Code:	IBC	Branch Seq#:	4890	Source:	S	Cntg:					
Original Size:	4	Traded Vol:	4	Cncl Vol:	0	Book Vol:	0	Cncl Req. Vol:	0				
Opt Text:	P:THI												
Extension Text:	PDPM=THITHI												
User Assigned ID:													
<div>  Export PDF Export XLS</div>													
Event Time	Event Type	Sub Event Type	Price	Acct	T. Price	T. Qty	Remainder	Booked	Busted	Mismatchd	Canceled	Cancel Reason	
14:00:22: 903	NEW ORDER	0	\$33.00										
14:00:22: 941	BOOK ORDER	0	\$33.00					4					
14:06:42: 918	FILL ORDER	1	\$33.00		\$33.00	4							

Click on the **FILL ORDER** link to display trade details.

Order History for Order UID:354499675281981

Trade Date:12/10/2007

Received Time:12/10/2007 14:00:22: 903

Series:AAPL APV JAN08 165.00 C

B/S:S

TIF:D

ORSID:KTE572

Branch Code:IBC

Branch Seq#:4890

Source:S

Cntg:

Original Size:4

Traded Vol:4

Cncl Vol:0

Book Vol:0

Cncl Req. Vol:0

Opt Text:P:THI

Extension Text:PDPM=THITHI

User Assigned ID:

Export PDF

Export XLS

Event Time	Event Type	Sub Event Type	Price	Acct	T. Price	T. Qty	Remainder	Booked	Busted	Mismatchd	Canceled	Cancel Reason
14:00:22: 903	NEW ORDER	0	\$33.00									
14:00:22: 941	BOOK ORDER	0	\$33.00					4				
14:06:42: 918	FILL ORDER	1	\$33.00		\$33.00	4						

Trade Detail

Sell Side												Buy Side											
Trade Time	Exc Frm	Cmta Frm	Exc Bkr	Acr LogID	Acc Of	OR	OC	O/Q	Exc Frm	Cmta Frm	Exc Bkr	Acr LogID	Acc Of	OR	OC	O/Q	Trade Price	Contr Qty	Total Qty	Mkt Cond	B	Trade Id	
14:06:42:860	017	279	XXH	IBB-IBB	IBB	C	C	Ord	551		XXH	CZE-CZE01	CIT	M	C	Ord	\$33.00	4	4			825348028788	

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Valid codes and column definitions that are represented in the Trades window are defined in the table below.


Valid Codes & Definitions

Column	Description
OR	P/A Linkage = 'A' B/D = 'B' CUSTOMER = 'C' Customer-FBW = 'D' Member, House Account = 'E' FIRM = 'F' User Proxy for trader, Customer Segregated = 'G' User Proxy for trader, House Account = 'H' In-Crowd MM = 'I' Firm - FBW = 'J' B/D-FBW='K' Firm-FBW='L'

	MARKET_MAKER = 'M' Away MM='N' Non Member, House Account='O' Principle Linkage = 'P' Member, SIPC Protected Account = 'Q' User Proxy for trader, SIPC Protected Account = 'R' Satisfaction Linkage = 'S' Non Member, SIPC Protected Account='T' M-FBW='U' Member, Customer Segregated Account='V' Broker/Dealer-FBW='W' Customer Broker/Dealer='X' Underly Specialist='Y' N,Y-FBW='Z'
OC	O=Open, C=Close
Sell Side/Acc of	This column will be populated with a Q account if this side of the trade was originated by a DPM, otherwise, it will be populated with the Broker or Market Maker acronym. If the order originator is not a Market Maker or a broker, then the value in this field will not be validated by CBOE [®] direct.
Buy Side/Acc of	This column represents the buyer's account information. If this is a trade from a quote, the Q account or Market Maker acronym is displayed. If this is a trade from an order, it is a free form field for the firm.
Mkt Cond	CANC=trade bust report CNCO=trade bust report for opening trade FTAO=used if the first trade for product occurs after the opening OPNT=used if first trade for product occurs during opening REOP=trade that occurs during an opening rotation that is not the first rotation of the day
S (Trade Source)	How the trade was entered. SYSTEM or MANUAL. The Help Desk has the ability to enter a manual trade (block trade)
B	The letter 'B' stands for Bust. An * displayed in this column represents a busted trade.

Alert Messages The Alert Message display allows you to view types of trade throughs that have occurred in CBOE[®]direct.

To retrieve current data in the Alert Messages display, make your selections from the **Selection Parameters** window.

- Select the Options trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.


 **Note:** The data warehouse maintains trade information for three years.

<div> <div>◀</div> <div>Dec</div> <div>2007</div> <div>▶</div> <div>✕</div> </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
 - Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
 - Class/Series selection by post and station (**P/S**)
 - To query all the class and series at every post/station, select the **P/S** checkbox. The **P/S** drop down list will gray out, defaulting to query **ALL** post/stations.
 - If you wish to generate data for all the class and series activity for a specific Post and Station, select the Post/Station from the **P/S** drop down list box.
 - Class/Series selection
 - Select the underlying security from the **Underly** drop down list box or select a class from the **Class** drop down list box. Select **ALL** for both to retrieve all class and series information.
 - Specify the series you are interested in viewing by clicking on the corresponding checkbox.
- 📌 **Note:** You must select a series, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria			User Search Criteria																															
Session:	Options		Firms:	All AB Financial LLC AG Edwards & Sons Inc AK Capital, LLC Allston Trading, LLC Andrie Trading LLC AOS, Inc. Archelon LLC Archlight Securities, LLC																														
Trade Date:	11/14/2007	Refresh	User:	All CD718(OPTIVER US)(C) ---(Bates, Jason P.)(M) ...(Boyle, Terrance G.)(M) ...1(Boyle, Terrance G.)(M) ..X1(TEST USER 1)(M) ..Y1(TEST USER 2)(M) 0(Weber, Daniel M.)(M) 000(Rothman, Howard M.)(M)																														
Near Real Time:	<input checked="" type="checkbox"/>		Clear Firm:	All 001(Cboe Billing/Accounting) 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing L.P.) 012(Swiss American Securities Inc (012)) 013(Sanford C Bernstein & Co Inc) 015(Morgan Stanley DW Inc/Alt 1) 017(Interactive Brokers LLC) 019(Jefferies & Company, Inc.)																														
Start Time:	14:45:00	000																																
End Time:	15:05:00	000																																
P/S:	All	<input checked="" type="checkbox"/>																																
Underly:	AAPL	Class: *ALL*																																
All Series	<input type="checkbox"/>																																	
Strategies	<input type="checkbox"/>																																	
<table border="1"> <thead> <tr> <th>Series Class</th> <th>Call Exer. Price</th> <th>Put Exer. Price</th> </tr> </thead> <tbody> <tr> <td>ALL</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>QAA DEC07</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/> 90.00</td> <td><input type="checkbox"/> 90.00</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 95.00</td> <td><input type="checkbox"/> 95.00</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 100.00</td> <td><input type="checkbox"/> 100.00</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 105.00</td> <td><input type="checkbox"/> 105.00</td> </tr> <tr> <td>QAA DEC07</td> <td><input type="checkbox"/> 110.00</td> <td><input type="checkbox"/> 110.00</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 115.00</td> <td><input type="checkbox"/> 115.00</td> </tr> <tr> <td></td> <td><input type="checkbox"/> 120.00</td> <td><input type="checkbox"/> 120.00</td> </tr> </tbody> </table>			Series Class	Call Exer. Price	Put Exer. Price	ALL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	QAA DEC07	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> 90.00	<input type="checkbox"/> 90.00		<input type="checkbox"/> 95.00	<input type="checkbox"/> 95.00		<input type="checkbox"/> 100.00	<input type="checkbox"/> 100.00		<input type="checkbox"/> 105.00	<input type="checkbox"/> 105.00	QAA DEC07	<input type="checkbox"/> 110.00	<input type="checkbox"/> 110.00		<input type="checkbox"/> 115.00	<input type="checkbox"/> 115.00		<input type="checkbox"/> 120.00	<input type="checkbox"/> 120.00		
Series Class	Call Exer. Price	Put Exer. Price																																
ALL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																
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			<input type="checkbox"/> Orders <input type="checkbox"/> Trades <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input type="checkbox"/> Assignments <input checked="" type="checkbox"/> Alerts																															
			Retrieve																															

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, Assignments or Alerts**. Select **Alerts**.

 **Note:** The search for Assignments is only available for Data Warehouse archive trade dates.

- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Alerts** window will display with the requested data.

Alerts for Trade Date: 11/14/2007

Trade Date:11/14/2007

Session:Options

Start Time:14:45:08.000

End Time:15:05:08.000

P/S:All

Underl:AAPL

Class:*ALL*

All Series:


Firm:All


MM:All

C. Firm:All

Refresh

» Export results to:

 Export PDF

 Export XLS

Alert Time	Alert Type	Alert Result	NBB0 Agent	Update Agent	Mkttable?	Last Exch Acr	Last Price	Last Postfix	B/A	Comment	TH Price	TH Qty	Detail
Series: AAPL APV 11/17/2007 160.00 P P/S: 03/04													
14:51:03	Satisfaction Alert				N	BOX	1.53	AUTO	A		1.5	0	Detail
Series: AAPL APV 11/17/2007 165.00 P P/S: 03/04													
14:49:17	Satisfaction Alert				N	BOX	3.15	AUTO	B		3.2	0	Detail

The **Alert Messages** window above displays all the alerts that occurred on November 14, 2007 from 14:45:08 to 15:05:08 for all Hybrid classes. If there is any related trade / order activity in the alert, it is shown in the bottom half of the display.

Click on the **Detail** link in the Detail column to view additional information about the alerts.

Alerts for Trade Date: 11/14/2007

Trade Date:11/14/2007

P/S:All

Firm:All

Session:Options

Underl:AAPL

MM:All

Start Time:14:48:08.000

Class:*ALL*

C. Firm:All

End Time:15:08:08.000

All Series:

Refresh

>> Export results to:

Export PDF

 |

Export XLS

Alert Time	Alert Type	Alert Result	NBBO Agent	Update Agent	Mkttable?	Last Exch Acr	Last Price	Last Postfix	B/A	Comment	TH Price	TH Qty	Detail
Series: AAPL APV 11/17/2007 160.00 P P/S: 03/04													
14:51:03	Satisfaction Alert				N	BOX	1.53	AUTO	A		1.5	0	Detail
Series: AAPL APV 11/17/2007 165.00 P P/S: 03/04													
14:49:17	Satisfaction Alert				N	BOX	3.15	AUTO	B		3.2	0	Detail

SBT Alert Exchange Market Info

Mkt Info Type

NBBO Bid Price

NBBO Bid Exch:Vol

NBBO Ask Price

NBBO Ask Exch:Vol

Nothing found to display.

Trade Detail

Sell Side										Buy Side												
Trade Time	Exc Firm	Cmta Firm	Exc Bkr	Acr LogID	Acc Of	OR	OC	O/Q	Exc Firm	Cmta Firm	Exc Bkr	Acr LogID	Acc Of	OR	OC	O/Q	Trade Price	Contr Qty	Total Qty	Mkt Cond	B	Trade Id
Nothing found to display.																						

Order

Rev Time

E Firm

CMTA

E Bkr

S Acct

OR

OC

B/S

Qty

Price

TIF

Cntg

Status

Trade Qty

Trade Price

Corr Firm

ORSID

B Code

B Seq

Auct

Nothing found to display.

You can sort on the contents of any column in the display by clicking on the column heading.

Assignments The Assignments display allows you to view user assignments for historical trade dates.

To retrieve user assignments data, make your selections from the **Selection Parameters** window.

- Select the Options trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

Note: The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the archive trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by

hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).

Market Replay Main Search Criteria				User Search Criteria																															
Session:	Options			Firms:	All																														
Trade Date:	12/20/2007																																		
Refresh																																			
Near Real Time:	<input type="checkbox"/>																																		
Start Time:	10	31	35	.000																															
End Time:	13	51	35	.000																															
P/S:	All	<input checked="" type="checkbox"/>																																	
Underly:	AAPL	Class:	*ALL*																																
All Series	<input type="checkbox"/>																																		
Strategies	<input type="checkbox"/>																																		
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Series Class	Call Exer. Price	Put Exer. Price																																	
	210.00	210.00																																	
	220.00	220.00																																	
	230.00	230.00																																	
APV DEC07	240.00	240.00																																	
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<table border="1"> <thead> <tr> <th colspan="2">Market Replay Screen Selection</th> </tr> </thead> <tbody> <tr> <td>Export To:</td> <td>None</td> </tr> <tr> <td><input type="checkbox"/> Orders</td> <td><input type="checkbox"/> Trades</td> </tr> <tr> <td><input type="checkbox"/> Quotes</td> <td><input type="checkbox"/> Market Conditions</td> </tr> <tr> <td><input checked="" type="checkbox"/> Assignments</td> <td><input type="checkbox"/> Alerts</td> </tr> <tr> <td colspan="2" style="text-align: right;">Retrieve</td> </tr> </tbody> </table>						Market Replay Screen Selection		Export To:	None	<input type="checkbox"/> Orders	<input type="checkbox"/> Trades	<input type="checkbox"/> Quotes	<input type="checkbox"/> Market Conditions	<input checked="" type="checkbox"/> Assignments	<input type="checkbox"/> Alerts	Retrieve																			
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Retrieve																																			

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, Assignments or Alerts**. Select **Assignments**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **User Assignments** window will display with the requested data.

SbtUserAssign for Trade Date: 12/20/2007

Trade Date:12/20/2007

Session:Options

Start Time:10:31:35.000

End Time:13:51:35.000

P/S:All

Underl:AAPL

Class:*ALL*



All Series:

Firm:All

MM:All

C. Firm:All

Refresh

» Export results to:  | 

Export PDF

Export XLS

User Acr	Full Name	Exch Acr	Role	Underl. Sym
AJX	Witten, John A.	CBOE	MM	AAPL
BMK	McKnight, John B.	CBOE	MM	AAPL
BUK	Buckley, Matthew E.	CBOE	MM	AAPL
CBY	Moore, Michael R.	CBOE	MM	AAPL
CJV	Vitale, Conan J.	CBOE	MM	AAPL
CMS	SMC Option Management DPM-RMM, CMS	CBOE	RMM	AAPL
CSF	Credit Suisse Securities (USA) LLC RMM, CSF	CBOE	RMM	AAPL
CZE	Citadel EDPM, CZE	CBOE	EDPM	AAPL
EWA	EWT LLC RMM, EWA	CBOE	RMM	AAPL

The **Assignments** window displays the user assignments for the AAPL class that occurred on the archive date of December 20, 2007 from 10:33:35 to 13:51:35.

You can sort on the contents of any column in the display by clicking on the column heading.

Composite Display

Market Replay allows you to query for more than one type of criteria (orders, trades, quotes, alerts, market conditions). In the example below, the query has been set to display both orders and trades for the AAPL class.

Market Replay Main Search Criteria		
Session:	Options	
Trade Date:	12/10/2007	<input type="button" value="Refresh"/>
Near Real Time: <input checked="" type="checkbox"/>		
Start Time:	14:48:00	
End Time:	15:08:00	
P/S:	All	<input checked="" type="checkbox"/>
Underly:	AAPL	Class: *ALL*
All Series	<input type="checkbox"/>	Strategies <input type="checkbox"/>
Series Class	Call Exer. Price	Put Exer. Price
ALL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
QAA DEC07	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> 90.00	<input type="checkbox"/> 90.00
	<input type="checkbox"/> 95.00	<input type="checkbox"/> 95.00
	<input type="checkbox"/> 100.00	<input type="checkbox"/> 100.00
	<input type="checkbox"/> 105.00	<input type="checkbox"/> 105.00
QAA DEC07	<input type="checkbox"/> 110.00	<input type="checkbox"/> 110.00
	<input type="checkbox"/> 115.00	<input type="checkbox"/> 115.00
	<input type="checkbox"/> 120.00	<input type="checkbox"/> 120.00

User Search Criteria	
Firms:	All AB Financial LLC AG Edwards & Sons Inc AK Capital, LLC Allston Trading, LLC Andrie Trading LLC AOS, Inc. Archelon LLC Arclight Securities, LLC
User:	All CD718(OPTIVER US)(C) ---(Bates, Jason P.)(M) ...(Boyle, Terrance G.)(M) ...1(Boyle, Terrance G.)(M) ..X1(TEST USER 1)(M) ..Y1(TEST USER 2)(M) 0(Weber, Daniel M.)(M) 000(Rothman, Howard M.)(M)
Clear Firm:	All 001(Cboe Billing/Accounting) 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing L.P.) 012(Swiss American Securities Inc (012)) 013(Sanford C Bernstein & Co Inc) 015(Morgan Stanley DW Inc/Alt 1) 017(Interactive Brokers LLC) 019(Jefferies & Company, Inc.)

Market Replay Screen Selection	
Export To:	None
<input checked="" type="checkbox"/> Orders	<input checked="" type="checkbox"/> Trades
B/S:	All
Order Type:	All
Auct Type:	All
Cntg:	All
TIF:	All
Order Entry:	All
Origin Type Code:	All
Trade Type:	All
<input type="checkbox"/> Quotes	<input type="checkbox"/> Market Conditions
<input type="checkbox"/> Assignments	<input type="checkbox"/> Alerts
<input type="button" value="Retrieve"/>	

Two windows display for the query; Orders and Trades.

Orders for Trade Date: 12/10/2007

Trade Date: 12/10/2007

P/S: All

Firm: All

Order Type: All

Status: All

Session: Options

Underl: AAPL

MM: All

Auct Type: All

Origin: All

Start Time: 14:50:11.000

Class: *ALL*

C. Firm: All

Cntg: All

End Time: 15:10:11.000

All Series:

Refresh

TIF: All

We couldn't display all the results for the requested time interval.
Displaying the initial 551 results from time 14:50:11.000 to 14:59:29.999
Please perform the query again by choosing a new start time from the list to see remaining results.

Start Time:

14:59:30.000

Retrieve

Export PDF

Export XLS

Recv Time	E Firm	CMTA	E Brkr	S Acct	DR	OC	B/S	Qty	Price	TIF	Cntg	Status	Trade Qty	Trade Price	Corr Firm	ORSID	B Code	B Seq	Auct
Series: AAPL APV																			
14:50:47:846	338		OPX5		C	N	O	2	\$-3.00	DAY	NONE	Cancelled				NBY867	OXU	3892	Ended
13:29:43:131	338		OPX5		C	N	O	2	\$-2.90	DAY	NONE	Cancelled				KNB836	OXU	3585	
14:50:48:874	050		MSA		M	N	O	2	\$-2.79	DAY	Auction Response	Cancelled				Order	MSC	1284	
14:50:48:907	009		HXA	QIA00	M	O	O	2	\$-2.89	DAY	Auction Response	Cancelled				Order	AGE	4087	
14:50:48:944	501		WVZ	QYW30	M	O	O	2	\$-2.88	DAY	Auction Response	Cancelled				Order	WXT	3058	
14:51:55:601	411	385	KEP		C	N	D	7	MKT	DAY	NONE	Filled	7	\$-0.84	DES	NCH930	YBN	2622	Ended
14:51:57:286	671		WFG		M	N	D	3	\$-0.48	DAY	Auction Response	Cancelled				Order	WFG	564	
14:51:57:302	671		WFG		M	N	D	7	\$-0.38	DAY	Auction Response	Cancelled				Order	WFG	565	
14:51:57:316	671		WFG		M	N	D	7	\$-0.28	DAY	Auction Response	Cancelled				Order	WFG	566	
14:51:57:329	009		HXA	QIA00	M	O	D	7	\$-0.44	DAY	Auction Response	Cancelled				Order	AGE	4088	
14:51:57:332	050		MSA		M	N	D	5	\$-0.61	DAY	Auction Response	Cancelled				Order	MSC	1285	
14:52:30:311	338		OPX5		C	N	D	2	\$8.60	DAY	NONE	Filled	2	\$8.60		NCM118	OXU	3905	Ended
14:52:33:044	009		HXA	QIA00	M	O	O	2	\$-8.60	DAY	IOC	Cancelled				NCM446	AGE	4090	
14:52:33:047	551		CTZ		C	N	D	2	\$-8.60	DAY	NONE	Filled	2	\$-8.60		NCM453	CTZ	737	Ended
14:52:33:069	501		EYE		M	N	O	2	\$-8.60	DAY	IOC	Cancelled				NCM491	STR	3938	
14:52:33:430	501		WVZ	QYW30	M	O	O	2	\$-8.53	DAY	Auction Response	Cancelled				Order	WXT	3063	
14:52:33:503	501		WVZ	QYW30	M	O	O	4	\$-8.53	DAY	Auction Response	Cancelled				Order	WXT	3064	
14:52:33:519	050		MSA		M	N	O	2	\$-8.48	DAY	Auction Response	Cancelled				Order	MSC	1292	

Export PDF

Export XLS

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction

Order Status: Green=HD Cancelled, Black=Other

Trades for Trade Date: 12/10/2007

Trade Date: 12/10/2007

P/S: All

Firm: All

Session: Options

Underl: AAPL

MM: All

Start Time: 14:50:11.000

Class: *ALL*

C. Firm: All

End Time: 15:10:11.000

All Series:

Refresh

Export results to:

Export PDF

Export XLS

Export EDM

Total Trades: 181 Sum of Contract Quantities: 2306

Sell Side										Buy Side												
Trade Time	Exc Firm	Cmta Firm	Exc Brkr	Acc LogID	Acc OF	OR	OC	O/Q	Exc Firm	Cmta Firm	Exc Brkr	Acc LogID	Acc OF	OR	OC	O/Q	Trade Price	Contr Qty	Total Qty	Mkt Cond	B	Trade Id
Series: AAPL APV DEC07 135.00 C P/S: 03/04																						
14:50:44:455	695		EVA	EVA-EWA2	EWI	I	N	Quo	501		XOH	WOO-WOO	SEI	N	O	Ord	\$59.35	10	10			82534:80295460
Series: AAPL APV DEC07 135.00 P P/S: 03/04																						
14:50:45:985	551		CZE	CZE-CZE01	CIT	I	N	Quo	695	695	EWA	EWA-EWA2	EWI	I	N	Ord	\$0.06	10	10			82534:80295454
Series: AAPL APV DEC07 145.00 C P/S: 03/04																						
14:54:50:751	549		TZE	TZE-TZE1	QTO	I	N	Quo	501		XOH	WOO-WOO	SEI	N	O	Ord	\$49.60	10	10			82534:80296484
Series: AAPL APV DEC07 150.00 C P/S: 03/04																						
14:57:13:475	325		XOH	XOH-XOH		A	O	Ord	695		EWA	EWA-EWA2	EWI	I	N	Quo	\$44.50	1	5			82534:80297141
14:57:13:475	325		XOH	XOH-XOH		A	O	Ord	501		WVZ	WVZ-WXT	QYW	I	N	Quo	\$44.50	1	5			82534:80297141

Trade Types: Blue=Cross Product, Black=Other

Display Futures Trade Information

Market Replay allows you to view current and historical Futures data for both the CFE and OneChicago sessions. The window defaults to the Options session and the current business day.

The window examples below present single data types (i.e. Trades) rather than combination displays (i.e. Trades & Orders).

The screenshot displays the Market Replay window, which is divided into three main sections:

- Market Replay Main Search Criteria:**
 - Session:** A dropdown menu set to "Futures".
 - Trade Date:** A date field showing "11/19/2007" with a "Refresh" button.
 - Near Real Time:** A checkbox that is checked.
 - Start Time:** A time field set to "12:33:46.000".
 - End Time:** A time field set to "12:53:46.000".
 - Class:** A dropdown menu set to "*ALL*".
 - All Series:** A checkbox that is checked.
 - Strategies:** A checkbox that is unchecked.
 - A text area below these options contains the message "All series selected."
- User Search Criteria:**
 - Firms:** A list box containing various firm names, including ABN AMRO Inc, ABN AMRO SAGE CORP, Archelon L.L.C., Banc of America Securities LLC, Bear Stearns Securities Corp., Blue Capital Group LLC, Blue Capital LLC, and BNP Paribas Securities Corp.
 - MM:** A list box containing market maker identifiers and names, such as AA1_CFE(ABN AMRO Inc, ABN AMRO Inc), AA2_CFE(ABN AMRO Inc, ABN AMRO Inc), AA3_CFE(ABN Amro Sage, Abn Amro Sage), AA4_CFE(ABN AMRO Inc., ABN AMRO Inc.), AA5_CFE(ABN AMRO Inc., ABN AMRO Inc.), AA6_CFE(ABN AMRO Inc., ABN AMRO Inc.), ABL_CFE(DRO WST Trading, ABL), and ABN_CFE(ABN Amro Sage, Abn Amro Sage).
 - Clear Firm:** A list box containing clearing firm identifiers and names, including 072(Prudential), 084(Lehman Bros), 090(Cargill Investor Services, Inc.), 094(Deutsche Bank), 180(Nomura Securities International Inc.), 259(MF Global Inc. (MF)), 288(Bear Stearns Securities Corp.), and 289(Credit Suisse).
- Market Replay Screen Selection:**
 - Export To:** A dropdown menu set to "None".
 - Four checkboxes for data types: **Orders**, **Trades**, **Quotes**, and **Market Conditions**. The **Trades** checkbox is selected.
 - A checkbox for **Alerts**, which is unchecked.
 - A **Retrieve** button at the bottom right.

The Market Replay window is split into three panels: Market Replay Main Search Criteria, User Search Criteria and Market Replay Screen Selections. This window is used to set limitations for your data request.

The Market Replay Main Search Criteria section of the window allows you to select:

- The session and trade date
- Near real-time monitoring or a fixed time range
- Underlying and Class selections

The User Search Criteria section allows you to filter your Market Replay requests by Firm, Market Maker, or Clearing Firm. The window defaults to display all Firms, Market Makers and Clearing Firms for the Options session.

If you select only one Firm from the Firm list, only the Market Makers for that Firm will display in the MM list box.

User Search Criteria	
Firms:	<div> All ABN AMRO Inc ABN AMRO SAGE CORP Archelon L.L.C. Banc of America Securities LLC Bear Stearns Securities Corp. Blue Capital Group LLC Blue Capital LLC BNP Paribas Securities Corp. </div>
User:	<div> All AA1_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) AA2_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) AA3_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) AA4_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) AA5_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) AA6_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) ABL_CFE(DRO WST Trading, ABL)(M) ABN_CFE(ABN AMRO Inc, ABN AMRO Inc)(B) </div>
Clear Firm:	<div> All 072(Prudential) 084(Lehman Bros) 090(Cargill Investor Services, Inc.) 094(Deutsche Bank) 180(Nomura Securities International Inc.) 259(MF Global Inc. (MF)) 288(Bear Stearns Securities Corp.) 289(Credit Suisse) </div>

If you select only one Market Maker from the MM list, only the Clearing Firm for that Market Maker will display in the Clear Firm list box.

The Market Replay Screen Selection section allows you to filter your Market Replay requests by Orders, Trades, Quotes, Market Conditions and Alerts. You can also export the data to Excel or PDF formats.

Market Replay Screen Selection	
Export To:	None
<input type="checkbox"/> Orders	<input type="checkbox"/> Trades
<input type="checkbox"/> Quotes	<input type="checkbox"/> Market Conditions
	<input type="checkbox"/> Alerts
Retrieve	

Orders Market Replay allows you to retrieve current order information for CFE and OneChicago futures contracts. Make your selections from the **Selection Parameters** window:

- Select either the Futures or OneChicago trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶ ✕						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- If you wish to view only Strategy contracts, select the **Strategy** checkbox. If you wish to view all classes and series, deselect the checkbox.
- Specify the futures contract you are interested in viewing by clicking on the corresponding checkbox.

📅 **Note:** You must select a futures contract, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	Futures	<div>All</div> <div>ABN AMRO Inc</div> <div>ABN AMRO SAGE CORP</div> <div>Archelon L.L.C.</div> <div>Banc of America Securities LLC</div> <div>Bear Stearns Securities Corp.</div> <div>Blue Capital Group LLC</div> <div>Blue Capital LLC</div> <div>BNP Paribas Securities Corp.</div>	
Trade Date:	11/16/2007 <input type="button" value="Refresh"/>	Firms:	<div>All</div> <div>AA1_CFE(ABN AMRO Inc, ABN AMRO Inc)</div> <div>AA2_CFE(ABN AMRO Inc, ABN AMRO Inc)</div> <div>AA3_CFE(ABN AMRO Inc, ABN AMRO Inc)</div> <div>AA4_CFE(ABN AMRO Inc, ABN AMRO Inc)</div> <div>AA5_CFE(ABN AMRO Inc, ABN AMRO Inc)</div> <div>AA6_CFE(ABN AMRO Inc, ABN AMRO Inc)</div> <div>ABL_CFE(DRO WST Trading, ABL)</div> <div>ABN_CFE(ABN AMRO Inc, ABN AMRO Inc)</div>
Near Real Time:	<input type="checkbox"/>	MM:	<div>All</div> <div>072(Prudential)</div> <div>084(Lehman Bros)</div> <div>090(Cargill Investor Services, Inc.)</div> <div>094(Deutsche Bank)</div> <div>180(Nomura Securities International Inc.)</div> <div>259(MF Global Inc. (MF))</div> <div>288(Bear Stearns Securities Corp.)</div> <div>289(Credit Suisse)</div>
Start Time:	13:01:11.000	Clear Firm:	
End Time:	13:21:11.000		
Class:	VN		
All Series	<input checked="" type="checkbox"/>		
Strategies	<input checked="" type="checkbox"/>		
<div>Strategies</div> <div> <input type="checkbox"/> VN Time 20071121:1183987890168 <input type="checkbox"/> VN Time 20071121:1190408073635 <input type="checkbox"/> VN Time 20071219:1190408089756 <input type="checkbox"/> VN Time 20080116:1193062512589 <input type="checkbox"/> VN Time 20080116:1193062531036 <input type="checkbox"/> VN Time 20080116:1193062548465 <input type="checkbox"/> VN Time 20080116:1193062560145 </div>			
		<div>Market Replay Screen Selection</div> <div>Export To: None</div> <div> <input checked="" type="checkbox"/> Orders <input type="checkbox"/> Trades </div> <div> <div>B/S: All</div> <div>Order Type: All</div> <div>Order Entry: All</div> <div>Origin Type Code: All</div> </div> <div> <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input type="checkbox"/> Alerts </div> <div><input type="button" value="Retrieve"/></div>	

- To further filter your request, select to retrieve **Orders**, **Quotes**, **Trades**, **Market Conditions**, or **Alerts**. Select **Orders**.
- You can further filter your orders request by: Buy/Sell (B/S), Order Type, Order Entry or Origin Type Code. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To**: drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Orders** window will display with the requested data.

Orders for Trade Date: 11/16/2007

Trade Date: 11/16/2007

P/S: All

Firm: All

Order Type: All

Session: Futures

Underl: *ALL*

MM: All

Order Status: All

Start Time: 13:01:11.000

Class: DV

C. Firm: All

End Time: 13:21:11.000

All Series: Y

Refresh

Export PDF

Export XLS

Rcv Time	E Firm	CMIA	E Brkr	S Acct	OR	OC	B/S	Qty	Price	TIF	Cntr	Status	Trade Qty	Trade Price	Corr Firm	ORSID	B Code	B Seq	Auct
Future: DV DV NOV07 P/S: 00:00																			
13:01:57:559	643		TM1	U50425C	C	O	S	45	\$25.47	DAY	NONE	Cancelled				Order	BDB	5643	
12:56:36:841	643		TM1	U50425C	C	O	S	45	\$25.50	DAY	NONE	Cancelled				Order	BDB	5490	
13:02:02:942	602		MS2	602	C	N	S	1	\$25.28	DAY	NONE	Filled	1	\$25.33		Order	NAA	70	
13:02:02:965	643		TM1	U50425C	C	O	S	45	\$25.50	DAY	NONE	Cancelled				Order	BDB	5648	
13:02:19:747	602		MS2	602	C	N	S	10	\$25.31	DAY	NONE	Filled	10	\$25.39		Order	NAA	71	
13:03:23:727	643		TM1	U50425C	C	O	S	45	\$25.42	DAY	NONE	Cancelled				Order	BDB	5701	
13:03:30:276	643		TM1	U50425C	C	O	S	10	\$25.40	DAY	NONE	Filled	10	\$25.40		Order	BDB	5706	
13:11:02:252	643		TM1	U50425C	C	O	S	45	\$25.69	DAY	NONE	Cancelled				Order	BDB	5950	
13:11:12:475	643		TM1	U50425C	C	O	S	45	\$25.66	DAY	NONE	Cancelled				Order	BDB	5951	
13:14:24:198	643		TM1	U50425C	C	O	S	45	\$25.73	DAY	NONE	Cancelled				Order	BDB	6064	
13:15:52:035	643		TM1	U50425C	C	O	S	10	\$25.65	DAY	NONE	Filled	10	\$25.65		Order	BDB	6137	
13:16:20:813	643		TM1	U50425C	C	O	S	45	\$25.78	DAY	NONE	Cancelled				Order	BDB	6160	
13:16:26:570	643		TM1	U50425C	C	O	S	45	\$25.74	DAY	NONE	Cancelled				Order	BDB	6167	
13:20:03:592	643		TM1	U50425C	C	O	S	45	\$26.74	DAY	NONE	Cancelled				Order	BDB	6271	
Future: DV DV JAN08 P/S: 00:00																			
11:27:25:118	094	094	BZ1	A502E	C	O	B	10	\$24.98	DAY	NONE	Cancelled				Order	TSN	6210	
Future: DV DV FEB08 P/S: 00:00																			
12:56:30:183	643		TM1	U50425C	C	O	S	45	\$25.20	DAY	NONE	Cancelled				Order	BDB	5481	

Export PDF

Export XLS

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction

Order Status: Green=HD Cancelled, Black=Other

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction
Order Status: Green=HD Cancelled, Black=Other

The example above displays all the order transactions that occurred in the CFE_MAIN session on November 16, 2007, for all the DV futures contracts.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

To view order details, click on the corresponding value in the ORSID column for the selected data row. The order history window will display.

Market Replay

User ID : castroo

Help

Order History for Order UID:348828686144148

Trade Date:09/17/2007

Received Time:09/17/2007 13:54:25: 191

Series:AAPL AAQ JAN08 40.00 C P/S: 03/04

B/S:

S TIF:D

ORSID:LCQ314

Branch Code:357

Branch Seq#:CTI

Source:S

S Cntg:IOC

Original Size:10

Traded Vol:0

Cncl Vol:10

Book Vol:0

Cncl Req. Vol:0

Opt Text:P:CIT

Extension Text:PDPM=CIT

User Assigned ID:220699716

PDF

Export PDF

XLS

Export XLS

Event Time	Event Type	Sub Event Type	Price	Acct	T. Price	T. Qty	Remainder	Booked	Busted	Mismtchd	Canceled	Cancel Reason
13:54:25:191	NEW ORDER	0	\$99.70									
13:54:26:061	CANCEL ORDER	0	\$99.70								10	SYSTEM

Auction Order Detail Market Market Replay

Start Time	End Time	Expr Time	Time To Live	Price	Qty	State	Type	Term Reason
13:54:25:295	13:54:26:58	13:54:26:58	750	\$99.70	10	Ended	HAL	Normal

If the order is an Auction order, the Auction order details display in the lower portion of the window. Data fields are described below.

Valid Codes & Definitions

Column	Description
Start Time	When auction starts and RFQ is sent
End Time	When auction processing completes, including fill allocation (time when finished expiring the auction)
Expr Time	When auction processing completes, including fill allocation (time when CBOE starts processing the auction expiration).

Time to Live (sec)	Configured and calculated auction timeout period in milliseconds. It is the time period in milliseconds for which the auction will be live/active. Once the time to live expires, the auction order will get traded.
Auct Price	Auction starting price
Auct Qty	Auction quantity
Auct Type	Internalization, strategy, regular single, unspecified
Match ORS ID	Related (match) ORS ID to determine which order is the related (match) order to the auction order.
Terminate Reason	<p>Auction terminate reason:</p> <p>UNSPECIFIED = 0</p> <p>ORDER_MARKETABLE_AGAINST_BOOK = 1</p> <p>ORDER_MARKETABLE_AGAINST_AUCTION = 2</p> <p>QUOTE_BID_LOCK = 3</p> <p>QUOTE_ASK_LOCK = 4</p> <p>QUOTE_BID_TRIGGER = 5</p> <p>QUOTE_ASK_TRIGGER = 6</p> <p>QUOTE_MARKETABLE_AGAINST_AUCTION = 7</p> <p>Q_ORDER_LOCK = 8</p> <p>Q_ORDER_TRIGGER = 9</p> <p>Q_ORDER_MARKETABLE_AGAINST_AUCTION = 10</p> <p>AUCTION_RESPONSE = 11</p> <p>NEW_AUCTION = 12</p> <p>AUCTIONED_ORDER_CANCEL = 13</p> <p>PRODUCT_STATE_CHANGE = 14</p>
State	State of the auction: Expired or Active

Window buttons and system codes that are specific to Market Replay are defined in the table below.

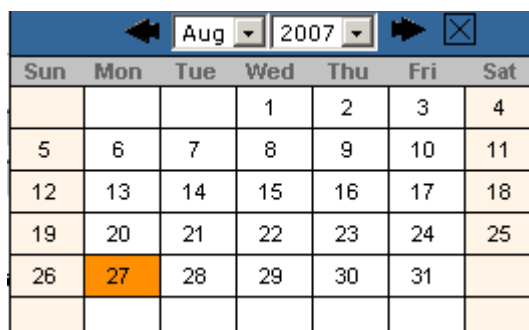

Valid Codes &
Definitions

Column	Description
OR & CVG	CUSTOMER = C, CTI Equivalent - Non Member, Customer Segregated Account FIRM = F CTI Equivalent - Firm Trader, House Account BROKER_DEALER = B CUSTOMER_BROKER_DEALER = X MARKET_MAKER = M MARKET_MAKER_AWAY = N CTI1Origin1 = V - Member, Customer Segregated Account CTI1Origin2 = E - Member, House Account CTI1Origin5 = Q - Member, SIPC Protected Account CTI3Origin1 = G - User Proxy for trader, Customer Segregated Account CTI3Origin2 = H - User Proxy for trader, House Account CTI3Origin5 = R - User Proxy for trader, SIPC Protected Account CTI4Origin2 = O - Non Member, House Account CTI4Origin5 = T - Non Member, SIPC Protected Account PRINCIPAL = P PRINCIPAL_ACTING_AS_AGENT = A SATISFACTION = S
OC	O=Open, C=Close
TIF	D=Day, G=Good until cancelled, T=Good until expire time

Quotes Market Replay gives you the ability to retrieve current quote information for CFE and OneChicago futures contracts. Make your selections from the **Selection Parameters** window:

- Select either the Futures or OneChicago trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.



<div> ◀ Aug 2007 ▶ ✕ </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- If you wish to view only Strategy contracts, select the **Strategy** checkbox. If you wish to view all classes and series, deselect the checkbox.
- Specify the futures contract you are interested in viewing by clicking on the corresponding checkbox.

📅 **Note:** You must select a futures contract, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria															
Session: Futures Trade Date: 11/16/2007 Refresh		Firms: All ABN AMRO Inc ABN AMRO SAGE CORP Archelon L.L.C. Banc of America Securities LLC Bear Stearns Securities Corp. Blue Capital Group LLC Blue Capital LLC BNP Paribas Securities Corp.															
Near Real Time: <input type="checkbox"/> Start Time: 13:01:11.000 End Time: 13:21:11.000 Class: DV All Series <input type="checkbox"/> Strategies <input type="checkbox"/>		MM: All AA1_CFE(ABN AMRO Inc, ABN AMRO Inc) AA2_CFE(ABN AMRO Inc, ABN AMRO Inc) AA3_CFE(ABN AMRO Inc, ABN AMRO Inc) AA4_CFE(ABN AMRO Inc, ABN AMRO Inc) AA5_CFE(ABN AMRO Inc, ABN AMRO Inc) AA6_CFE(ABN AMRO Inc, ABN AMRO Inc) ABL_CFE(DRO WST Trading, ABL) ABN_CFE(ABN AMRO Inc, ABN AMRO Inc)															
<table border="1"> <thead> <tr> <th>Series Class</th> <th>Check</th> </tr> </thead> <tbody> <tr> <td>DV 11/21/2007</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 12/19/2007</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>DV 1/16/2008</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 2/19/2008</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 3/19/2008</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 5/21/2008</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Series Class	Check	DV 11/21/2007	<input type="checkbox"/>	DV 12/19/2007	<input checked="" type="checkbox"/>	DV 1/16/2008	<input type="checkbox"/>	DV 2/19/2008	<input type="checkbox"/>	DV 3/19/2008	<input type="checkbox"/>	DV 5/21/2008	<input type="checkbox"/>	Clear Firm: All 072(Prudential) 084(Lehman Bros) 090(Cargill Investor Services, Inc.) 094(Deutsche Bank) 180(Nomura Securities International Inc.) 259(MF Global Inc. (MF)) 288(Bear Stearns Securities Corp.) 289(Credit Suisse)	
Series Class	Check																
DV 11/21/2007	<input type="checkbox"/>																
DV 12/19/2007	<input checked="" type="checkbox"/>																
DV 1/16/2008	<input type="checkbox"/>																
DV 2/19/2008	<input type="checkbox"/>																
DV 3/19/2008	<input type="checkbox"/>																
DV 5/21/2008	<input type="checkbox"/>																
Market Replay Screen Selection Export To: None																	
<input type="checkbox"/> Orders <input type="checkbox"/> Trades <input checked="" type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions Quote Event Type: All <input type="checkbox"/> Alerts																	
Retrieve																	

- To further filter your request, select to retrieve **Orders**, **Quotes**, **Trades**, **Market Conditions**, or **Alerts**. Select **Quotes**.
- You can further filter your quote requests by **Quote Event Type**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Quotes** window will display with the requested data.

Quotes for Trade Date: 11/16/2007

Trade Date:	11/16/2007	Session:	Futures	Start Time:	13:01:11.000	End Time:	13:21:11.000
P/S:	All	Underl:	*ALL*	Class:	DV	All Series:	
Firm:	All	MM:	All	C. Firm:	All		
Quote Event Type:	All						<input type="button" value="Refresh"/>

Export PDF Export XLS

Quote Time	Quote Event	Buy/Sell	Bid Qty	Bid Price	Ask Price	Ask Qty	Cancel Reason	UserAcct/LogID	Trade Qty	Trade Price	Remain Qty
Future: DV DV DEC07 P/S: 00:00											
13:01:32.666	UpdateOle		10	\$25.20	\$25.40	10		CTI-CTI_CFE			
13:01:32.666	BQ-Open		10	\$25.20	\$25.40	10		Best			
13:01:37.888	UpdateOle		10	\$25.21	\$25.41	10		CTI-CTI_CFE			
13:01:37.888	BQ-Open		10	\$25.21	\$25.41	10		Best			
13:01:50.719	UpdateOle		10	\$25.24	\$25.44	10		CTI-CTI_CFE			
13:01:50.719	BQ-Open		10	\$25.24	\$25.44	10		Best			
13:02:15.271	UpdateOle		10	\$25.25	\$25.45	10		CTI-CTI_CFE			
13:02:15.271	BQ-Open		10	\$25.25	\$25.45	10		Best			
13:02:19.360	UpdateOle		10	\$25.26	\$25.46	10		CTI-CTI_CFE			
13:02:19.360	BQ-Open		10	\$25.26	\$25.46	10		Best			
13:02:32.152	UpdateOle		10	\$25.28	\$25.48	10		CTI-CTI_CFE			
13:02:32.152	BQ-Open		10	\$25.28	\$25.48	10		Best			
13:02:35.724	UpdateOle		10	\$25.27	\$25.47	10		CTI-CTI_CFE			
13:02:35.724	BQ-Open		10	\$25.27	\$25.47	10		Best			
13:02:39.097	UpdateOle		10	\$25.26	\$25.46	10		CTI-CTI_CFE			
13:02:39.097	BQ-Open		10	\$25.26	\$25.46	10		Best			
13:02:45.065	UpdateOle		10	\$25.25	\$25.45	10		CTI-CTI_CFE			
13:02:45.065	BQ-Open		10	\$25.25	\$25.45	10		Best			

Export PDF Export XLS

Quote Types: Red=Quote, Black=Market Condition, Green=Fill Quote

In the example above, quote information for DV futures contracts displays for the CFE_MAIN session.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Market Conditions Market Replay gives you the ability to retrieve current market condition information for CFE and OneChicago futures contracts. Make your selections from the **Selection Parameters** window:

- Select either the Futures or OneChicago trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

<div> ◀ Aug 2007 ▶ ✕ </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- If you wish to view only Strategy contracts, select the **Strategy** checkbox. If you wish to view all classes and series, deselect the checkbox.
- Specify the futures contract you are interested in viewing by clicking on the corresponding checkbox.

📅 **Note:** You must select a futures contract, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria

Session: Trade Date: Refresh

Near Real Time: ☒ Start Time: End Time: Class: All Series ☐ Strategies ☐

Series Class	Check
DV 12/19/2007	<input checked="" type="checkbox"/>
DV 1/16/2008	<input type="checkbox"/>
DV 2/19/2008	<input type="checkbox"/>
DV 3/19/2008	<input type="checkbox"/>
DV 5/21/2008	<input type="checkbox"/>
DV 8/20/2008	<input type="checkbox"/>

User Search Criteria

Firms:
 User Role:
 User:
 Clear Firm:

Market Replay Screen Selection

Export To:

☐ Orders ☐ Trades ☐ Quotes ☒ Market Conditions ☐ Alerts

MKT Product State:

Retrieve

Privacy Statement | Terms and Conditions | Copyright & Trademarks
 ©2006 Chicago Board Options Exchange, Incorporated.

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions**, or **Alerts**. Select **Market Conditions**.
- You can further filter your request by **Mkt Product State**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
 - Note:** Choosing **Condensed** will display a smaller subset of columns and automatically export the query results to Excel. Refer to the Exporting Data section, page 76.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Market Conditions** window will display with the requested data.

Market Conditions for Trade Date: 11/28/2007

Trade Date:11/28/2007

P/S:All

Firm:All

MKT Product State:All

Session:UnderL:

Futures*ALL*

MM:All

Start Time:10:27:35.000

Class:DV

C. Firm:All

End Time:10:47:35.000

All Series:

Refresh

Export PDFExport XLS

Entry Time	Entry Type	Bid Qty	Bid Price	Ask Price	Ask Qty	L/Sale Price	L/Sale Qty	NBBO B/Pr	NBBO A/Pr	BOBR B/Pr	BOBR A/Pr	Best B/Sz	Best B/Pr	Best A/Pr	Best A/Sz	Imbal Qty	Prod Stat	Est Open Price St
Future: DV DV DEC07P/S: 00.00																		
10:27:35.179	Quote	10	\$23.39	\$23.59	10				\$23.39		\$23.59						Open	
10:27:40.478	Quote	10	\$23.41	\$23.61	10				\$23.41		\$23.61						Open	
10:27:59.394	Quote	10	\$23.42	\$23.62	10				\$23.42		\$23.62						Open	
10:28:05.447	Quote	10	\$23.41	\$23.61	10				\$23.41		\$23.61						Open	
10:28:10.741	Quote	10	\$23.39	\$23.59	10				\$23.39		\$23.59						Open	
10:28:15.325	Quote	10	\$23.39	\$23.59	10				\$23.39		\$23.59						Open	
10:28:20.759	Quote	10	\$23.39	\$23.59	10				\$23.39		\$23.59						Open	
10:28:30.483	Quote	10	\$23.35	\$23.55	10				\$23.35		\$23.55						Open	
10:28:37.101	Quote	10	\$23.36	\$23.56	10				\$23.36		\$23.56						Open	
10:28:41.031	Quote	10	\$23.30	\$23.50	10				\$23.30		\$23.50						Open	
10:28:48.337	Quote	10	\$23.35	\$23.55	10				\$23.35		\$23.55						Open	
10:28:57.080	Quote	10	\$23.39	\$23.59	10				\$23.39		\$23.59						Open	
10:29:07.001	Quote	10	\$23.36	\$23.56	10				\$23.36		\$23.56						Open	
10:29:13.008	Quote	10	\$23.38	\$23.58	10				\$23.38		\$23.58						Open	
10:29:17.571	Quote	10	\$23.36	\$23.56	10				\$23.36		\$23.56						Open	
10:29:36.225	Quote	10	\$23.35	\$23.55	10				\$23.35		\$23.55						Open	
10:30:01.053	Quote	10	\$23.36	\$23.56	10				\$23.36		\$23.56						Open	
10:30:04.870	Quote	5	\$23.46	\$23.66	10				\$23.46		\$23.66						Open	

Export PDFExport XLS

Details are provided for all the market events that occurred in the CFE session from 10:27:35 to 10:47:35 for all the DV DEC07 futures contracts. Columns that are specific to Market Replay for market conditions are defined in the picture above.

Scroll down on your scroll bar to view all the events for each series.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Trades Market Replay allows you to retrieve current trade information for futures contracts. Make your selections from the **Selection Parameters** window:

- Select either the Futures or OneChicago trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

<div> ◀ Aug 2007 ▶ ✕ </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- If you wish to view only Strategy contracts, select the **Strategy** checkbox. If you wish to view all classes and series, deselect the checkbox.
- Specify the futures contract you are interested in viewing by clicking on the corresponding checkbox.

📅 **Note:** You must select a futures contract, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria															
Session:	Futures	Firms:	All ABN AMRO Inc ABN AMRO SAGE CORP Archelon L.L.C. Banc of America Securities LLC Bear Stearns Securities Corp. Blue Capital Group LLC Blue Capital LLC BNP Paribas Securities Corp.														
Trade Date:	12/04/2007 <input type="button" value="Refresh"/>	MM:	All AA1_CFE(ABN AMRO Inc, ABN AMRO Inc) AA2_CFE(ABN AMRO Inc, ABN AMRO Inc) AA3_CFE(ABN AMRO Inc, ABN AMRO Inc) AA4_CFE(ABN AMRO Inc, ABN AMRO Inc) AA5_CFE(ABN AMRO Inc, ABN AMRO Inc) AA6_CFE(ABN AMRO Inc, ABN AMRO Inc) ABL_CFE(DRO WST Trading, ABL) ABN_CFE(ABN AMRO Inc, ABN AMRO Inc)														
Near Real Time:	<input type="checkbox"/>	Clear Firm:	All 072(Prudential) 084(Lehman Bros) 090(Cargill Investor Services, Inc.) 094(Deutsche Bank) 180(Nomura Securities International Inc.) 259(MF Global Inc. (MF)) 288(Bear Stearns Securities Corp.) 289(Credit Suisse)														
Start Time:	13 : 51 : 11 . 000																
End Time:	14 : 11 : 11 . 000																
Class:	DV																
All Series	<input type="checkbox"/>																
Strategies	<input type="checkbox"/>																
<table border="1"> <thead> <tr> <th>Series Class</th> <th>Check</th> </tr> </thead> <tbody> <tr> <td>DV 12/19/2007</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 1/16/2008</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>DV 2/19/2008</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 3/19/2008</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 5/21/2008</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DV 8/20/2008</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Series Class	Check	DV 12/19/2007	<input type="checkbox"/>	DV 1/16/2008	<input checked="" type="checkbox"/>	DV 2/19/2008	<input type="checkbox"/>	DV 3/19/2008	<input type="checkbox"/>	DV 5/21/2008	<input type="checkbox"/>	DV 8/20/2008	<input type="checkbox"/>		
Series Class	Check																
DV 12/19/2007	<input type="checkbox"/>																
DV 1/16/2008	<input checked="" type="checkbox"/>																
DV 2/19/2008	<input type="checkbox"/>																
DV 3/19/2008	<input type="checkbox"/>																
DV 5/21/2008	<input type="checkbox"/>																
DV 8/20/2008	<input type="checkbox"/>																
		Market Replay Screen Selection Export To: None															
		<input type="checkbox"/> Orders <input checked="" type="checkbox"/> Trades Trade Type: All <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input type="checkbox"/> Alerts															
		<input type="button" value="Retrieve"/>															

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, or Alerts**. Select **Trades**.
- You can further filter your trades request by **Trade Type**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Trades** window will display with the requested data.

Market Replay

User ID : castroo

Help

Trades for Trade Date: 11/16/2007

Trade Date: 11/16/2007

Session: Futures

Start Time: 13:51:11.000

End Time: 14:11:11.000

P/S: All

Underl: *ALL*

Class: DV

All Series:

Firm: All

MM: All

C. Firm: All

Refresh

> Export results to: Export PDF | Export XLS Total Trades: 2 Sum of Contract Quantities: 2

Trade Time	Exc Firm	Cmta Firm	Exc Bkr	Sell Side				O/Q	Exc Firm	Cmta Firm	Exc Bkr	Buy Side				Trade Price	Contr Qty	Total Qty	Mkt Cond	B	Trade Id
				Acc LogID	Acc Of	OR	OC					Acc LogID	Acc Of	OR	OC						
Future: DV DV JAN08 P/S: 00/00																					
14:00:06.917	299		CT1	CT1-CT1_CFE	QTA	M	N	Quq	602		MS2	MS2-MS2_CFE		C	N	Ord	\$25.35	1	1		82188-240378728
14:00:18.626	299		CT1	CT1-CT1_CFE	QTA	M	N	Quq	602		MS2	MS2-MS2_CFE		C	N	Ord	\$25.34	1	1		82188-240378733

Trade Types: Blue=Cross Product, Black=Other

Trade Types: Blue=Cross Product, Black=Other

The example above displays all the trades that occurred in the CFE_MAIN session on November 16, 2007, for the DV futures contracts. The total number of trades represents all the trades in the display.

Trade details are provided as well as system specific information. Valid codes and column definitions that are represented in the Trades window are defined in the table below.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.



Column	Description
OR	P/A Linkage = 'A' B/D = 'B' CUSTOMER = 'C' Customer-FBW = 'D' Member, House Account = 'E' FIRM = 'F' User Proxy for trader, Customer Segregated = 'G' User Proxy for trader, House Account = 'H' In-Crowd MM = 'I' Firm - FBW = 'J' B/D-FBW='K' Firm-FBW='L' MARKET_MAKER = 'M' Away MM='N' Non Member, House Account='O' Principle Linkage = 'P' Member, SIPC Protected Account = 'Q' User Proxy for trader, SIPC Protected Account = 'R' Satisfaction Linkage = 'S' Non Member, SIPC Protected Account='T' M-FBW='U' Member, Customer Segregated Account='V' Broker/Dealer-FBW='W' Customer Broker/Dealer='X' Underly Specialist='Y' N,Y-FBW='Z'
OC	O=Open, C=Close
Sell Acc of	This column will be populated with a Q account if this side of the trade was originated by a DPM, otherwise, it will be populated with the Broker or Market Maker acronym. If the order originator is not a Market Maker or a broker, then the value in this field will not be validated by CBOE [®] direct.
Buy Acc of	This column represents the buyer's account information. If this is a trade from a quote, the Q account or Market Maker acronym is displayed. If this is a trade from an order, it is a free form field for the firm.
Mkt Cond	CANC=trade bust report CNCO=trade bust report for opening trade FTAO=used if the first trade for product occurs after the opening OPNT=used if first trade for product occurs during opening REOP=trade that occurs during an opening rotation that is not the first rotation of the day
Trade Source	SYSTEM or MANUAL. The Help Desk has the ability to enter a manual trade (block trade)
B	The letter 'B' stands for Bust. An * displayed in this column represents a busted trade.

Alerts The Alert Message display allows you to view types of trade throughs that have occurred in CBOE[®]direct.

To retrieve current data in the Alert Messages display, make your selections from the **Selection Parameters** window.

- Select either the Futures or OneChicago trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

<div> ◀ Aug ▼ 2007 ▶ ✕ </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- If you wish to view only Strategy contracts, select the **Strategy** checkbox. If you wish to view all classes and series, deselect the checkbox.
- Specify the futures contract you are interested in viewing by clicking on the corresponding checkbox.

📅 **Note:** You must select a futures contract, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	OneChicago	Firms:	All AB Financial LLC AG Edwards & Sons Inc AK Capital, LLC Allston Trading, LLC Andrie Trading LLC AOS, Inc. Archelon LLC Arlight Securities, LLC
Trade Date:	12/10/2007 <input type="button" value="Refresh"/>	User:	All CD718(OPTIVER US)(C) ---(Silverman, Gary R.)(M) ...(Boyle, Terrance G.)(M) ...X1(Boyle, Terrance G.)(M) ...X1(TEST USER 1)(M) ...X1(TEST USER 2)(M) 0(Weber, Daniel M.)(M) 000(Rothman, Howard M.)(M)
Near Real Time:	<input type="checkbox"/>	Clear Firm:	All 001(Cboe Billing/Accounting) 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing L.P.) 012(Swiss American Securities Inc (012)) 013(Sanford C Bernstein & Co Inc) 015(Morgan Stanley DW Inc/Alt 1) 017(Interactive Brokers LLC) 019(Jefferies & Company, Inc.)
Start Time:	10:04:44.000	Market Replay Screen Selection	
End Time:	15:24:44.000	Export To: None	
Class:	DELL1C	<input type="checkbox"/> Orders <input type="checkbox"/> Trades <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input checked="" type="checkbox"/> Alerts	
All Series <input checked="" type="checkbox"/> Strategies <input type="checkbox"/>		<input type="button" value="Retrieve"/>	

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, or Alerts**. Select **Alerts**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Alerts** window will display with the requested data.

Alerts for Trade Date: 12/10/2007					
Trade Date:	12/10/2007	Session:	OneChicago	Start Time:	10:04:44.000
P/S:	All	Underl:	*ALL*	Class:	DELL1C
Firm:	All	MM:	All	C. Firm:	All
				End Time:	15:24:44.000
				All Series:	Y
					<input type="button" value="Refresh"/>

Alert Time	Alert Type	Alert Result	NBBO Agent	Update Agent	Marktable?	Last Exch Acq	Last Price	Last Postfix	B/A	Comment	TH Price	TH Qty	Detail
Nothing found to display.													

The Alerts window shows that no alerts occurred for the DELL1C futures contract on 12/10/07.



Composite Market Replay allows you to query for more than one type of criteria (orders, trades, quotes, alerts, market conditions). In the example below, the query has been set to display both quotes and market conditions for DV futures contract.

Market Replay Main Search Criteria		User Search Criteria															
Session: Futures Trade Date: 12/14/2007 [K1] Refresh																	
Near Real Time : <input checked="" type="checkbox"/> Start Time: 13 : 48 : 38 . 000 End Time: 14 : 08 : 38 . 000 Class: DV																	
All Series <input type="checkbox"/> Strategies <input type="checkbox"/>																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="text-align: left; padding: 2px;">Series Class</th> <th style="text-align: center; padding: 2px;">Check</th> </tr> </thead> <tbody> <tr><td>DV 12/19/2007</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>DV 1/16/2008</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>DV 2/19/2008</td><td style="text-align: center;"><input checked="" type="checkbox"/></td></tr> <tr><td>DV 3/19/2008</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>DV 5/21/2008</td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td>DV 8/20/2008</td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>				Series Class	Check	DV 12/19/2007	<input type="checkbox"/>	DV 1/16/2008	<input type="checkbox"/>	DV 2/19/2008	<input checked="" type="checkbox"/>	DV 3/19/2008	<input type="checkbox"/>	DV 5/21/2008	<input type="checkbox"/>	DV 8/20/2008	<input type="checkbox"/>
Series Class	Check																
DV 12/19/2007	<input type="checkbox"/>																
DV 1/16/2008	<input type="checkbox"/>																
DV 2/19/2008	<input checked="" type="checkbox"/>																
DV 3/19/2008	<input type="checkbox"/>																
DV 5/21/2008	<input type="checkbox"/>																
DV 8/20/2008	<input type="checkbox"/>																
Firms: <div style="border: 1px solid gray; height: 150px; margin-top: 5px;"></div>		User: <div style="border: 1px solid gray; height: 150px; margin-top: 5px;"></div>															
Clear Firm: <div style="border: 1px solid gray; height: 150px; margin-top: 5px;"></div>																	
Market Replay Screen Selection																	
Export To: None																	
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Orders <input type="checkbox"/> Trades </div>																	
<div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Quotes <input checked="" type="checkbox"/> Market Conditions </div>																	
Quote Event Type: All		MKT Product State: All															
<input type="checkbox"/> Alerts																	

Two windows display for the query; Market Conditions and Quotes.

[illegible]

Quotes for Trade Date: 12/14/2007							
Trade Date:	12/14/2007	Session:	Futures	Start Time:	13:48:38.000	End Time:	14:08:38.000
P/S:	All	Underl:	*ALL*	Class:	DV	End Series:	All Series
Firm:	All	Mkt:	All	C. Firm:	All	<input type="button" value="Refresh"/>	
Quote Event Type:	All						

 Export PDF  Export XLS

Quote Time	Quote Event	Buy/Sell	Bid Qty	Bid Price	Ask Price	Ask Qty	Cancel Reason	UserAcr/LogID	Trade Qty	Trade Price	Remn Qty
Future: DV DV FE808								P/S: 00.00			
13:48:44.997	UpdateOtr		10	\$22.85	\$22.85	10		CTI-CTI_CFE			
13:48:54.998	BQ-Open		10	\$22.70	\$22.85	10		Best			
13:49:06.592	UpdateOtr		10	\$22.67	\$22.87	10		CTI-CTI_CFE			
13:49:06.593	BQ-Open		10	\$22.70	\$22.87	10		Best			
13:49:12.700	UpdateOtr		10	\$22.68	\$22.86	10		CTI-CTI_CFE			
13:49:12.761	BQ-Open		10	\$22.70	\$22.86	10		Best			
13:49:15.117	UpdateOtr		10	\$22.67	\$22.87	10		CTI-CTI_CFE			
13:49:15.118	BQ-Open		10	\$22.70	\$22.87	10		Best			
13:49:56.533	UpdateOtr		10	\$22.68	\$22.88	10		CTI-CTI_CFE			
13:49:56.533	BQ-Open		10	\$22.70	\$22.86	10		Best			
13:50:07.044	UpdateOtr		10	\$22.68	\$22.88	10		CTI-CTI_CFE			
13:50:07.045	BQ-Open		10	\$22.70	\$22.88	10		Best			
13:50:37.951	UpdateOtr		10	\$22.70	\$22.90	10		CTI-CTI_CFE			
13:50:37.952	BQ-Open		20	\$22.70	\$22.90	10		Best			
13:50:47.325	UpdateOtr		10	\$22.71	\$22.91	10		CTI-CTI_CFE			
13:50:47.325	BQ-Open		10	\$22.71	\$22.91	10		Best			
13:50:52.522	UpdateOtr		10	\$22.72	\$22.92	10		CTI-CTI_CFE			
13:50:52.522	BQ-Open		10	\$22.72	\$22.92	10		Best			

 Export PDF  Export XLS

Quote Types: Red=Quote, Black=Market Condition, Green=Fill Quote

Display Stock Trade Information

Market Replay allows you to view current and historical Stock (underlying) trading information. The window defaults to the Options session and the current business day.

The window examples below present single data types (i.e. Trades) rather than combination displays (i.e. Trades & Orders).

The screenshot displays the Market Replay window interface, which is divided into three main sections:

- Market Replay Main Search Criteria:** This panel includes a 'Session' dropdown set to 'Stock', a 'Trade Date' field showing '12/14/2007' with a 'Refresh' button, a 'Near Real Time' checkbox that is checked, 'Start Time' and 'End Time' fields set to '13:58:26.000' and '14:18:26.000' respectively, and an 'Underly' dropdown set to 'AAPL'.
- User Search Criteria:** This panel contains three lists:
 - Firms:** A list of trading firms including A G Edwards & Sons, Inc., Allston Trading LLC, Andrie Trading LLC, Associated Options Inc., Automated Trading Desk Brokerage Services, LLC, Automated Trading Desk Financial Services, LLC, Banc of America Securities LLC, and Bear Stearns & Co., Inc.
 - User:** A list of users including ADB_CBOEW(DeBoom, Alan)(M), AJ_CBOEW(Jimenez, Albert)(M), ALL1(Allston Trading LLC, ALL)(M), ALL_CBOEW(Allston Trading LLC, ALL)(M), ALTN(Allston Trading LLC, ALL)(M), AND_CBOEW(Andrie Trading LLC, AND)(M), AR_CBOEW(Sanchez, Arcilia)(M), and ASO_CBOEW(Associated Options, ASO)(B).
 - Clear Firm:** A list of clearing firms including 005(Goldman Sachs & Co.), 009(Goldman Sachs Execution & Clearing LP), 012(Swiss American Securities Inc), 013(Sanford C. Bernstein & Co., LLC), 017(Interactive Brokers LLC), 050(Morgan Stanley & Co., Incorporated), 060(JP Morgan Securities, Inc.), and 067(Instinet LLC).
- Market Replay Screen Selection:** This panel includes an 'Export To' dropdown set to 'None', a grid of checkboxes for 'Orders', 'Quotes', 'ITS Admin Messages', 'Trades', 'Market Conditions', and 'Alerts', and a 'Retrieve' button at the bottom right.

The Market Replay window is split into three panels: Market Replay Main Search Criteria, User Search Criteria and Market Replay Screen Selections. This window is used to set limitations for your data request.

The Market Replay Main Search Criteria section of the window allows you to select:

- The session and trade date
- Near real-time monitoring or a fixed time range
- Underlying selections

The User Search Criteria section allows you to filter your Market Replay requests by Firm, Market Maker, or Clearing Firm. The window defaults to display all Firms, Market Makers and Clearing Firms for the Options session.

If you select only one Firm from the Firm list, only the Market Makers for that Firm will display in the MM list box.

User Search Criteria	
Firms:	<div> All A G Edwards & Sons, Inc. Allston Trading LLC Andrie Trading LLC Associated Options Inc. Automated Trading Desk Brokerage Services, LLC Automated Trading Desk Financial Services, LLC Banc of America Securities LLC Bear Stearns & Co., Inc. </div>
User:	<div> All ADB_CBOEW(DeBoom, Alan)(M) AJ_CBOEW(Jimenez, Albert)(M) ALL1(Allston Trading LLC, ALL)(M) ALL_CBOEW(Allston Trading LLC, ALL)(M) ALTN(Allston Trading LLC, ALL)(M) AND_CBOEW(Andrie Trading LLC, AND)(M) AR_CBOEW(Sanchez, Arcilia)(M) ASO_CBOEW(Associated Options, ASO)(B) </div>
Clear Firm:	<div> All 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing LP) 012(Swiss American Securities Inc) 013(Sanford C. Bernstein & Co., LLC) 017(Interactive Brokers LLC) 050(Morgan Stanley & Co., Incorporated) 060(JP Morgan Securities, Inc.) 067(Instinet LLC) </div>

If you select only one Market Maker from the MM list, only the Clearing Firm for that Market Maker will display in the Clear Firm list box.

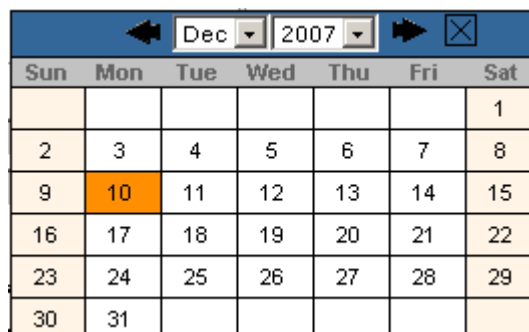
The Market Replay Screen Selection section allows you to filter your Market Replay requests by Orders, Trades, Quotes, Market Conditions, ITS Admin Messages and Alerts. You can also export the data to Excel or PDF formats.

Market Replay Screen Selection	
Export To: None	
<input type="checkbox"/> Orders	<input type="checkbox"/> Trades
<input type="checkbox"/> Quotes	<input type="checkbox"/> Market Conditions
<input type="checkbox"/> ITS Admin Messages	<input type="checkbox"/> Alerts
Retrieve	

Orders Market Replay allows you to retrieve current order information for the Stock (underlying) trading session. Make your selections from the **Selection Parameters** window:

- Select the Stock trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.



Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Select the Stock (underlying) product.

📅 **Note:** You must select a Stock product, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	Stock	Firms:	All A G Edwards & Sons, Inc. Allston Trading LLC Andrie Trading LLC Associated Options Inc. Automated Trading Desk Brokerage Services, LLC Automated Trading Desk Financial Services, LLC Bank of America Securities LLC Bear Stearns & Co., Inc.
Trade Date:	12/21/2007 <input type="button" value="Next"/> <input type="button" value="Previous"/> <input type="button" value="Refresh"/>	User:	All ADB_CBOEW(DeBoom, Alan)(M) AJ_CBOEW(Jimenez, Albert)(M) ALL1(Allston Trading LLC, ALL)(M) ALL_CBOEW(Allston Trading LLC, ALL)(M) ALTN(Allston Trading LLC, ALL)(M) AND_CBOEW(Andrie Trading LLC, AND)(M) AR_CBOEW(Sanchez, Arcilia)(M) ASO_CBOEW(Associated Options, ASO)(B)
Near Real Time :	<input type="checkbox"/>	Clear Firm:	All 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing LP) 012(Swiss American Securities Inc) 013(Sanford C. Bernstein & Co., LLC) 017(Interactive Brokers LLC) 050(Morgan Stanley & Co., Incorporated) 060(JP Morgan Securities, Inc.) 067(Instinet LLC)
Start Time:	10 : 55 : 52 . 000		
End Time:	11 : 05 : 52 . 000		
Underly:	AAPL		
		Market Replay Screen Selection Export To: None	
		<input checked="" type="checkbox"/> Orders <input type="checkbox"/> Trades Order Type: All Cntg: All TIF: All Order Entry: All Origin Type Code: All <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input type="checkbox"/> ITS Admin Messages <input type="checkbox"/> Alerts	
		<input type="button" value="Retrieve"/>	

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, ITS Admin Messages** or **Alerts**. Select **Orders**.
- You can further filter your orders request by: Order Type, Contingency (Cntg), Time in Force (TIF), Order Entry or Origin Type Code. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Orders** window will display with the requested data.

Orders for Trade Date: 12/21/2007

Trade Date: 12/21/2007

P/S: All

Firm: All

Order Type: All

Status: All

Session: Equity Sym: AAPL

MM: All

Auct Type: null

Origin: All

Start Time: 10:55:52.000

C. Firm: All

Cntg: All

End Time: 11:05:52.000

TIF: All

Refresh

Export PDF

Export XLS

Act Time	Firm	G UP	E Brkr	S Acct	OR	OC	B/S	Qty	Price	TIF	Cntg	Status	Trade Qty	Trade Price	Corr Firm	Order	b Code	b Seq	Cross	Exch
Stock: AAPL																				
10:56:50.568	355		CSU		L	N	Sell	100	\$191.82	DAY	IOC	Cancelled				Order	AAB	2845	N	
10:57:09.065	695		TNK	CBY	E	N	Buy	100	\$191.90	DAY	NONE	Filled	100	\$191.80	CBY	Order	TTV	3429	N	
10:54:50.042	501		VXD	318T1209	I	N	Buy	100	\$190.27	DAY	NONE	Cancelled				Order	UBG	8357	N	
10:54:50.046	501		VXD	318T1209	I	N	Sell	100	\$193.37	DAY	NONE	Cancelled				Order	UBG	8358	N	
10:57:16.737	501		VXD	318T1209	I	N	Sell	100	\$193.77	DAY	NONE	Cancelled				Order	UBH	1075	N	
10:57:16.731	501		VXD	318T1209	I	N	Buy	100	\$189.93	DAY	NONE	Cancelled				Order	UBH	1074	N	
10:57:16.874	501		VXD	318T1209	I	N	Buy	100	\$190.31	DAY	NONE	Cancelled				Order	UBH	1099	N	
10:57:16.878	501		VXD	318T1209	I	N	Sell	100	\$193.40	DAY	NONE	Cancelled				Order	UBH	1100	N	
10:58:20.033	501		VXD	318T1209	I	N	Buy	100	\$189.92	DAY	NONE	Cancelled				Order	UBH	2405	N	
10:58:20.037	501		VXD	318T1209	I	N	Sell	100	\$193.76	DAY	NONE	Cancelled				Order	UBH	2406	N	
10:58:20.145	501		VXD	318T1209	I	N	Buy	100	\$190.27	DAY	NONE	Cancelled				Order	UBH	2421	N	
10:58:20.147	501		VXD	318T1209	I	N	Sell	100	\$193.36	DAY	NONE	Cancelled				Order	UBH	2422	N	
10:59:23.798	501		VXD	318T1209	I	N	Buy	100	\$189.89	DAY	NONE	Cancelled				Order	UBH	3934	N	
10:59:23.802	501		VXD	318T1209	I	N	Sell	100	\$193.73	DAY	NONE	Cancelled				Order	UBH	3935	N	
10:59:23.845	501		VXD	318T1209	I	N	Buy	100	\$190.26	DAY	NONE	Cancelled				Order	UBH	3942	N	
10:59:23.848	501		VXD	318T1209	I	N	Sell	100	\$193.35	DAY	NONE	Cancelled				Order	UBH	3943	N	
10:59:37.695	501		VXD	318T1209	I	N	Buy	100	\$189.82	DAY	NONE	Cancelled				Order	UBH	4341	N	
10:59:37.698	501		VXD	318T1209	I	N	Sell	100	\$193.66	DAY	NONE	Cancelled				Order	UBH	4342	N	

Export PDF

Export XLS

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction
Order Status: Green=HD Cancelled, Black=Other

Order Types: Black=Simple, Red=Complex, Blue=Complex Auction, Purple=Simple Auction
 Order Status: Green=HD Cancelled, Black=Other

The example above displays all the order activity that occurred in the W_MAIN session on December 21, 2007 from 10:55:52 to 11:05:52 for the AAPL class. Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Click **Refresh** at anytime to update the query.

To view order details, click on the corresponding value in the Order column for the selected data row. The order history window will display.

Order History for Order UID:355221579850546												
Trade Date:	12/21/2007	Received Time:	12/21/2007 10:56:50.568	Series:	AAPL	B/S:	S	TIF:	D			
ORSID:		Branch Code:	AAB	Branch Seq#:	2845	Source:	S	Cntg:	IOC			
Original Size:	100	Traded Vol:	0	Cncl Vol:	100	Book Vol:	0	Cncl Req. Vol:	0			
Opt Text:												
Extension Text:	21=1□60=20071221-16:56:50											
User Assigned ID:												
<div> Export PDF  Export XLS</div>												
Event Time	Event Type	Sub Event Type	Price	Acct	T. Price	T. Qty	Remainder	Booked	Busted	Mismtchd	Cancelcd	Cancel Reason
10:56:50.568	NEW ORDER	0	\$191.82									
10:56:50.584	CANCEL ORDER	0	\$191.82								100	USER

Quotes Market Replay allows you to retrieve current quote information for the Stock (underlying) trading session. Make your selections from the **Selection Parameters** window:

- Select the Stock trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶ ☒						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Select the Stock (underlying) product.

📅 **Note:** You must select a Stock product, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria

Session:

Trade Date:

Near Real Time: ☐

Start Time: : : .

End Time: : : .

Underly:

User Search Criteria

Firms:
 A G Edwards & Sons, Inc.
 Allston Trading LLC
 Andrie Trading LLC
 Associated Options Inc.
 Automated Trading Desk Brokerage Services, LLC
 Automated Trading Desk Financial Services, LLC
 Banc of America Securities LLC
 Bear Stearns & Co., Inc.

User:
 ADB_CBOEW(DeBoom, Alan)(M)
 AJ_CBOEW(Jimenez, Albert)(M)
 ALL1(Allston Trading LLC, ALL)(M)
 ALL_CBOEW(Allston Trading LLC, ALL)(M)
 ALTN(Allston Trading LLC, ALL)(M)
 AND_CBOEW(Andrie Trading LLC, AND)(M)
 AR_CBOEW(Sanchez, Arcilia)(M)
 ASO_CBOEW(Associated Options, ASO)(B)

Clear Firm:
 005(Goldman Sachs & Co.)
 009(Goldman Sachs Execution & Clearing LP)
 012(Swiss American Securities Inc)
 013(Sanford C. Bernstein & Co., LLC)
 017(Interactive Brokers LLC)
 050(Morgan Stanley & Co., Incorporated)
 060(JP Morgan Securities, Inc.)
 067(Instinet LLC)

Market Replay Screen Selection

Export To:

☐ Orders ☐ Trades

☒ Quotes ☐ Market Conditions

Quote Event Type:
 All
 New/Update
 Fill
 Cancel
 Cancel All
 System Cancel
 UTM Cancels
 Bust

☐ ITS Admin Messages ☐ Alerts

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- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, ITS Admin Messages** or **Alerts**. Select **Quotes**.
- You can further filter your quote requests by **Quote Event Type**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Quotes** window will display with the requested data.

Quotes for Trade Date: 12/10/2007

Trade Date:	12/10/2007	Session:	Stock	Start Time:	10:58:35.000	End Time:	11:52:35.000
P/S:	All	Equity Sym.:	AAPL				
Firm:	All	MM:	All	C. Firm:	All		<input type="button" value="Refresh"/>
Quote Event Type:	All						

Export PDF Export XLS

Quote Time	Quote Event	Buy/Sell	Bid Qty	Bid Price	Ask Price	Ask Qty	Cancel Reason	UserAcr/LogID	Trade Qty	Trade Price	Remn Qty
Stock: AAPL											
10:58:42.844	BQ-Open		100	\$0.01	\$196.72	300		Best			
10:58:42.846	BQ-Open		100	\$0.01	\$999.99	100		Best			
10:58:42.878	BQ-Open		300	\$193.65	\$999.99	100		Best			
10:58:42.889	BQ-Open		300	\$193.65	\$197.57	300		Best			
10:58:42.948	BQ-Open		100	\$0.01	\$197.57	300		Best			
10:58:42.952	BQ-Open		100	\$0.01	\$999.99	100		Best			
10:58:43.028	BQ-Open		300	\$194.43	\$999.99	100		Best			
10:58:43.030	BQ-Open		300	\$194.43	\$196.81	300		Best			
10:58:57.942	BQ-Open		100	\$0.01	\$196.81	300		Best			
10:58:57.945	BQ-Open		100	\$0.01	\$999.99	100		Best			
10:58:57.968	BQ-Open		300	\$193.67	\$999.99	100		Best			
10:58:57.971	BQ-Open		300	\$193.67	\$197.59	300		Best			
10:58:58.152	BQ-Open		100	\$0.01	\$197.59	300		Best			
10:58:58.155	BQ-Open		100	\$0.01	\$999.99	100		Best			
10:58:58.323	BQ-Open		300	\$194.44	\$999.99	100		Best			
10:58:58.327	BQ-Open		300	\$194.44	\$196.81	300		Best			
10:59:05.185	BQ-Open		100	\$0.01	\$196.81	300		Best			
10:59:06.100	BQ-Open		100	\$0.01	\$999.99	100		Best			

Export PDF Export XLS

Quote Types: Red=Quote, Black=Market Condition, Green=Fill Quote

In the example above, quote information for AAPL displays for the Stock session.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Trades Market Replay allows you to retrieve current trade information for the Stock (underlying) trading session. Make your selections from the **Selection Parameters** window:

- Select the Stock trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶ ☒						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Select the Stock (underlying) product.

📅 **Note:** You must select a Stock product, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria
Session: Stock
Trade Date: 01/07/2008 Refresh

Near Real Time: ☐
Start Time: 10:58:04.000
End Time: 11:52:04.000
Underly: *ALL*

User Search Criteria

Firms:

All
A G Edwards & Sons, Inc.
Allston Trading LLC
Andrie Trading LLC
Associated Options Inc.
Automated Trading Desk Brokerage Services, LLC
Automated Trading Desk Financial Services, LLC
Banc of America Securities LLC
Bear Stearns & Co., Inc.

User:

All
ADB_CBOEW(DeBoom, Alan)(M)
AJ_CBOEW(Jimenez, Albert)(M)
ALL1(Allston Trading LLC, ALL)(M)
ALL2(Allston Trading LLC, ALL)(M)
ALL_CBOEW(Allston Trading LLC, ALL)(M)
ALTN(Allston Trading LLC, ALL)(M)
AND_CBOEW(Andrie Trading LLC, AND)(M)
AR_CBOEW(Sanchez, Arcilia)(M)

Clear Firm:

All
005(Goldman Sachs & Co.)
009(Goldman Sachs Execution & Clearing LP)
012(Swiss American Securities Inc)
013(Sanford C. Bernstein & Co., LLC)
017(Interactive Brokers LLC)
050(Morgan Stanley & Co., Incorporated)
060(JP Morgan Securities, Inc.)
067(Instinet LLC)

Market Replay Screen Selection
Export To: None

☐ Orders
☒ Trades
☐ Quotes
☐ Market Conditions
☐ ITS Admin Messages
☐ Alerts

Trade Type: All

Retrieve

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, ITS Admin Messages** or **Alerts**. Select **Trades**.
- You can further filter your quote requests by **Trade Type**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Trades** window will display with the requested data.

Trades for Trade Date: 01/07/2008																										
Trade Date: 01/07/2008					Session: AAPL					Start Time: 10:58:04.000					End Time: 11:52:04.000											
P/S: All					Equity Sym: AAPL					C. Firm: All										<button>Refresh</button>						
Firm: All					MM:																					
Export results to: Total Trades: 32 Sum of Contract Quantities: 4400																										
Export PDFExport XLS																										
Sell Side													Buy Side													
Trade Time	Exc Firm	G Up Firm	Exc Bkr	Acc LogID	Acc DI	OR	OC	O/Q	Exc Firm	G Up Firm	Exc Bkr	Acc LogID	Acc DI	OR	OC	O/Q	Trade Price	Conty Qty	Total Qty	Type	Src	AsOf	Hdt Cont	Trade ID		
Stock: AAPL																										
11:13:57:266	627		BZ0	BZ0-BZ01		B	N	Ord	164			BZ0	BZ0-BZ01		B	N	Ord	\$177.50	100	100		S	N		82644280233273	
11:17:08:306	627		BZ0	BZ0-BZ01		B	N	Ord	164			BZ0	BZ0-BZ01		B	N	Ord	\$177.00	100	100		S	N		82944280220699	
11:31:53:277	739		X0W	X0W-X0W	X0W	1		Ord	695			TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	\$178.91	100	100	L	S	N		82944280220225	
11:32:05:636	695		TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	739			X0W	X0W-X0W	X0W	1		Ord	\$178.76	200	200	L	S	N		82644280233340	
11:32:05:757	695		TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	739			X0W	X0W-X0W	X0W	1		Ord	\$178.75	100	100	L	S	N		82944280233345	
11:32:05:784	695		TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	739			X0W	X0W-X0W	X0W	1		Ord	\$178.75	100	100	L	S	N		82944280233347	
11:32:05:952	695		TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	739			X0W	X0W-X0W	X0W	1		Ord	\$178.76	200	200	L	S	N		82644280233501	
11:32:06:043	695		TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	739			X0W	X0W-X0W	X0W	1		Ord	\$178.76	200	200	L	S	N		82944280233507	
Trade Types: Blue=Cross Product, Black=Other																										

Trade Types: Blue=Cross Product, Black=Other

The example above displays all the trades that occurred in the Stock session on January 7, 2008, for the APPL class. The total number of trades represents all the trades in the display.

Trade details are provided as well as system specific information. Valid codes and column definitions that are represented in the Trades window are defined in the table below.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.



Column	Description
OR	P/A Linkage = 'A' B/D = 'B' CUSTOMER = 'C' Customer-FBW = 'D' Member, House Account = 'E' FIRM = 'F' User Proxy for trader, Customer Segregated = 'G' User Proxy for trader, House Account = 'H' In-Crowd MM = 'I' Firm - FBW = 'J' B/D-FBW='K' Firm-FBW='L' MARKET_MAKER = 'M' Away MM='N' Non Member, House Account='O' Principle Linkage = 'P' Member, SIPC Protected Account = 'Q' User Proxy for trader, SIPC Protected Account = 'R' Satisfaction Linkage = 'S' Non Member, SIPC Protected Account='T' M-FBW='U' Member, Customer Segregated Account='V' Broker/Dealer-FBW='W' Customer Broker/Dealer='X' Underly Specialist='Y' N,Y-FBW='Z'
OC	O=Open, C=Close
Sell Acc of	This column will be populated with a Q account if this side of the trade was originated by a DPM, otherwise, it will be populated with the Broker or Market Maker acronym. If the order originator is not a Market Maker or a broker, then the value in this field will not be validated by CBOE [®] direct.
Buy Acc of	This column represents the buyer's account information. If this is a trade from a quote, the Q account or Market Maker acronym is displayed. If this is a trade from an order, it is a free form field for the firm.

Mkt Cond	CANC=trade bust report CNCO=trade bust report for opening trade FTAO=used if the first trade for product occurs after the opening OPNT=used if first trade for product occurs during opening REOP=trade that occurs during an opening rotation that is not the first rotation of the day
Src (Trade Source)	SYSTEM or MANUAL. The Help Desk has the ability to enter a manual trade (block trade)
B	The letter 'B' stands for Bust. An * displayed in this column represents a busted trade.

Market Conditions Market Replay allows you to retrieve current market condition information for the Stock (underlying) trading session. Make your selections from the **Selection Parameters** window:

- Select the Stock trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

📅 **Note:** The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶ ☒						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Select the Stock (underlying) product.

📅 **Note:** You must select a Stock product, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	Stock	Firms:	All A G Edwards & Sons, Inc. Allston Trading LLC Andrie Trading LLC Associated Options Inc. Automated Trading Desk Brokerage Services, LLC Automated Trading Desk Financial Services, LLC Banc of America Securities LLC Bear Stearns & Co., Inc.
Trade Date:	1/7/2008 <input type="button" value="Refresh"/>	User Role:	All
Near Real Time:	<input checked="" type="checkbox"/>	User:	All ADB_CBOEW(DeBoom, Alan)(M) AJ_CBOEW(Jimenez, Albert)(M) ALL1(Allston Trading LLC, ALL)(M) ALL_CBOEW(Allston Trading LLC, ALL)(M) ALTN(Allston Trading LLC, ALL)(M) AND_CBOEW(Andrie Trading LLC, AND)(M) AR_CBOEW(Sanchez, Arcilia)(M) ASO_CBOEW(Associated Options, ASO)(B)
Start Time:	14 : 47 : 43 . 000	Clear Firm:	All 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing LP) 012(Swiss American Securities Inc) 013(Sanford C. Bernstein & Co., LLC) 017(Interactive Brokers LLC) 050(Morgan Stanley & Co., Incorporated) 060(JP Morgan Securities, Inc.) 067(Instinet LLC)
End Time:	15 : 07 : 43 . 000		
Underly:	AAPL		
Market Replay Screen Selection			
Export To: None			
<input type="checkbox"/> Orders	<input type="checkbox"/> Trades		
<input type="checkbox"/> Quotes	<input checked="" type="checkbox"/> Market Conditions		
		MKT Product State: All	
<input type="checkbox"/> ITS Admin Messages	<input type="checkbox"/> Alerts	<div> All Closed Pre Open Opening Rotation Open Halted Fast Market No Session On Hold Ending Hold </div>	
Privacy Statement Terms and Conditions Copyright & Trademark ©2006 Chicago Board Options Exchange, Incorporated.			

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, ITS Admin Messages** or **Alerts**. Select **Market Conditions**.
- You can further filter your request by **Mkt Product State**. Make your selections from the corresponding dropdown lists. The default for the filters is **All**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Market Conditions** window will display with the requested data.

Market Conditions for Trade Date: 01/07/2008

Trade Date: 01/07/2008 Session: Stock Start Time: 10:58:04.000 End Time: 11:52:04.000

P/S: All Equity Sym.: AAPL

Firm: All MM: All C. Firm: All Refresh

MKT Product Status: All

We couldn't display all the results for the requested time interval.
Displaying the initial 2542 results from time 10:58:04.000 to 11:19:26.999.
Please perform the query again by choosing a new start time from the list to see remaining results.

Start Time: 11:19:30.000 Retrieve

Expert PDF Expert XLS

Entry Time	Entry Type	Bid Qty	Bid Price	Ask Price	Ask Qty	L/Sale Price	L/Sale Qty	NBBO U/Pr	NBBO A/Pr	BOTR U/Pr	BOTR A/Pr	Best U/Sz	Best U/Pr	Best A/Pr	Best A/Sz	Imbal Qty	Prod Stat	Est Open Price	St
10:58:05.217	Quote	100	\$177.35	\$183.72	200			\$178.43	\$178.45	\$178.43	\$178.45						Open		
10:58:05.276	Quote	100	\$177.35	\$179.69	100			\$178.43	\$178.44	\$178.43	\$178.44						Open		
10:58:06.465	Quote	200	\$173.16	\$179.69	100			\$179.42	\$179.43	\$179.42	\$179.43						Open		
10:58:06.501	Quote	200	\$173.15	\$179.69	100			\$178.40	\$178.43	\$178.40	\$178.43						Open		
10:58:06.532	Quote	100	\$177.16	\$179.69	100			\$178.40	\$178.43	\$178.40	\$178.43						Open		
10:58:12.856	Quote	100	\$177.16	\$183.55	200			\$179.24	\$179.26	\$179.24	\$179.26						Open		
10:58:13.916	Quote	100	\$177.16	\$179.50	100			\$179.23	\$179.25	\$179.23	\$179.25						Open		
10:58:13.921	Quote	200	\$172.99	\$179.50	100			\$178.23	\$178.25	\$178.23	\$178.25						Open		
10:58:14.047	Quote	200	\$172.95	\$179.50	100			\$178.22	\$178.24	\$178.22	\$178.24						Open		
10:58:14.090	Quote	100	\$176.97	\$179.50	100			\$179.22	\$179.25	\$179.22	\$179.25						Open		
10:58:19.130	Quote	200	\$172.99	\$179.50	100			\$178.31	\$178.30	\$178.31	\$178.30						Open		
10:58:19.133	Quote	200	\$172.99	\$183.55	200			\$178.31	\$178.30	\$178.31	\$178.30						Open		
10:58:19.209	Quote	200	\$173.04	\$183.60	200			\$179.23	\$179.30	\$179.23	\$179.30						Open		
10:58:19.292	Quote	200	\$172.97	\$183.53	200			\$178.23	\$178.30	\$178.23	\$178.30						Open		
10:58:19.328	Quote	100	\$176.51	\$183.53	200			\$178.23	\$178.28	\$178.23	\$178.28						Open		
10:58:19.332	Quote	100	\$176.51	\$180.09	100			\$179.23	\$179.29	\$179.23	\$179.29						Open		
10:58:19.340	Quote	200	\$172.97	\$180.09	100			\$178.25	\$178.28	\$178.25	\$178.28						Open		
11:19:26.999	Quote	200	\$172.97	\$183.53	200			\$179.26	\$179.30	\$179.26	\$179.30						Open		

Expert PDF Expert XLS

Details are provided for all the market events that occurred in the Stock session from 10:58:04 to 11:52:04 for the AAPL class. Columns that are specific to Market Replay for market conditions are defined in the picture above.

Scroll down on your scroll bar to view all the events for each series.

Market Replay gives you the ability to sort on the contents of any column in the display by clicking on the column heading.

Alerts The Alert Message display allows you to view types of trade throughs that have occurred in CBOE[®]direct.

To retrieve current data in the Alert Messages display, make your selections from the **Selection Parameters** window.

- Select the Stock trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

 **Note:** The data warehouse maintains trade information for three years.

◀ Dec 2007 ▶						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.
- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Select the Stock (underlying) product.
 ⚡ **Note:** You must select a Stock product, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	Stock	Firms:	All A G Edwards & Sons, Inc. Allston Trading LLC Andrie Trading LLC Associated Options Inc. Automated Trading Desk Brokerage Services, LLC Automated Trading Desk Financial Services, LLC Banc of America Securities LLC Bear Stearns & Co., Inc.
Trade Date:	01/07/2008 Refresh	User:	All ADB_CBOEW(DeBoom, Alan)(M) AJ_CBOEW(Jimenez, Albert)(M) ALL1(Allston Trading LLC, ALL)(M) ALL2(Allston Trading LLC, ALL)(M) ALL_CBOEW(Allston Trading LLC, ALL)(M) ALTN(Allston Trading LLC, ALL)(M) AND_CBOEW(Andrie Trading LLC, AND)(M) AR_CBOEW(Sanchez, Arcilia)(M)
Near Real Time :	<input type="checkbox"/>	Clear Firm:	All 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing LP) 012(Swiss American Securities Inc) 013(Sanford C. Bernstein & Co., LLC) 017(Interactive Brokers LLC) 050(Morgan Stanley & Co., Incorporated) 060(JP Morgan Securities, Inc.) 067(Instinet LLC)
Start Time:	10 : 58 : 04 . 000		
End Time:	11 : 52 : 04 . 000		
Underly:	AAPL		
		Market Replay Screen Selection Export To: None	
		<input type="checkbox"/> Orders <input type="checkbox"/> Trades <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input type="checkbox"/> ITS Admin Messages <input checked="" type="checkbox"/> Alerts	
		Retrieve	

- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, ITS Admin Messages** or **Alerts**. Select **Alerts**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **Alerts** window will display with the requested data.

Alerts for Trade Date: 01/07/2008

Trade Date:01/07/2008

P/S:All

Firm:All

Session:Stock

Equity Sym.:AAPL

MM:All

Start Time:10:58:04.000

C. Firm:All

End Time:11:52:04.000

Refresh

Export results to:

Export PDF

 |

Export XLS

Alert Time	Alert Type	Alert Result	NBBO Agent	Update Agent	Mkttable?	Last Exch Acr	Last Price	Last Postfix	B/A	Comment	TH Price	TH Qty	Detail
Stock: AAPL													
11:31:53	NBBO Trade Through	NR	XXW		N		0.0				0.0	0	Detail
11:32:05	NBBO Trade Through	NR	XXW		N		0.0				0.0	0	Detail
11:32:05	NBBO Trade Through	NR	XXW		N		0.0				0.0	0	Detail
11:32:06	NBBO Trade Through	NR	XXW		N		0.0				0.0	0	Detail
11:34:02	NBBO Trade Through	NR	XXW		N		0.0				0.0	0	Detail

Alerts that occurred on 1/7/08 for AAPL display in the window above.

Click on the **Detail** link of any row to view additional information on the alert type.

SBT Alert Exchange Market Info

Mkt Info Type	NBBO Bid Price	NBBO Bid Exch:Vol	NBBO Ask Price	NBBO Ask Exch:Vol
BBO @ORDR TRADE TIME	177.64	CBOE:100	180.2	CBOE:100
NBBO @ORDR TRADE TIME	178.88	NASD:1200	178.9	NSX:700
WRST BBO @SYS DEFND TIME	177.64	CBOE:100	180.2	CBOE:100
WRST NBBO @SYS DEFND TIME	178.88	NASD:1200	178.9	NSX:700
NBBO @ORDR RCPT TIME	178.9	NASD:200	178.91	NSX:500
BBO @ORDR TRADE TIME	177.64	CBOE:100	180.2	CBOE:100

Trade Detail

Sell Side										Buy Side															
Trade Time	Exc Firm	G Up Firm	Exc Bkr	Acc LogID	Acc Of	OR	OC	O/Q	Exc Firm	G Up Firm	Exc Bkr	Acc LogID	Acc Of	DR	OC	O/Q	Trade Price	Contr Qty	Total Qty	Type	Src	AsOf	Mkt Cond	B	Trade Id
11:31:53:277	739		XXW	XXW-XXW	XXW	1		Ord	695		TNK	TNK-TNK_CBOEW	TNK	E	N	Ord	\$178.91	100	100	L	S	N			82944-280233336

Order




Rcv Time	E Firm	G UP	E Brkr	S Acct	OR	OC	B/S	Qty	Price	TIF	Cntg	Status	Trade Qty	Trade Price	Corr Firm	B Order	B Code	B Seq	Cross	Exch	
Stock: 11:31:53:035	AAPL	695			CBY	E	N	Buy	100	\$179.01	DAY	NONE	Filled	100	\$178.91	CBY	Order	TTV	4104	N	

ITS Admin Messages

Market Replay allows you to view Intermarket Trading System (ITS) administrative messages that occurred on a specific trade date.

- Select the Stock trading session from the **Session** drop down list.
- The date of the request defaults to the current business day and is displayed in the **Trade Date** text box.
- To choose a previous trading day, click on the calendar button. The following calendar window will display.

 **Note:** The data warehouse maintains trade information for three years.

<div>  <div>Dec 2007</div>   </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

- Click on the trade day you wish to query. The date will display in the **Trade Date** text box.

- Choose the time of your request as near real time by selecting the **Near Real Time** radio button. If you would like to select a fixed time range, deselect the **Near Real Time Monitoring** radio button. Enter the **Start Time** and **End Time** by, hour:minutes:seconds:milliseconds (i.e. Start Time: 10:48:00:000, End Time: 13:55:00:000).
- Select the Stock (underlying) product.
 - Note:** You must select a Stock product, clearing firm or broker in order to retrieve the data.

Market Replay Main Search Criteria		User Search Criteria	
Session:	Stock	Firms:	All A G Edwards & Sons, Inc. Allston Trading LLC Andrie Trading LLC Associated Options Inc. Automated Trading Desk Brokerage Services, LLC Automated Trading Desk Financial Services, LLC Bank of America Securities LLC Bear Stearns & Co., Inc.
Trade Date:	1/7/2008 Refresh	User:	All ADB_CBOEW(DeBoom, Alan)(M) A1_CBOEW(Jimenez, Albert)(M) ALL1(Allston Trading LLC, ALL)(M) ALL2(Allston Trading LLC, ALL)(M) ALL_CBOEW(Allston Trading LLC, ALL)(M) ALTN(Allston Trading LLC, ALL)(M) AND_CBOEW(Andrie Trading LLC, AND)(M) AR_CBOEW(Sanchez, Arcilia)(M)
Near Real Time:	<input type="checkbox"/>	Clear Firm:	All 005(Goldman Sachs & Co.) 009(Goldman Sachs Execution & Clearing LP) 012(Swiss American Securities Inc) 013(Sanford C. Bernstein & Co., LLC) 017(Interactive Brokers LLC) 050(Morgan Stanley & Co., Incorporated) 060(JP Morgan Securities, Inc.) 067(Instinet LLC)
Start Time:	08:27:42.000		
End Time:	13:00:42.000		
Underly:	*ALL*		
Market Replay Screen Selection Export To: None <input type="checkbox"/> Orders <input type="checkbox"/> Trades <input type="checkbox"/> Quotes <input type="checkbox"/> Market Conditions <input checked="" type="checkbox"/> ITS Admin Messages <input type="checkbox"/> Alerts Retrieve			


- To further filter your request, select to retrieve **Orders, Quotes, Trades, Market Conditions, ITS Admin Messages** or **Alerts**. Select **ITS Admin Messages**.
- To save the query results to an Excel or PDF format, select either format from the **Export To:** drop down list. For export details, refer to the Exporting Data section, page 76.
- If you are satisfied with your selections and would like to view the data, click **Retrieve**. The **ITS Message** window will display with the requested data.

ItsMessage for Trade Date: 01/07/2008					
Trade Date:	01/07/2008	Session:	Stock	Start Time:	08:27:42.000
P/S:	All	Equity Sym.:	*ALL*	End Time:	13:00:42.000
Firm:	All	MM:	All	C. Firm:	All
Refresh					
Msg Time Source Exch Dest Exch Its User Name Msg Text Msg Subject					
Nothing found to display.					

In the example above, there were no ITS administrative messages delivered on 1/07/08 from 08:27:42 through 13:00:42.

Ending a Market Replay Session

**Exit the
System**

To exit the Market Replay system, click the right button (X)  in the upper right corner of the window. The application will be closed and you will be returned to your system desktop.



Section 2: Reference Guide

Exporting Data

Market Replay data can be exported to two different file formats: PDF and Excel.

Export to PDF Format

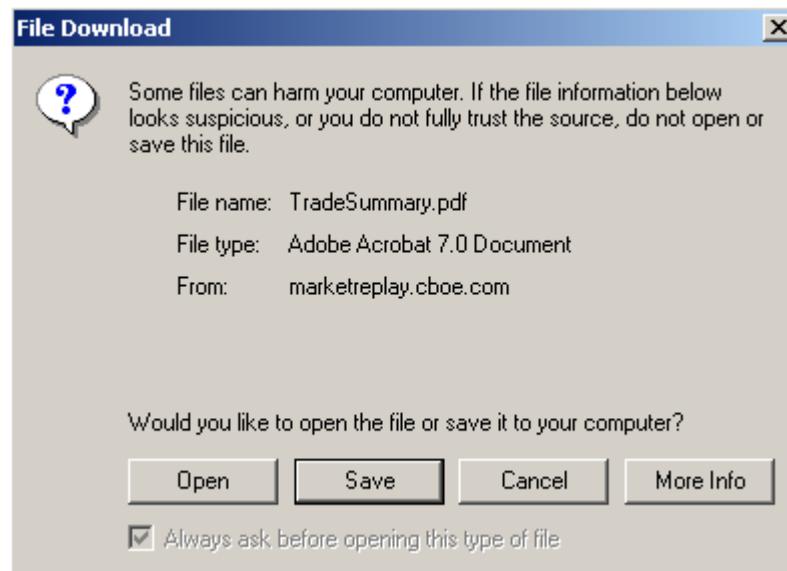
Market Replay allows you to save your search results in PDF format.

To export your query results to PDF format, select your Main Search Criteria, User Search Criteria and Screen Selection.

The screenshot displays the Market Replay interface with three main sections:

- Market Replay Main Search Criteria:**
 - Session: Stock
 - Trade Date: 1/7/2008
 - Near Real Time: ☐
 - Start Time: 08:27:42.000
 - End Time: 13:00:42.000
 - Underly: AAPL
- User Search Criteria:**
 - Firms: List of firms including A G Edwards & Sons, Inc., Allston Trading LLC, Andrie Trading LLC, etc.
 - User: List of users including ADB_CBOEW(DeBoom, Alan)(M), AJ_CBOEW(Jimenez, Albert)(M), etc.
 - Clear Firm: List of firms including 005(Goldman Sachs & Co.), 009(Goldman Sachs Execution & Clearing LP), etc.
- Market Replay Screen Selection:**
 - Export To: PDF
 - ☒ Orders (with sub-options: Order Type, Cntg, TIF, Order Entry, Origin Type Code)
 - ☐ Trades
 - ☐ Quotes
 - ☐ Market Conditions
 - ☐ ITS Admin Messages
 - ☐ Alerts
 - Retrieve button

- From the **Export To** dropdown list, select **PDF**.
- Click **Retrieve**. The system will prompt you to either **Open** or **Save** the file to your computer. At this point, you may also cancel your format request by clicking on the **Cancel** button.



- To quickly view the data in PDF format, click **Open**. The data will be exported in PDF format.

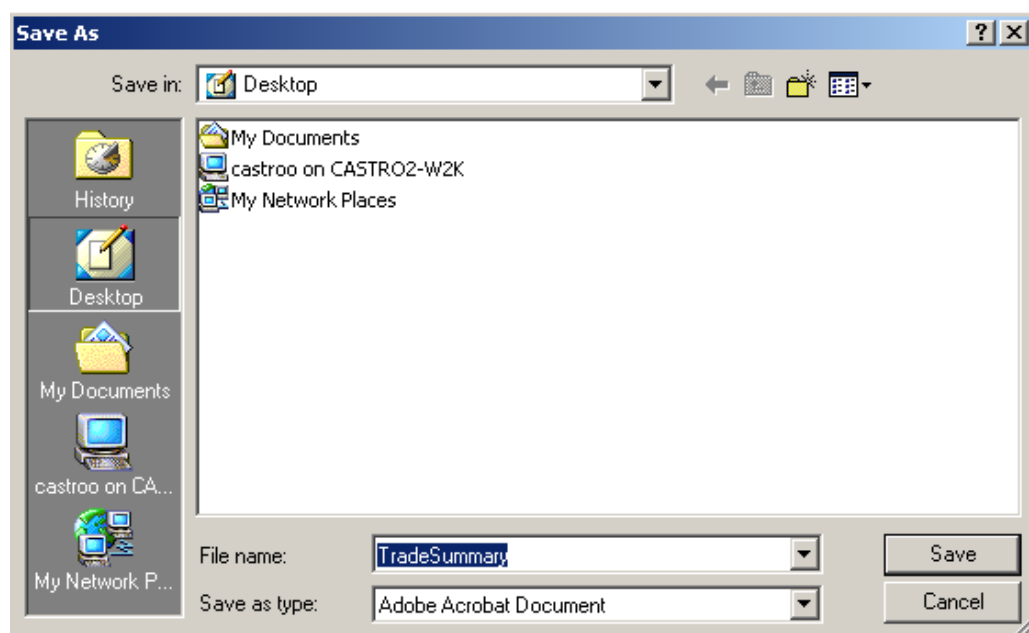
Chicago Board Options Exchange
 Trade Summary Report for Trade Date and time: 01/07/2008 10:27:42.000 through 11:00:42.000

Input Parameters
 Trade Date: 01/07/2008 Session: All Stock: All Start Time: 10:27:42.000 End Time: 11:00:42.000
 Stock: AAPL Firms: All MM Users: All C. Firms: All

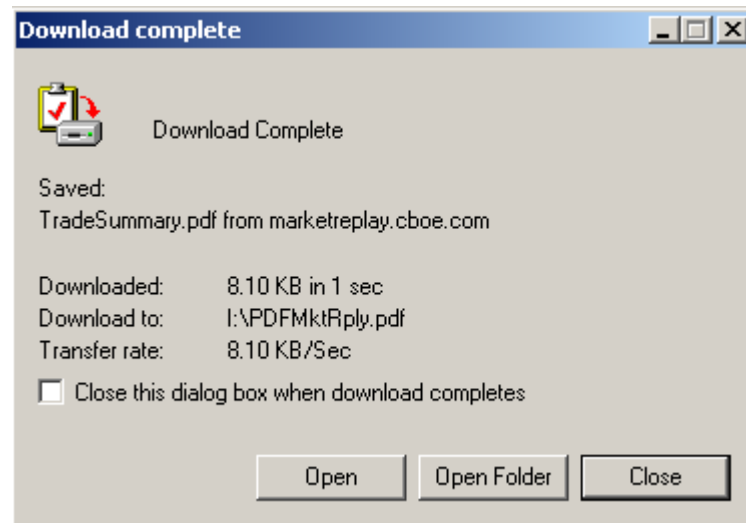
Trades List Total Number of Trades: 17 Total Sum of Contract Quantities: 2600

Stock	Trade Time	Sell Exc Fm	Sell G Up Fm	Sell Exc Bkr	Sell Orig Act - LogID	Sell Acc Of	SO R	SO C	Sell O/C	Buy Exc Fm	Buy G Up Fm	Buy Exc Bkr	Buy Orig Act - LogID	Buy Acc Of	B O R	B O C	Buy O/C	Trade Price	Contr Qty	Total Qty	T	S	A	Mkt Cond	B	Trade Id
AAPL	10:26:13.05	Q	739		XXW	XXW-XXW	XXW	1	Order	695			THK	THK_CBOE_W	THK	E	N	Order	\$175.59	200	200	L	S	N		62944200100944
AAPL	10:28:13.88	Q	739		XXW	XXW-XXW	XXW	1	Order	695			THK	THK_CBOE_W	THK	E	N	Order	\$175.61	100	100	L	S	N		62944200100965
AAPL	10:28:19.72	2	739		XXW	XXW-XXW	XXW	1	Order	695			THK	THK_CBOE_W	THK	E	N	Order	\$175.61	200	200	L	S	N		62944200100986

- To store the data before viewing, click **Save**.

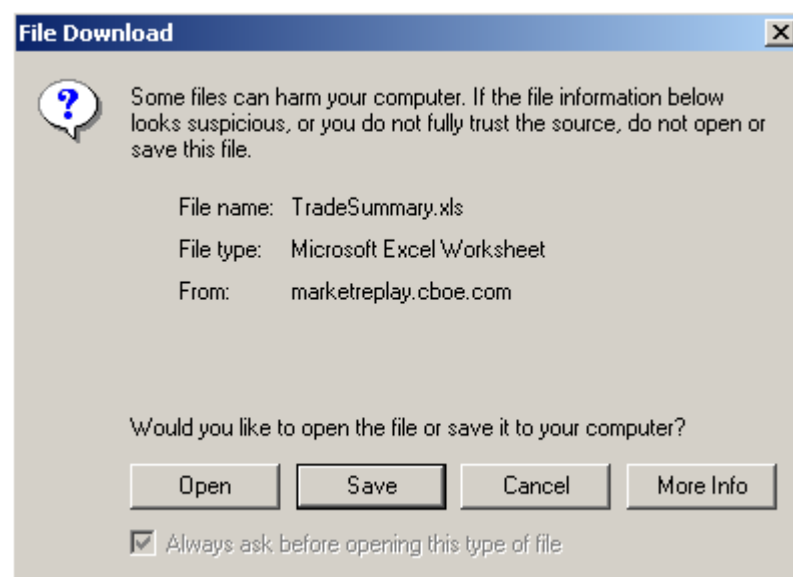


- Select the location where you want to save the file and enter the file name. If you wish to exit the window without saving the file, click **Cancel**.
- Click **Save**. Your file will be saved in PDF format. The system will display the **Download complete** window.



- Click **Open** to extract the data in PDF format, or select **Open Folder** to choose the file from the Windows directory.
- Click **Close** to exit the window without opening the PDF file.

Export to Excel If you wish to export the data to an Excel spreadsheet, select **Excel** from the **Export To** drop down list. The system will prompt you to open an Excel window or save the data. If you wish to cancel your export request, click **Cancel**.



- To quickly view the data in Excel format, click **Open**. The data will be exported to Excel.

Microsoft Excel - TradeSummary[1]

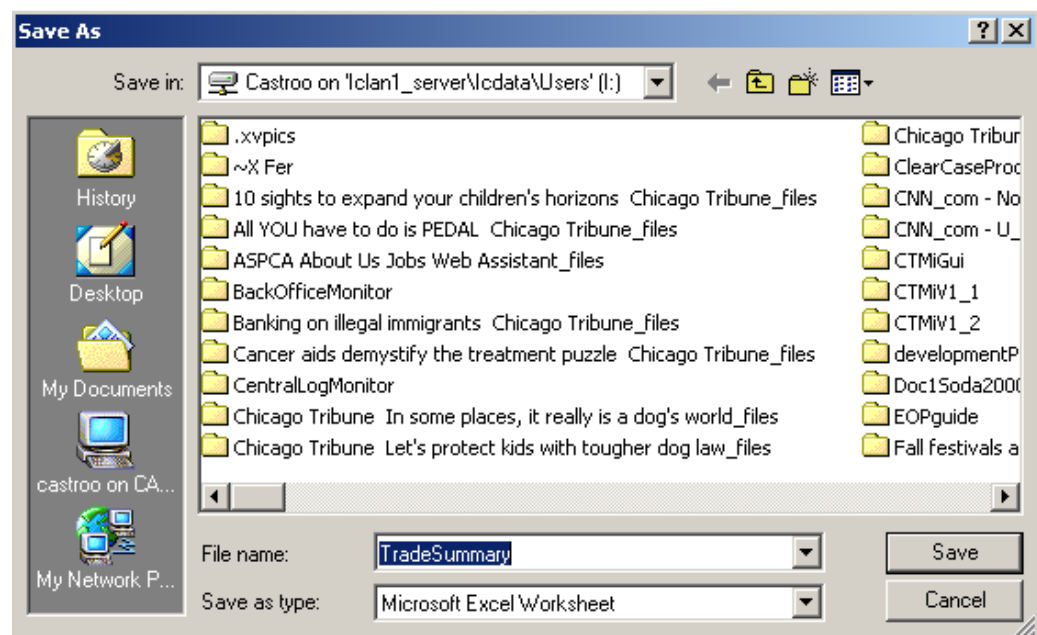
File Edit View Insert Format Tools Data Window Help Adobe PDF

100% Arial 10

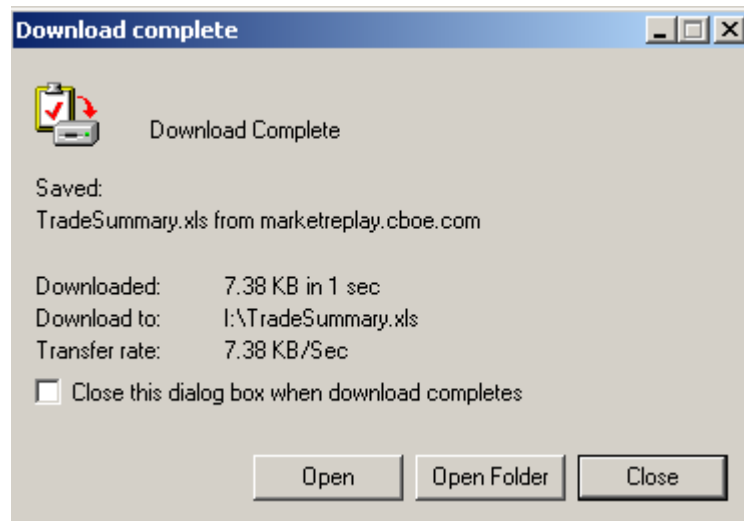
Stock

	A	B	C	D	E	F	G	H	I	J	K	L
1	Stock	Trade Time	Entry Time	Entry Time	Sell User A	Sell Log U	Sell Sbt U	Sell Exch	Sell Ors	ID Sell Exc F	Sell Giveu	Sell Exc B
2	AAPL	10:28:13:6	10:28:13	660	XXW	XXW	2.96E+08	CBOEW		739		XXW
3	AAPL	10:28:13:6	10:28:13	680	XXW	XXW	2.96E+08	CBOEW		739		XXW
4	AAPL	10:28:13:7	10:28:13	722	XXW	XXW	2.96E+08	CBOEW		739		XXW
5	AAPL	10:28:13:7	10:28:13	742	XXW	XXW	2.96E+08	CBOEW		739		XXW
6	AAPL	10:28:13:7	10:28:13	772	XXW	XXW	2.96E+08	CBOEW		739		XXW
7	AAPL	10:38:05:9	10:38:05	943	XXW	XXW	2.96E+08	CBOEW		739		XXW
8	AAPL	10:38:05:9	10:38:05	964	XXW	XXW	2.96E+08	CBOEW		739		XXW
9	AAPL	10:38:05:9	10:38:05	984	XXW	XXW	2.96E+08	CBOEW		739		XXW
10	AAPL	10:38:06:0	10:38:06	13	XXW	XXW	2.96E+08	CBOEW		739		XXW
11	AAPL	10:38:39:2	10:38:39	248	NDQ	NDQ2	3.31E+08	CBOEW		568		NDQ
12	AAPL	10:46:53:5	10:46:53	587	XXW	XXW	2.96E+08	CBOEW		739		XXW
13	AAPL	10:49:51:8	10:49:51	874	XXW	XXW	2.96E+08	CBOEW		739		XXW
14	AAPL	10:49:51:9	10:49:51	943	XXW	XXW	2.96E+08	CBOEW		739		XXW
15	AAPL	10:49:52:2	10:49:52	224	XXW	XXW	2.96E+08	CBOEW		739		XXW
16	AAPL	10:49:52:2	10:49:52	257	XXW	XXW	2.96E+08	CBOEW		739		XXW
17	AAPL	10:49:52:4	10:49:52	466	XXW	XXW	2.96E+08	CBOEW		739		XXW
18	AAPL	10:49:52:8	10:49:52	864	XXW	XXW	2.96E+08	CBOEW		739		XXW

- To store the data before viewing, click **Save**.



- Select the location where you want to save the file and enter the file name. If you wish to exit the window without saving, click **Cancel**.
- Click **Save**. Your file will be saved in Excel format. The system will display the Download complete window.



- Click **Open** to extract the data to Excel format or select **Open Folder** to choose the file from the Windows directory.
- Click **Close** to exit the window without opening the Excel file.