

FIX session Logs for FIXEdge C++

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Session Logs Monitoring

FIXICC H2 provides access to FIX session logs.

- FIX messages are displayed in a table
- The table's column names correspond to FIX message tag names
- Users can filter the list of the FIX messages and monitor desired sequences

Server Logs page

To navigate to the **Server Logs** page:

1. Click a server on the **Servers** page and see the **Server Details** page in the Object View layout part
 - To open the **Server Details** page in a new tab, click **View in tab** (item 1 in the figure below)

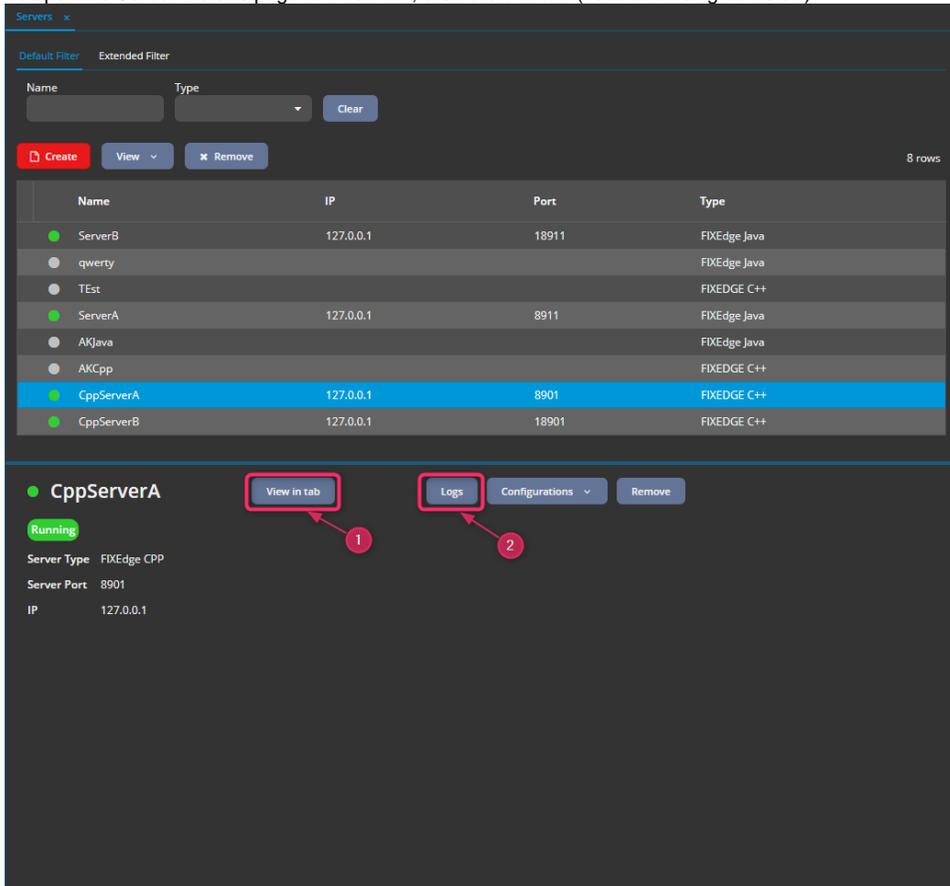


Figure. The **Servers** page.

- On the **Server Details** page, click **Logs** (item 2 in the figure above or item 1 in the figure below)

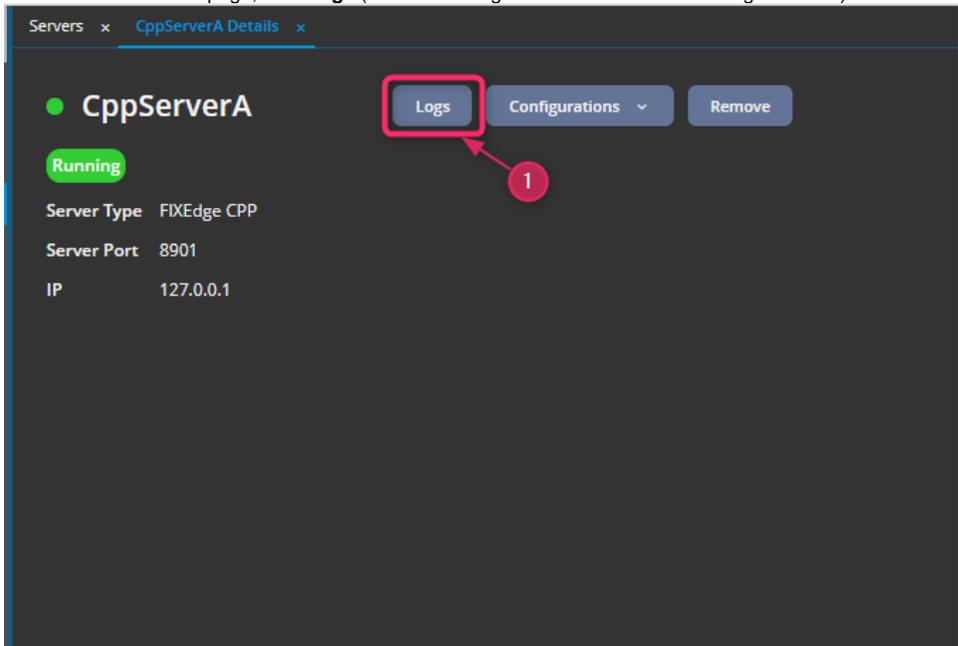
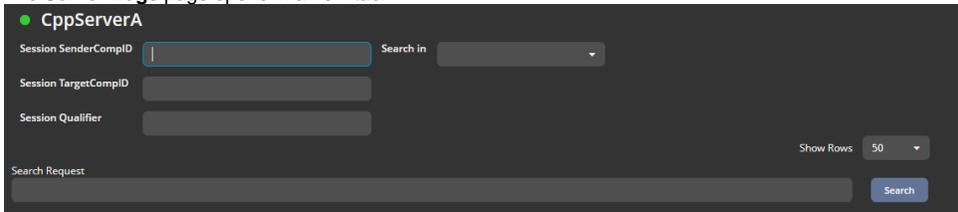


Figure. The **Server Details** page.

- The **Server Logs** page opens in a new tab



The default **Server Logs** page.

Session Logs page

To navigate to the **Session Logs** page:

- Choose a server on the **Servers** page (item 1 in the figure below) or from the menu on the left side (item 3 in the figure below)
- Click **FIX** in the menu on the left side under the server name (item 4 in the figure below) or click **FIX** in the **View** drop-down menu (item 2 in the figure below)

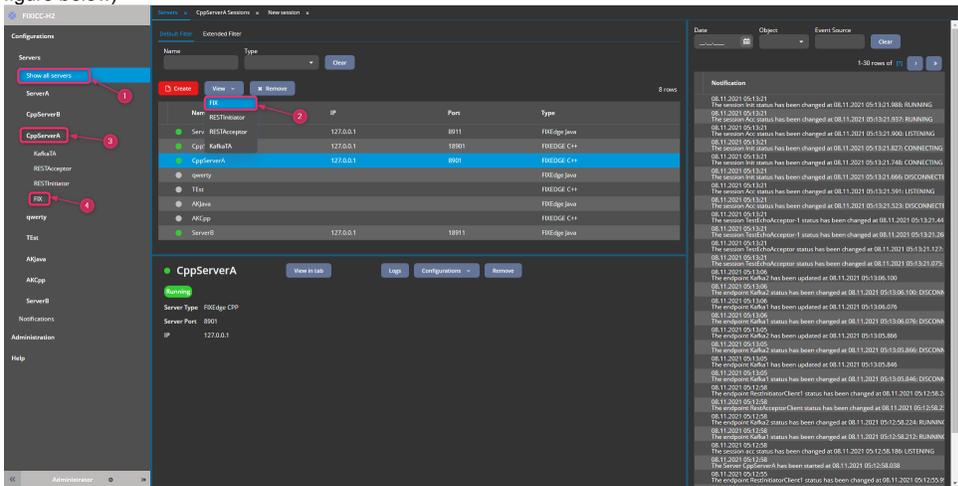


Figure. The **Servers** page.

- The **Server Sessions** page opens
- Click a session in the table
- The **Session Dynamic State** page opens in the Object View layout part
- To open the **Session Dynamic State** page in a new tab, use one of the following options:
 - Click **View in tab** (item 1 in the figure below)

- Double-click the session row
- Click **View** in the context menu (item 2 in the figure below)
- Click **View** under the table (item 3 in the figure below)
- Press **Enter** on your keyboard

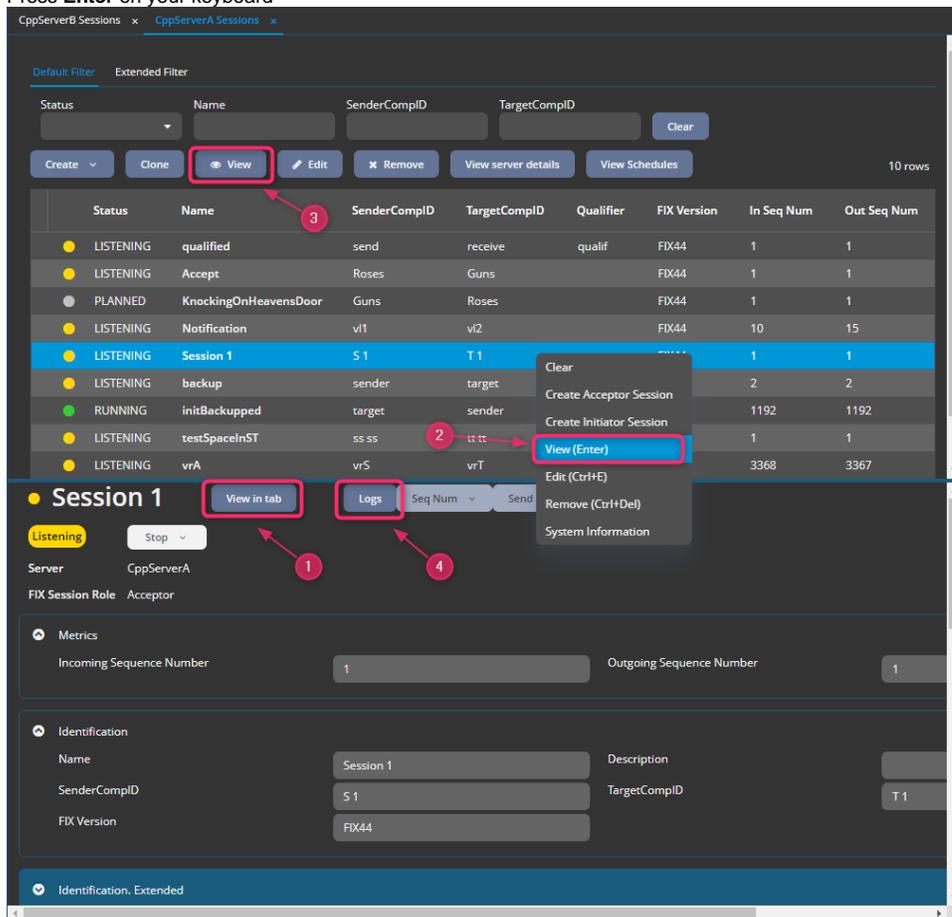


Figure. The *Session Dynamic State* page.

7. On the **Session Dynamic State** page, click **Logs** (item 4 in the figure above or item 1 in the figure below)

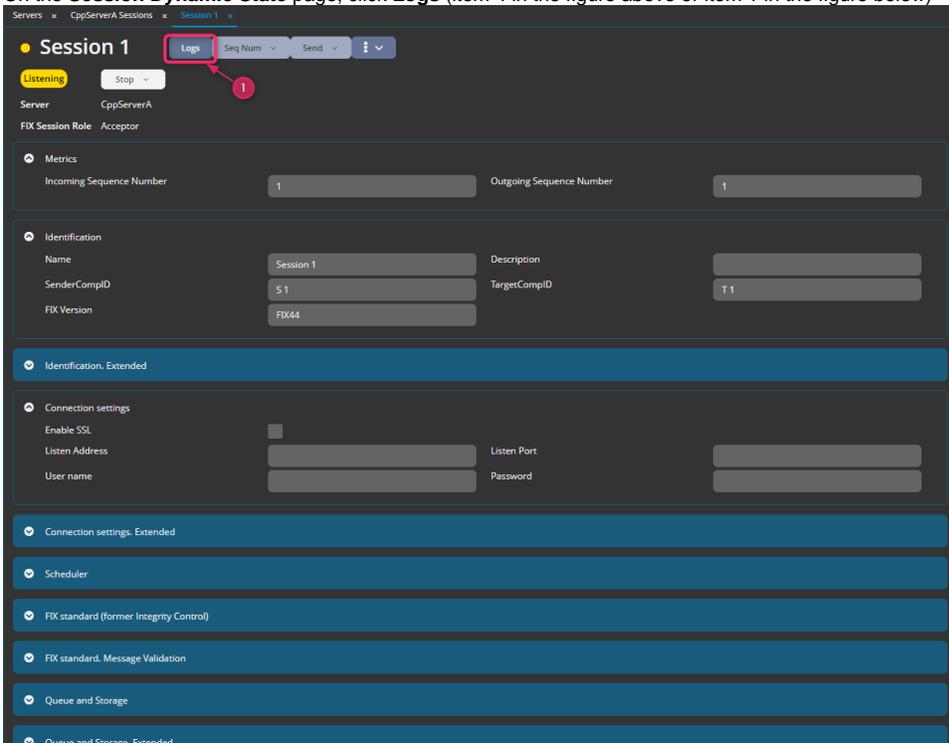
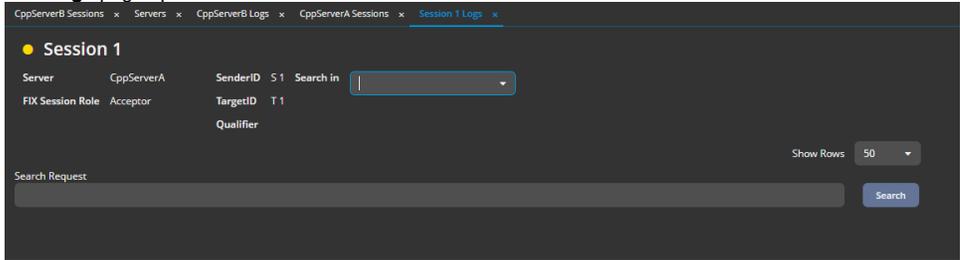


Figure. The **Session Dynamic State** page in a single tab.

8. The **Session Logs** page opens in a new tab



a.

Figure. The default **Session Logs** page.

View settings

Pagination

To set the number of visible rows on the **Server/Session Logs** page:

1. Select a number from the **Show Rows** drop-down menu:



Figure. The **Show Rows** drop-down menu.

2. Click **Search**

After the search is completed (you can see a green sign that says "Completed" next to the **Search Request** field), FIXICC H2 displays the desired number or fewer of FIX messages from the logs. If the number of FIX messages displayed equals the number of the displayed rows, you see the *next page* button under the table

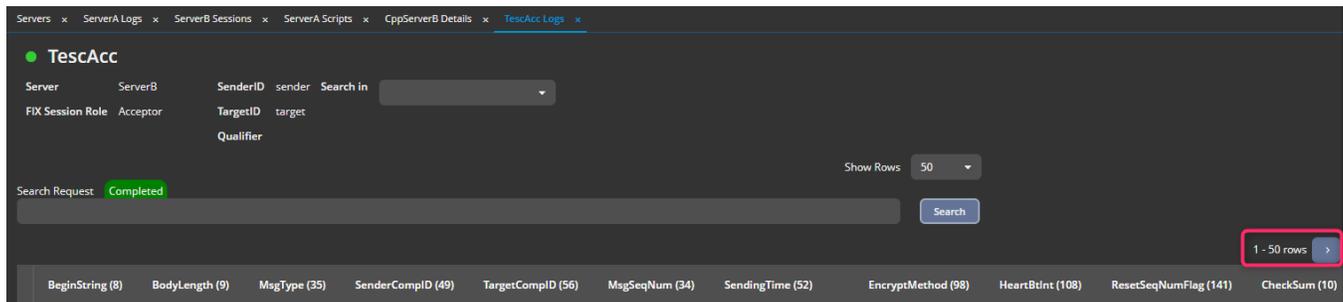


Figure. The *next page* button.

When you click the *next page* button and the search is completed, FIXICC H2 displays the next portion of FIX messages. If there are no messages corresponding to the search request then the table does not change.

If FIXICC H2 displays the next portion of the FIX messages, you can see the *previous page* and *the first page* buttons. Use the corresponding button to move between pages.

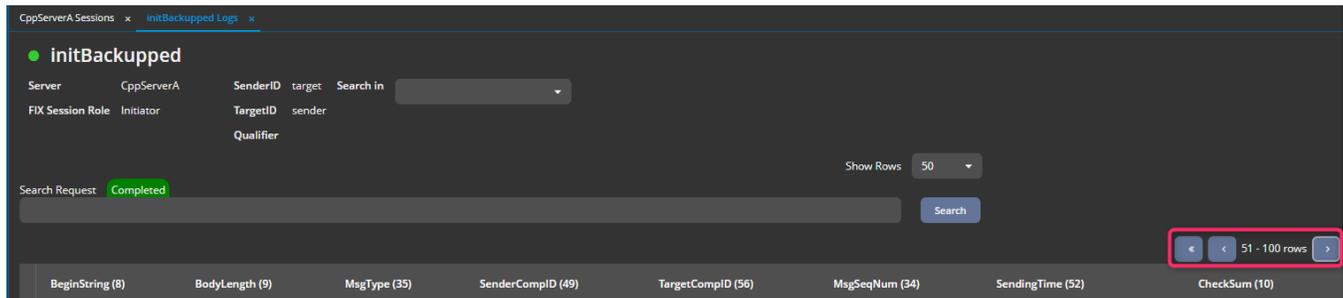
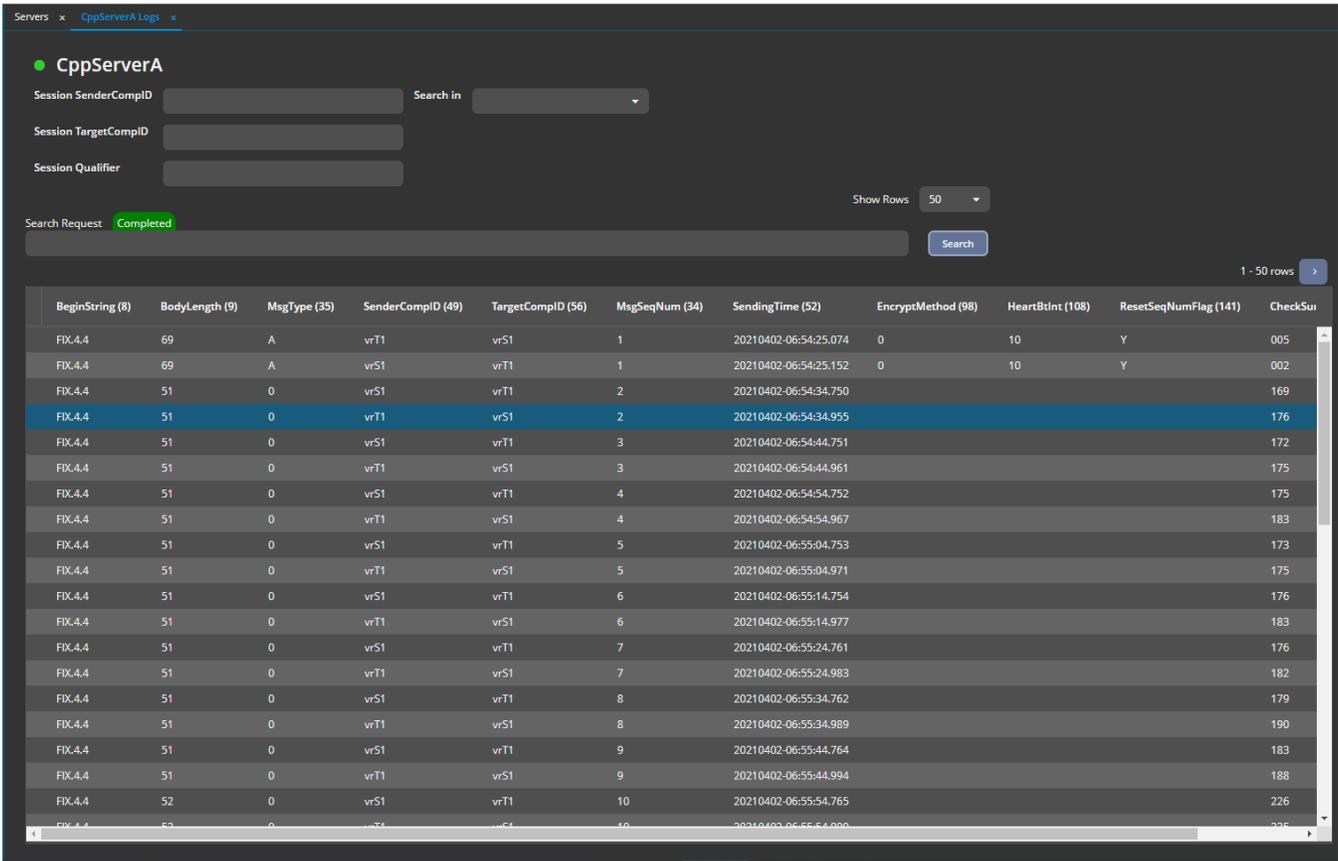


Figure. The *previous page* and *first page* buttons.

Search request

All messages

When the **Server Logs** or **Session Logs** page is opened, you can get all FIX messages in the logs by clicking **Search** when the **Search Request** and the **Search in** fields are empty.



The screenshot shows the 'CppServerA' logs interface. At the top, there are search filters for 'Session SenderCompID', 'Session TargetCompID', and 'Session Qualifier'. A 'Search Request' field contains the text 'Completed'. Below the filters, there is a 'Show Rows' dropdown set to '50' and a 'Search' button. The main area displays a table of FIX messages with the following columns: BeginString (8), BodyLength (9), MsgType (35), SenderCompID (49), TargetCompID (56), MsgSeqNum (34), SendingTime (52), EncryptMethod (98), HeartBtInt (108), ResetSeqNumFlag (141), and CheckSum. The table contains 20 rows of data, with the 4th row highlighted in blue.

BeginString (8)	BodyLength (9)	MsgType (35)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum (34)	SendingTime (52)	EncryptMethod (98)	HeartBtInt (108)	ResetSeqNumFlag (141)	CheckSum
FIX.4.4	69	A	vrT1	vrS1	1	20210402-06:54:25.074	0	10	Y	005
FIX.4.4	69	A	vrS1	vrT1	1	20210402-06:54:25.152	0	10	Y	002
FIX.4.4	51	0	vrS1	vrT1	2	20210402-06:54:34.750				169
FIX.4.4	51	0	vrT1	vrS1	2	20210402-06:54:34.955				176
FIX.4.4	51	0	vrS1	vrT1	3	20210402-06:54:44.751				172
FIX.4.4	51	0	vrT1	vrS1	3	20210402-06:54:44.961				175
FIX.4.4	51	0	vrS1	vrT1	4	20210402-06:54:54.752				175
FIX.4.4	51	0	vrT1	vrS1	4	20210402-06:54:54.967				183
FIX.4.4	51	0	vrS1	vrT1	5	20210402-06:55:04.753				173
FIX.4.4	51	0	vrT1	vrS1	5	20210402-06:55:04.971				175
FIX.4.4	51	0	vrS1	vrT1	6	20210402-06:55:14.754				176
FIX.4.4	51	0	vrT1	vrS1	6	20210402-06:55:14.977				183
FIX.4.4	51	0	vrS1	vrT1	7	20210402-06:55:24.761				176
FIX.4.4	51	0	vrT1	vrS1	7	20210402-06:55:24.983				182
FIX.4.4	51	0	vrS1	vrT1	8	20210402-06:55:34.762				179
FIX.4.4	51	0	vrT1	vrS1	8	20210402-06:55:34.989				190
FIX.4.4	51	0	vrS1	vrT1	9	20210402-06:55:44.764				183
FIX.4.4	51	0	vrT1	vrS1	9	20210402-06:55:44.994				188
FIX.4.4	52	0	vrS1	vrT1	10	20210402-06:55:54.765				226
FIX.4.4	53	0	vrT1	vrS1	10	20210402-06:55:54.990				226

Figure. All FIX messages in logs for the server CppServerA.

Regular expression request

When the **Server Logs** or **Session Logs** page is opened, you can add a new search request according to the following rules:

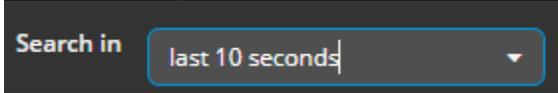
The search request should comply with the format: "Tag number"=*search expression* "Tag number"=*search expression* ...

1. Where *search expression* means a regular expression with the tag values, e.g. "35=[A58]"
2. The space between the "Tag number"=*search expression* elements equals the logical operator **AND**. Please note that the "Tag number"=*search expression* element can be added as many times as you need
3. Pay attention that some symbols used in the *search expression* should be escaped according to the rule:
 - a. " " -> "\"
 - b. "." -> "\."
 - c. "\" -> "\\\"
 - d. "+" -> "\\+"
 - e. "*" -> "*"
 - f. "[" -> "\\["
 - g. "]" -> "\\]"
 - h. "(" -> "\\("
 - i. ")" -> "\\)"
 - j. "|" -> "\\|"
 - k. "?" -> "\\?"
 - l. "&" -> "\\&"
 - m. "^" -> "\\^"
 - n. "\$" -> "\\\$"
 - o. "\$" -> "\\\$"
4. For more information on regular expressions rules, use the following [link](#).

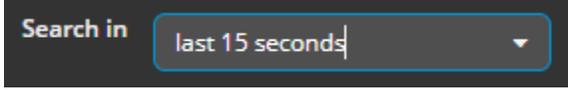
Search in a time interval

When the **Server Logs** or **Session Logs** page is opened, you can choose a time interval for the search to be repeated from one of the options from **Search in** in the drop-down menu:

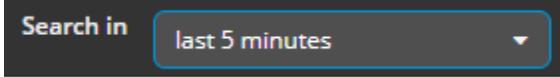
- last 10 seconds - repeat the search in a 10 second interval after the **Search** button is clicked



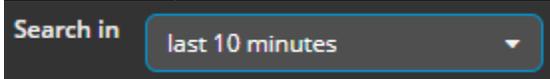
- last 15 seconds - repeat the search in a 15 second interval after the **Search** button is clicked



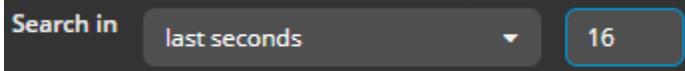
- last 5 minutes - repeat the search in a 5 minute interval after the **Search** button is clicked



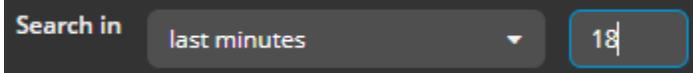
- last 10 minutes - repeat the search in a 10 minute interval after the **Search** button is clicked



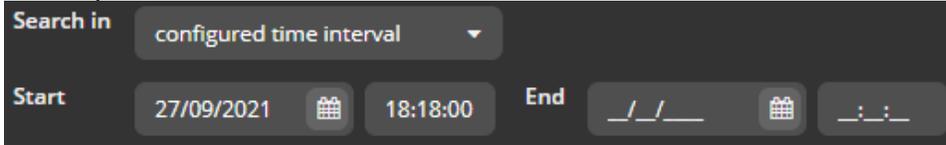
- last seconds - FIXICC H2 displays a field for entering the exact number of seconds. Enter an integer positive value to complete the search interval.



- last minutes - FIXICC H2 displays a field for entering the exact number of minutes. Enter a positive integer value to complete the search interval.



- configured time interval - FIXICC H2 displays fields to enter the desired time interval. Pick the date/time or date for the **Start** and **End** of the interval or just enter one value.



After choosing an interval and clicking the **Search** button, FIXICC H2 displays the messages that contain tag 52's value in the desired interval.

Search by session

On the **Server Logs** page you have the following options:

- To add identification parameters for a given session, enter them in the **Session SenderCompID**, **Session TargetCompID**, **Session Qualifier** fields. The entered parameters are added to the search request.

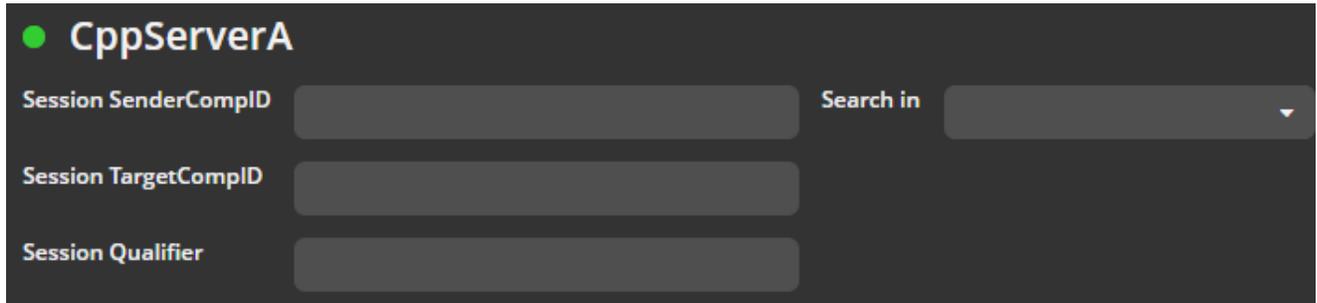


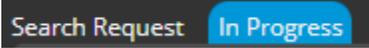
Figure. The session identifications for the FIXEdge C++ server.

Search Results

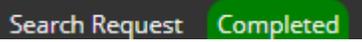
When the **Session Logs** or the **Server Logs** page is opened, you can form the search request by:

- adding regular expressions in the **Search Request** field
- configuring the time interval
- adding the session identification
- combining several options

When you click **Search**, FIXICC H2 displays a blue sign with the text "In Progress" under the **Search Request** field.



After the search is completed FIXICC H2 displays the table with the FIX messages from the logs and a green sign with the text "Completed" under the **Search Request** field.



If an error appears FIXICC H2 displays an error form with an explanation text and a red sign with the following error text under the **Search Request** field.



Message Detailed View

When the **Session Logs** or **Server Logs** page is opened, to find more details for a given FIX message, click the corresponding row in the table:

A screenshot of the application interface showing a table of FIX messages. The table has columns: BeginString (8), BodyLength (9), MsgType (35), SenderComplID (49), TargetComplID (56), MsgSeqNum (34), SendingTime (52), CheckSum (10), SenderSubID (50), TargetSubID (57), and OrigSendingTime (1). One row is highlighted in blue. Below the table, there is a 'Details' section with a table of tags and values, and a large text area showing the raw FIX message.

BeginString (8)	BodyLength (9)	MsgType (35)	SenderComplID (49)	TargetComplID (56)	MsgSeqNum (34)	SendingTime (52)	CheckSum (10)	SenderSubID (50)	TargetSubID (57)	OrigSendingTime (1)
FX.4.4	57	0	sender	target	119	20210930-13:16:55.463	077			
FX.4.4	57	0	target	sender	119	20210930-13:16:55.600	070			
FX.4.4	618	AE	target	sender	120	20210930-13:17:09.514	081	DBS	PUBLIC	20050214-16:12:51
FX.4.4	57	0	sender	target	120	20210930-13:17:10.481	061			
FX.4.4	57	0	target	sender	121	20210930-13:17:23.631	063			
FX.4.4	57	0	sender	target	121	20210930-13:17:25.490	068			
FX.4.4	57	0	target	sender	122	20210930-13:17:38.643	073			

Tag	Name	Value
8	BeginString	FX.4.4
9	BodyLength	618
35	MsgType	AE
49	SenderComplID	target
56	TargetComplID	sender
34	MsgSeqNum	120
50	SenderSubID	DBS
57	TargetSubID	PUBLIC

```
8=FIX.4.409=618035=AE049=target056=sender034=120050=057=PUBLIC052=20210930-13:17:09.5140122=20050214-16:12:510571=0000FB64-F3BCD9910150=FD570=ND423=1055=
(IN)A048=003924AG022=1D167=CORP0541=189912300224=200502140225=200502140228=10231=10000223=00106=ABITIBI070=ABY 8.55
00100226=0032=50031=111079=20050214060=20050214-16:12:49064=200502170550=2054=1037=0000FB64-
F3BCD9910453=10448=GINSD447=CD452=10802=30523=01240803=170523=20803=20523=JOHN0803=921=GINSD483=20050214-16:12:490159=0054=2037=0000FB64-
F3BCD9910453=10448=CHASD447=CD452=170802=40523=01640803=170523=23540803=20523=JOE LEE/PAUL.MONTAQUILAD803=90523=NA0803=7D1=SCHWABD10=0810
```

Figure. The FIX messages details.

The raw FIX message is on the right side of the details table.

Repeating groups details

If FIX messages contain repeating groups, FIXICC H2 marks them with a  symbol.

You can see the details of a given repeating group by clicking the row marked with the  symbol.

Servers x CppServerA Logs x CppServerB Logs x

CppServerB

Session SenderCompID Search in configured time interval

Session TargetCompID Start End

Session Qualifier

Search Request Completed Show Rows 50

BeginString (8)	BodyLength (9)	MsgType (35)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum (34)	SendingTime (52)	Checksum (10)	SenderSubID (50)	TargetSubID (57)	OrigSendingTime (16)
FIX.4.4	57	0	sender	target	119	20210930-13:16:55.463	077			
FIX.4.4	57	0	target	sender	119	20210930-13:16:55.600	070			
FIX.4.4	618	AE	target	sender	120	20210930-13:17:09.514	081	DBS	PUBLIC	20050214-16:12:51
FIX.4.4	57	0	sender	target	120	20210930-13:17:10.481	061			
FIX.4.4	57	0	target	sender	121	20210930-13:17:23.631	063			
FIX.4.4	57	0	sender	target	121	20210930-13:17:25.490	068			
FIX.4.4	57	0	target	sender	122	20210930-13:17:38.643	073			

34 rows 1 6 rows

Tag	Name	Value
20	Time	u
32	LastQty	50
31	LastPx	111
75	TradeDate	20050214
60	TransactTime	20050214-16:12:51
64	SettlDate	20050217
552	NoSides	2
10	Checksum	081

Tag	Name	Value
54	Side	1
37	OrderID	0000FB64-F3BCD9910453-1D448-GINS0447-CD452-1D802-30523-01240803-170523-20523-JOHN0803-9D1-GINS0483-20050214-16:12:49D159-0D54-2037-0000FB64-F3BCD9910453-1D448-CHAS0447-CD452-17D802-40523-01640803-170523-23540803-20523-JOE LEE/PAUL MONTAQUILA0803-9D523-NAD0803-701-SCHWAB010-0810
453	NoPartyIDs	1
1	Account	GINS
483	TransBkdTime	20050214-16:12:51
159	AccruedInterestAmt	0

Figure. The details of the repeating group.

If a given repeating group contains several elements, you can choose the desired one from the drop-down above the detailed table.

Servers x CppServerA Logs x CppServerB Logs x

CppServerB

Session SenderCompID Search in configured time interval

Session TargetCompID Start End

Session Qualifier

Search Request Completed Show Rows 50

BeginString (8)	BodyLength (9)	MsgType (35)	SenderCompID (49)	TargetCompID (56)	MsgSeqNum (34)	SendingTime (52)	Checksum (10)	SenderSubID (50)	TargetSubID (57)	OrigSendingTime (16)
FIX.4.4	57	0	sender	target	119	20210930-13:16:55.463	077			
FIX.4.4	57	0	target	sender	119	20210930-13:16:55.600	070			
FIX.4.4	618	AE	target	sender	120	20210930-13:17:09.514	081	DBS	PUBLIC	20050214-16:12:51
FIX.4.4	57	0	sender	target	120	20210930-13:17:10.481	061			
FIX.4.4	57	0	target	sender	121	20210930-13:17:23.631	063			
FIX.4.4	57	0	sender	target	121	20210930-13:17:25.490	068			
FIX.4.4	57	0	target	sender	122	20210930-13:17:38.643	073			

34 rows 1 6 rows

Tag	Name	Value
20	Time	u
32	LastQty	50
31	LastPx	111
75	TradeDate	20050214
60	TransactTime	20050214-16:12:51
64	SettlDate	20050217
552	NoSides	2
10	Checksum	081

1 2

Tag	Name	Value
54	Side	1
37	OrderID	0000FB64-F3BCD9910453-1D448-GINS0447-CD452-1D802-30523-01240803-170523-20523-JOHN0803-9D1-GINS0483-20050214-16:12:49D159-0D54-2037-0000FB64-F3BCD9910453-1D448-CHAS0447-CD452-17D802-40523-01640803-170523-23540803-20523-JOE LEE/PAUL MONTAQUILA0803-9D523-NAD0803-701-SCHWAB010-0810
453	NoPartyIDs	1
1	Account	GINS
483	TransBkdTime	20050214-16:12:51
159	AccruedInterestAmt	0

Figure. Selecting the repeating group element.



Note: The tags in the repeating group are marked with the  symbol.