Continuous Trade Match (CTM-I) Systems Support User's Guide

Version 1.2

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Change Notices

The following change notices are provided to assist users of the CBOE Trade Match 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
8/16/07	1.2	No changes
6/12/07	1.1	No changes
7/07/06	1.0-draft	Third draft of V1.0: • Captured several new screen shots.
3/21/06	1.0-draft	Second draft of V1.0: • Added new Login window • Separated the Query Trade Data section by (1) Options, (2) Futures • Enhanced description of drop copy re-send functionality • Changed resolution to capture entire CTM windows without scrolling • Overall documentation changes for Firm text box entry
3/07/06	1.0-draft	First draft of Version 1.0.

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Introduction

Purpose

This user guide was written to assist CBOE System Operators in utilizing the Continuous Trade Match (CTM) features using a web browser.

The CTM system combines the basic functions of the Intra-day Trade Processing (ITP), End of Day Trade Processing (EOD), and Real Time Trade Communication (RTC) systems.

Intended Audience

This user guide is intended for System Operations users interested in the Trade Match administrator functions.

Window Settings

The recommended resolution to view CTM windows is 1280 x 1024 pixels. If your desktop display is set to a lower resolution, you will have to use the scroll bar to view CTM windows in their entirety.

Note About Displayed Screens

An attempt is made to show the current look and format of screens that are included in this document. However, the displays here may not reflect recent changes to these browser screens. Also, information displayed on the screens may not reflect true production data.

Conventions Used in this Guide

The Continuous Trade Match system was designed so that you can perform all of your administrative functions from a web browser. All web browser functionality applies to the CTM system.

Section 1 of the document illustrates how to perform the necessary System Operation functions. Additional information about window configuration and sizing can be found in Section 2: Reference Guide.

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

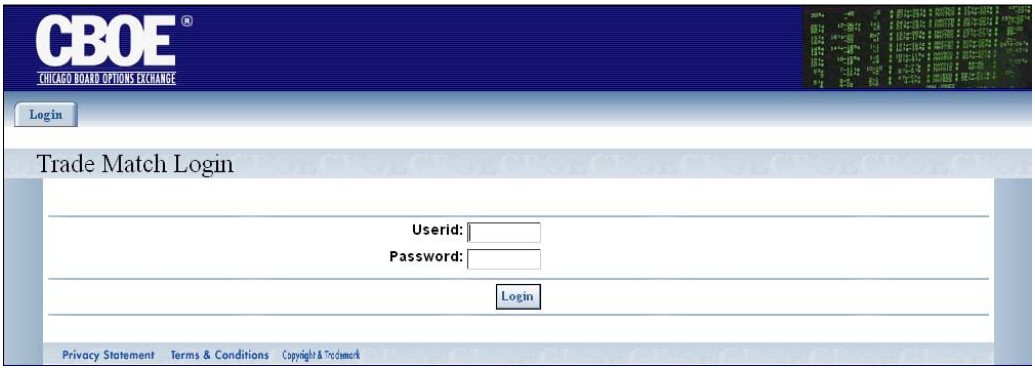
Bolding	Used to highlight menu selections (e.g., **Login**) and button names (e.g., **Update**)
↳ Note:	This notation is used to indicate important information you should note when performing the associated function.
Data Values	This graphic will appear in the margin when there is information relating to data values.

Section 1:
CBOE Trade Match

This section of the user guide will direct you through all the System Operation functions of CBOE's Continuous Trade Match system using a web browser.

Getting Started

When you launch the CTM application, the following login window will display.



Functionality Restrictions

Functionality restrictions apply based on your User ID and Password. There are three Roles (restriction types) that pertain to the CTM system.

1. **Entry**: allows data entry and browse functions only
2. **Control**: authorized to perform data security control functions only. These functions include setting passwords, trade matching parameters, and firm and wire authorizations.
3. **All**: access to all functions

Login

Enter your User ID and Password. Both User ID and Password are case sensitive.

Click **Login**.

The CTM **Welcome** window will display.

You are now ready to perform CTM functions.

Trade Query

From the Trade Query tab, you can query trades, browse trade messages and enter trades into the system. Click on the **Trade Query** tab to display the sub-menus for these functions.

Functionality Restrictions

ENTRY level: query trades, browse trade messages, enter trades

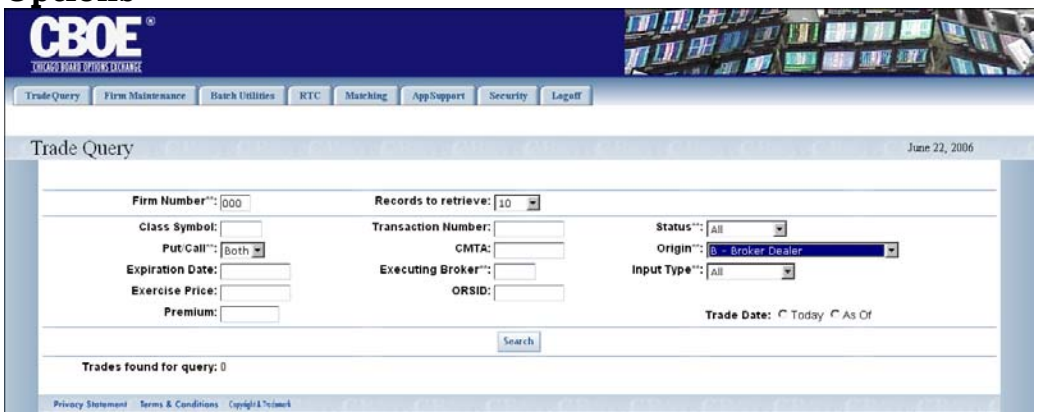
CONTROL level: browse trade messages

ALL level: query trades, browse trade messages, enter trades

Trade Query

The CTM trade query functionality allows you to display trade information based on the filters you provide. To display the Trade Query window for Options, click on the **TradeQuery** option. The following window will display.

Options



Query Options Trade Data

CTM trade data is queried by using combinations of the fields in the Trade Query window. Below is a description of each field. Fields that have astericks (**) are used for exact match search criteria.

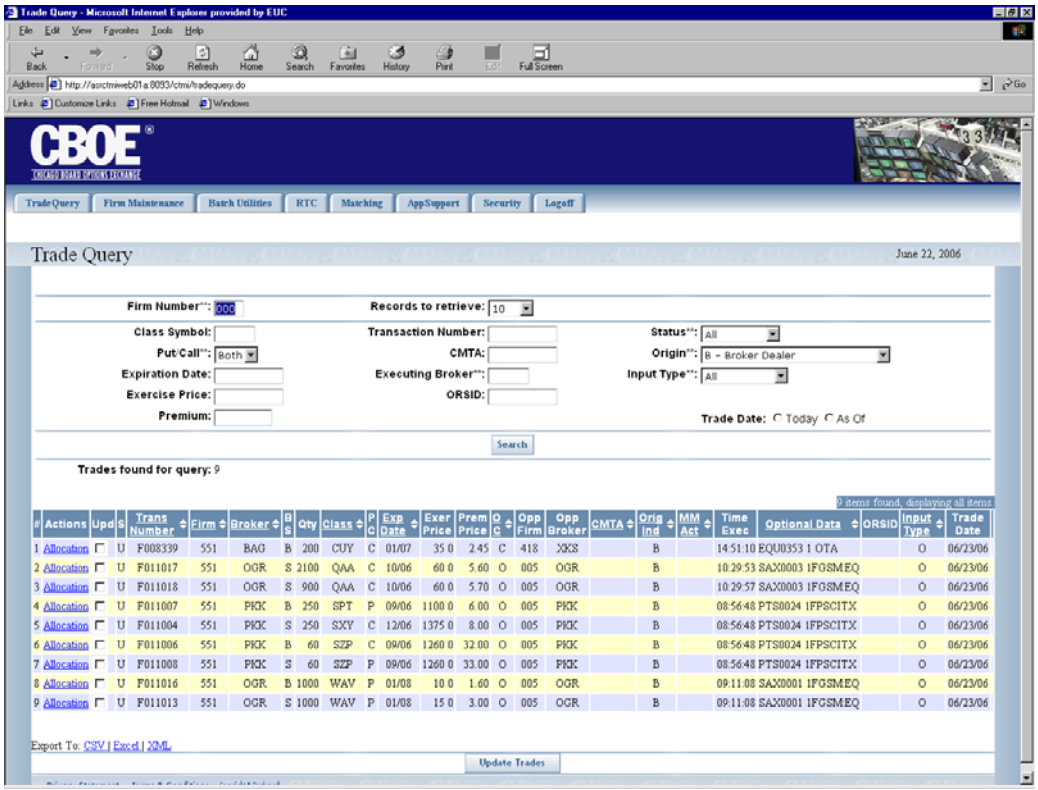
- Firm Number**: refers to the executing Firm's (EXEC Firm) number. The Firm number is entered in the text box.
- Class Symbol: this is a text field and allows you to enter the class symbol you wish to query (i.e. IBM).

- Put/Call**: refers to the type of option. You can elect to query by Call, Put or Both by making your selection from the dropdown list. The default is Both.
- Expiration Date: this is a text field that allows you to enter the date the security will expire. The allowable formats are: mm/yy (03/06), mm yy (03<space>06) and mmyy (0306).
- Exercise Price: allows you to enter the expiration price of the security. The allowable format is: 42 4 (42<space>4).
- Premium: this is a text field that can be used to enter the premium price of the security. The allowable format is: 72.65.
- Records to retrieve: you can select the number of data rows to display on the window from this dropdown list. The default is 10 rows.
- Transaction Number: trade identification number
- CMTA: Clearing Member Trade Agreement provides non-member firms (who have clearing numbers with the OCC) a way to trade at the Exchange through member firms who contractually agree to submit trades for them.
- Executing Broker: the acronym of the broker executing the trade.
- ORSID: identification number from the ORS system
- Status**: allows you to query by matched or unmatched trades, trades with errors or all trades. Make your selection from the dropdown list.
- Origin**: account type that identifies the type of trade origin. E.g. customer, firm, market maker, etc. Make your selection from the dropdown list.
- Input Type**: the system where the trade was entered.
- Trade Date: you must select a trade date for your query. To choose the current business day, click **Today**. To display all trades previous to the current business day, click **As of**. If neither radio button is selected, the trade date defaults to today.

In the Options example above, the data request is filtered based on Firm **000** for both **Puts/Calls** for all trades previous to the current business day. The **Status** and **Input Type** are set to All. The **Origin** is set to B-Broker Dealer. The query will display up to 10 records per window. The total number of trades found in the query displays in the window.

Click **Search**. Your query will display.

↳ **Note**: Some trades returned to the screen may have data errors. Errors by trade will be given in a box in the upper left part of the screen. For details, *refer to the Data Errors section, page 12*.



To view additional trades, click **Next Trades**.

Click **Search** at anytime to refresh the window for the current query.

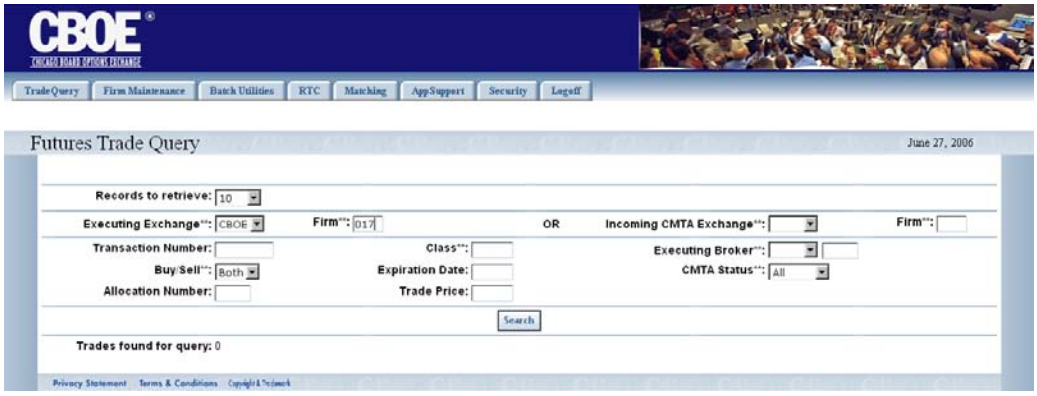
To view trades that were earlier displayed, click **Previous Trades**.

Data columns that display the up/down arrows can be sorted. Click on the column name to perform an ascending or descending sort. This only sorts data last retrieved into the current screen.

Clicking on the **Export To** links on the botton of the page will fill a form with data from the screen in the selected format. For instructions on exporting CTM data to CSV, Excel or XML format, refer to the section *Customize and Export CTM Windows, page 34*.

Futures

To display the Trade Query window for Futures, select Futures Trade Query. The following window will display.



Query Futures Trade Data

CTM trade data is queried by using combinations of the fields in the Trade Query window. Below is a description of each field. Fields that have astericks (**) are used for exact match search criteria.

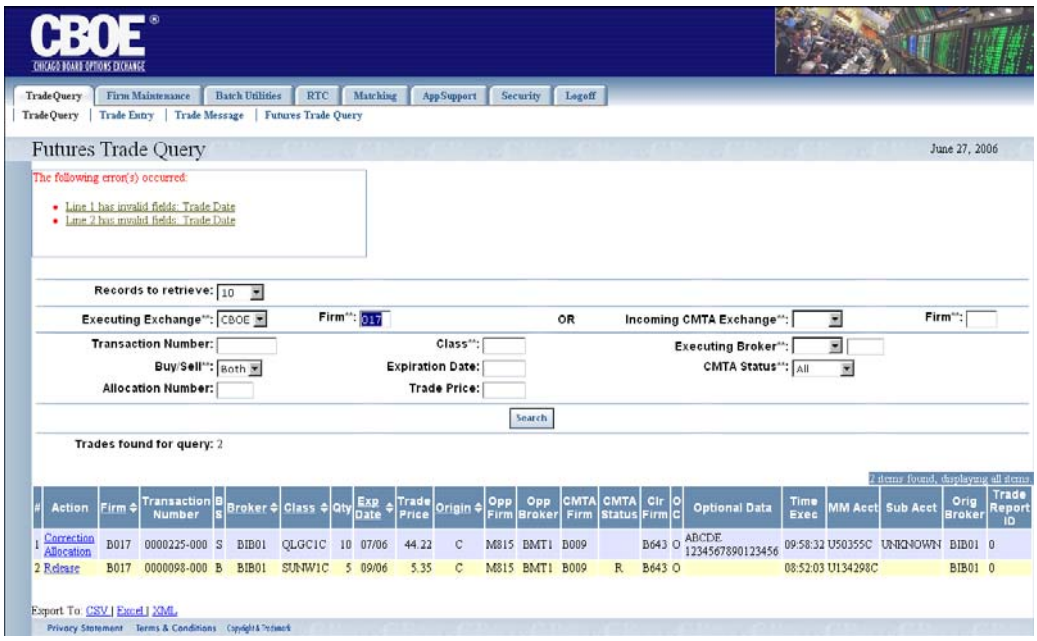
- Records to retrieve: you can select the number of data rows to display on the window from this dropdown list. The default is 10 rows.
- Firm**: refers to the executing Firm's (EXEC Firm) number. The Firm number is entered in the text box.
- Executing Exchange**: refers to the Futures executing exchange acronym and is selected from the dropdown list box.
- Transaction Number: trade identification number.
- Class**: this is a text field that allows you to enter the class symbol you wish to query (i.e. AMZN1C or GOOG1C).
- Buy/Sell**: refers to the Futures contract type. The default is Both.
- Expiration Date: this is a text field that allows you to enter the date the security will expire. The allowable formats are: mm/yy (03/06), mm yy (03<space>06) and mmyy (0306).
- Allocation Number: entering a '1' (or another number) will locate trades with that number or a higher allocation number.
- Trade Price: this is a text field that is used to enter the trade price of the security. The allowable format is: 72.65.
- Incoming CMTA Exchange**: Clearing Member Trade Agreement provides non-member firms (who have clearing numbers with the CME) a way to trade at the Exchange through member firms who contractually agree to submit trades for them. In Futures trading, this is usually called the give-up Firm (and Exchange). For Futures agreements held at the CME, the give-up Firm may be different other than the executing Firm.
- Executing Broker**: the acronym of the broker executing the trade.
- CMTA Status**: identifies the status of the CMTA Firm as valid, invalid, error,

release. Make your selection from the dropdown list.

- Firm**: this is a text field that allows you to enter the Firm number of the incoming CMTA Firm.

In the Futures example above, the data request is filtered based on Firm **017** for both **Buy/Sell**. The trade date for Futures queries is always the current business day. The Executing Exchange/Firm is **CBOE** and the CMTA Status is set to **All**. The query will display up to 10 records per window.

Click **Search**. Your query will display.



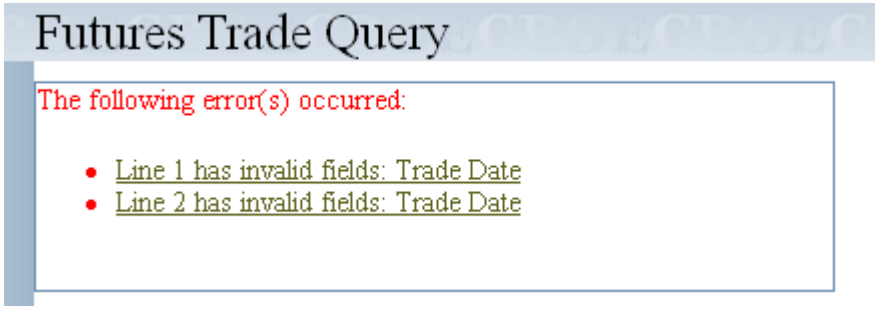
Trades found for query shows the count of all stored trades that satisfy the query. However, the window only displays up to the number selected by the **Records to retrieve** drop-down list.

Data columns that display the up/down arrows can be sorted. Click on the column name to perform an ascending or descending sort.

Clicking on the **Export To** links on the botton of the page will fill a form with data from the screen in the selected format. For instructions on exporting CTM data to CSV, Excel or XML format, refer to the section *Customize and Export CTM Windows, page 34*.

Data Errors

Data errors for Trade Query windows will be shown in a box at the top of the window. The error box lists all the corrections that need to be made in the query. No corrections or trade allocations will be accepted until all errors are corrected.



Click on the link for a particular error (i.e. **Line 1 has invalid fields: Trade Date**). The system will bring you to the selected line in the query. In this example, the Trade Date needs to be corrected for both errors.

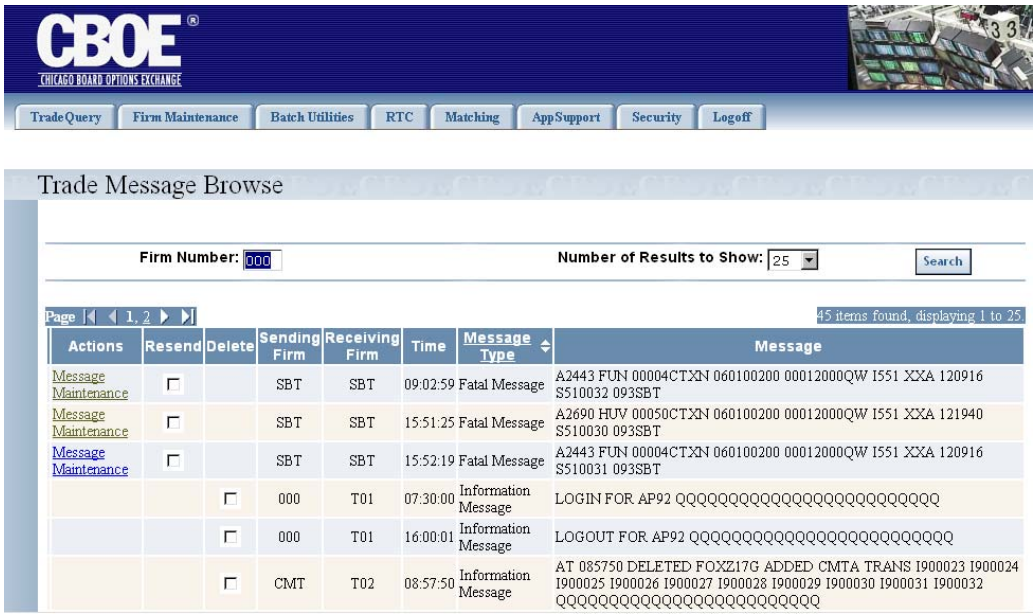
Trade Message

The Trade Message window allows you to browse messages for all receiving or sending Firms.

To display the Trade Message window, click on the Trade Query tab and then select **Trade Message**. The following window will display.

To browse messages for a particular Firm:

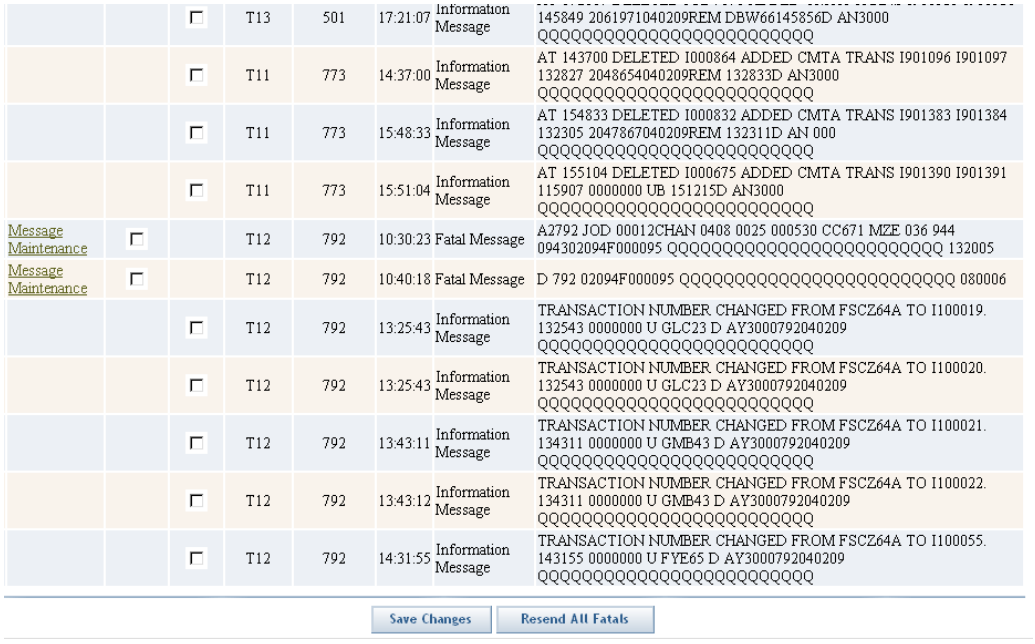
- Enter the **Firm Number** in the text box.
- Choose the **Number of Results to Show**.
- Click **Search**.



From the **Trade Message Browse** window you can view the time the message was sent along with a description of the message type and the actual message text.

Click the in the Message Type column to perform a column sort.

To view another page, click on a page number and scroll through the window.



To resend fatal messages, click **Resend All Fatals**. This attempts to take trade fatal messages and add them as new trades.

Firm Maintenance

The Firm Maintenance window gives you the ability to perform maintenance functions for Firms.

Functionality Restrictions

ENTRY level: Firm Contact List, Broker Contact List, Firm Statistics

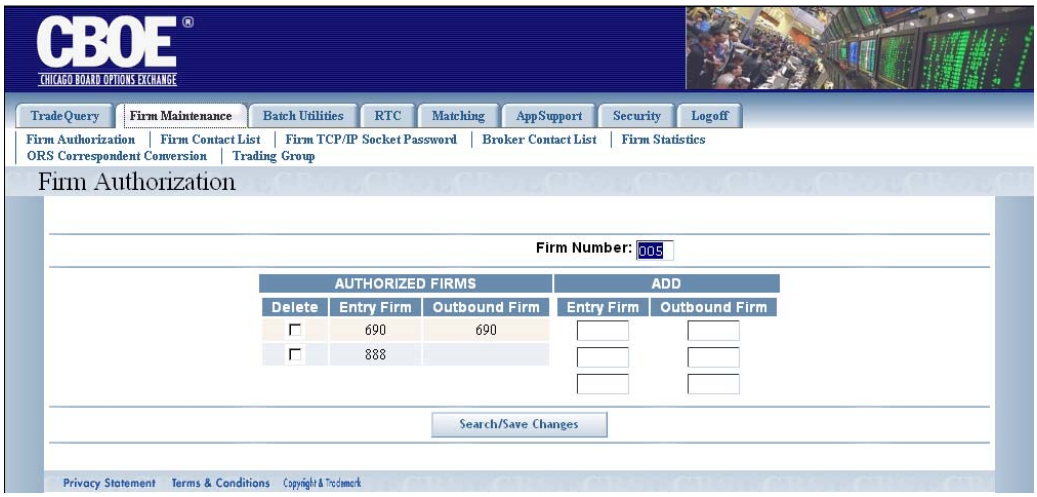
CONTROL level: Firm Authorization, Firm Contact List, Broker Contact List, Firm Statistics, ORS Correspondent Conversion, Trading Group

ALL level: Firm Authorization, Firm Contact List, Firm TCP/IP Socket Password, Broker Contact List, Firm Statistics, ORS Correspondent Conversion, Trading Group

Firm Authorization

The Firm Authorization window allows you to view which Firms are authorized to perform ITP functions on behalf of a Firm. Operators can also add and delete authorizations for Firms.

Click **Firm Maintenance** and then select **Firm Authorization**. The Firm Authorization window will display.



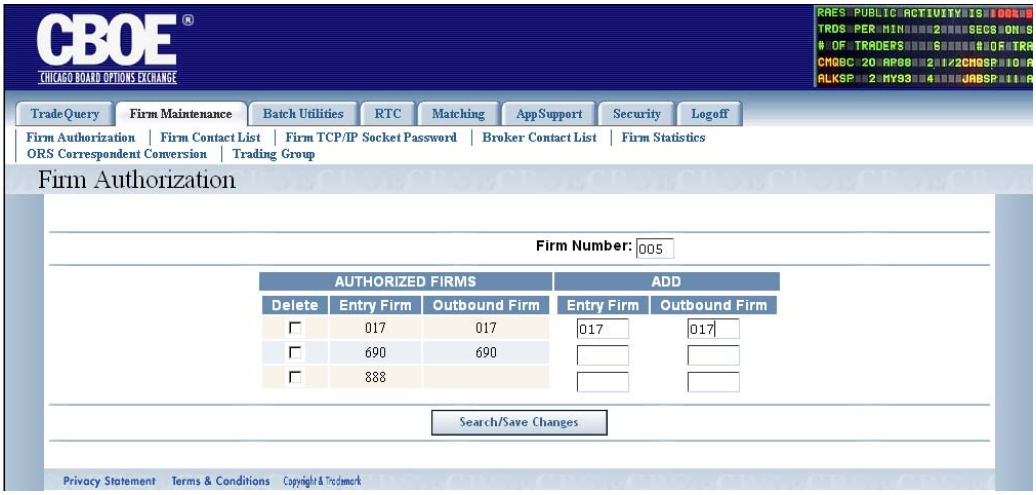
To display Firms that are currently authorized to perform CTM functions:

- Enter the **Firm Number** in the text box.
- Click **Search/Save Changes**. The authorized Firms will display.

To authorize a new Firm to enter, correct or allocate trades:

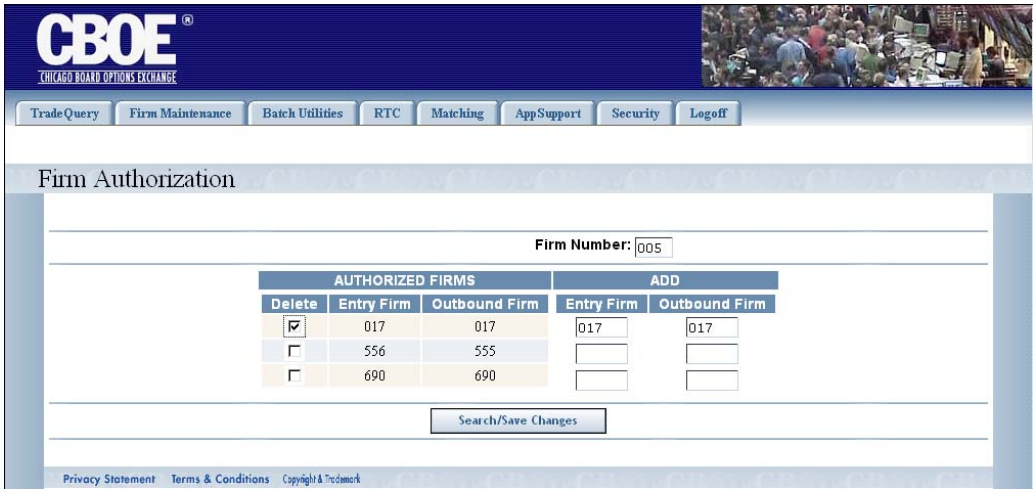
- Enter the Firm's entry clearing number in the **Entry Firm** text box.
- Enter the Firm's outbound clearing number in the **Outbound Firm** text box. This will allow the Firm to receive outbound trade data and reports.

- Click **Search/Save Changes**. The new authorized Firm will display in the Authorized Firms column.



If you wish to remove a Firm's authorization:

- Select the **Delete** check box for the desired Firm from the Authorized Firms column.
- Click **Search/Save Changes**.



The system will prompt you to verify you wish to delete the Firm's authorization.

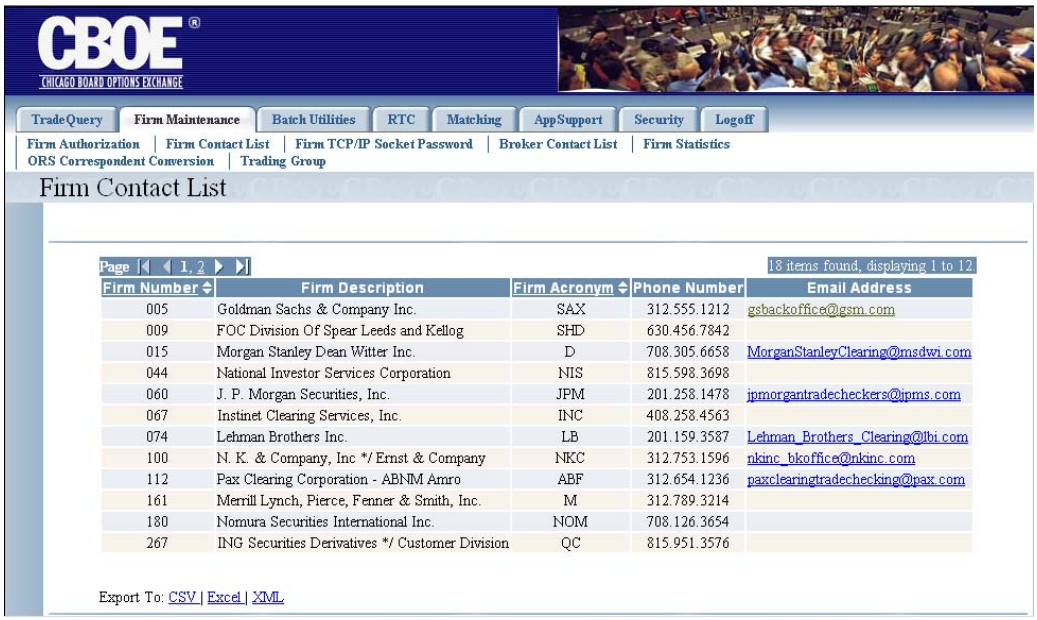
Click **OK** to proceed with the deletion.

If you decide not to remove the Firm's authorization, click **Cancel**.

Firm Contact List

Not available in Version 1.0

The Firm Contact List contains the Firm's ID number, name, acronym, phone number and email address.



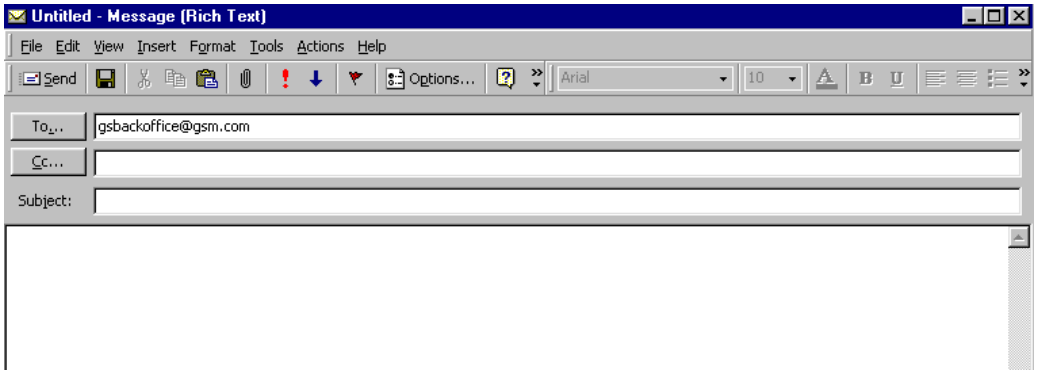
Firm Number	Firm Description	Firm Acronym	Phone Number	Email Address
005	Goldman Sachs & Company Inc.	SAX	312.555.1212	gsbackoffice@gsm.com
009	FOC Division Of Spear Leeds and Kellog	SHD	630.456.7842	
015	Morgan Stanley Dean Witter Inc.	D	708.305.6658	MorganStanleyClearing@msdwi.com
044	National Investor Services Corporation	NIS	815.598.3698	
060	J. P. Morgan Securities, Inc.	JPM	201.258.1478	jpmorgantradecheckers@jpms.com
067	Instinet Clearing Services, Inc.	INC	408.258.4563	
074	Lehman Brothers Inc.	LB	201.159.3587	Lehman_Brothers_Clearing@lbi.com
100	N. K. & Company, Inc */ Ernst & Company	NKC	312.753.1596	nkinc_bkoffice@nkinc.com
112	Pax Clearing Corporation - ABNM Amro	ABF	312.654.1236	paxclearingtradechecking@pax.com
161	Merrill Lynch, Pierce, Fenner & Smith, Inc.	M	312.789.3214	
180	Nomura Securities International Inc.	NOM	708.126.3654	
267	ING Securities Derivatives */ Customer Division	QC	815.951.3576	

To scroll through the pages, click on the page numbers

or the direction arrows until the desired page is reached.

Send Email to a Firm

To send an email to a Firm, click on the Firm's email address from the Email Address column. The Untitled email window will display.



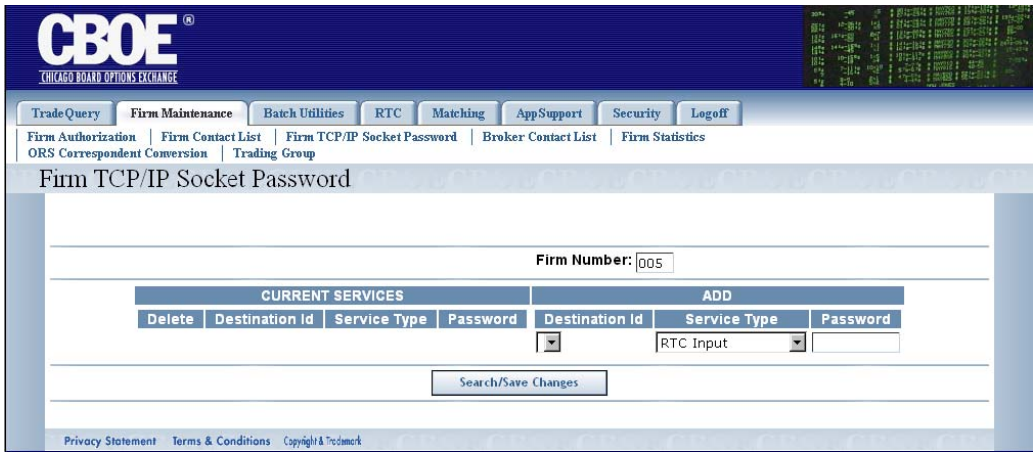
Enter your message and click **Send**.

For instructions on exporting CTM data to CSV, Excel or XML format, refer to the section *Customize and Export CTM Windows, page 34*.

Firm TCP/IP Socket Password

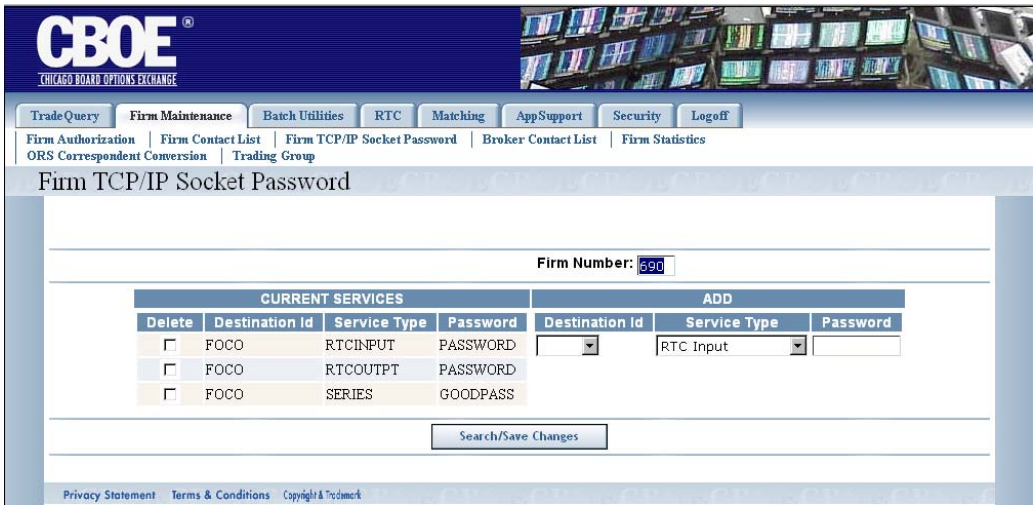
This CTM application allows you to set TCP/IP socket passwords.

Click **Firm Maintenance** and then select **Firm TCP/IP Socket Password**. The following window will display.



To display the current services:

- Enter the **Firm Number** in the text box.
- Click **Search/Save Changes**. The services for the selected Firm will display in the **Current Services** column.



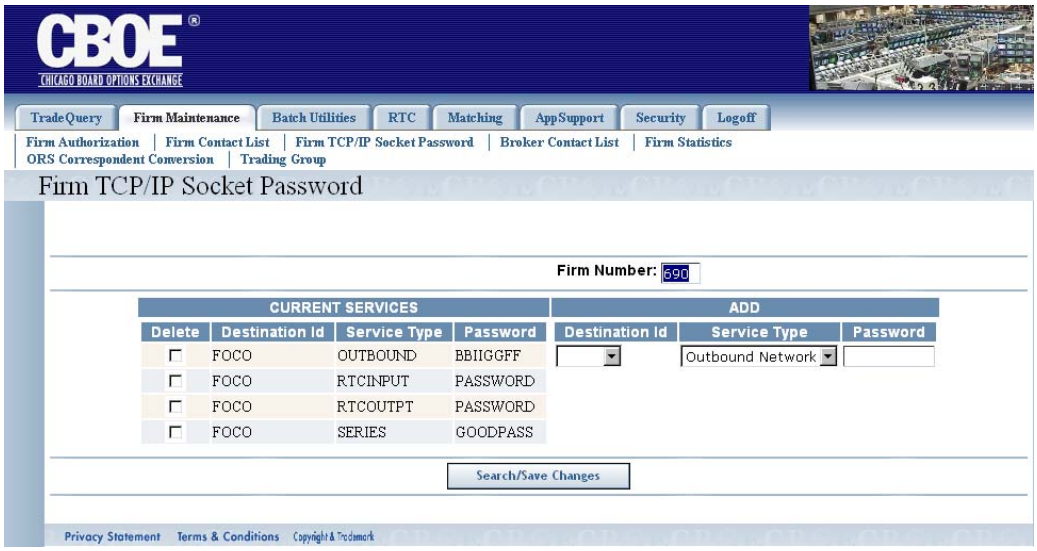
To add a new service:

- From the **Add** column, select the **Destination ID** and **Service Type** from the corresponding dropdown lists.

- Enter the password in the **Password** text box. To change the password you must delete it and then re-add the new password.

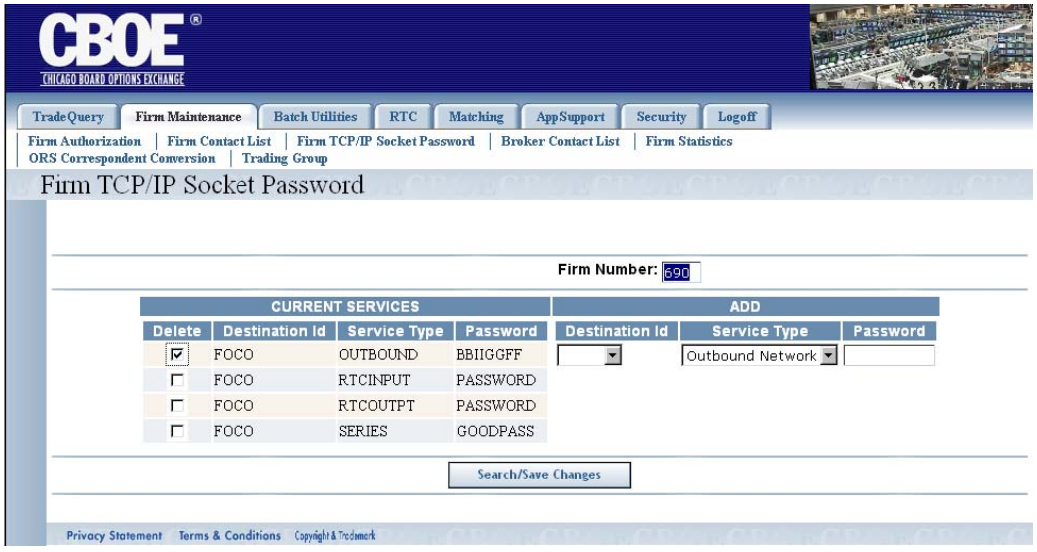
  ↳ **Note**: The password must be eight characters.

- Click **Search/Save Changes**. The new service will display in the **Current Services** column.



To delete a current service:

- From the **Current Services** column, select the **Delete** check box for the service you wish to remove.
- Click **Search/Save Changes**.



The system will prompt you to confirm your delete request.

- Click **OK** to proceed with the delete.
- Click **Cancel** to remove your request.

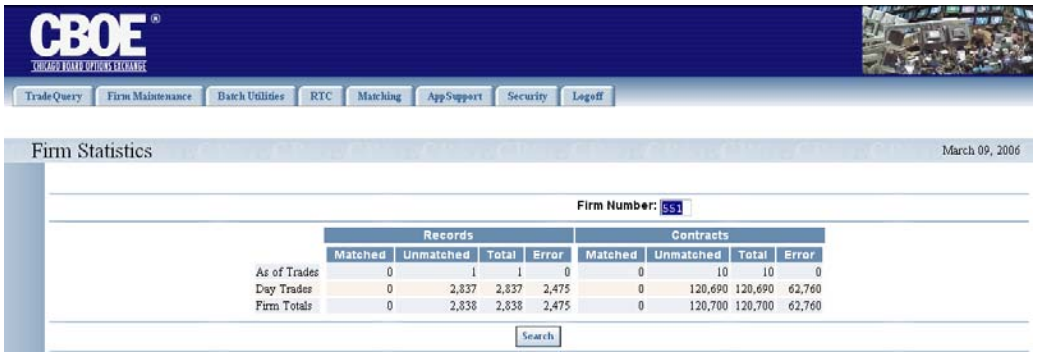
Broker Contact List

Not available in Version 1.0.

Firm Statistics

This window allows you to view the number of records and contracts that have been entered into the CTM system.

To display the Firm Statistics window, click **Firm Maintenance** and then select **Firm Statistics**.



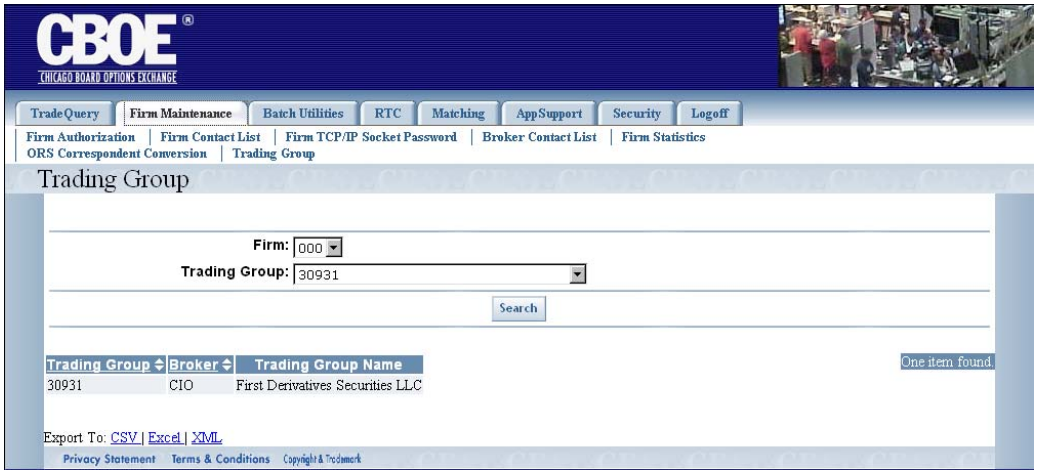
- Enter the Firm's number in the **Firm Number** text box.
- Click **Search**. The number of records and contracts that were entered into the CTM system for the selected Firm will display.

Trading Group

The CTM system enables you to display trading groups by Firm.

To display the Trading Group window, click on the **Firm Maintenance** tab and select **Trading Group**.

Not available in Version 1.0



- Enter the Firm's number from the **Firm** text box list.
- Select the trading group from the **Trading Group** dropdown list.
- Click **Search**. The trading group number, broker and trading group name display in column format.

For instructions on exporting CTM data to CSV, Excel or XML format, refer to the section *Customize and Export CTM Windows, page 34*.

Real-Time Communication

The CTM system allows you to route trades to the Real-Time Communication (RTC) system.

Functionality Restrictions

ENTRY level: N/A

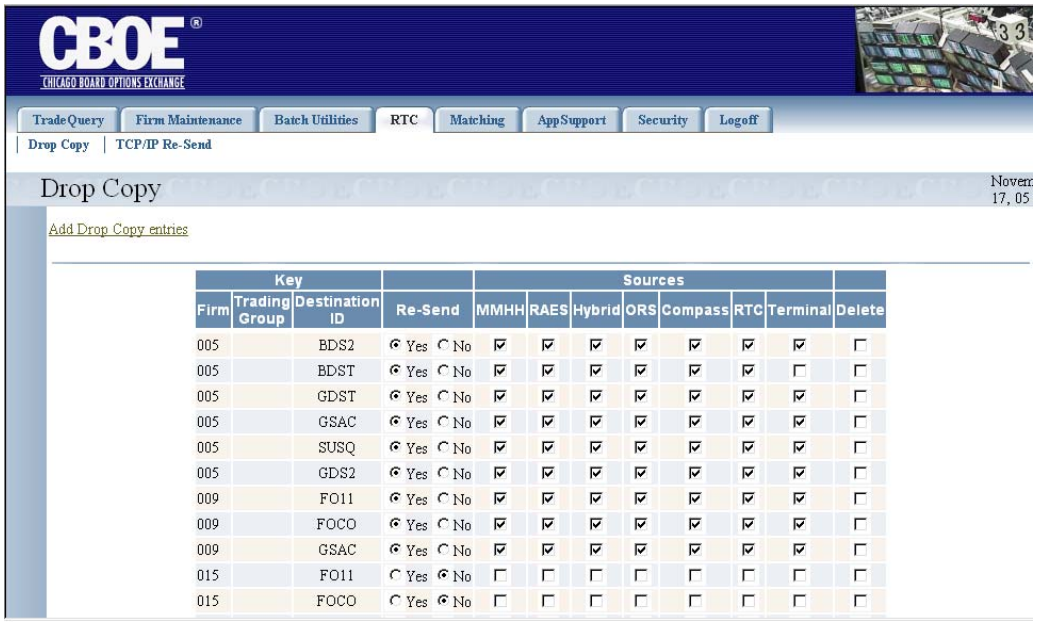
CONTROL level: Drop-copy, TCP IP Re-send

ALL level: access to all functions

Drop-Copy

The drop copy destination table for a Firm is maintained by the Drop Copy window. The window displays whether trades will be routed to RTC.

To display the **Drop Copy** window, click **RTC** and then select **Drop Copy**. The following window will display.



Key				Sources							
Firm	Trading Group	Destination ID	Re-Send	MMHH	RAES	Hybrid	ORS	Compass	RTC	Terminal	Delete
005		BDS2	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
005		BDST	Yes / No	☑	☑	☑	☑	☑	☑	☐	☐
005		GDST	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
005		GSAC	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
005		SUSQ	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
005		GDS2	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
009		FO11	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
009		FOCO	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
009		GSAC	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
015		FO11	Yes / No	☐	☐	☐	☐	☐	☐	☐	☐
015		FOCO	Yes / No	☐	☐	☐	☐	☐	☐	☐	☐

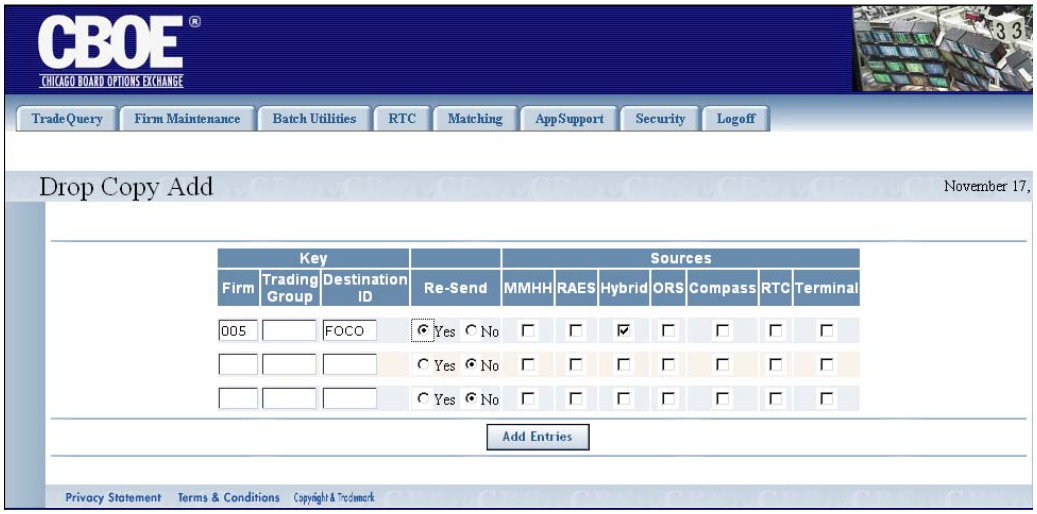
The rows consist of the following information:

- The Firm number
- Trading Group
- Destination ID
- Yes/No radio button for whether or not the Firm is to be resent messages.
- Checkbox for every input source (RTC, MMHH, Hybrid, etc.).
- Checkbox for the delete of a drop copy entry.

During ITP online processing, whenever a trade is added, changed, or deleted, the Drop Copy table is checked to see if a copy of the trade needs to be sent. For example, in the window above, a copy of the trade will be sent to MMHH, RAES, Hybrid, ORS, Compass, RTC and Terminal for Firm 005.

Add Drop Copy

To add entries for Drop Copy, click **Add Drop Copies entries**. The following window will display.



- Enter the **Firm's** number and **Destination ID**.
- If the Firm requests the re-send messages option be turned on, select the **Yes** radio button in the **Re-Send** column. If the Firm does not wish to have messages resent, select the **No** radio button.

  Note: The **Re-Send** choice allows trades to be resent to Firms at the Firms request. A re-send of the same trade will be sent to the Firm after 30 minutes from the last time the trade was sent.

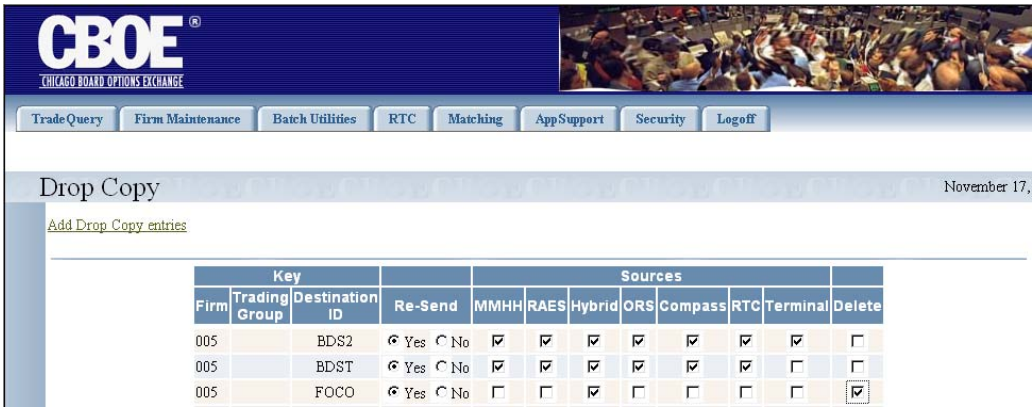
- From the **Sources** column, select where the Firm wants to send the drop copy by checking the corresponding check box. In the example above, the drop copy will be sent to Hybrid.
- Click **Add Entries**. The drop copy entry will display in the **Drop Copy** window.

Key				Sources							
Firm	Trading Group	Destination ID	Re-Send	MMHH	RAES	Hybrid	ORS	Compass	RTC	Terminal	Delete
005		BDS2	Yes / No	☑	☑	☑	☑	☑	☑	☑	☐
005		BDST	Yes / No	☑	☑	☑	☑	☑	☑	☐	☐
005		FOCO	Yes / No	☐	☐	☑	☐	☐	☐	☐	☐

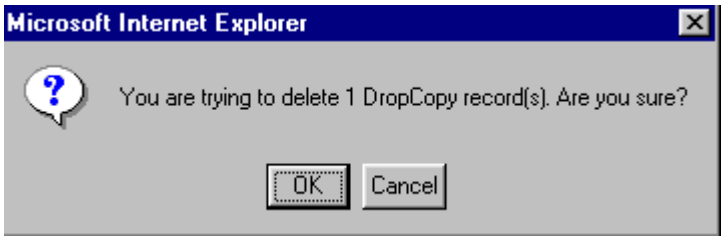
Delete Drop Copy

To delete a drop copy entry, select the **Delete** check box on the data row you wish to remove.

Click **Save Changes**.



The system will prompt you to confirm your delete request.



Click **OK** to remove the data row from the **Drop Copy** table.

Click **Cancel** to remove the delete request.

Matching

The Matching windows allow you to set and display trade matching criteria for ITP.

Functionality Restrictions

ENTRY level: N/A

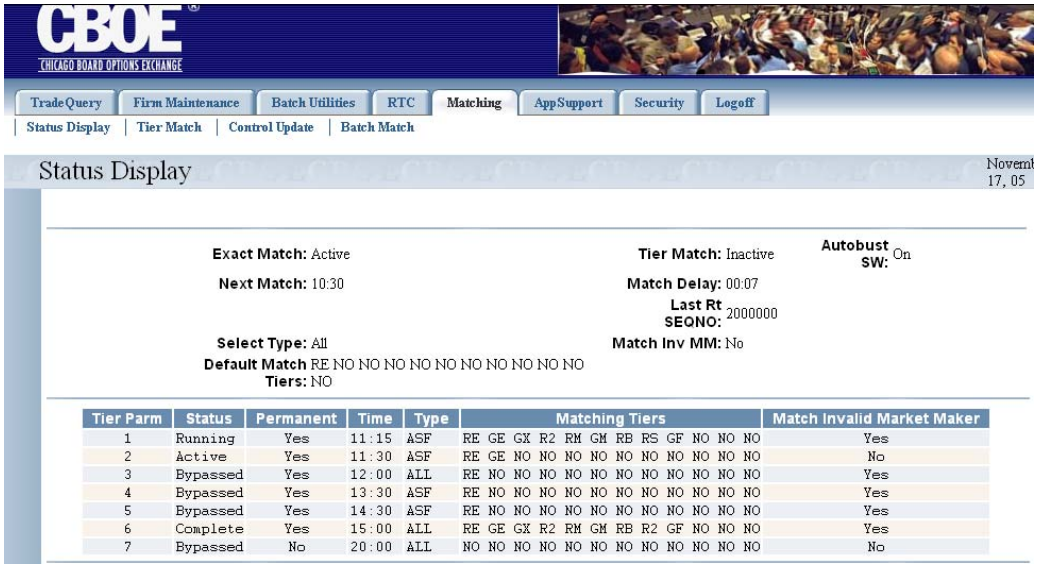
CONTROL level: Status Display, Tier Match, Control Update, Batch Match

ALL level: access to all functions

Status Display

This Status Display window shows the current settings that are modified for tier match or control update.

To open the **Status Display** window, click on the **Matching** tab and then select, **Status Display**. The following window will open.



Tier Parm	Status	Permanent	Time	Type	Matching Tiers	Match Invalid Market Maker
1	Running	Yes	11:15	ASF	RE GE GX R2 RM GM RB RS GF NO NO NO	Yes
2	Active	Yes	11:30	ASF	RE GE NO NO NO NO NO NO NO NO NO NO	No
3	Bypassed	Yes	12:00	ALL	RE NO NO NO NO NO NO NO NO NO NO NO	Yes
4	Bypassed	Yes	13:30	ASF	RE NO NO NO NO NO NO NO NO NO NO NO	Yes
5	Bypassed	Yes	14:30	ASF	RE NO NO NO NO NO NO NO NO NO NO NO	Yes
6	Complete	Yes	15:00	ALL	RE GE GX R2 RM GM RB R2 GF NO NO NO	Yes
7	Bypassed	No	20:00	ALL	NO NO NO NO NO NO NO NO NO NO NO NO	No

The Status Display shows the criteria as last set in the **Tier Match** and **Control Update** windows. These windows are discussed in the following sections.

The table below describes the matching criteria shown in the **Matching Tiers** column.

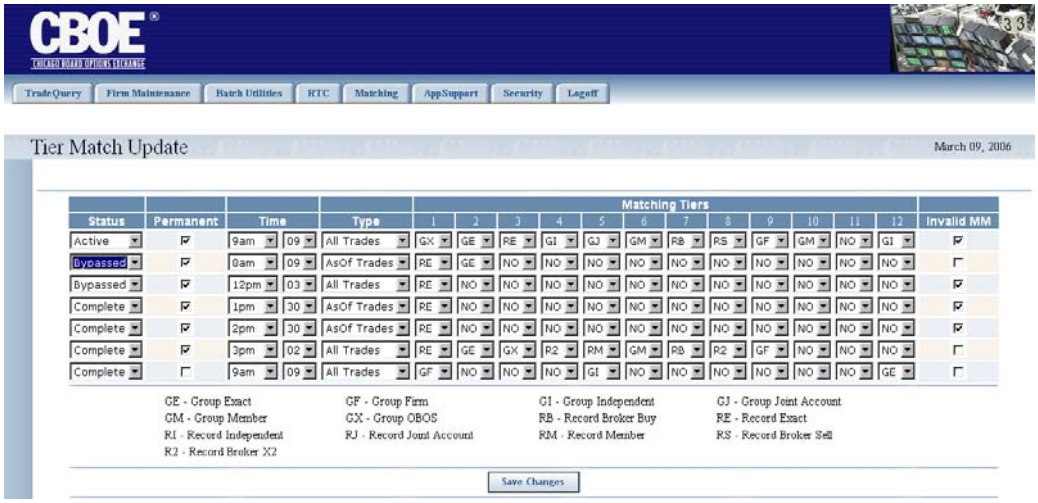
Data Values

GE - Group Exact	GF - Group Firm	GI - Group Independent	GJ - Group Joint Account
GM - Group Member	GX - Group OBOS	RB - Record Broker Buy	RE - Record Exact
RI - Record Independent	RJ - Record Joint Account	RM - Record Member	RS - Record Broker Sell
R2 - Record Broker X2			

Tier Match

The system allows you to add and change tier matching criteria for CTM through the Tier Match window.

From the **Matching** tab, select **Tier Match**. The following window will display.



- From the **Status** column, set the state of the intraday processing to Active, Bypassed or Complete.
  - Active: activate intraday processing
  - Complete: intraday processing is completed
  - Bypassed: skip the processing for the scheduled time
    - **Note**: You may choose to bypass the processing time due to an existing production issue.
    - **Note**: If intraday processing is executing, the status will display as "Running".
- To permanently set your tier match update, select the **Permanent** checkbox. Deselect the checkbox if you want the tier match criteria to only run once.
- The **Time** column allows you to set the time that matching tier will run. Set the time from the drop down selection.
- Select the type of trades from the **Type** drop down list. You can choose either **All Trades** or **As Of Trades**.
- Select the **Matching Tiers** based on the criteria described in the table below.

Data Values

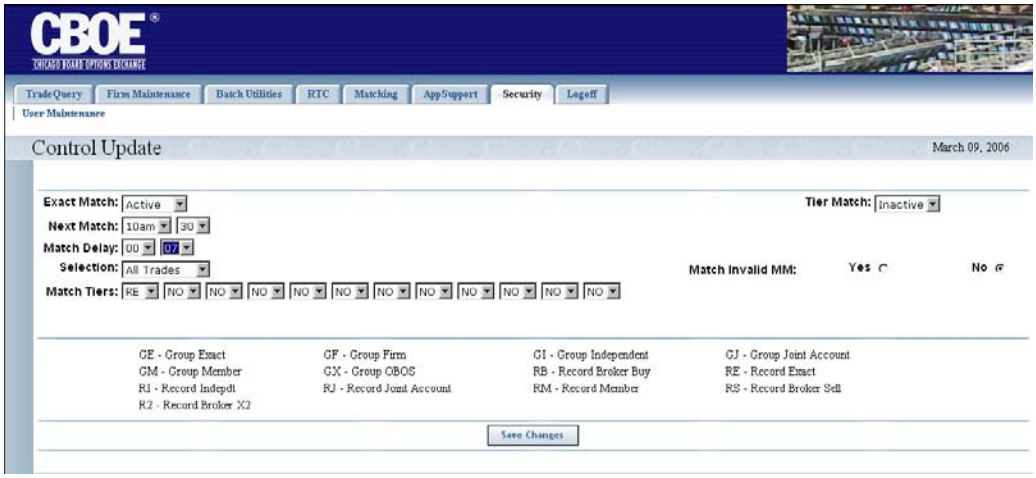
GE - Group Exact	GF - Group Firm	GI - Group Independent	GJ - Group Joint Account
GM - Group Member	GX - Group OBOS	RB - Record Broker Buy	RE - Record Exact
RI - Record Independent	RJ - Record Joint Account	RM - Record Member	RS - Record Broker Sell
R2 - Record Broker X2			

- If you want the CTM system to match invalid Market Makers, select the **Invalid MM** checkbox.
- Click **Save Changes**. The system will capture your changes.

Control Update

This Control Update window allows you to change the trade matching process control parameters.

Click **Matching** and then select, **Control Update**. The **Control Update** window will display.



Several matching parameters are controlled through this window.

- From the **Exact Match** drop down list, choose if you want exact matching to be Active or Inactive.
- Select when you would like the next match to occur by selecting the time from the **Next Match** drop down selection.
- Set the **Match Delay** in minutes or seconds from the drop down selection.
- From the **Selection** drop down list, choose if you want to set these parameters for All Trades or As Of Trades.
- Select the match criteria from the **Matching Tiers** drop down lists based on the legend at the bottom of the window (i.e, GE - Group Exact, etc.).
- From the **Tier Match** drop down list, select if you want tier match to be Active or Inactive.
- If you want the CTM system to match invalid Market Makers, select the Yes or No radio buttons.
- Click **Save Changes**. The system will set your matching parameters.

In the example above, the matching parameters are set to match active trades at 10:30a.m. for all trades corresponding to RE-Record Exact. The tier match is inactive and invalid Market Makers will not be matched. Match delays are set to 7 seconds.

Batch Match

This window allows you to select the type of trade and tier match criteria you want to use in the batch matching process.

To display the Batch Match window, click on the **Matching** tab and then select **Batch Match**. The following window will display.

- From the **Selection** drop down list, choose if you want All Trades or As Of Trades to be included in the batch matching process.
- From the **Match Tiers** drop down list, select which matching criteria to include in the batch.
- Click **Submit Batch**. An unscheduled match batch will be submitted into the system.

APP Support

The APP Support window allows you to perform log controls, internal switch maintenance and audit logs.

Functionality Restrictions

ENTRY level: N/A

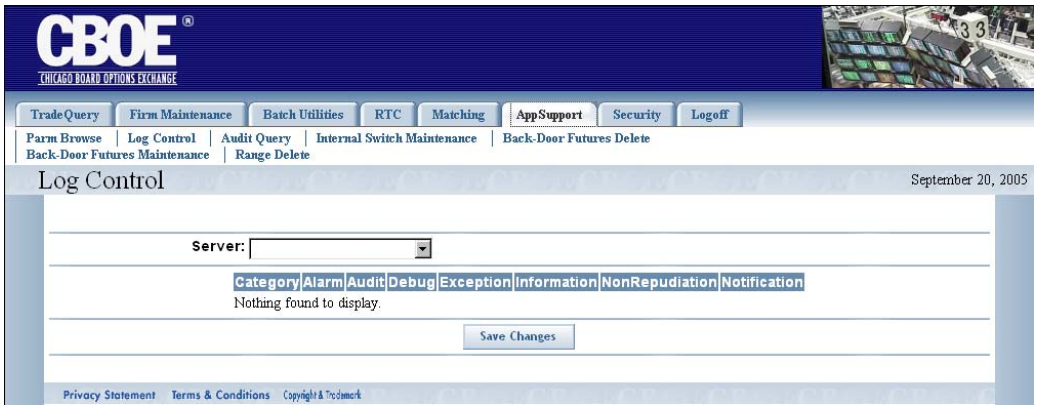
CONTROL level: Log Control, Audit Query, Internal Switch Maintenance

ALL level: Parm Browse, Log Control, Audit Query, Internal Switch Maintenance, Back-door Futures Delete, Back-door Futures Maintenance, Range Delete

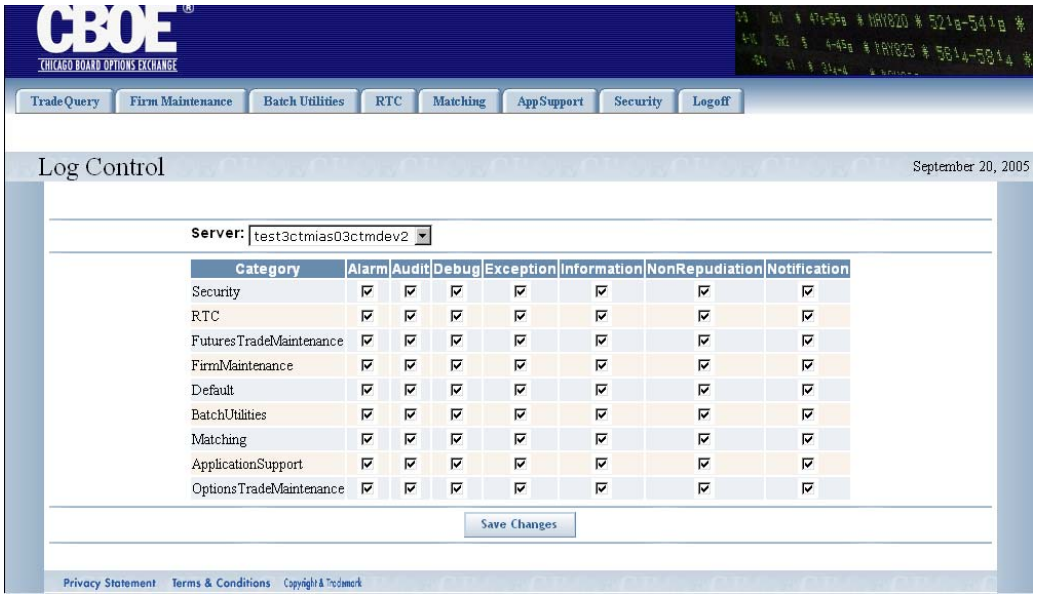
Log Control

The Log Control window allows you to activate specific logs per server.

From the **App Support** tab, select **Log Control**. The following window will display



- Select the **Server** from the drop down list. The selected trade server will display with its active logs.



In the example above, server: test3ctmias03ctmdev2 has all logs activated for each category.

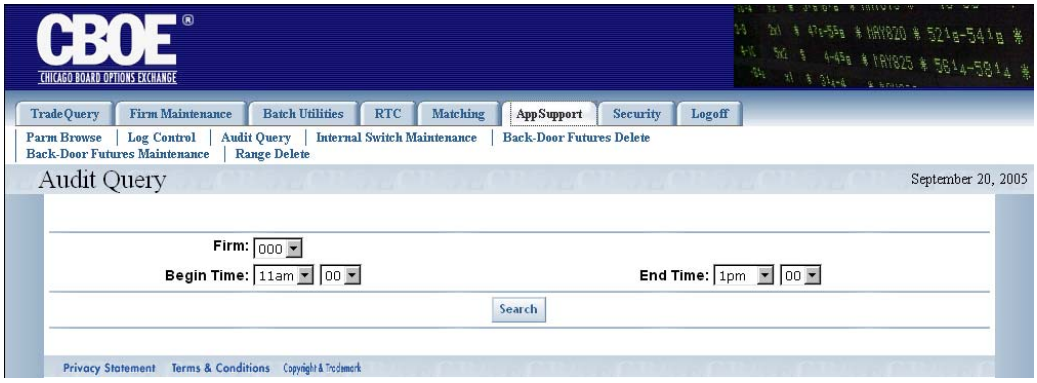
If you wish to remove logging for any category, deselect the corresponding checkbox. For example, to remove the audit log for the Security category, deselect the **Audit** checkbox. Click **Save Changes**.

Audit Query

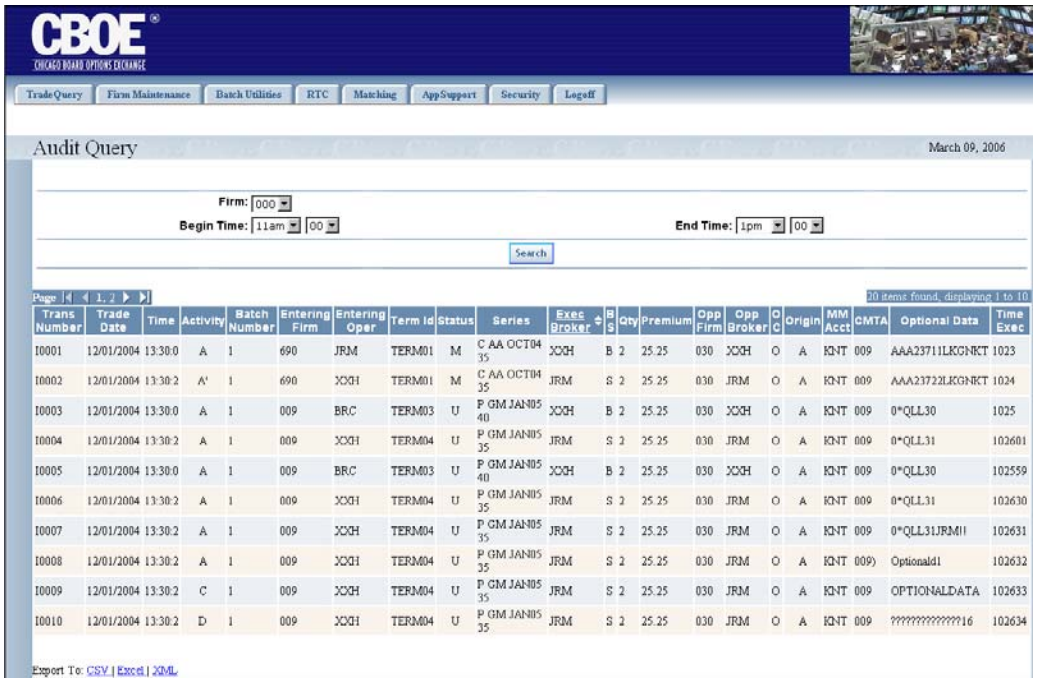
The Audit Query feature allows you to retrieve trade data in report format for a specified time.

From the **App Support** tab, select **Audit Query**. The following window will display

Not available in Version 1.0



- Select the Firm number from the **Firm** drop down list.
- Enter the Begin Time and End Time from the corresponding drop down lists.
- Click **Search**. Trade data for the specified time will display.



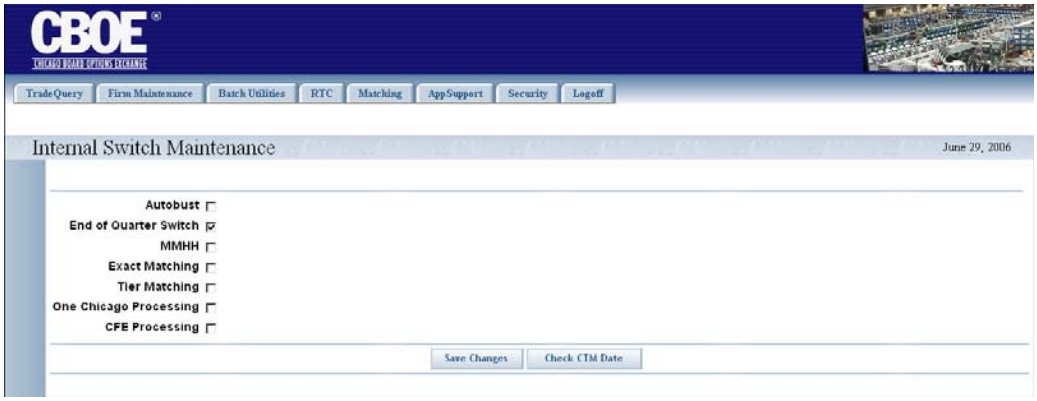
To scroll through the pages, click on the page numbers

or the direction arrows until the desired page is reached.

For instructions on exporting CTM data to CSV, Excel or XML format, refer to the section *Customize and Export CTM Windows, page 34*.

Internal Switch Maintenance

To activate internal switches, click **App Support** and then select **Internal Switch Maintenance**. The following window will display.



The Internal Switch Maintenance window allows you to set certain features to automatically activate for the CTM system.

For example, to set end of quarter switch to automatically activate, select the **End of Quarter Switch** checkbox. Click **Save Changes**. The system will save your request.

Exit the System

You can log out and exit the system at any time during the day.

Exit the System

To exit the CTM system, click on the **Logoff** tab and select **Logoff CTM**. You will be logged out of the application and will be returned to the **CTM Login** window.

Section 2:
Reference Guide

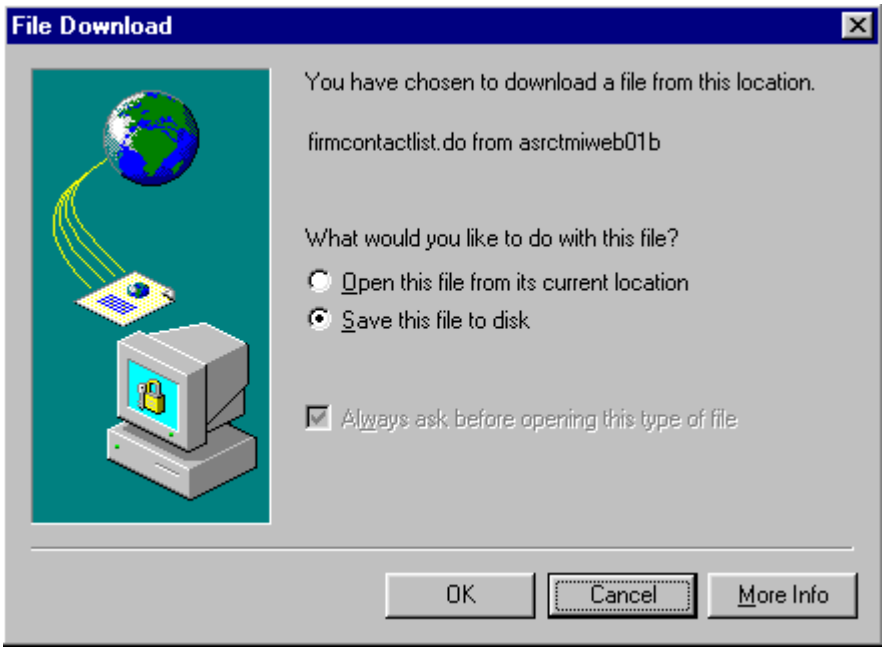
Customize and Export CTM Windows

Exporting CTM Data

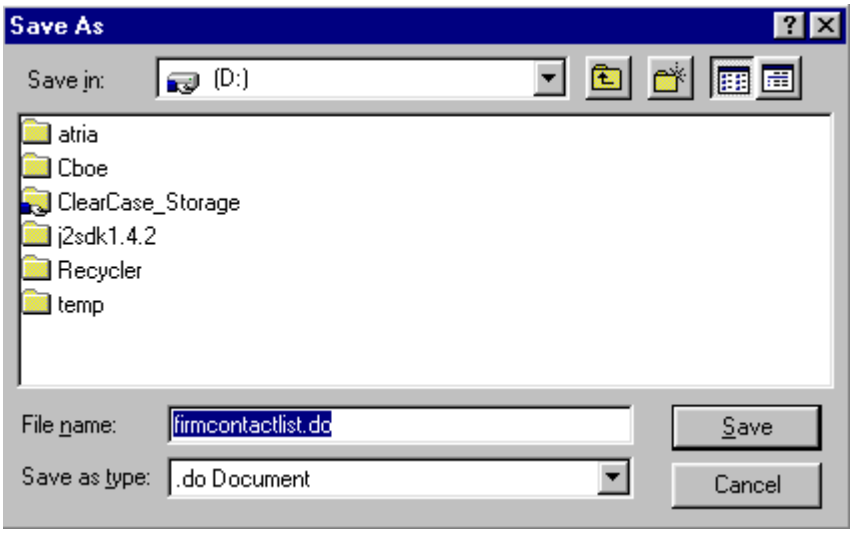
CTM windows that exhibit data in column format can be exported to different file formats.

Export to CSV Format

- Click **CSV** (Comma Separated Value). The File Download window will display. The window defaults to **Save this file to disk**.



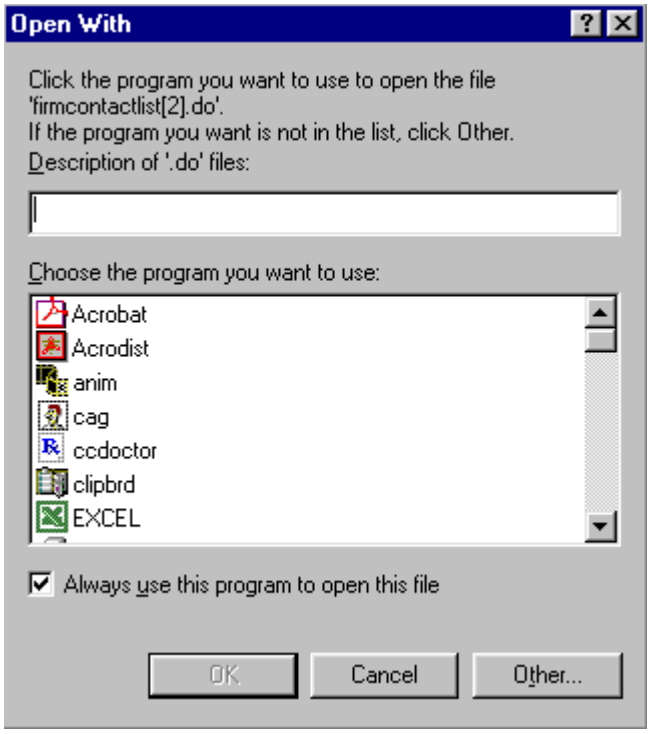
- Click **OK**. The Save As window displays.



- Select the location where you want to save the file and enter the file name.
- Click **Save**. Your file will be saved in CVS format.
- To exit the window without saving, click **Cancel**.

To open the file from the current location:

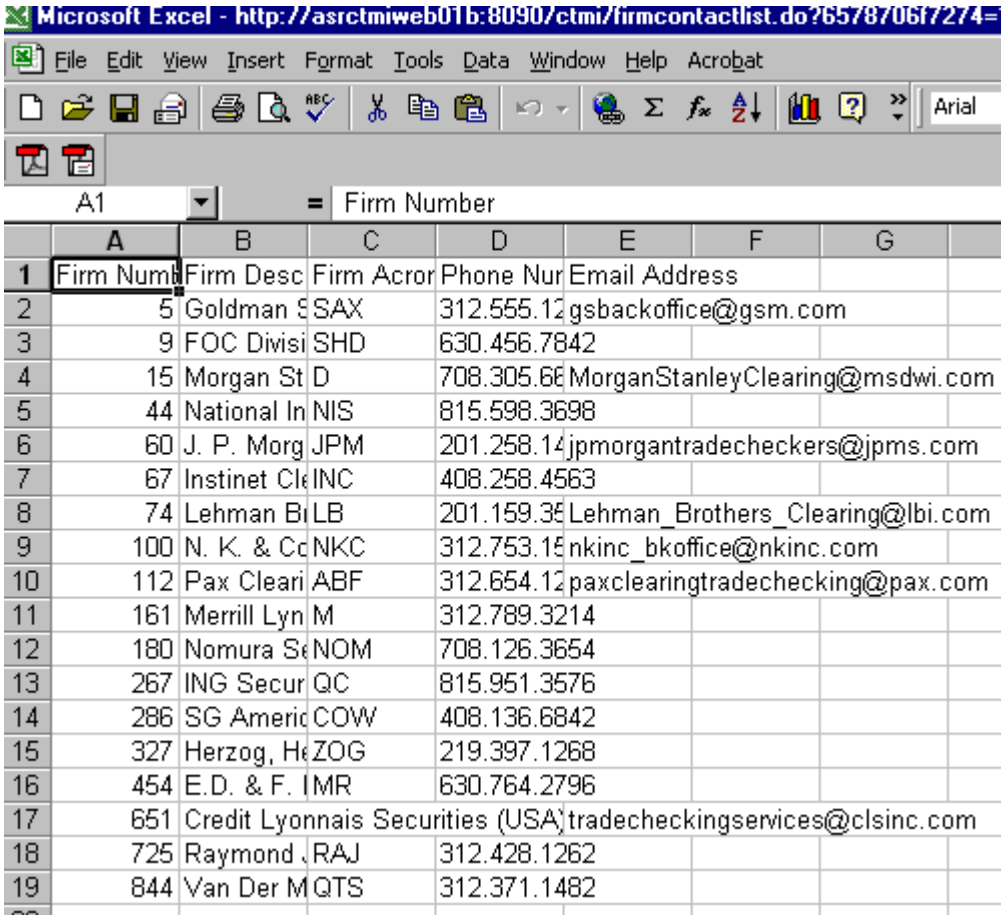
- Click on the corresponding radio button. The Open With window displays.



- Select the program in which to display the data.
- Click **OK**.
- Click **Cancel** to exit the window.

Export to Excel

If you wish to export the data to an Excel spreadsheet, click **Excel**. The system will open an Excel window and export the data.



	A	B	C	D	E	F	G
1	Firm Numb	Firm Desc	Firm Acror	Phone Nur	Email Address		
2	5	Goldman S	SAX	312.555.12	gsbackoffice@gsm.com		
3	9	FOC Divisi	SHD	630.456.7842			
4	15	Morgan St	D	708.305.68	MorganStanleyClearing@msdwi.com		
5	44	National In	NIS	815.598.3698			
6	60	J. P. Morg	JPM	201.258.14	jpmorgantradecheckers@jpms.com		
7	67	Instinet Cle	INC	408.258.4563			
8	74	Lehman Bi	LB	201.159.35	Lehman_Brothers_Clearing@lbi.com		
9	100	N. K. & Co	NKC	312.753.15	nkinc_bkoffice@nkinc.com		
10	112	Pax Cleari	ABF	312.654.12	paxclearingtradechecking@pax.com		
11	161	Merrill Lyn	M	312.789.3214			
12	180	Nomura Se	NOM	708.126.3654			
13	267	ING Secur	QC	815.951.3576			
14	286	SG Americ	COW	408.136.6842			
15	327	Herzog, He	ZOG	219.397.1268			
16	454	E.D. & F. I	MR	630.764.2796			
17	651	Credit Lyonnais Securities (USA)			tradecheckingservices@clsinc.com		
18	725	Raymond J	RAJ	312.428.1262			
19	844	Van Der M	QTS	312.371.1482			

XML Conversion

To convert the data to XML, click **XML**. A new browser window will open and the data will display in XML format.

```
<?xml version="1.0" ?>
- <table>
  - <row>
      <column>005</column>
      <column>Goldman Sachs & Company Inc.</column>
      <column>SAX</column>
      <column>312.555.1212</column>
      <column>gsbackoffice@gsm.com</column>
    </row>
  - <row>
      <column>009</column>
      <column>FOC Division Of Spear Leeds and Kellog</column>
      <column>SHD</column>
      <column>630.456.7842</column>
      <column />
```

Click the right button (**X**) in the uppder right corner of the window to close the window and return to CTM system.

Sizing CTM Windows

The CTM windows are only as sizable as the browser allows.

Place the mouse on any edge of the window until it becomes a two-sided arrow. Hold the left mouse button down and move it to the desired size.

Resizing a window on the corner will expand or contract it in both directions (i.e. up and down and side-to-side). Resizing it on the side or top/bottom will expand or contract the window only in that one direction.

Windows can also be resized using the center glyph in the upper right corner of the window.

Click the left button (_) to minimize the window. Click the right button (✕) to close the window. The center button is used for sizing.

If ☐ is displayed, clicking it will increase the window size to a full-screen display.
If 🗗 is displayed, clicking it will return the window to its default size.