

UNDERSTANDING CROSS-DATABASE JOINS

Cross-database joins in Tableau allows the **joins** to be carried out on **tables** from **different data sources**

(although with some limitations from the database side on which platforms are compatible)

Cross-database joins require a **multi-connection data source**—that is, we need to create a new connection to each database before joining the tables

DETAILS OF THE DATA SOURCE USED FOR CROSS-DATABASE JOINS

We will be using the below mentioned fictitious spreadsheet and csv file

Players.xlsx

Players Table

Number	Player Name	Generation
101	Kapil	1
102	Sachin	2
103	Gavaskar	1
104	Ganguly	3
105	Dravid	3
106	Kohli	4
107	Dhoni	4

Match.csv

Match Table

Match Number	Player Number	Date
1	101	01-01-1980
2	102	03-05-1987
3	103	03-01-1980
4	104	04-01-1996
5	105	04-01-1996
6	106	09-07-2010
7	107	07-05-2006

STEPS TO CREATE A CROSS-DATABASE JOIN

Step 1: Connect to the first data source e.g.: **Players.xlsx**

Connections [Add](#)

Players
Microsoft Excel

Sheets

Player

New Union

Player (Players)

Filters
0 [Add](#)

Player

Need more data?
Drag tables here to relate them. [Learn more](#)

Sort fields Data source order

☐ Show aliases ☐ Show hidden fields 7 rows

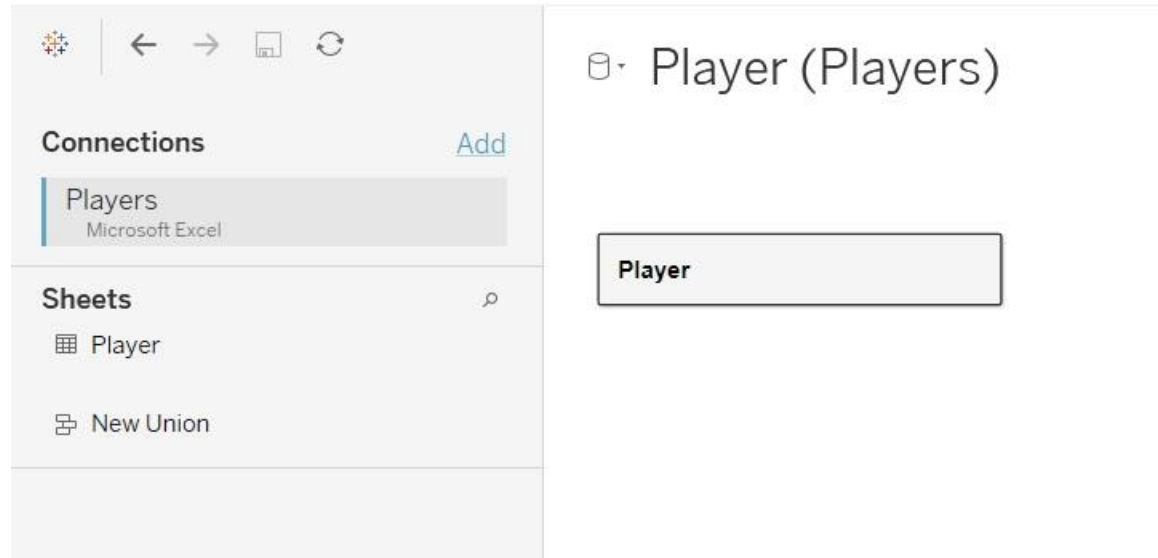
#	Abc	#
Player	Player	Player
Number	Player Name	Generation
101	Kapil	1
102	Sachin	2
103	Gavaskar	1
104	Ganguly	3
105	Dravid	3
106	Kohli	4
107	Dhoni	4

Go to Worksheet

Data Source Sheet 1

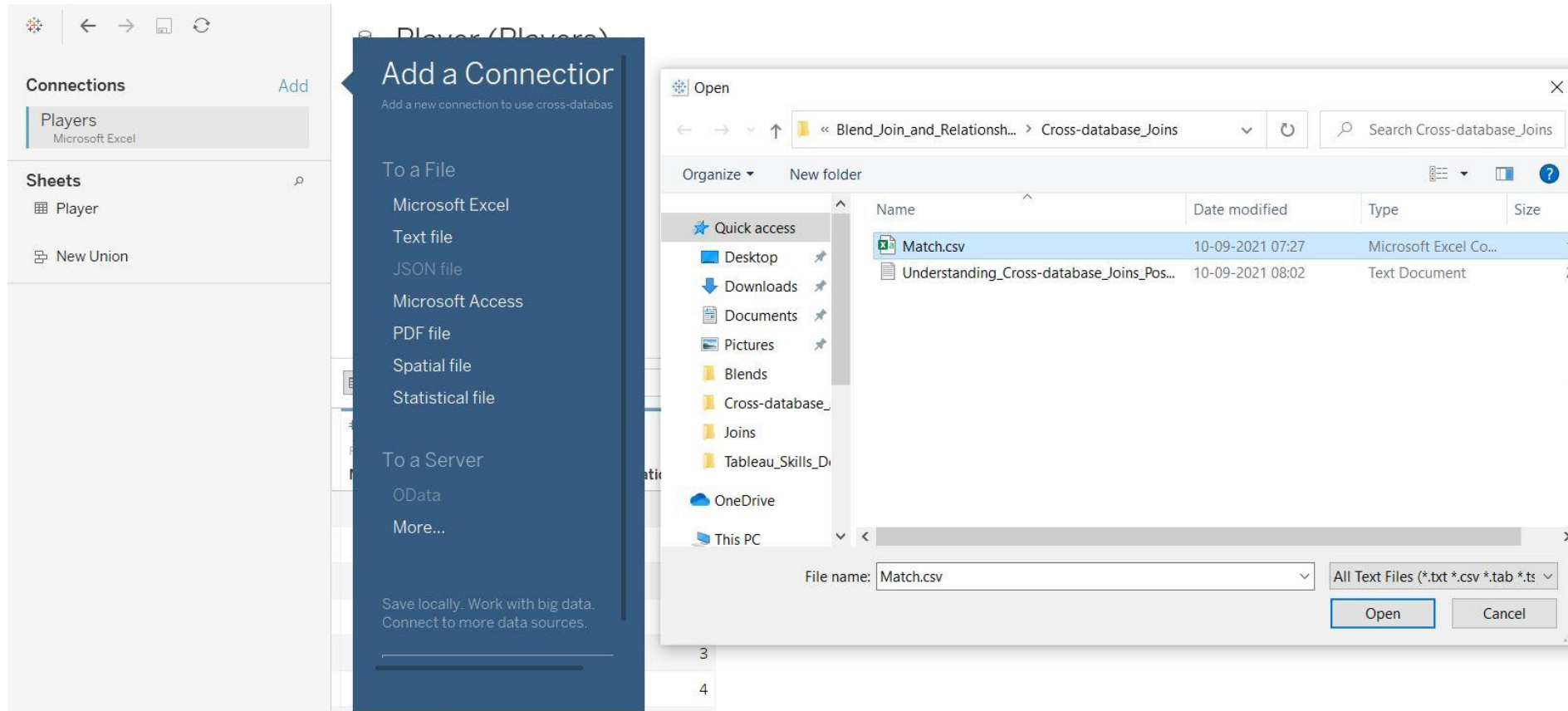
STEPS TO CREATE A CROSS-DATABASE JOIN

Step 2: Use the **Add** option in the data pane to add another connection



STEPS TO CREATE A CROSS-DATABASE JOIN

Step 3: Select the second data source e.g.: **Match.csv** and Click **Open**



STEPS TO CREATE A CROSS-DATABASE JOIN

Step 4: Now both the data sources will be visible in the **Connections** section

Primary connection is indicated by **Blue** color

Secondary connection is indicated by **Orange** color

Click the **Players** data source

The screenshot displays a data tool interface. On the left, the 'Connections' section lists 'Players' (Microsoft Excel) with a blue bar and 'Match' (Text file) with an orange bar. Below it, the 'Files' section lists 'Match.csv' and 'Understanding_...st_Details.txt'. The main area shows a 'Player (Multiple Connections)' view with a 'Player' button and a table of player data.

#	Player	Player Name	Generation
101	Kapil		1
102	Sachin		2
103	Gavaskar		1
104	Ganguly		3
105	Dravid		3
106	Kohli		4
107	Dhoni		4

STEPS TO CREATE A CROSS-DATABASE JOIN

Step 5: Select **Open** from the menu or double-click the **Players table** to open the join canvas (**physical layer**)

The screenshot shows a data tool interface. On the left, a sidebar contains 'Connections' (Players: Microsoft Excel, Match: Text file) and 'Files' (Match.csv, Understanding_...st_Details.txt). The main area is titled 'Player (Multiple Connections)'. A 'Player' table is selected, and a context menu is open with 'Open...' highlighted. Below the menu, a table displays player data. At the bottom right, there are checkboxes for 'Show aliases' and 'Show hidden fields', and a row count of 7.

#	Abc	#
Player	Player	Player
Number	Player Name	Generation
101	Kapil	1
102	Sachin	2
103	Gavaskar	1
104	Ganguly	3
105	Dravid	3
106	Kohli	4
107	Dhoni	4

STEPS TO CREATE A CROSS-DATABASE JOIN

Step 6: Double-click or drag **Match table** to the join canvas

Connections

Add

Players

Microsoft Excel

Match

Text file

Files

☐ Use Data Interpreter

Data Interpreter might be able to clean your Text file workbook.

Match.csv

Understanding_...st_Details.txt

New Union

Player+ (Multiple Connections)

Filters
0 | Add

Player is made of 2 tables. ⓘ

Player

Match.csv

Join

Inner

Left

Right

Full Outer

Data Source

Match.csv

Add new join clause

Sort fields

Data source

Show aliases

Show hidden fields

rows

#	#	🗓	#	Abc	#
Match.csv	Match.csv	Match.csv	Player	Player	Player
Match Number	Player Number	Date	Number	Player Name	Generation

STEPS TO CREATE A CROSS-DATABASE JOIN

Step 7: Select the connecting fields from the drop-down of both tables i.e., Number and Player Number

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Connections

Add

Players

Microsoft Excel

Match

Text file

Files

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Player

Match.csv

Join

Inner

Left

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Full Outer

Data Source

Match.csv

Number

=

Player Number

Add new join clause

Sort fields

Data source

Show aliases

Show hidden fields

7

rows

#	#	#	#	Abc	#
Match.csv	Match.csv	Match.csv	Player	Player	Player
Match Number	Player Number	Date	Number	Player Name	Generation
1	101	01-01-1980	101	Kapil	1
2	102	03-05-1987	102	Sachin	2
3	103	03-01-1980	103	Gavaskar	1
4	104	04-01-1996	104	Ganguly	3
5	105	04-01-1996	105	Dravid	3
6	106	09-07-2010	106	Kohli	4
7	107	07-05-2006	107	Dhoni	4

STEPS TO CREATE A CROSS-DATABASE JOIN

Step 8: When finished, close the join dialog and join canvas

Player+ (Multiple Connections)



STEPS TO CREATE A CROSS-DATABASE JOIN

Step 9: Now we see the final cross-database join created

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Connections

Add

Players

Microsoft Excel

Match

Text file

Files

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Match.csv

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Match.csv

Sort fields

Data source order

☐ Show aliases

☐ Show hidden fields

7

rows

#	#	#	#	Abc	#
Match.csv	Match.csv	Match.csv	Player	Player	Player
Match Number	Player Number	Date	Number	Player Name	Generation
1	101	01-01-1980	101	Kapil	1
2	102	03-05-1987	102	Sachin	2
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