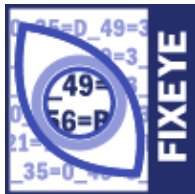


FIX Eye

Getting Started: The Guide



Product overview

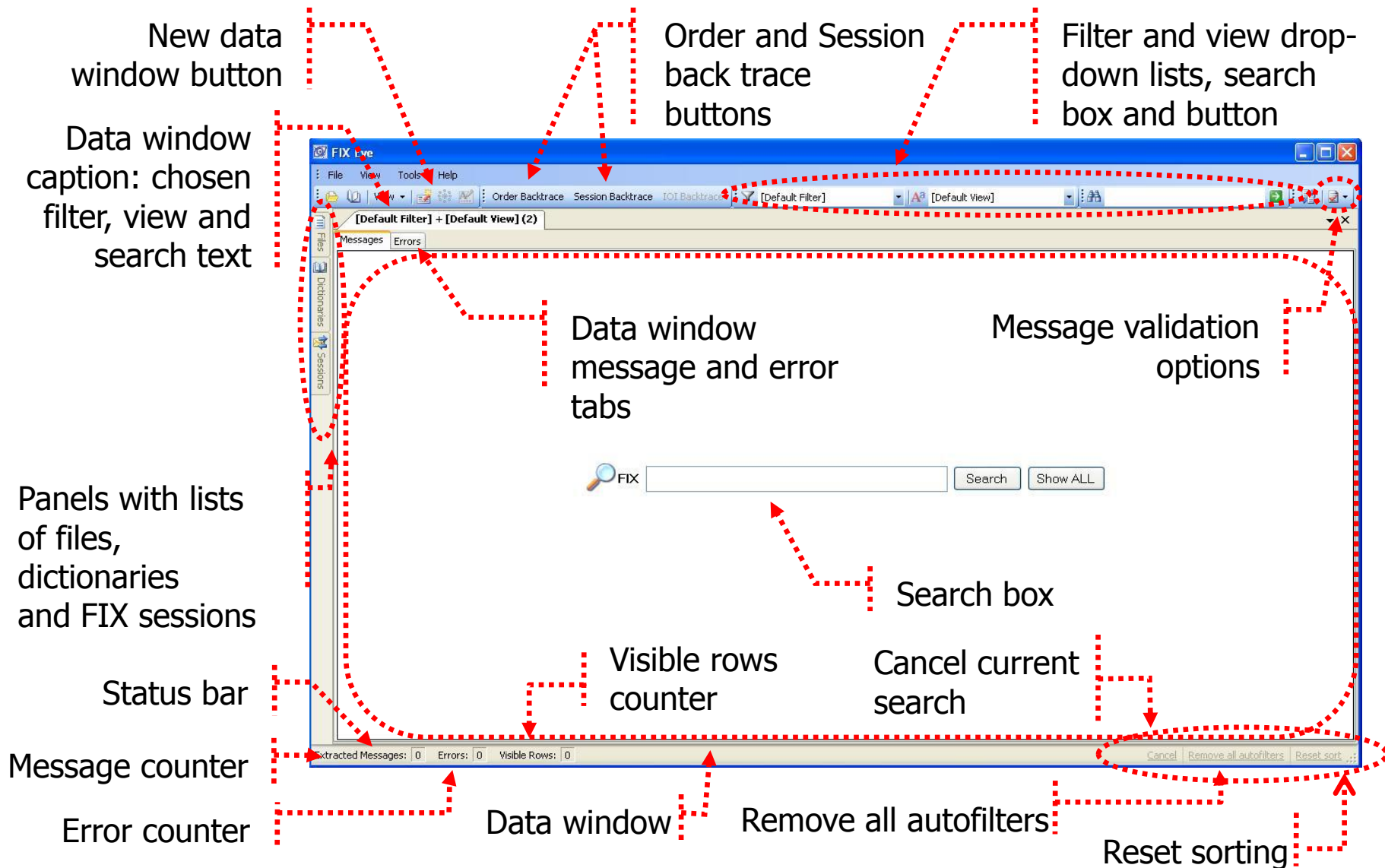
FIX Eye is a tool designed to facilitate fast data search in FIX log files. FIX Eye presents search results in an easy to work with form. It has intuitive graphical user interface and uses many familiar from MS Excel operational features.

FIX Eye can process multiple log-files distributed on the network.

FIX Eye features

- Search for FIX log-files on a local computer and a whole network
- Show FIX messages in a table
- Select FIX fields to be shown in a table
- Show FIX field names, values and descriptions
- Filter FIX messages by particular text in fields
- Recognize FIX version (4.0 – 4.4) from a log file
- Support Regular expression
- Read raw FIX messages from any text files (not cleaned FIX-logs only)
- Filter FIX messages by sessions
- Provide context search
- Create custom views
- Create custom filters
- Validate FIX messages
- Compare FIX messages
- Support FIX dialects
- Provide Order back trace
- Support Multi-tab view
- Export selected cells to CSV

FIX Eye main window



FIX Eye main window

The panels can either be docked on the main window or pop-up in it

Unchecked file records

Column auto filter

Column header with FIX tag

The screenshot shows the FIX Eye application window titled "stop limit order". The main area is a table with columns: BeginString (8), BodyLength (9), MsgType (35), ClOrdID (11), ExecID (17), ExecTransType (20), and ExecType (1). The table contains several rows of data, including "Execution" and "New Order - Single (D)" messages. A context menu is open over the "MsgType" column header, showing options like "3", "8", "9", "D", "F", and "G".

On the left side, there are three docked panels:

- Sessions:** A table with columns "SenderCompID" and "TargetCompID". It lists "OPSX" and "SDSI" for both sender and target.
- Files:** A list of files on the "Localhost" drive, including "D:\My Work\B2Bits\FixEye.0.0" files.
- Dictionaries:** A list of dictionaries on the "Localhost" drive.

At the bottom of the window, it says "Extracted messages count: 10585" and "Remove all autofilters".

List of found FIX-sessions

List of log-files containing FIX messages

List of dictionaries to define FIX Dialect

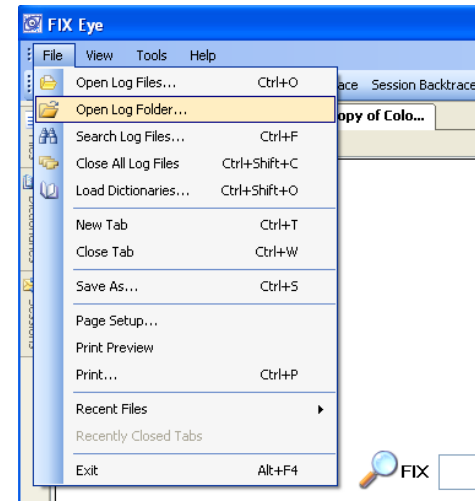
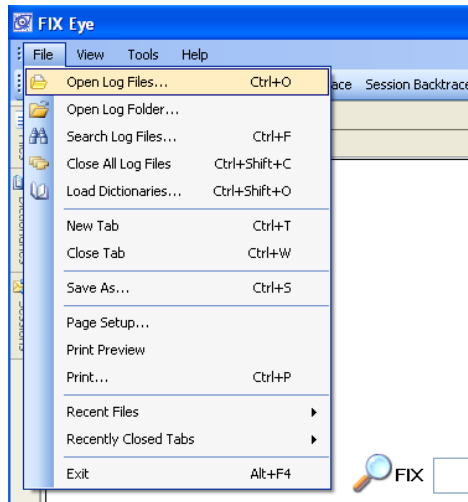
Quick start

- Click on the FIX Eye desktop icon to start the program or go to the Start menu and select “All Programs -> B2BITS -> FIX Eye”
- Choose data files: open the File menu and select “Open Log Files”, choose files with raw FIX messages and click “Open”
- Write a search query in a search box and click “Search”
- Double click on a raw message in the table to see FIX message details

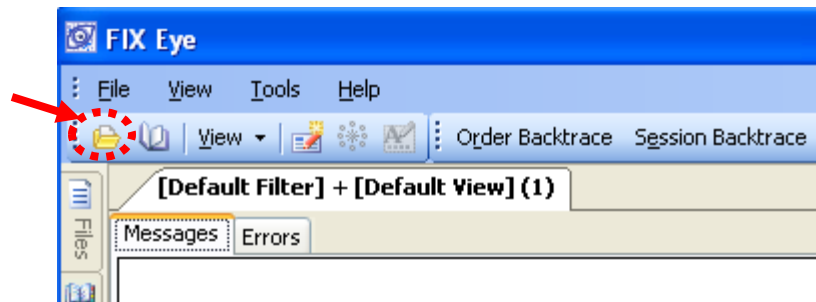
At the very beginning FIX Eye displays the dialog form for opening log files. It can be done either automatically – by hitting the “Search” button, or manually – after clicking “Browse”.

Opening file

Go to “File -> Open Log Files...” or “File -> Open Log Folder...”



or use the  button on your toolbar



Sending to FIX Eye

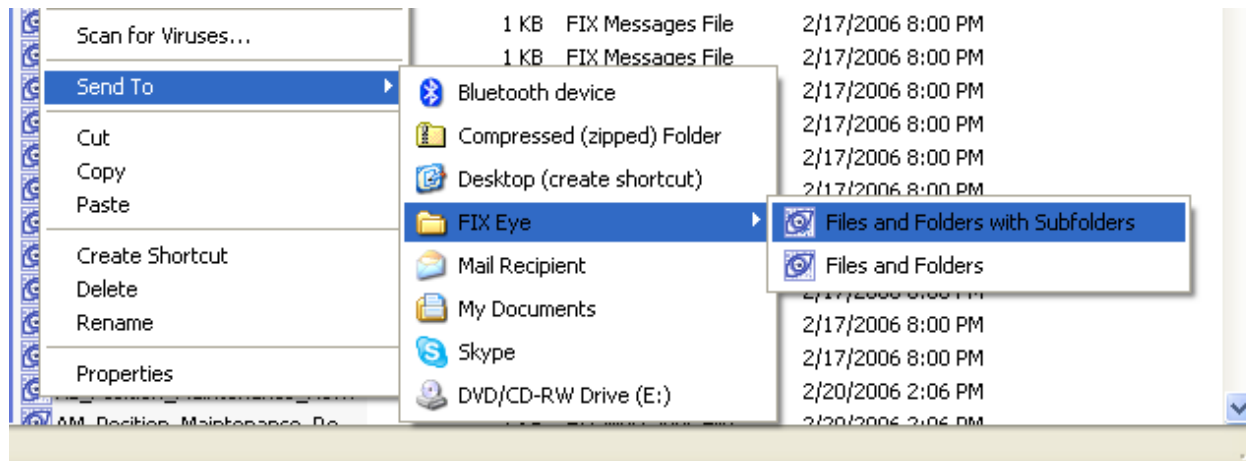


You can send log files to FIX Eye from any folder on your computer.

Right-click a folder, select “Send To -> FIX Eye” and choose:

- “Files and Folders” if you want to send only files from folder
- “Files and Folders with Subfolders” if you want to send files with all subfolders.

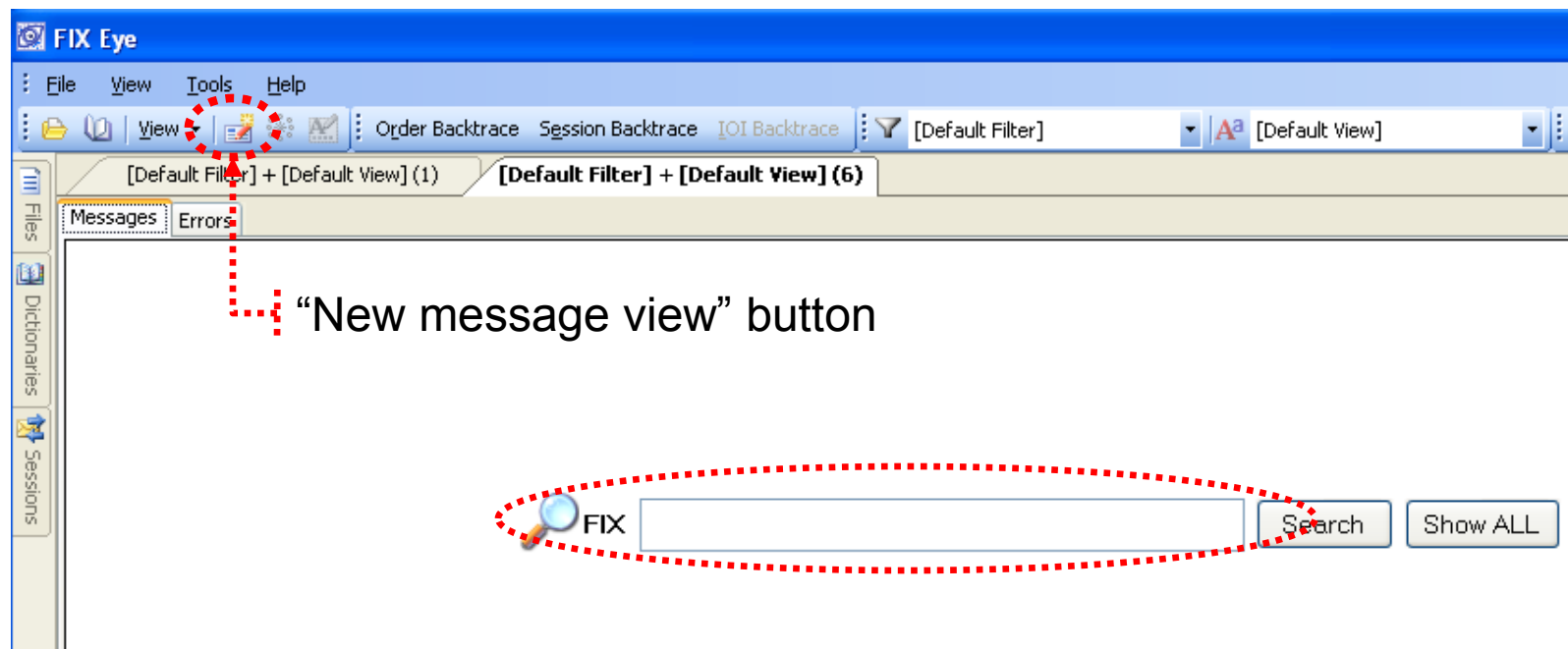
The sent files will be opened in a new instance of FIX Eye.




Multiple tabs

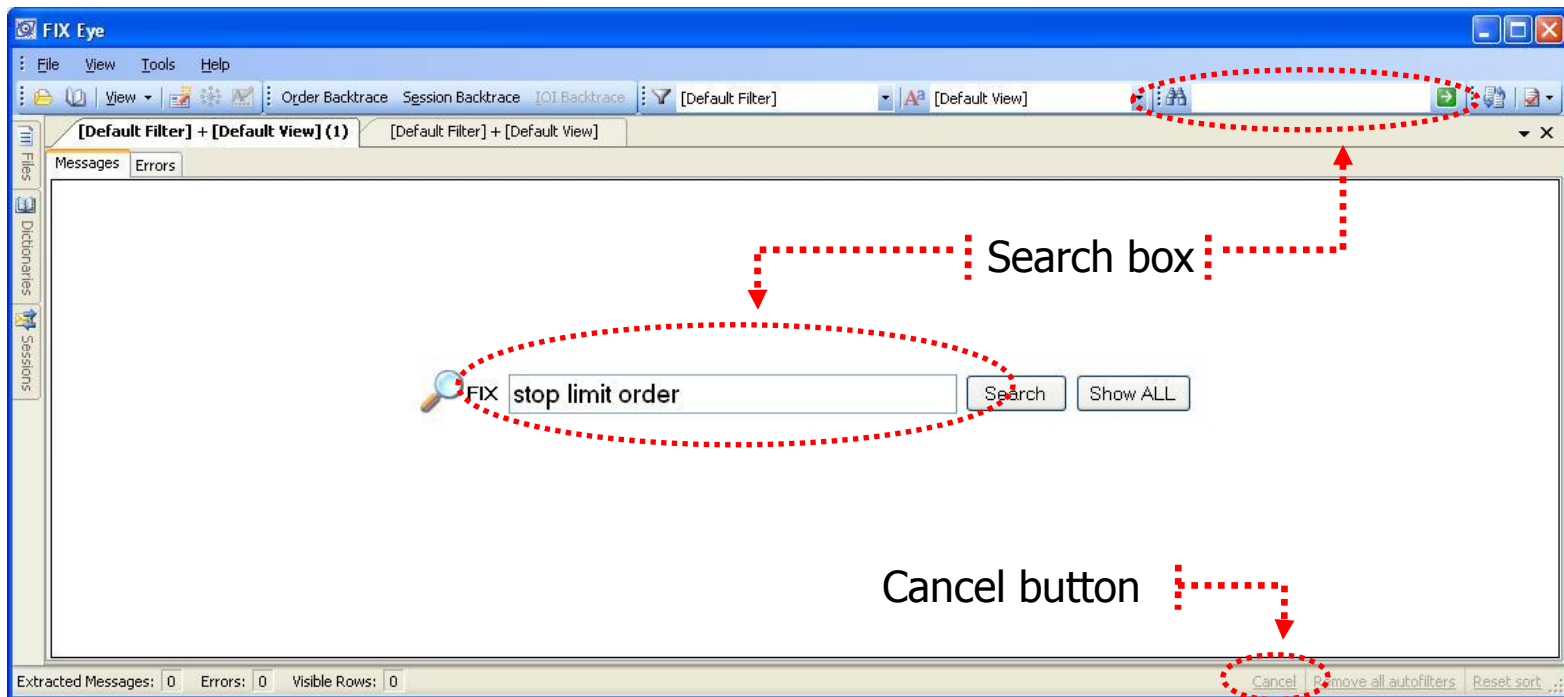
FIX Eye allows creating multiple data windows (tabs). It is possible to specify different search text, filter and view for each data window.

- Click on the “New message view” button to add a new tab or press “Ctrl” + “T”
- New data window with a clear search box will appear next to the current one.



Data search

Type your search query (one or more words that best describe messages you want to find) in any search box in the main window and hit the “Search” button or click the  icon.



You can stop the search process by clicking the “Cancel” button on the status bar.

Data search

Search results (namely messages) are sorted by relevance to the specified search terms.

Search terms are indicated on the data window label and placed into the search box as well.

The screenshot displays the Fix Eye application window titled "Fix Eye [stop limit order]". The search terms "stop limit order" are visible in the search bar at the top right. The main data window shows a table of messages with columns: Account (1), Symbol (55), MaturityMonthYear (200), PutOrCall (201), StrikePrice (202), Side (54), OrderQty (38), OrdType (40), and Pri. The search results are sorted by relevance, with "Stop limit (4)" orders appearing at the top of the list.

Account (1)	Symbol (55)	MaturityMonthYear (200)	PutOrCall (201)	StrikePrice (202)	Side (54)	OrderQty (38)	OrdType (40)	Pri
OPTIONSX1	BA	2007 11	Call (1)	110	Sell (2)	6	Stop limit (4)	3.4
OPTIONSX1	TLT	2007 06	Call (1)	83	Sell (2)	10	Stop limit (4)	0.2
OPTIONSX1	MAL	2007 07	Call (1)	165	Buy (1)	3	Stop limit (4)	2.6
OPTIONSX1	NOV	2007 08	Call (1)	105	Sell (2)	6	Stop limit (4)	5
OPTIONSX1	XLF	2007 09	Put (0)	35	Sell (2)	5	Stop limit (4)	0.9
OPTIONSX1	MAL	2007 10	Call (1)	180	Sell (2)	50	Stop limit (4)	2.5
OPTIONSX1	KBH	2007 10	Put (0)	50	Sell (2)	1	Stop limit (4)	6.5
OPTIONSX1	DE	2007 09	Put (0)	115	Sell (2)	2	Stop limit (4)	3.4
OPTIONSX1	UFB	2007 08	Call (1)	105	Sell (2)	3	Stop limit (4)	7.1
OPTIONSX1	MAL	2007 10	Call (1)	145	Sell (2)	1	Stop limit (4)	12.
OPTIONSX1	UFB	2007 07	Call (1)	105	Sell (2)	2	Stop limit (4)	5.1
OPTIONSX1	MAL	2007 10	Call (1)	140	Sell (2)	2	Stop limit (4)	17.
OPTIONSX1	F	2007 07	Call (1)	9	Sell (2)	10	Stop limit (4)	0.3
OPTIONSX1	DE	2007 06	Call (1)	115	Sell (2)	2	Stop (3)	0
OPTIONSX1	DQR	2007 07	Call (1)	35	Sell (2)	3	Stop (3)	0
OPTIONSX1	BTU	2007 07	Call (1)	50	Sell (2)	1	Stop (3)	0
OPTIONSX1	USU	2007 10	Call (1)	20	Sell (2)	10	Stop (3)	0
OPTIONSX1	TLT	2007 09	Put (0)	89	Sell (2)	4	Stop (3)	0
OPTIONSX1	CAT	2007 11	Call (1)	72.5	Sell (2)	1	Stop (3)	0
OPTIONSX1	GQO	2007 09	Call (1)	25	Sell (2)	5	Stop (3)	0
OPTIONSX1	PCP	2007 07	Call (1)	120	Sell (2)	3	Stop (3)	0

Data search



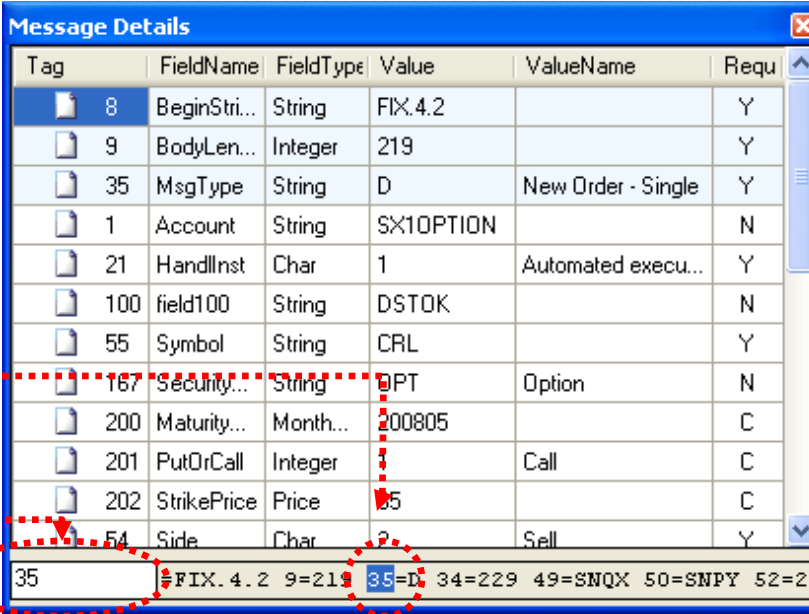
New!

You can search for a specific context in a raw message.

- Double click on a message to open the “Message Details” window and enter your search query in the search text box.
- Press “Enter” to go to the next search result or “Shift” + “Enter” to return to the previous one.

Search results

Search text box



Tag	FieldName	FieldType	Value	ValueName	Requ
8	BeginStri...	String	FIX.4.2		Y
9	BodyLen...	Integer	219		Y
35	MsgType	String	D	New Order - Single	Y
1	Account	String	SX10PTION		N
21	HandlInst	Char	1	Automated execu...	Y
100	field100	String	DSTOK		N
55	Symbol	String	CRL		Y
167	Security...	String	OPT	Option	N
200	Maturity...	Month...	200805		C
201	PutOrCall	Integer		Call	C
202	StrikePrice	Price	5		C
54	Side	Char	2	Sell	Y

35 =D

Message details

Double-click on any FIX message in the table to view message details in a separate window or right-click the message and select “Show message details” from the context menu.

The screenshot shows the FIX Eye application interface. The main window displays a table of messages with columns for Tag, BodyLength, MsgType, and SenderCom. A message with Tag 702 is selected. A 'Message Details' window is open, showing the fields and values for this message.

Tag	FieldName	FieldType	Value	ValueName	Require
8	BeginString	String	FIX.4.4		Y
9	BodyLength	Length	350		Y
35	MsgType	String	AP	Position Report	Y
721	PosMaintR...	String	8367		Y
325	Unsolicited...	Boolean	Y	Message is being sent...	N
728	PosReqRe...	Integer	0		Y
715	ClearingBus...	LocalMkt...	20050214		Y
1	Account	String	2		Y
581	AccountType	Integer	3	House Trader	Y
55	Symbol	String	[N/A]		Y
48	SecurityID	String	003924AG2		N
22	SecurityIDS...	String	1		C
228	Factor	Float	1.0000000000...		N
730	SettlPrice	Price	111		Y
731	SettlPriceT...	Integer	2	Theoretical	Y
734	PriorSettlPri...	Price	111		Y
702	NoPositi...	Numln...	1		Y
753	NoPosAmt	Numln...	6		Y
49	SenderCom...	String	CORE		Y
56	TargetCom...	String	PINK		Y

Search string: 8=FIX.4.4 9=350 35=AP 49=CORE 56=PINK 34=4 50=DBS 57=PUBLIC

Extracted Messages: 15928 | Errors: 1482 | Visible Rows: 15928

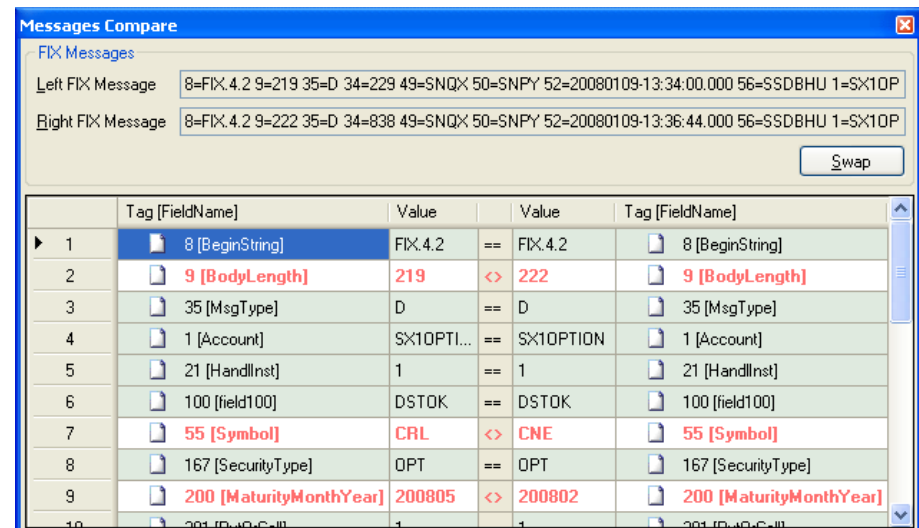
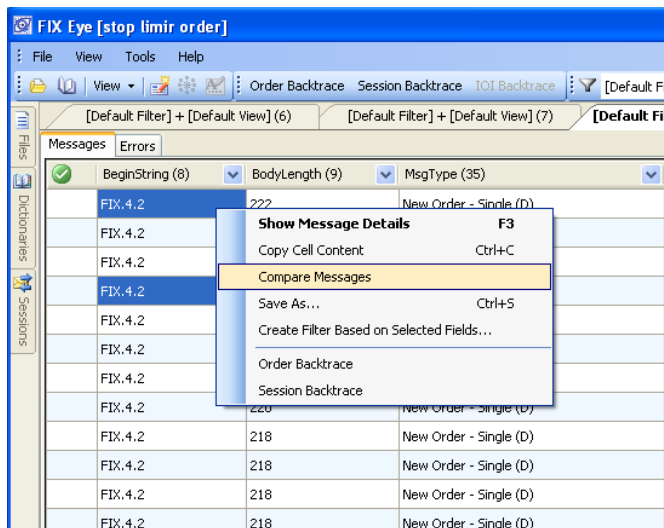
Comparing messages



You can compare two messages tag by tag in a separate window.

- Hold “Ctrl” and select 2 messages from the table, right-click on them and choose “Compare messages” from the context menu.

Please note, that if you select more than two messages, FIX Eye will compare only the first and the last one.



Message sorting

- Click the appropriate table column header to sort messages. The first and the second clicks apply ascending and descending sorting to messages respectively by related FIX field values.
- You can reset current sorting by pressing <Esc>.

Fix Eye [stop limit order]

File View Help

Order Backtrace Session Backtrace IOI Backtrace Orders [View] stop limit order

Orders + [View] + stop limit order

Messages Errors

BeginString (8)	BodyLength (9)	MsgType (35)	Account (1)	HandInst (21)	field100 (100)	Symbol (55) ▲	SecurityType (167)	
FIX.4.2	338	Order Cancel Request (F)				[N/A]	MLEG	
FIX.4.2	333	Order Cancel Request (F)				[N/A]	MLEG	
FIX.4.2	335	Order Cancel Request (F)				[N/A]	MLEG	
FIX.4.2	213	New Order - Single (D)	OPTIONSX1	Automated execution or...	STING	AA	Option (OPT)	21
FIX.4.2	210	New Order - Single (D)	OPTIONSX1	Automated execution or...	STING	AA	Option (OPT)	21

Fix Eye [stop limit order]

File View Help

Order Backtrace Session Backtrace IOI Backtrace Orders [View] stop limit order

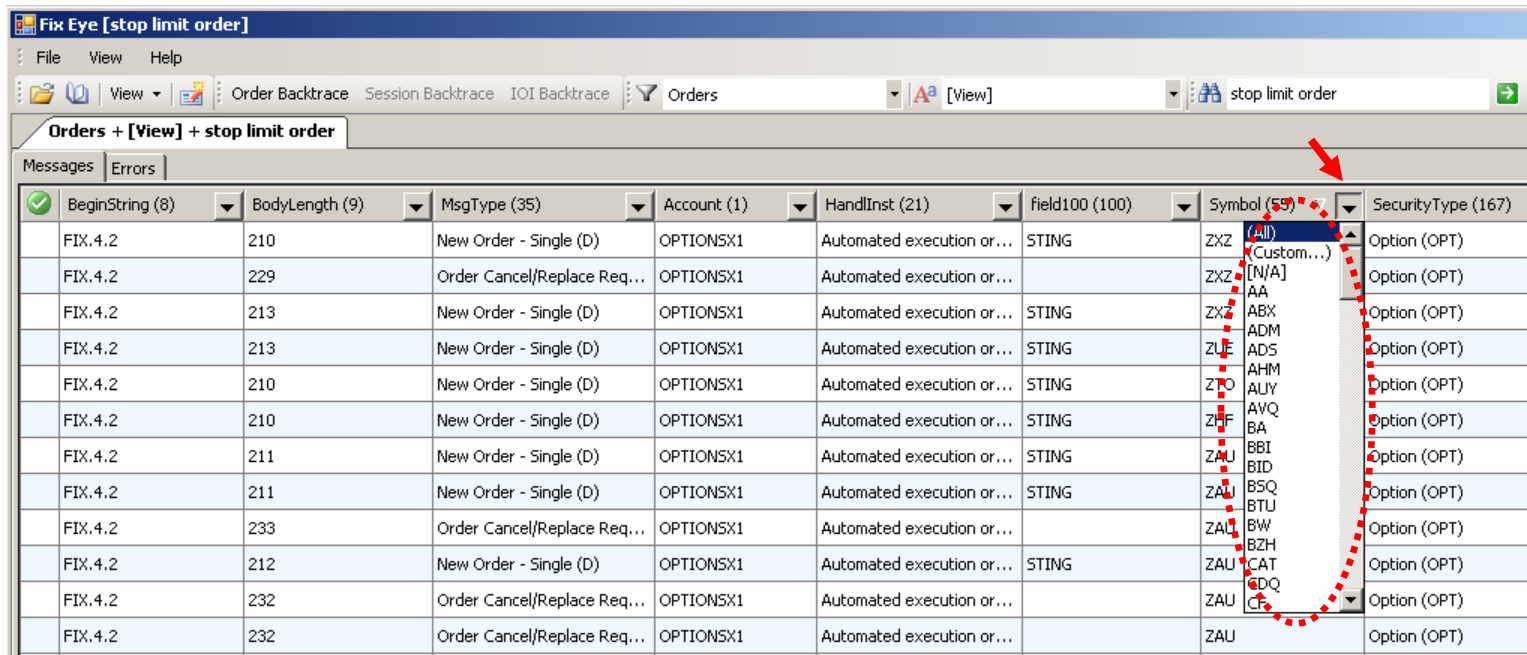
Orders + [View] + stop limit order

Messages Errors

BeginString (8)	BodyLength (9)	MsgType (35)	Account (1)	HandInst (21)	field100 (100)	Symbol (55) ▼	SecurityType (167)	
FIX.4.2	210	New Order - Single (D)	OPTIONSX1	Automated execution or...	STING	ZXZ	Option (OPT)	21
FIX.4.2	229	Order Cancel/Replace Req...	OPTIONSX1	Automated execution or...		ZXZ	Option (OPT)	21
FIX.4.2	213	New Order - Single (D)	OPTIONSX1	Automated execution or...	STING	ZXZ	Option (OPT)	21
FIX.4.2	213	New Order - Single (D)	OPTIONSX1	Automated execution or...	STING	ZUE	Option (OPT)	21
FIX.4.2	210	New Order - Single (D)	OPTIONSX1	Automated execution or...	STING	ZTO	Option (OPT)	21

Message auto filter

Click on the column header button  and select a required value from the drop-down list to apply auto filter.



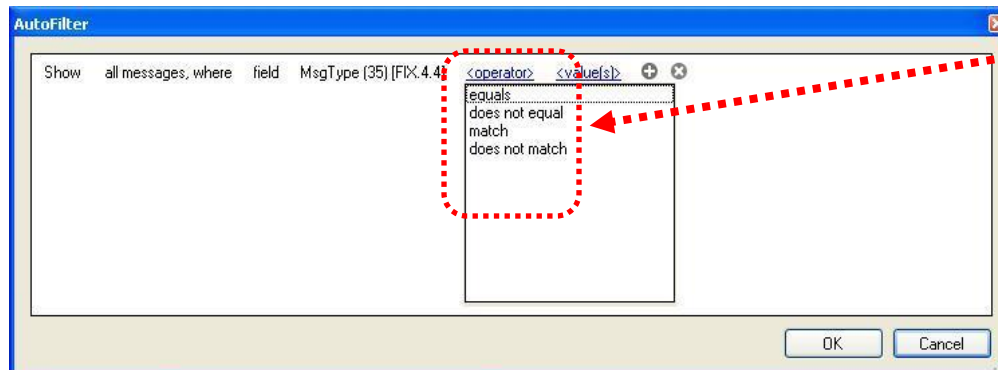
The screenshot shows the Fix Eye application interface. The main window displays a table of messages. The columns are: BeginString (8), BodyLength (9), MsgType (35), Account (1), HandInst (21), field100 (100), Symbol (59), and SecurityType (167). The Symbol column has a dropdown menu open, showing a list of options: (All), Custom..., [N/A], AA, ABX, ADM, AD5, AHM, AUJ, AVQ, BA, BBI, BID, BSQ, BTU, BW, BZH, CAT, CDQ, CF, and ZAU. A red dashed circle highlights the (All) option, and a red arrow points to the dropdown arrow in the Symbol column header.

BeginString (8)	BodyLength (9)	MsgType (35)	Account (1)	HandInst (21)	field100 (100)	Symbol (59)	SecurityType (167)
FIX.4.2	210	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZXZ	Option (OPT)
FIX.4.2	229	Order Cancel/Replace Req...	OPTION5X1	Automated execution or...		ZXZ	Option (OPT)
FIX.4.2	213	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZXZ	Option (OPT)
FIX.4.2	213	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZLJE	Option (OPT)
FIX.4.2	210	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZTO	Option (OPT)
FIX.4.2	210	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZHF	Option (OPT)
FIX.4.2	211	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZAU	Option (OPT)
FIX.4.2	211	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZAU	Option (OPT)
FIX.4.2	233	Order Cancel/Replace Req...	OPTION5X1	Automated execution or...		ZAU	Option (OPT)
FIX.4.2	212	New Order - Single (D)	OPTION5X1	Automated execution or...	STING	ZAU	Option (OPT)
FIX.4.2	232	Order Cancel/Replace Req...	OPTION5X1	Automated execution or...		ZAU	Option (OPT)
FIX.4.2	232	Order Cancel/Replace Req...	OPTION5X1	Automated execution or...		ZAU	Option (OPT)

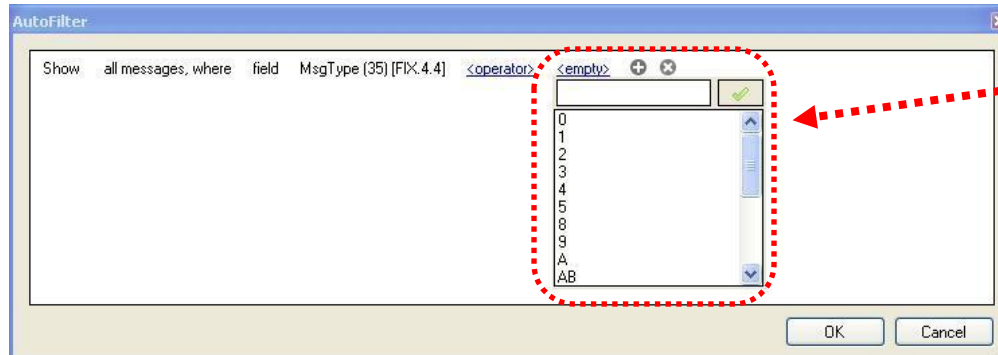
You can reset filtering for a particular column by selecting (All) item from the list

Message auto filter

- Select “Custom” from the column header drop-down list to create a custom filter. Set up a condition <operator> and a criterion <value(s)> to compare the current FIX field with some value(-s).
- The filter criteria can either be selected from the drop-down list or entered by user.



Operation list
of custom filter



Criterion value
list and input box

Files list

All opened log files are listed in the Files pop-up window. You can dock it in the left part of a main window by clicking on the Files title bar.

- Uncheck a file check-box to omit messages from that file in consecutive searches.
- Check this check-box to include the file content to the next search.

List of log-files Context menu Unchecked file messages

MsgType (35)	ClOrdID (11)	OrigClOrdID (41)	OrdStatus (39)	Account (1)	CxlRejResponseTo (4)
Quote (5)					
Quote Response (A)					
Quote Responses (A)					
Order Cancel Reject (9)	02398-0201-5949-0-01092008	02391-0201-5949-0-01...	Canceled (4)	SX1OPTION	Order Cancel Request
Order Cancel Reject (9)	02397-0201-5949-0-01092008	02391-0201-5949-0-01...	Canceled (4)	SX1OPTION	Order Cancel Request
New Order - Single (D)	00002-0511-2412-0-01092008			SX1OPTION	

Sessions list

The list of sessions found in opened log files appears in the Sessions panel.

Messages of all sessions

SenderCompID	TargetCompID	Text (58)	OrderID (37)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum (34)	TargetSubID (57)
<input checked="" type="checkbox"/>	CORE						
<input checked="" type="checkbox"/>	SNQX						
<input checked="" type="checkbox"/>	SSDBHU						
		ND NOTHING_DONE	ONA1767010908	SSDBHU	SNQX	2276	
		ND NOTHING_DONE	ONA0132010908	SSDBHU	SNQX	6159	
		ND NOTHING_DONE	ONA0465010908	SSDBHU	SNQX	6621	
		ND NOTHING_DONE	ONA0015010908	SSDBHU	SNQX	6407	
				CORE	PINK	12	PUBLIC
				CORE	PINK	3	PUBLIC
				CORE	PINK	18	PUBLIC

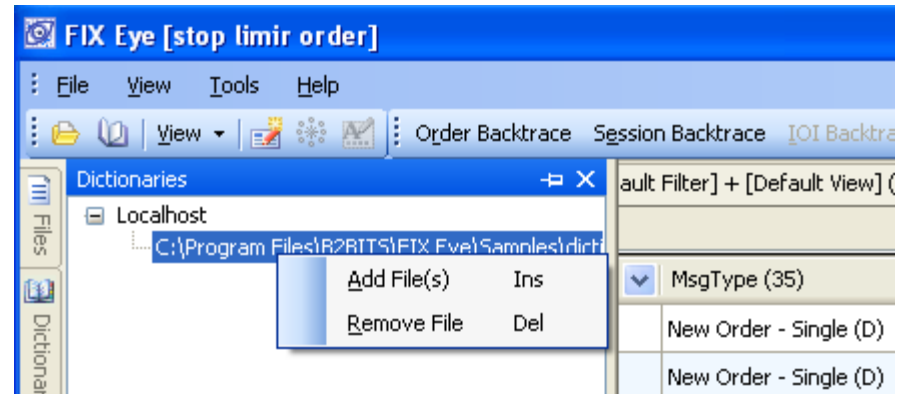
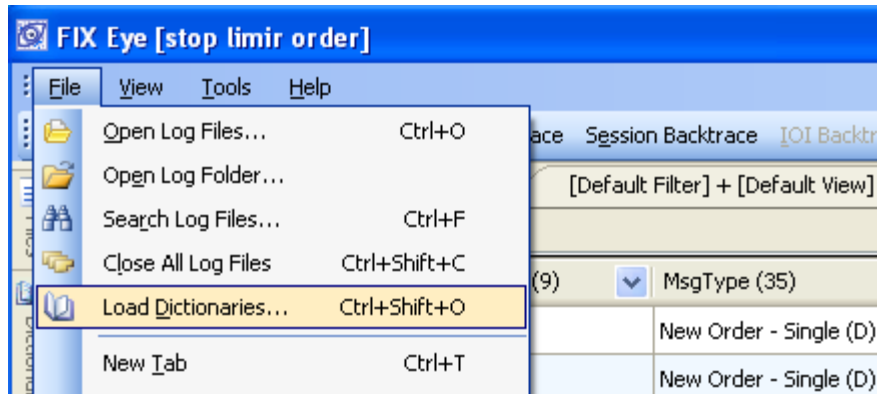
Messages of unchecked sessions disappeared

SenderCompID	TargetCompID	Text (58)	OrderID (37)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum (34)	TargetSubID (57)
<input type="checkbox"/>	CORE						
<input checked="" type="checkbox"/>	SNQX						
<input type="checkbox"/>	SSDBHU						
		CUSIP 834260AB...		CORE	PINK	3949	PUBLIC
				CORE	PINK	16	PUBLIC
				CORE	PINK	19	PUBLIC
				CORE	PINK	232	PINK
				CORE	PINK	346	PINK
				CORE	PINK	234	PINK
				CORE	PINK	370	PINK
				CORE	PINK	78	PINK

Dictionaries list

FIX Eye covers standard FIX-features by default, but you can work with non-standard FIX-dialects after loading special files (XML-format) that contain the necessary descriptions.

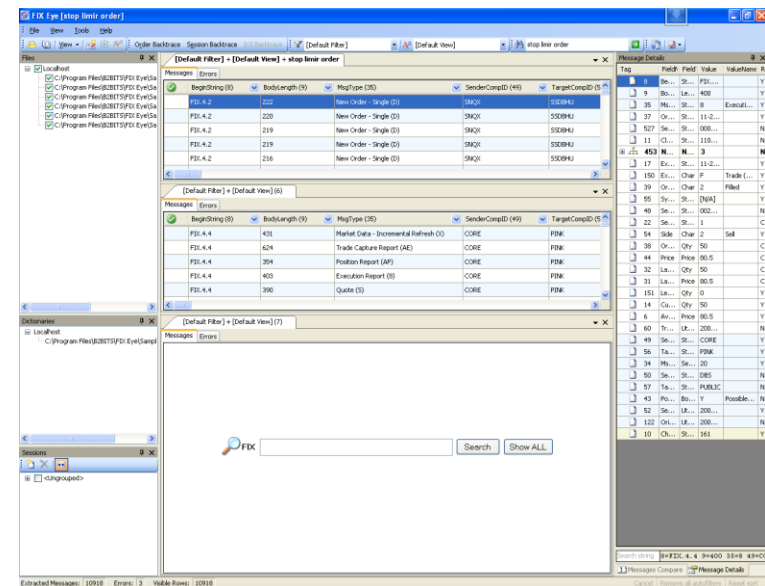
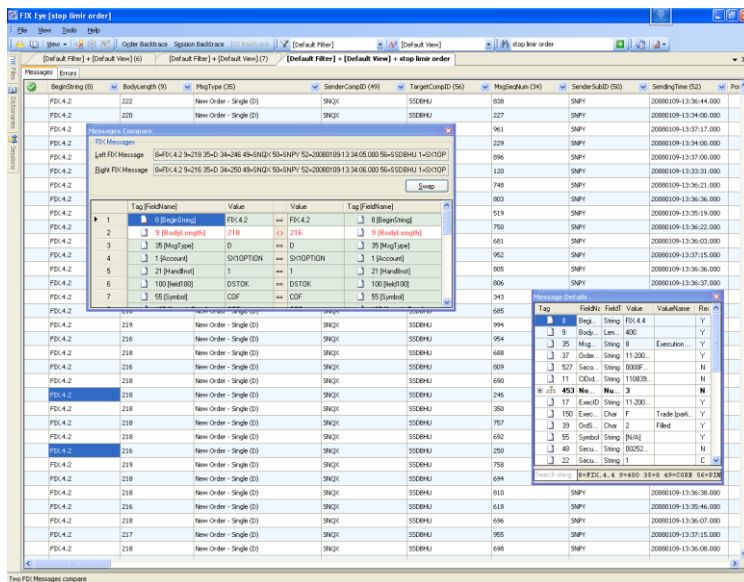
- Go to “File - Load Dictionary” to load a new dictionary for a particular FIX dialect or right-click on the Dictionaries window and select “Add File(s)” from the context menu.
- Right-click on a file in the list and select “Remove File” from the context menu to remove a dictionary.



Customizing interface

FIX Eye is provided with a flexible and functional design that will help you create a personal interface tailored to your own needs and tastes.

You can dock, undock, resize and rearrange windows and tabs and achieve maximum comfort while working with FIX Eye.



Customizing interface

The Files, Dictionaries and Sessions windows can be set to the following views:

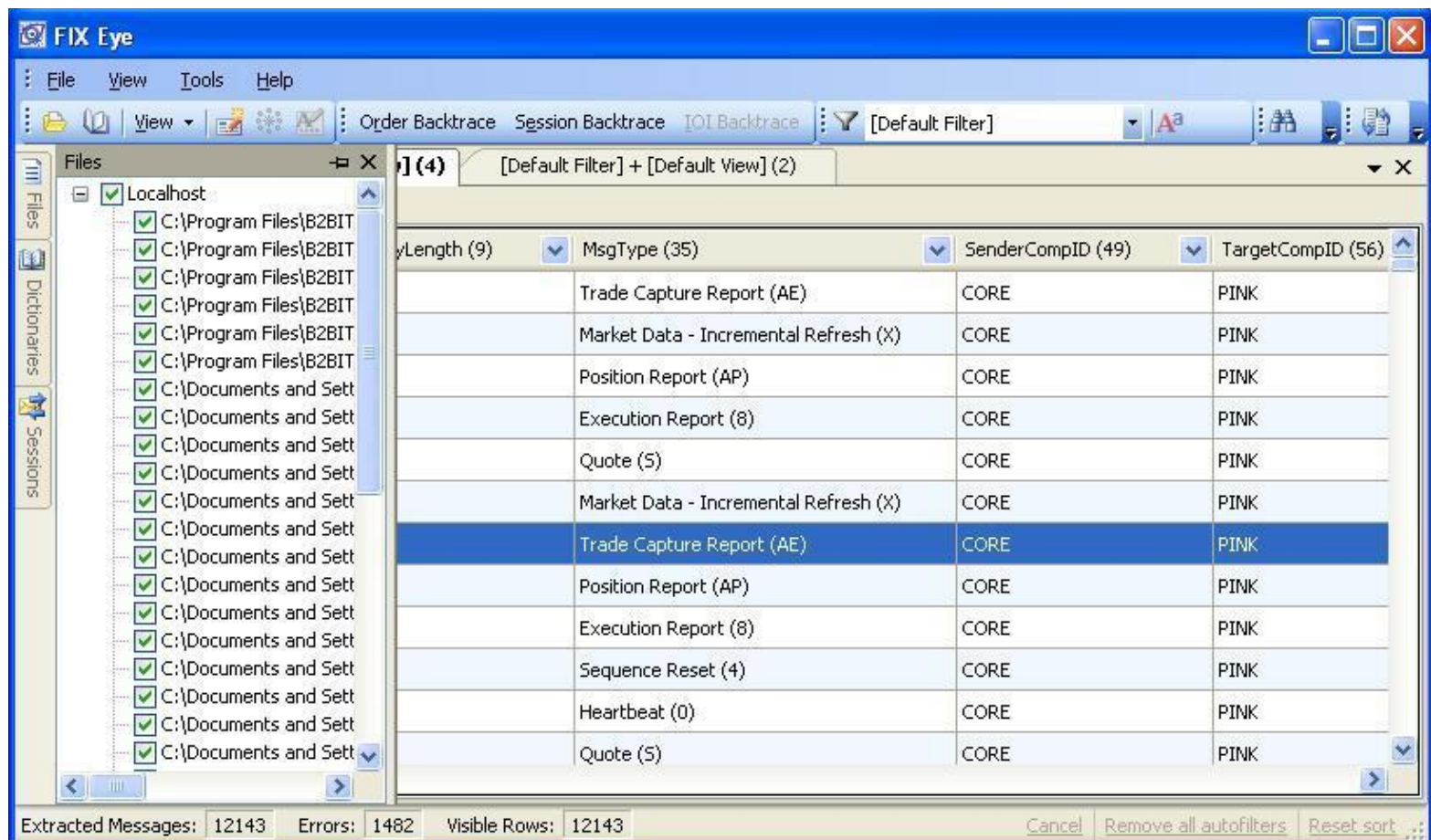
- Pop-up panels (by default they are in the left part of a main window)
- Docked separate windows
- A single docked window with 3 tabs
- Undocked separate windows
- A single undocked window with 3 tabs

The same pattern can be applied to the Message Details and Messages Compare windows.

Customizing interface

Files | Dictionaries | Sessions


Pop-up panels (by default on the left)

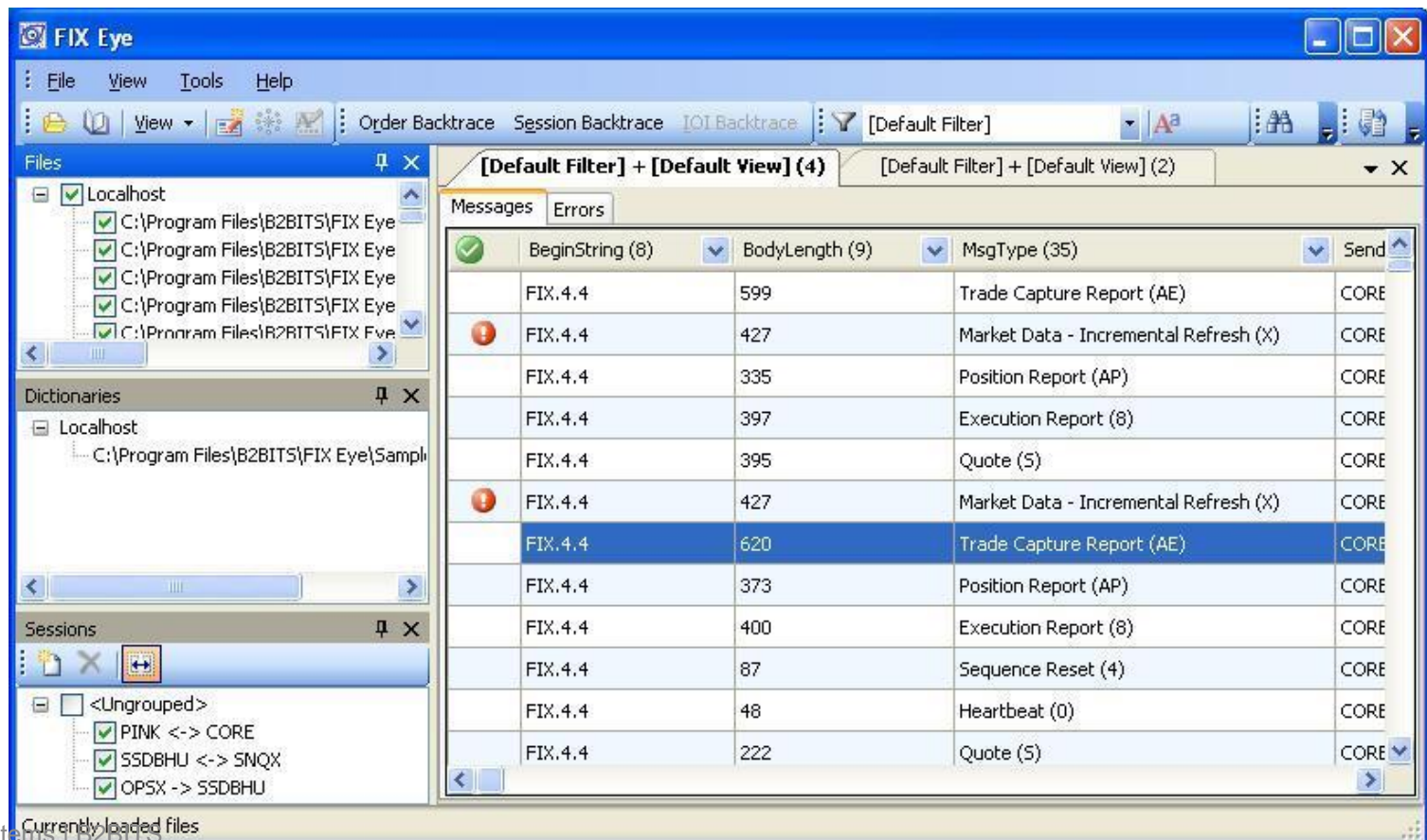


Customizing interface

Files | Dictionaries | Sessions

Docked separate windows

Use  button to fix the window and a mouse to drag it to a pop-up icon.



The screenshot displays the FIX Eye application interface. The main window is titled "FIX Eye" and contains several docked panels:


- Files:** A tree view showing the local file system structure, including folders for "C:\Program Files\B2BITS\FIX Eye".
- Dictionaries:** A tree view showing the local dictionary structure, including a folder for "C:\Program Files\B2BITS\FIX Eye\Sampl".
- Sessions:** A tree view showing the local session structure, including a folder for "<Ungrouped>" and sub-folders for "PINK <-> CORE", "SSDBHU <-> SMQX", and "OP5X -> SSDBHU".
- Messages:** A table displaying a list of messages. The table has columns for "Messages", "Errors", "BeginString (8)", "BodyLength (9)", "MsgType (35)", and "Send". The table contains several rows of data, including "Trade Capture Report (AE)", "Market Data - Incremental Refresh (X)", "Position Report (AP)", "Execution Report (8)", "Quote (5)", and "Heartbeat (0)".

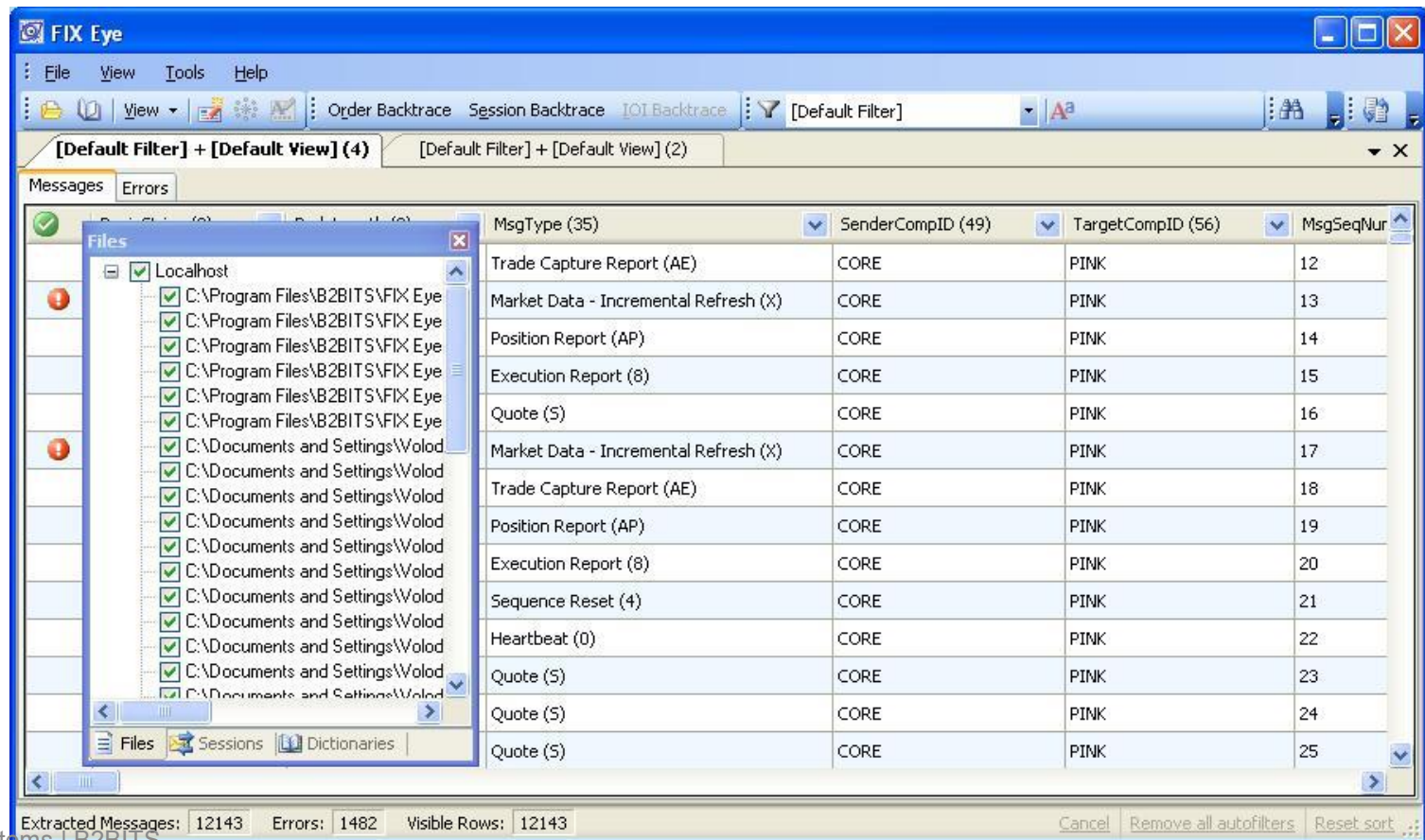
At the bottom of the interface, there is a section labeled "Currently loaded files" with a list of files.

Customizing interface

Files | Dictionaries | Sessions

A single undocked window with 3 tabs

Use  button to fix the window and double-click the title bar to undock it.



MsgType (35)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum
Trade Capture Report (AE)	CORE	PINK	12
Market Data - Incremental Refresh (X)	CORE	PINK	13
Position Report (AP)	CORE	PINK	14
Execution Report (8)	CORE	PINK	15
Quote (5)	CORE	PINK	16
Market Data - Incremental Refresh (X)	CORE	PINK	17
Trade Capture Report (AE)	CORE	PINK	18
Position Report (AP)	CORE	PINK	19
Execution Report (8)	CORE	PINK	20
Sequence Reset (4)	CORE	PINK	21
Heartbeat (0)	CORE	PINK	22
Quote (5)	CORE	PINK	23
Quote (5)	CORE	PINK	24
Quote (5)	CORE	PINK	25

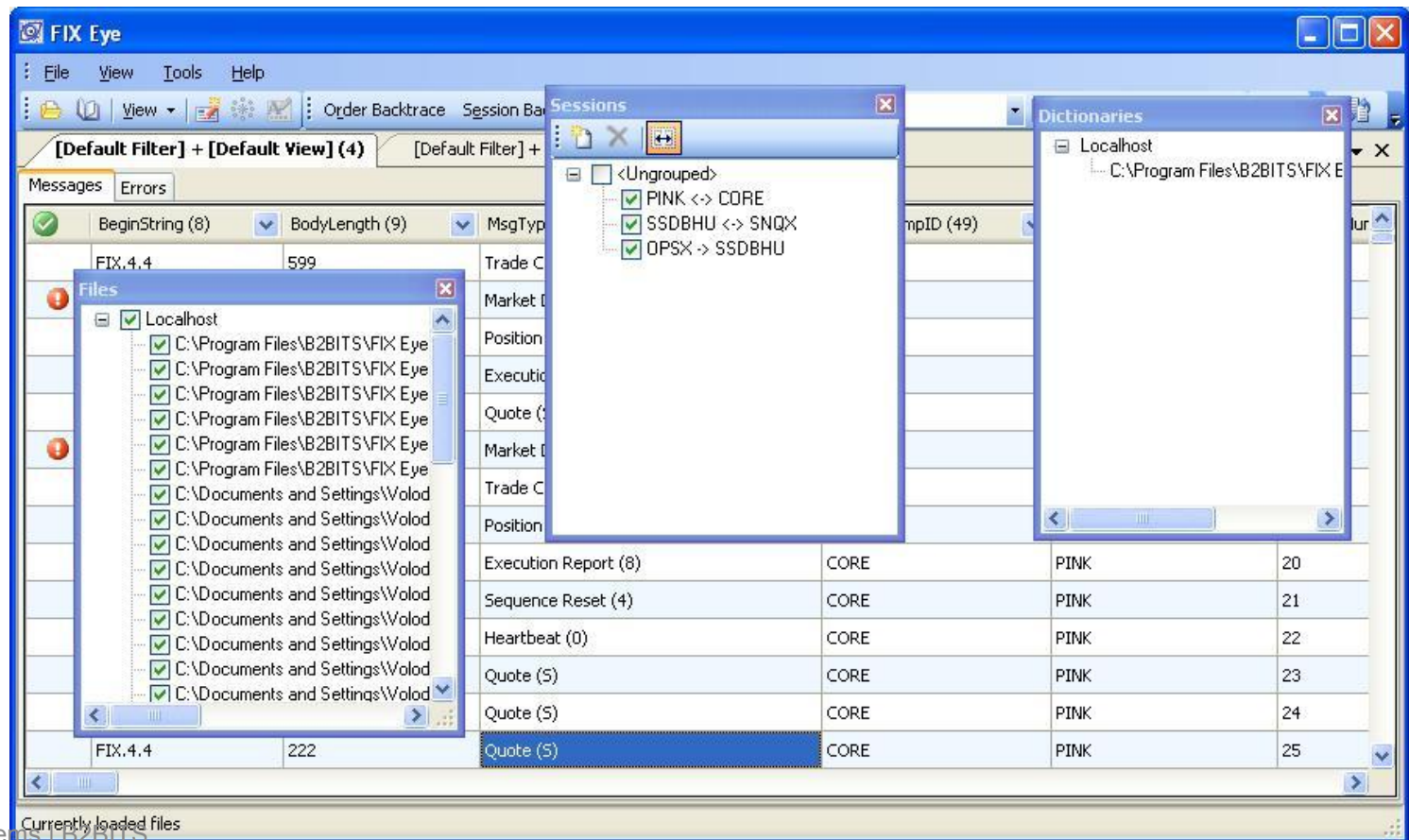
Extracted Messages: 12143 Errors: 1482 Visible Rows: 12143 Cancel Remove all autofilters Reset sort

Customizing interface

Files | Dictionaries | Sessions

Undocked separate windows

Undock the window, click on a tab label and drag it to separate windows.



Customizing interface

Search results, i.e. messages that are listed in the table, can be displayed in:

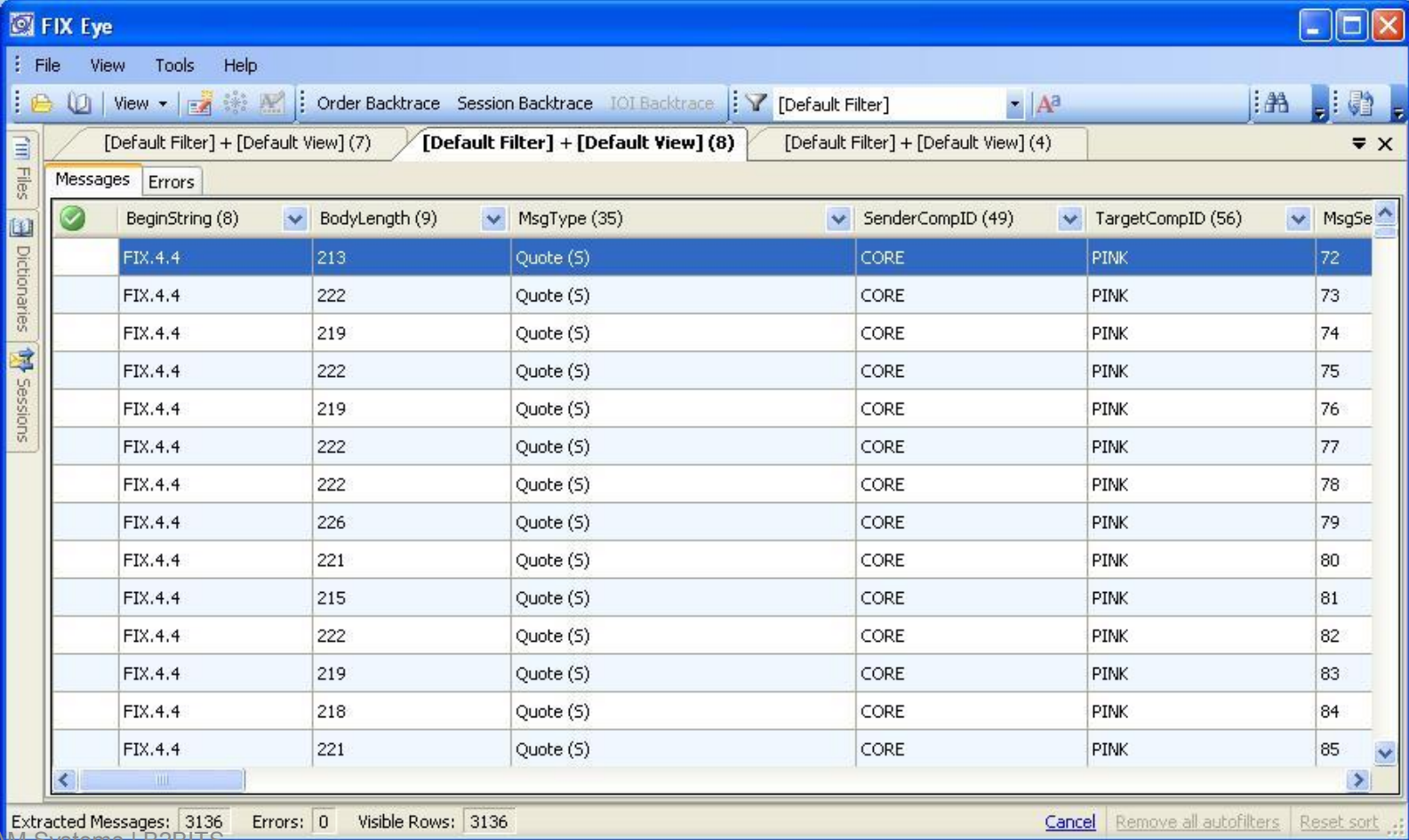
- One window with multiple tabs (the default view)
- Multiple docked windows

Use your mouse to drag and rearrange windows in FIX Eye.

Customizing interface

Search results

One window with multiple tabs (the default view)



The screenshot displays the FIX Eye application window. The title bar reads "FIX Eye". The menu bar includes "File", "View", "Tools", and "Help". The toolbar contains icons for "View", "Order Backtrace", "Session Backtrace", and "IOI Backtrace", along with a filter dropdown set to "[Default Filter]" and a search icon. The main area features three tabs: "[Default Filter] + [Default View] (7)", "[Default Filter] + [Default View] (8)", and "[Default Filter] + [Default View] (4)". The active tab is the second one, showing a table of search results under the "Messages" tab. The table has columns for "BeginString (8)", "BodyLength (9)", "MsgType (35)", "SenderCompID (49)", "TargetCompID (56)", and "MsgSe". The data rows show "FIX.4.4" messages with various body lengths and message types, all from "CORE" to "PINK".

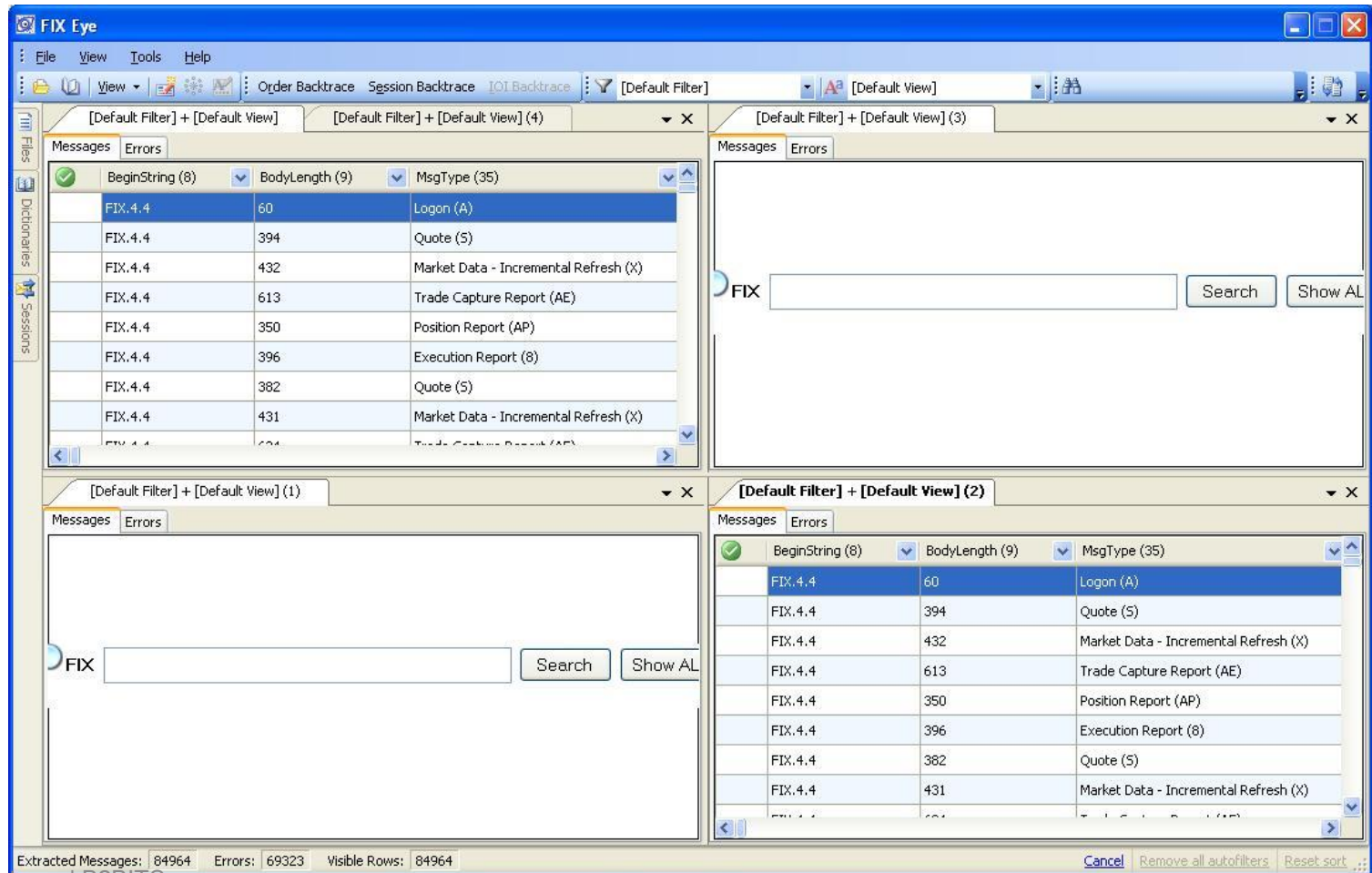
BeginString (8)	BodyLength (9)	MsgType (35)	SenderCompID (49)	TargetCompID (56)	MsgSe
FIX.4.4	213	Quote (5)	CORE	PINK	72
FIX.4.4	222	Quote (5)	CORE	PINK	73
FIX.4.4	219	Quote (5)	CORE	PINK	74
FIX.4.4	222	Quote (5)	CORE	PINK	75
FIX.4.4	219	Quote (5)	CORE	PINK	76
FIX.4.4	222	Quote (5)	CORE	PINK	77
FIX.4.4	222	Quote (5)	CORE	PINK	78
FIX.4.4	226	Quote (5)	CORE	PINK	79
FIX.4.4	221	Quote (5)	CORE	PINK	80
FIX.4.4	215	Quote (5)	CORE	PINK	81
FIX.4.4	222	Quote (5)	CORE	PINK	82
FIX.4.4	219	Quote (5)	CORE	PINK	83
FIX.4.4	218	Quote (5)	CORE	PINK	84
FIX.4.4	221	Quote (5)	CORE	PINK	85

At the bottom of the window, a status bar shows "Extracted Messages: 3136", "Errors: 0", and "Visible Rows: 3136". There are also buttons for "Cancel", "Remove all autofilters", and "Reset sort".

Customizing interface

Search results

Multiple docked windows



Data filter

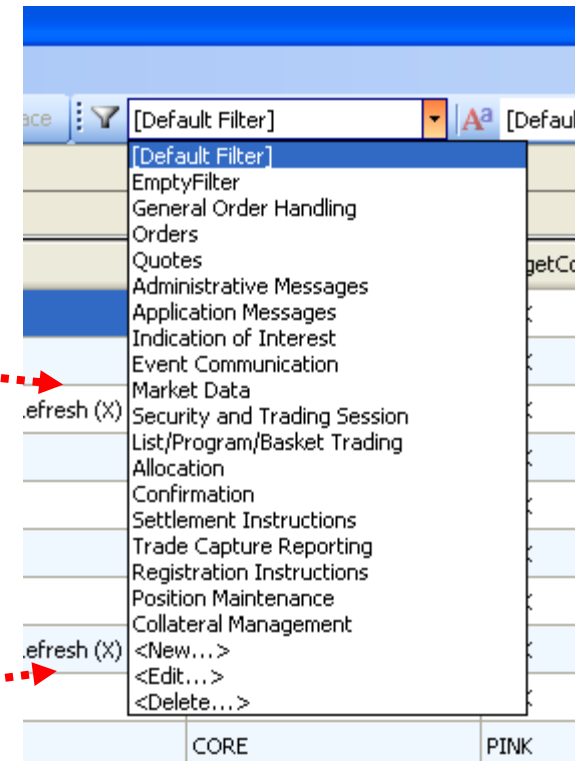
The Filter drop-down menu includes:

- The list of preset filters that can be applied immediately after selecting one of them
- Filter options for creating, modifying and deleting filter options

You can reset a filter by choosing the [Default Filter] option.

Preset filters

Filter options



Data filter

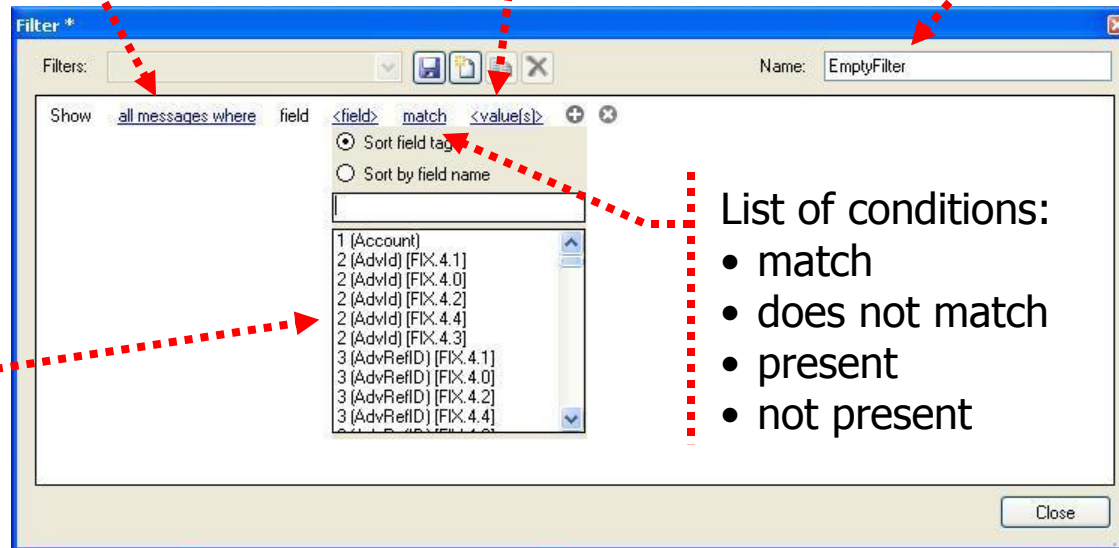
Select the <New> item from the previous menu and set up an appropriate condition to create a new filter.

Message pre-sets:

- all messages
- non-session
- session

Custom criterion.
A regular expression
can be used here.

New filter name



List of FIX-fields


List of conditions:

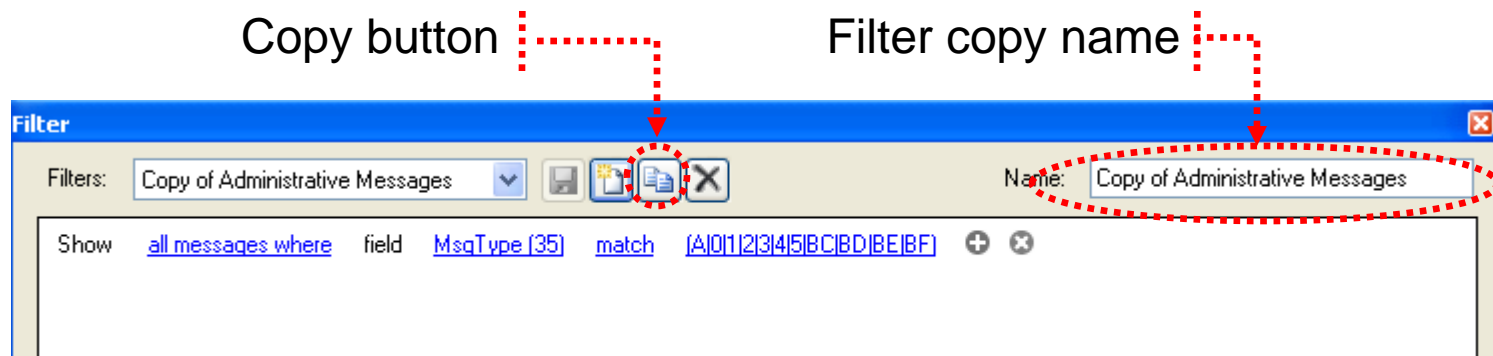
- match
- does not match
- present
- not present

Data filter



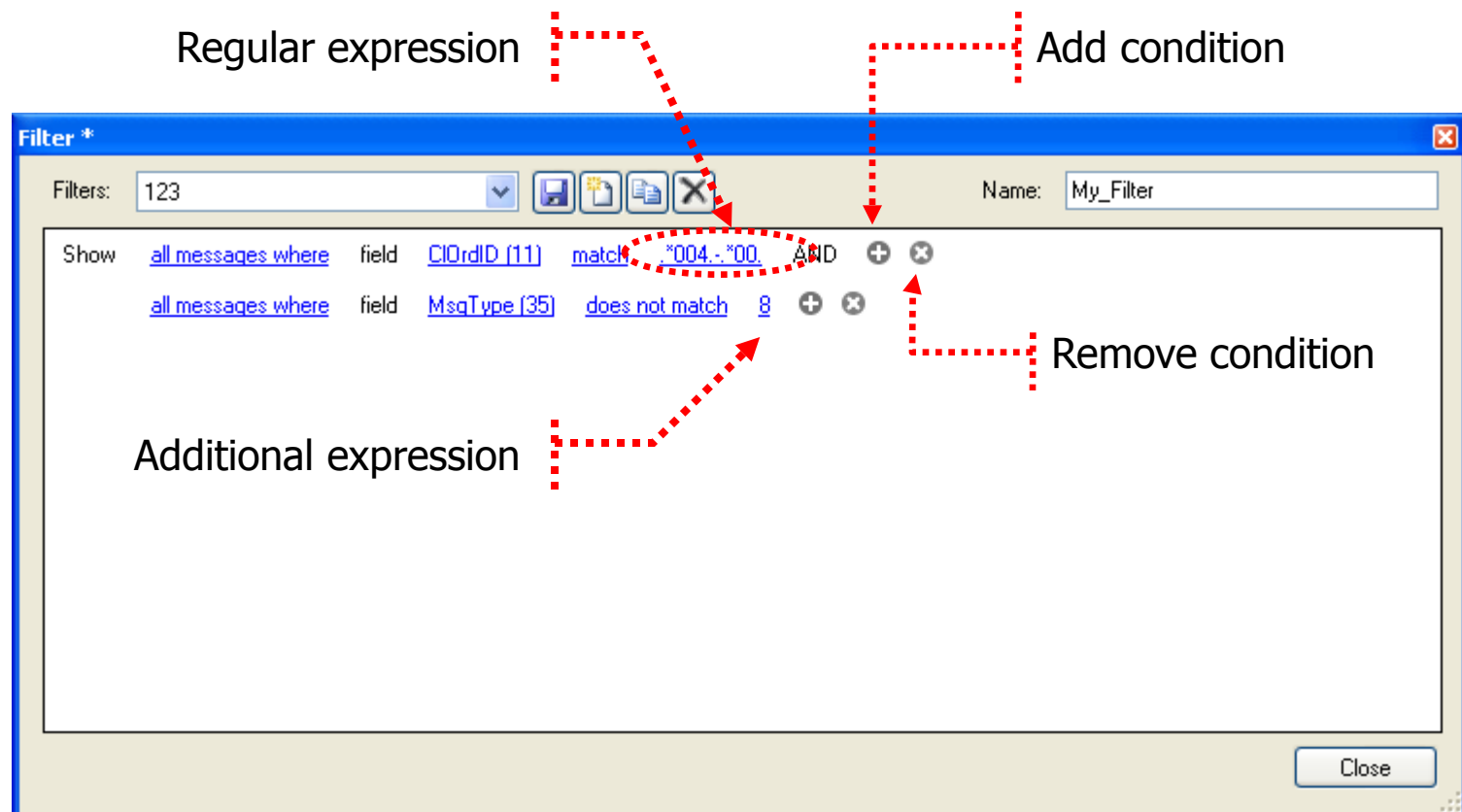
You can modify or delete a preset filter. First, apply any filter and then select <Edit> or <Delete> from the Filter drop-down list.

You can save a back copy of the current filter by clicking on  button in your Filter window tool bar.



Data filter

You can use a regular expression in the filter. Enter it into the <value> field. This expression can be combined with other expressions if necessary.



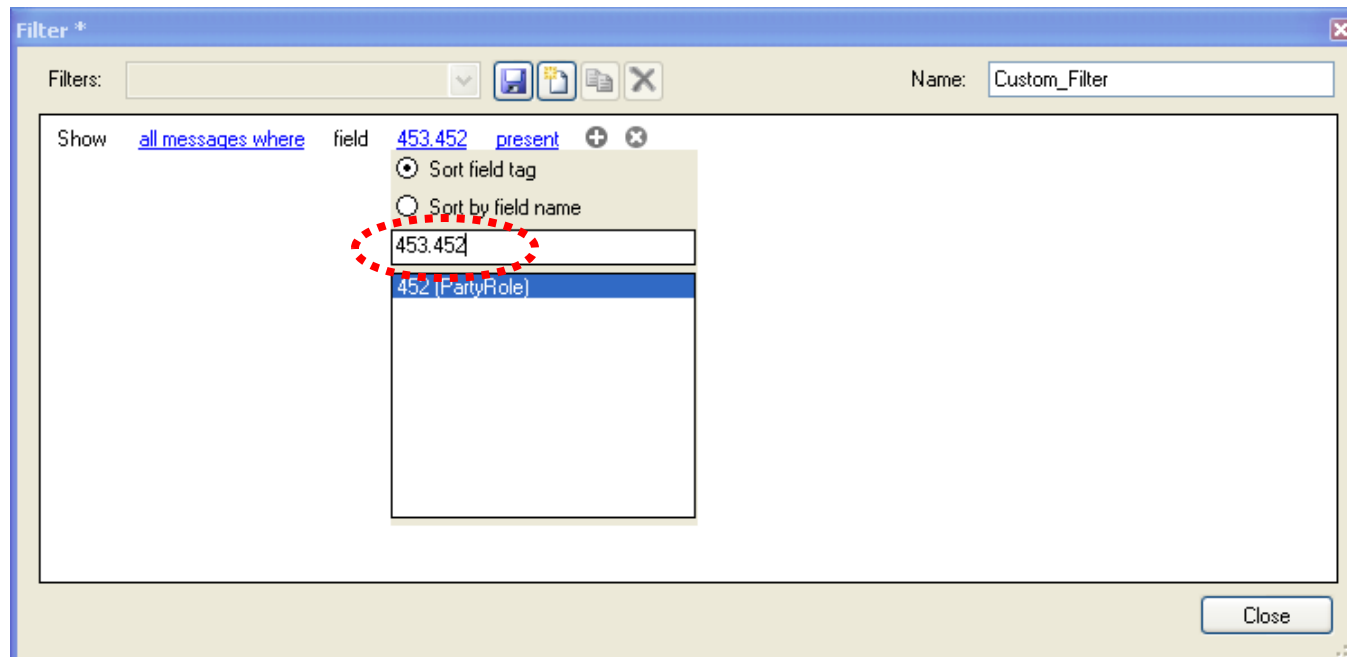
**New!**

Data filter

You can address a field tag, which is a part of a repeating group while creating a custom filter.

- Enter a repeating group tag, put a dot [.] and then a field tag, e.g. 453.452.

Thus messages with a repeating group tag 453 that includes tag 452 will be filtered.



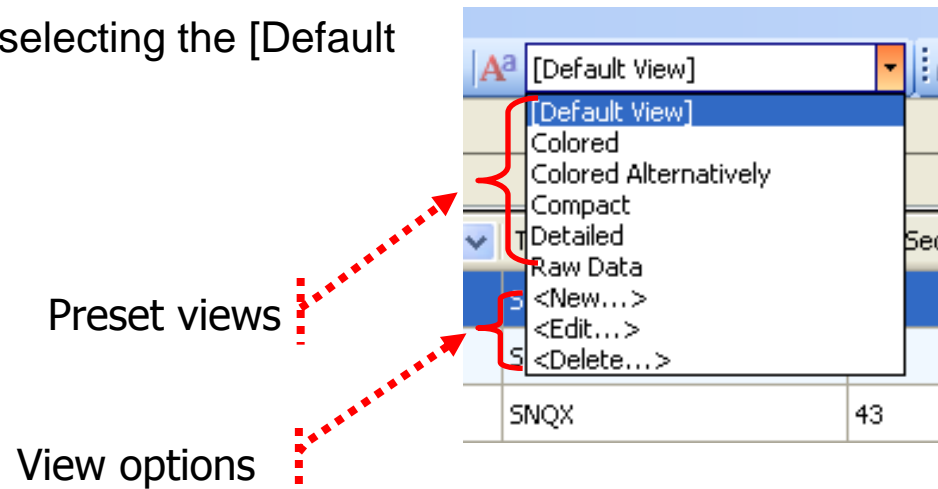
Custom view

You can customize message view (a set of displayed columns) in the table. Click on the view list to do that.

The drop-down menu includes:

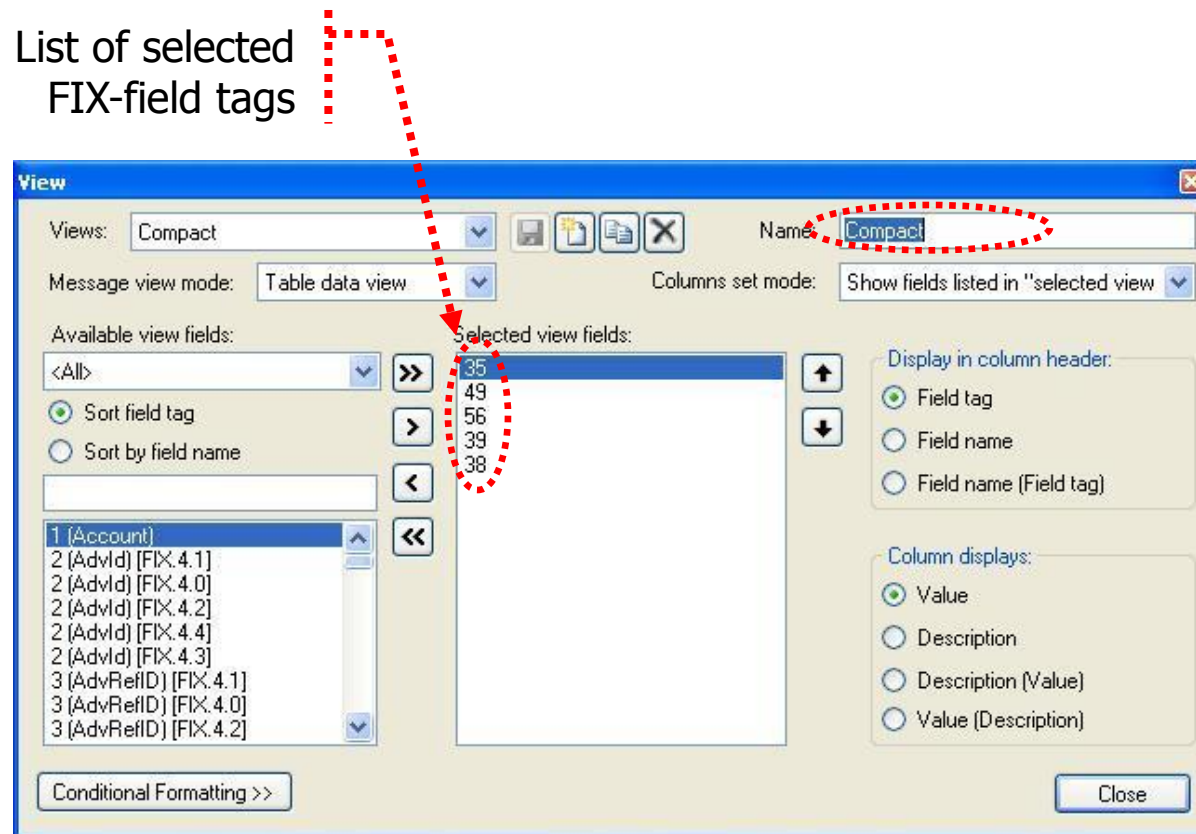
- The list of preset views that can be applied immediately after selecting one of them
- Options for creating, modifying and deleting views

You can reset a view by selecting the [Default View] option.



Custom view

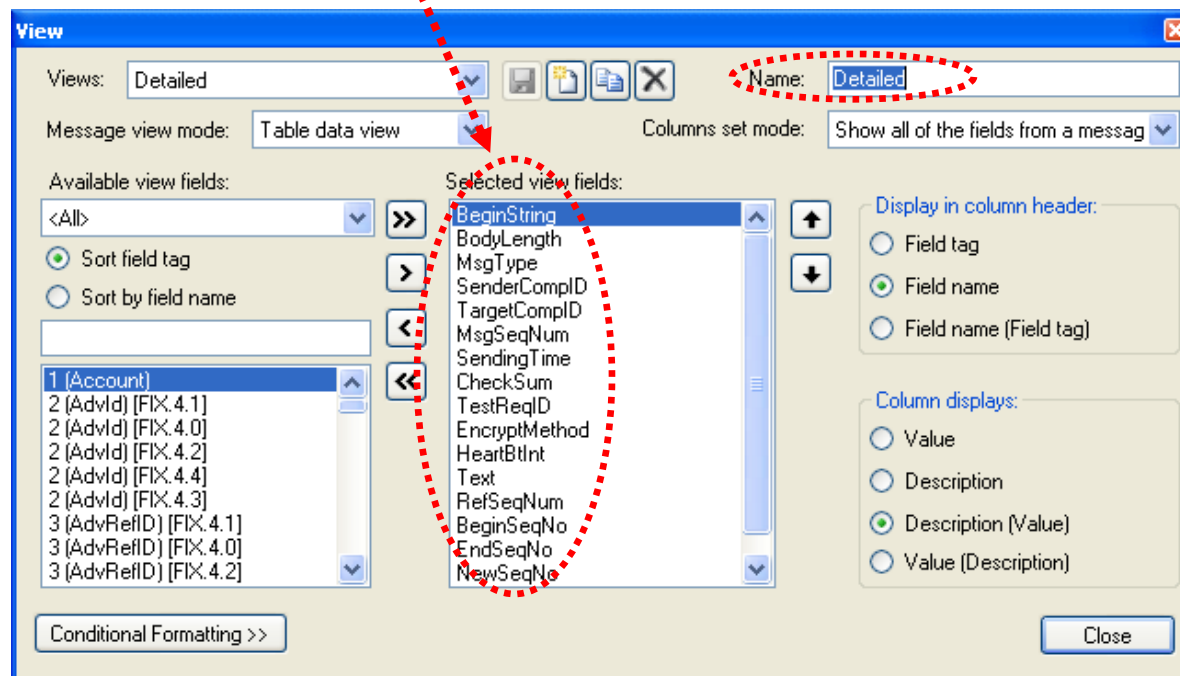
The “Compact” preset view allows showing messages in compact form, i.e. numbers for tags and values without description.



Custom view

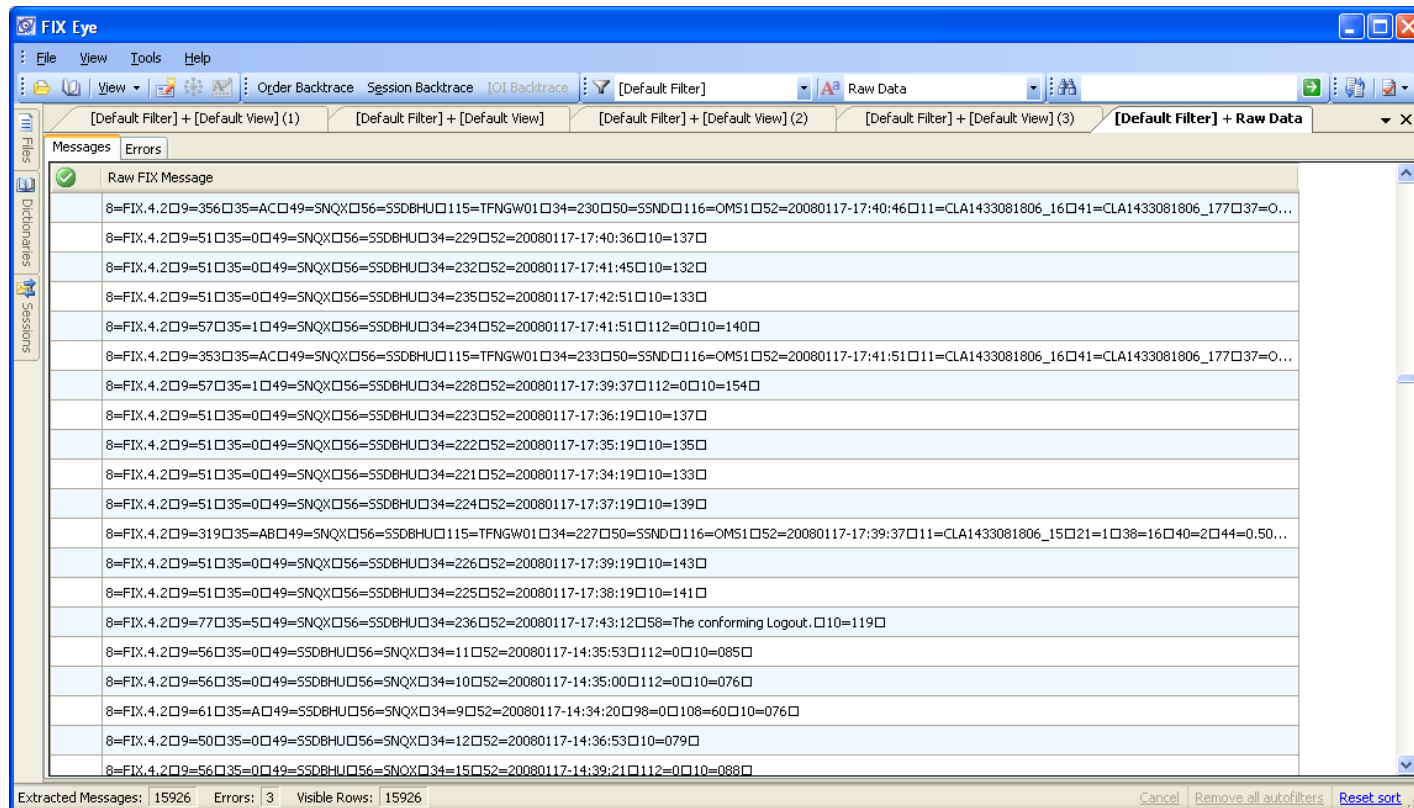
The “Detailed” preset view allows showing maximum information about messages. Tag names are displayed and field values are described.

List of selected
FIX-fields names



Custom view

The “Raw Data” preset view allows displaying messages in their raw view, i.e. as a row of symbols.



Custom view



The “Colored” preset view allows displaying messages in different colors, i.e. a particular color is assigned to every message type, to facilitate visual perception of table data.

The screenshot shows the FIX Eye application window with a table of messages. The table has the following columns: BeginString (8), BodyLength (9), MsgType (35), SenderCompID (49), TargetCompID (56), MsgSeqNum (34), and SendingTime (52). The messages are color-coded by type: Logon (A) is pink, Quote (5) is yellow, Market Data - Incremental Refresh (X) is green, Trade Capture Report (AE) is cyan, Position Report (AP) is light blue, and Execution Report (8) is red. The status bar at the bottom shows 'Extracted Messages: 15926', 'Errors: 3', and 'Visible Rows: 15926'.

BeginString (8)	BodyLength (9)	MsgType (35)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum (34)	SendingTime (52)
FIX.4.4	60	Logon (A)	CORE	PINK	21	20050214-21:02:06
FIX.4.4	394	Quote (5)	CORE	PINK	1	20050214-21:02:06
FIX.4.4	432	Market Data - Incremental Refresh (X)	CORE	PINK	2	20050214-21:02:06
FIX.4.4	613	Trade Capture Report (AE)	CORE	PINK	3	20050214-21:02:06
FIX.4.4	350	Position Report (AP)	CORE	PINK	4	20050214-21:02:06
FIX.4.4	396	Execution Report (8)	CORE	PINK	5	20050214-21:02:06
FIX.4.4	382	Quote (5)	CORE	PINK	6	20050214-21:02:06
FIX.4.4	431	Market Data - Incremental Refresh (X)	CORE	PINK	7	20050214-21:02:06
FIX.4.4	624	Trade Capture Report (AE)	CORE	PINK	8	20050214-21:02:06
FIX.4.4	354	Position Report (AP)	CORE	PINK	9	20050214-21:02:06
FIX.4.4	403	Execution Report (8)	CORE	PINK	10	20050214-21:02:06
FIX.4.4	390	Quote (5)	CORE	PINK	11	20050214-21:02:06
FIX.4.4	599	Trade Capture Report (AE)	CORE	PINK	12	20050214-21:02:06
FIX.4.4	427	Market Data - Incremental Refresh (X)	CORE	PINK	13	20050214-21:02:06
FIX.4.4	335	Position Report (AP)	CORE	PINK	14	20050214-21:02:06
FIX.4.4	397	Execution Report (8)	CORE	PINK	15	20050214-21:02:06
FIX.4.4	395	Quote (5)	CORE	PINK	16	20050214-21:02:06
FIX.4.4	427	Market Data - Incremental Refresh (X)	CORE	PINK	17	20050214-21:02:06
FIX.4.4	620	Trade Capture Report (AE)	CORE	PINK	18	20050214-21:02:06
FIX.4.4	373	Position Report (AP)	CORE	PINK	19	20050214-21:02:06
FIX.4.4	400	Execution Report (8)	CORE	PINK	20	20050214-21:02:06

Custom view

Select the <New> item from the previous menu and set up an appropriate condition to create a new view.

List of selected FIX-fields

List of available FIX-fields

New view name


Field displaying rules:

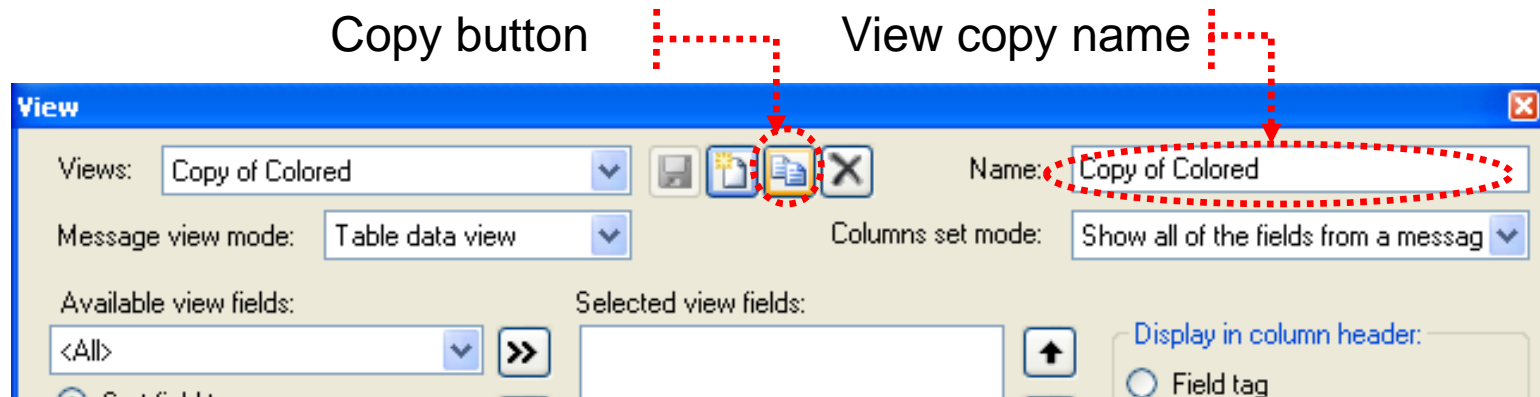
- fields listed in "selected view fields"
- all fields except for listed in "selected view fields"

Custom view



You can modify or delete a preset view. First, apply any view and then select <Edit> or <Delete> from the View drop-down list.

You can save a back copy of the current view by clicking on the  button in your View window tool bar.

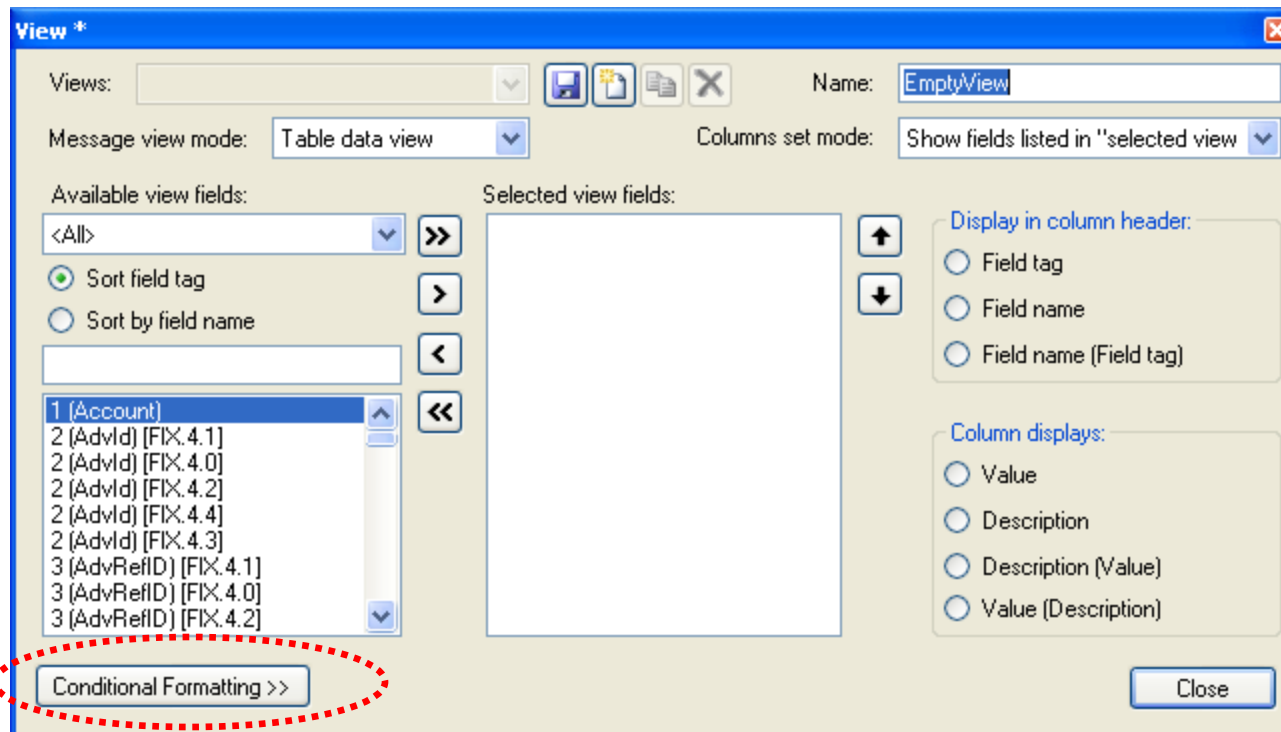


Custom view



You can create your own color theme in any view.


- Click the “Conditional Formatting” button and add the required formatting rules to the view.



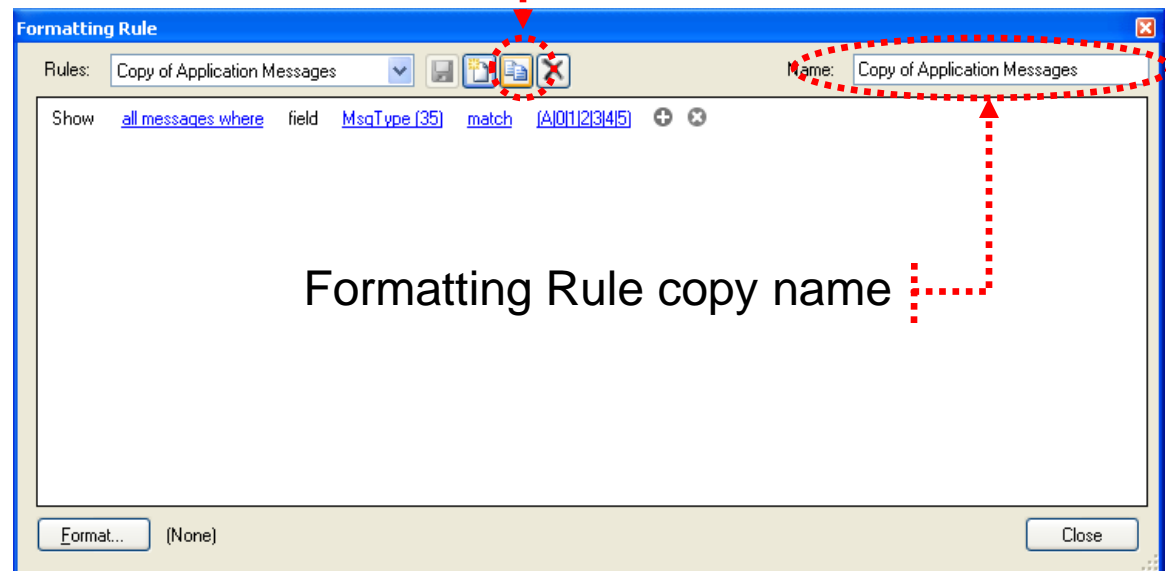
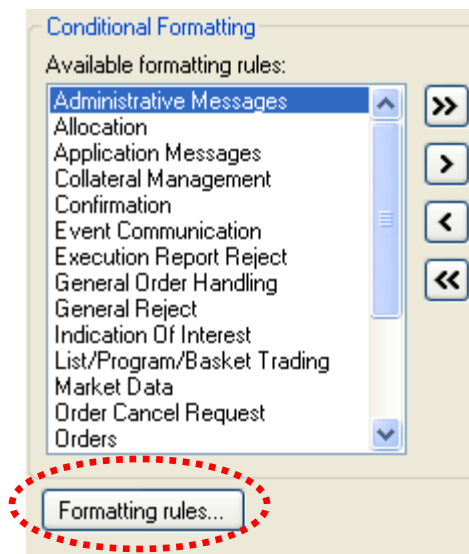
**New!**

Custom view

You can edit formatting rules by clicking the corresponding button in the left bottom corner of the window.

You can save a back copy of the current rule by clicking on the  button in your Formatting Rule window tool bar.

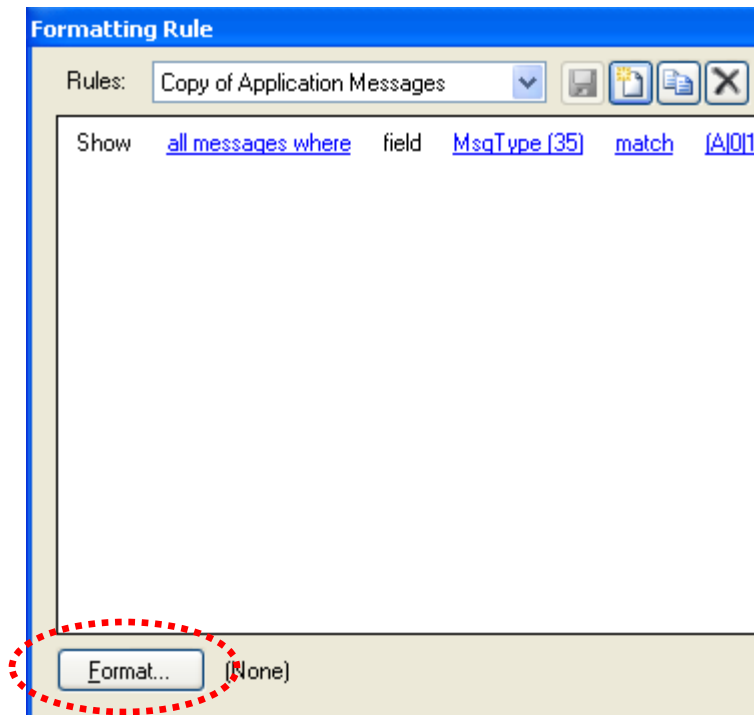
Copy button



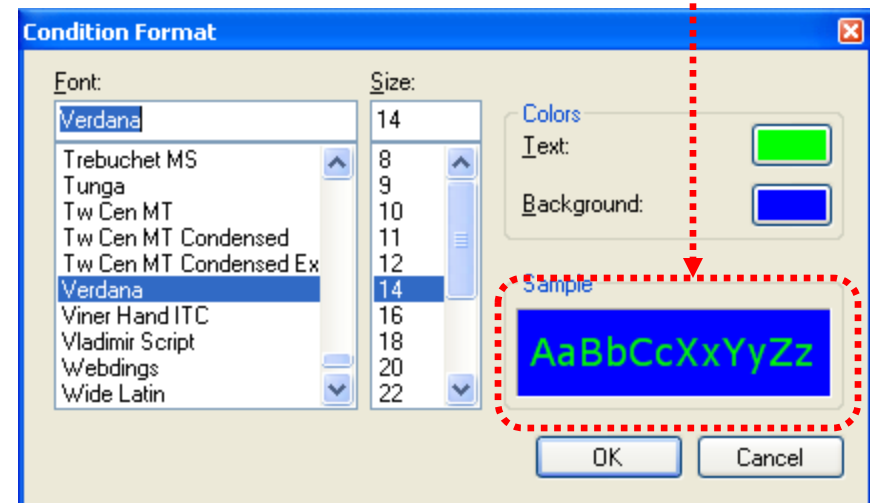
Custom view



Specify the condition and click the “Format” button in the Formatting Rule window to change font style, size and color and background color of messages displayed in the table. The “Sample” box allows checking the result of changes being made.



Sample box

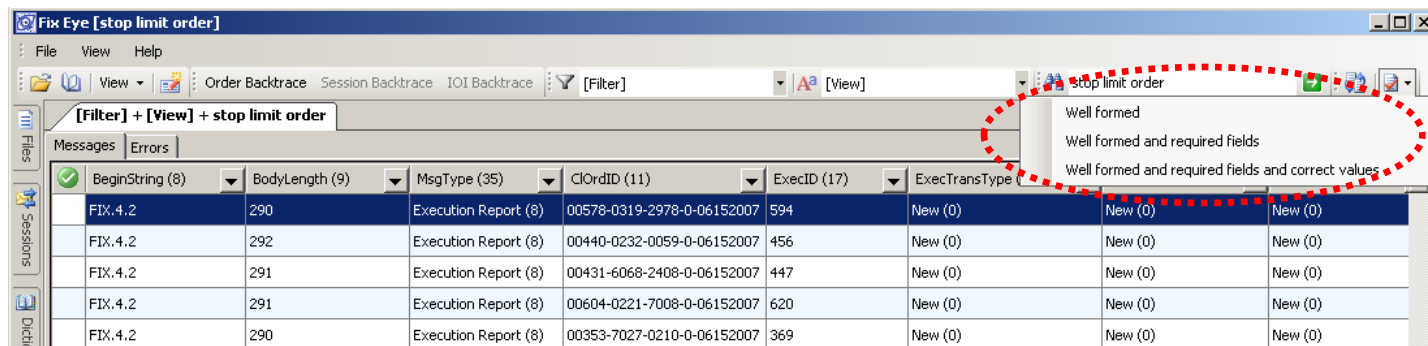


Message validation

Click the message validation button to validate messages in the table against FIX-rules.

Messages have 3 levels of validation:



- Well formed – message length and checksum match the corresponding field values
- Well formed and required fields – the same as above and all mandatory fields are present in a message
- Well formed and required fields and correct values – the same as above, plus message fields have correct values (e.g. numeric field has a numeric value, date field has some sensible date etc)

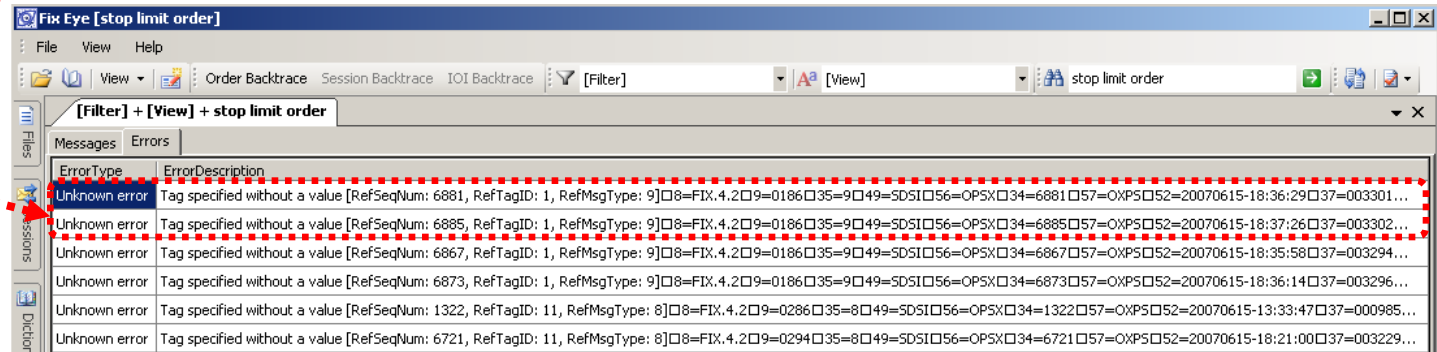
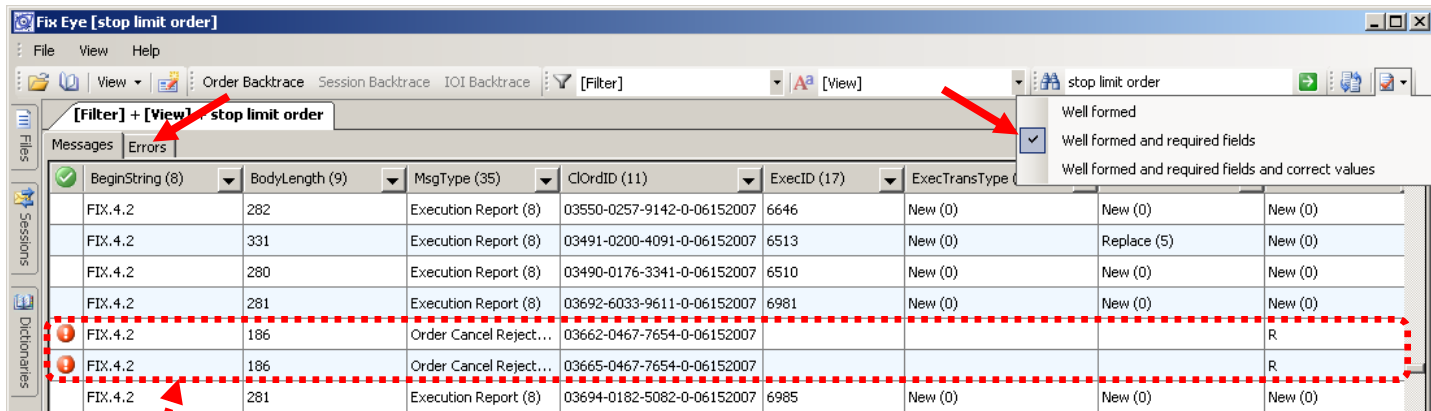


The screenshot shows the Fix Eye application window titled "Fix Eye [stop limit order]". The interface includes a menu bar (File, View, Help), a toolbar with buttons for "View", "Order Backtrace", "Session Backtrace", "IOI Backtrace", and "Filter", and a "View" dropdown menu. Below the toolbar is a tabbed interface with "Messages" and "Errors" tabs. The "Messages" tab is active, displaying a table with columns: BeginString (8), BodyLength (9), MsgType (35), ClOrdID (11), ExecID (17), and ExecTransType. The table contains five rows of data for "FIX.4.2" Execution Reports. A red dashed circle highlights a validation dropdown menu that is open, showing three options: "Well formed", "Well formed and required fields", and "Well formed and required fields and correct values".

BeginString (8)	BodyLength (9)	MsgType (35)	ClOrdID (11)	ExecID (17)	ExecTransType
FIX.4.2	290	Execution Report (8)	00578-0319-2978-0-06152007	594	New (0)
FIX.4.2	292	Execution Report (8)	00440-0232-0059-0-06152007	456	New (0)
FIX.4.2	291	Execution Report (8)	00431-6068-2408-0-06152007	447	New (0)
FIX.4.2	291	Execution Report (8)	00604-0221-7008-0-06152007	620	New (0)
FIX.4.2	290	Execution Report (8)	00353-7027-0210-0-06152007	369	New (0)

Message validation

- Invalid messages are marked in the table with  icon.
- Related error descriptions are placed into an error-tab of this data window. Double-click on the  icon to see the detailed description of an error.

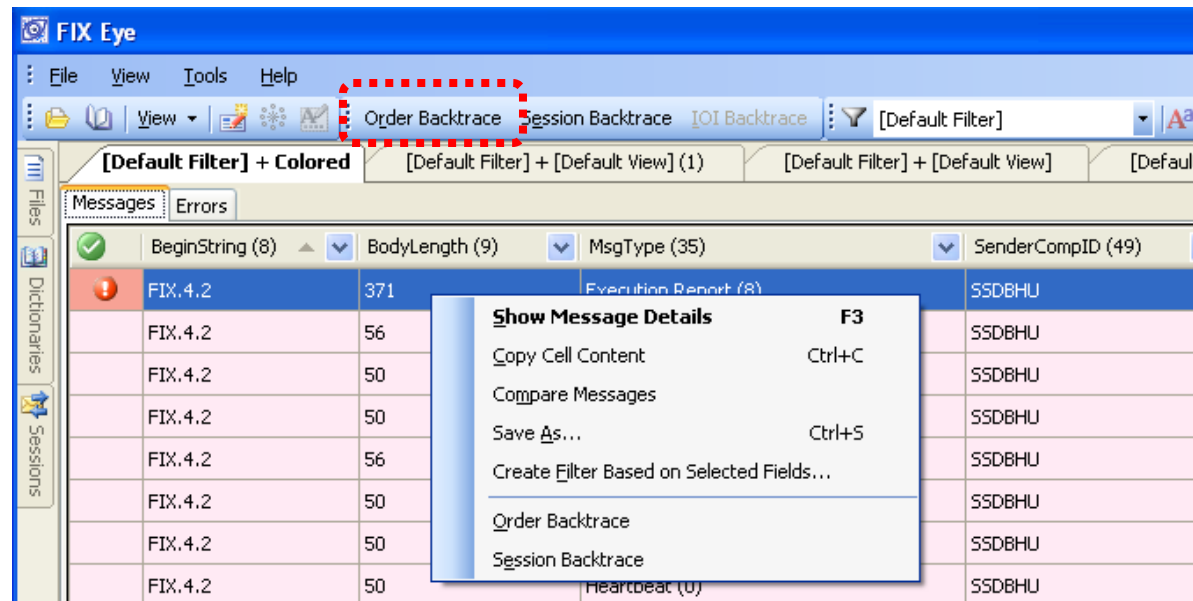


Invalid messages and descriptions of errors in them

Order backtrace

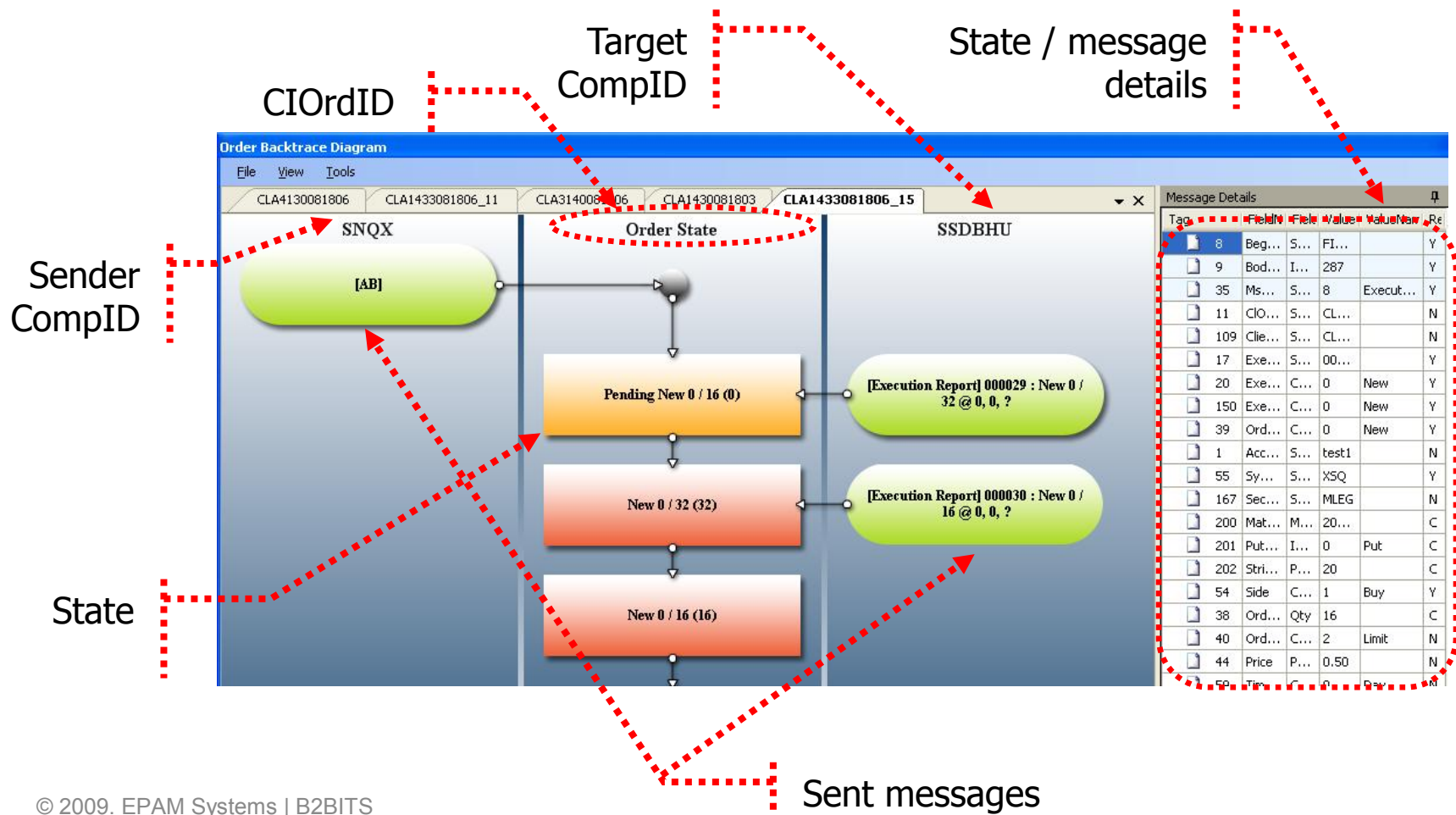
This feature shows a trade process as a chart of its states defined by related FIX-messages.

- Right-click on a message and select “Order Backtrace” from the context menu to see the chart.
- Click on the “Order Backtrace” button on the menu bar to open a form with all previous back traces that have not been closed yet.



Order backtrace

- Click on a message or a state shape to see the related object details as a table. This table can either be docked on this window or detached as a separate panel.

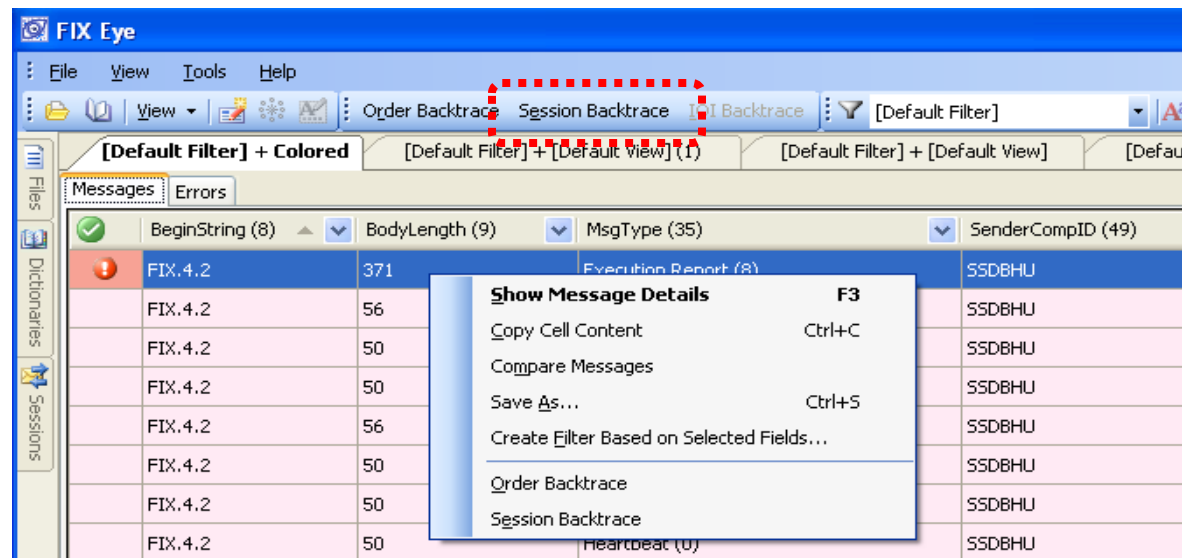


Session backtrace



This feature shows a session process as a chart consisting of its states defined by related Logon and Logout messages and Test Requests.

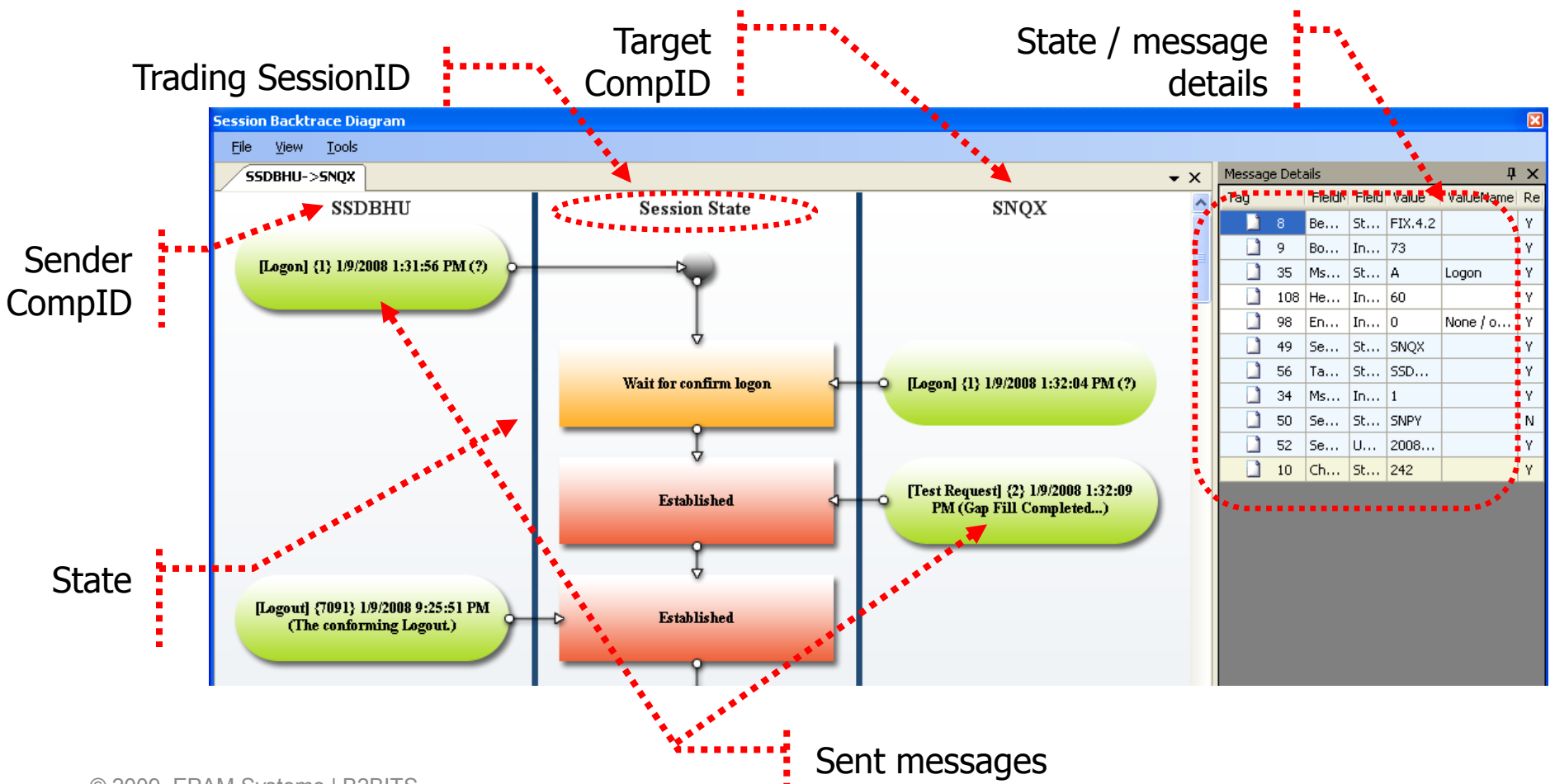
- Right-click on a message and select “Session Backtrace” from the context menu to see the chart.
- Click on the “Session Backtrace” button on the menu bar to open a form with all previous back traces that have not been closed yet.



Session backtrace



- Click on a message or a state shape to see the related object details as a table. This table can either be docked on this window or detached as a separate panel.



Order / Session backtrace

You can customize text displayed in shapes. Go to “Tools -> Options” to do that.

It is possible to create a dedicated string for each message and state type. It is also possible to put a field value into the string. Use %<tag>% string to address a specific tag or select a tag from the drop-down list at the bottom of the form.

The screenshot shows the 'Diagram Settings' dialog box with two main sections:

State Type	Pattern Text
Order	%39% %14% / %38% (%151%)
Session	%58%
IOI	%39% %14% / %38% (%151%)

Message Type	Pattern Text
Execution Report (8)	[%35%] %17% : %150% %14% / %38% @ %32%, %31%, ...
New Order - Single (D)	[%35%] %11% %54% %38% %55% @ %44% (%40%) %
Order Cancel/Replace Request (G)	[%35%] %11% %54% %38% %55% @ %44% (%40%)
Order Cancel Request (F)	[%35%] %11%
Order Cancel Reject (9)	[%35%] for %434%, reason: %102% (%58%)
Logon (A)	[%35%] {%34%} %52% (%58%)
Logout (5)	[%35%] {%34%} %52% (%58%)
Test Request (1)	[%35%] {%34%} %52% (%112%)
**	[%35%] {%34%} %52% (%112%)

Annotations in the image include:

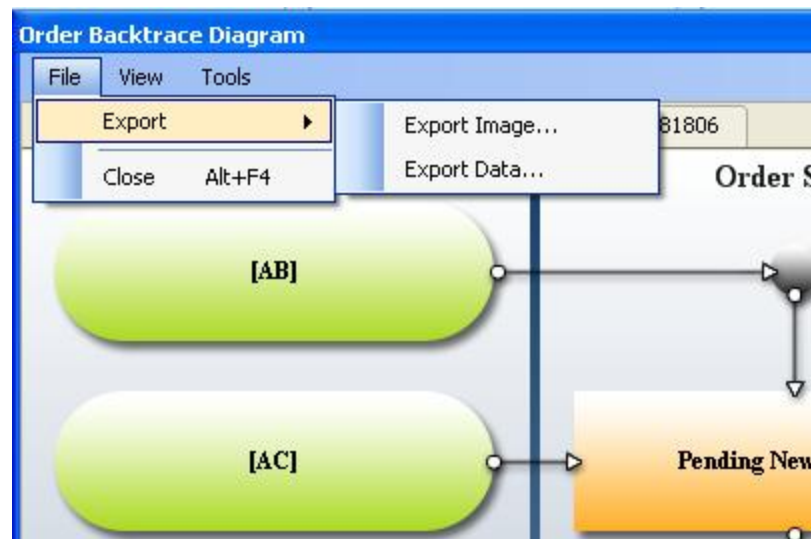
- A red dashed arrow pointing to the 'List of FIX-message types' (the message type table).
- A red dashed arrow pointing to the 'List of FIX-field types' (the dropdown menu at the bottom).
- A red dashed arrow pointing to the 'Insert' button, with a note: 'Insert selected field into message / state pattern'.

Exporting backtrace data



You can export data from Order and Session Backtrace diagrams as an image or a plain text.

- Go to “File -> Export” and choose “Export Data” if you want to save messages in text format or “Export Image” if you want to save a diagram.

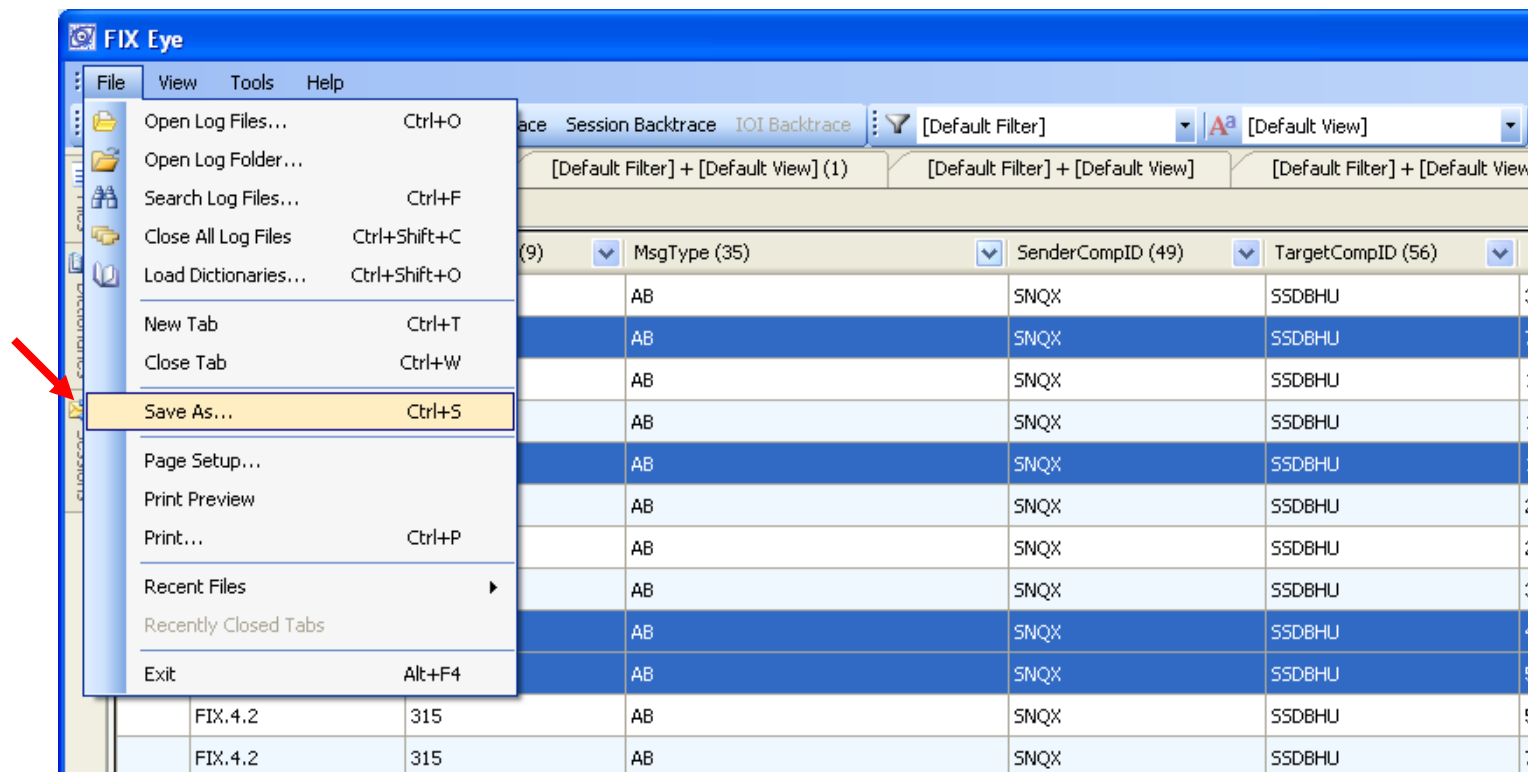


“Save as type” drop-down menu in the next window will provide you with a choice of file format

Exporting table data

You can export table data to a separate text file

- Select cells in the table
- Go to “File -> Save As”
- Choose the text file format (.csv or .fix)



FIX Eye.

Getting Started: The Guide

Further information on the product is available
at: www.b2bits.com, forum.b2bits.com

Contact manufacturer: sales@b2bits.com