DATA DAY OUT

Prepare & Manage Your Data with Tableau

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Tableau

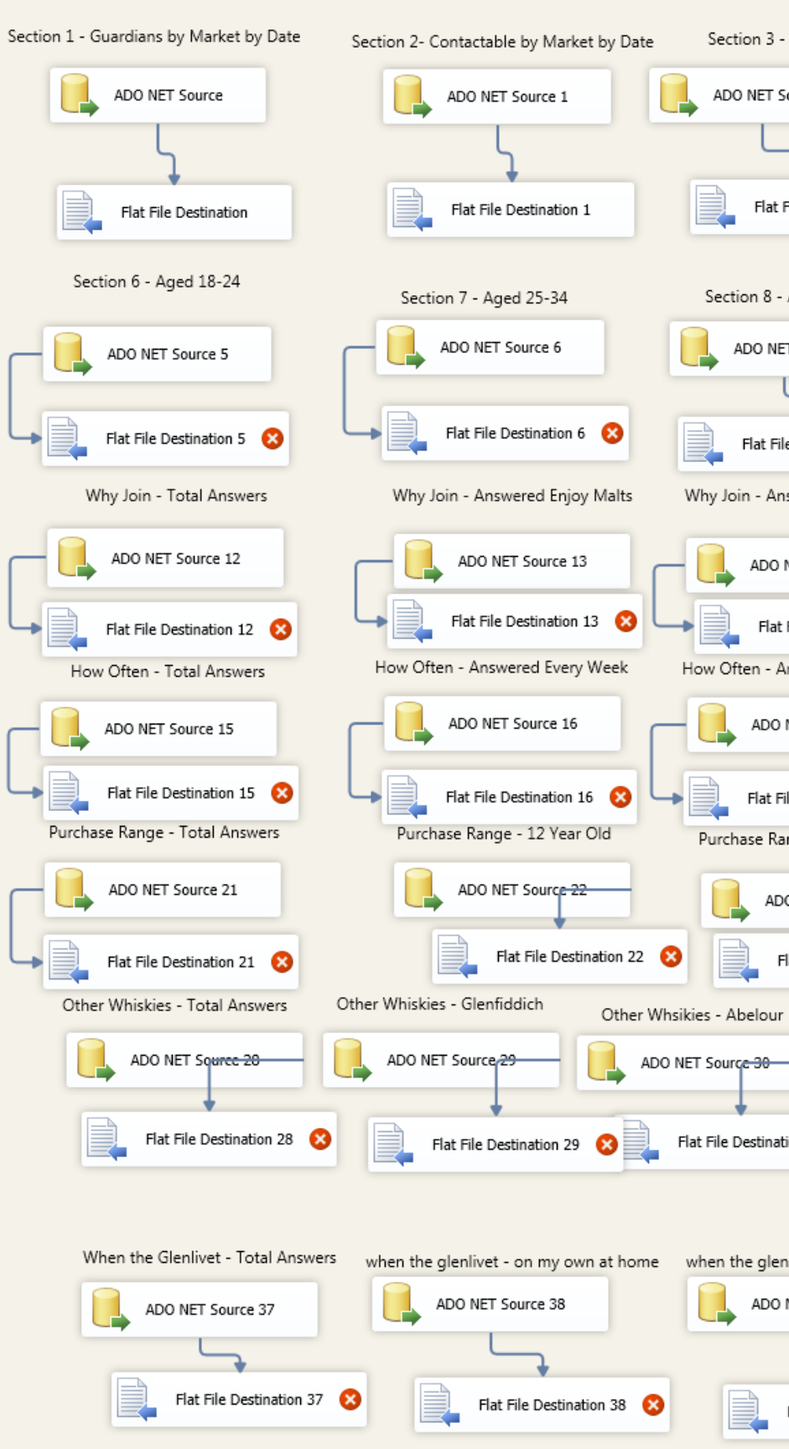
Agenda

- Visually clean and shape data with Tableau Prep Builder
- Operationalize data prep with Prep Conductor
- Understand data usage, communicate trusted data, and find data with Tableau Catalog

Order Number	Customer Identifer	Order Status	Reque
201766-6300005	C00005	Complete	
201766-6300014	C00014	In Transit	
201766-6300017	C00017	Processing	
201766-6300024	C00024	Complete	
201766-6300026	C00026	Complete	
201766-6300054	C00054	In Transit	
201766-6300055	C00055	Complete	
201766-6300083	C00083	Complete	
201766-6300105	C00105	In Transit	
201766-6300106	C00106	In Transit	
201766-6300115	C00115	Complete	
201766-6300126	C00126	In Transit	
201766-6300135	C00135	Complete	
201766-6300138	C00138	In Transit	
201766-6300141	C00141	Complete	
201766-6300142	C00142	In Transit	
201766-6300144	C00144	In Transit	
201766-6300152	C00152	In Transit	
201766-6300157	C00157	In Transit	
201766-6300161	C00161	In Transit	
201766-6300165	C00165	Processing	
201766-6300171	C00171	In Transit	
201766-6300177	C00177	In Transit	
201766-6300185	C00185	In Transit	
201766-6300187	C00187	Processing	
201766-6300191	C00191	In Transit	
201766-6300197	C00197	In Transit	
201766-6300222	C00222	Complete	
201766-6300224	C00224	In Transit	
201766-6300225	C00225	In Transit	
201766-6300232	C00232	In Transit	
201766-6300235	C00235	Complete	
201766-6300255	C00255	Complete	
2017512-600416	C00416	Complete	
2017515-600416	C00416	Complete	
2017515-600417	C00417	Complete	
2017516-600563	C00563	Complete	
2017516-600566	C00566	Complete	
2017516-600568	C00568	Complete	
2017516-600568	C00568	Complete	
2017516-600571	C00571	Complete	
2017516-600596	C00596	Complete	
2017516-600598	C00598	Complete	
2017516-600611	C00611	Complete	
2017516-600621	C00621	Complete	
2017516-600625	C00625	Complete	
2017516-600631	C00631	Complete	

```
WITH cteSource ( StaffMember, EventDateTime, EventType
       AS ( SELECT   StaffMember ,
                     CAST(EventDate AS DATETIME)
                     +   CAST(EventTime AS DATETIME)
                     EventType ,
                     ROW_NUMBER() OVER ( PARTITION BY
                                         ORDER BY EventDate, Even
            FROM dbo.StaffHours
          ),
    cteGrouped ( StaffMember, EventDateTime, grp )
       AS ( SELECT c.StaffMember ,
                   c.EventDateTime ,
                   ROW_NUMBER() OVER ( PARTITION BY c
                                       ORDER BY c.EventDateT
                   - 1 AS grp
            FROM cteSource AS  c
                 LEFT JOIN cteSource AS p
                   ON p.StaffMember = c.StaffMember
                      AND p.rn = c.rn - 1
                 LEFT JOIN cteSource AS n
                   ON n.StaffMember = c.StaffMember
                      AND n.rn = c.rn + 1
            WHERE ( COALESCE(p.EventType, 'Exit') = '
                    AND c.EventType = 'Enter'
                  )
                  OR ( c.EventType = 'Exit'
                       AND COALESCE(n.EventType, 'Ent
                     )
          )
   SELECT StaffMember ,
          MIN(EventDateTime) AS EventDateTime ,
          MAX(EventDateTime) AS ExitDateTime ,
          DATEDIFF(SECOND, MIN(EventDateTime), MAX(Eve

          CONVERT(CHAR(8), DATEADD(SECOND,
                                   DATEDIFF(SECOND, MIN(Ev
                                     MAX(EventDateTime)),
                                       '00:00:00'), 8) A
   FROM cteGrouped
   GROUP BY StaffMember ,
            grp / 2
   HAVING COUNT(*) = 2;
```



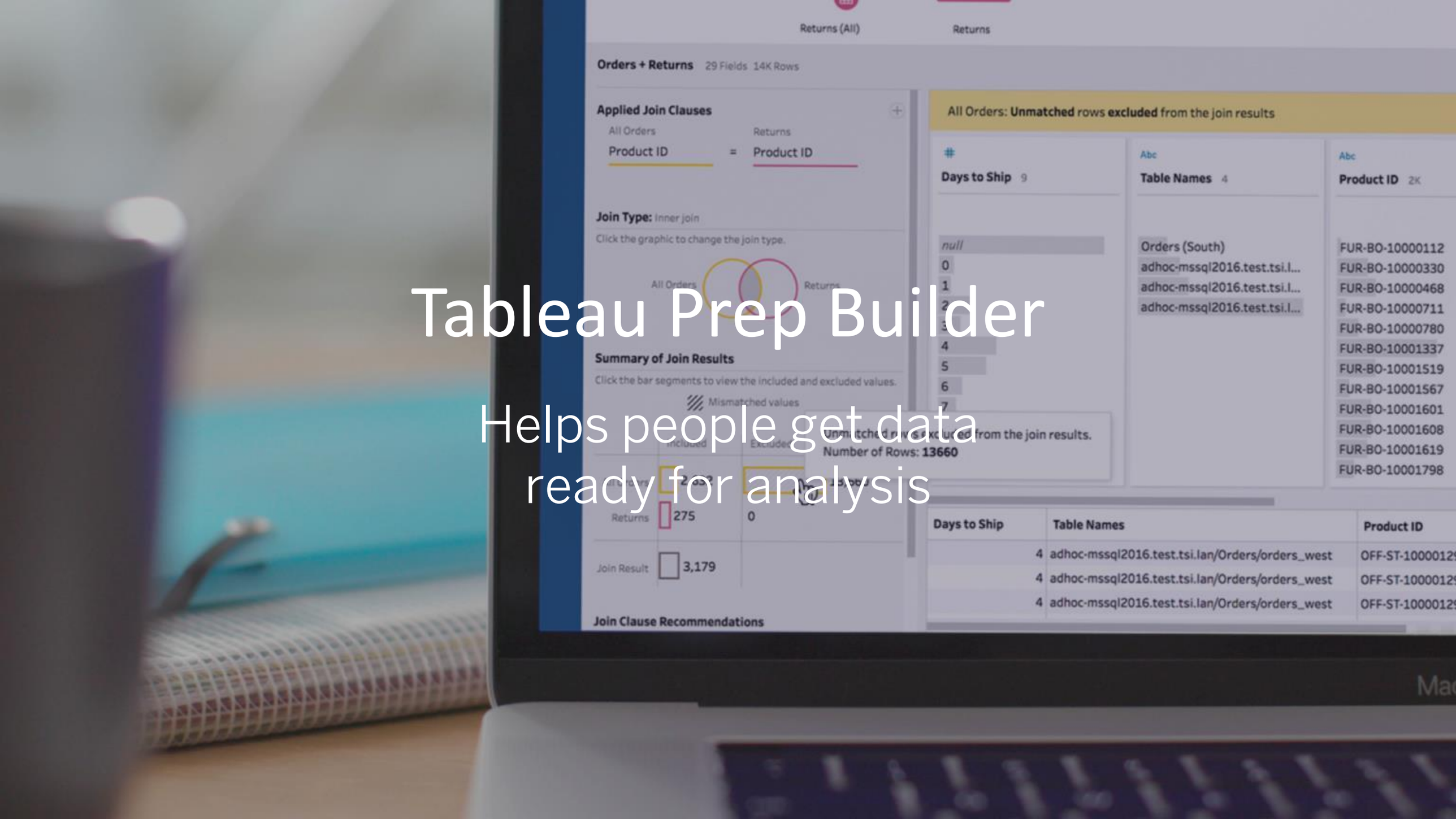


Tableau Prep Builder

Helps people get data ready for analysis

Tableau Prep

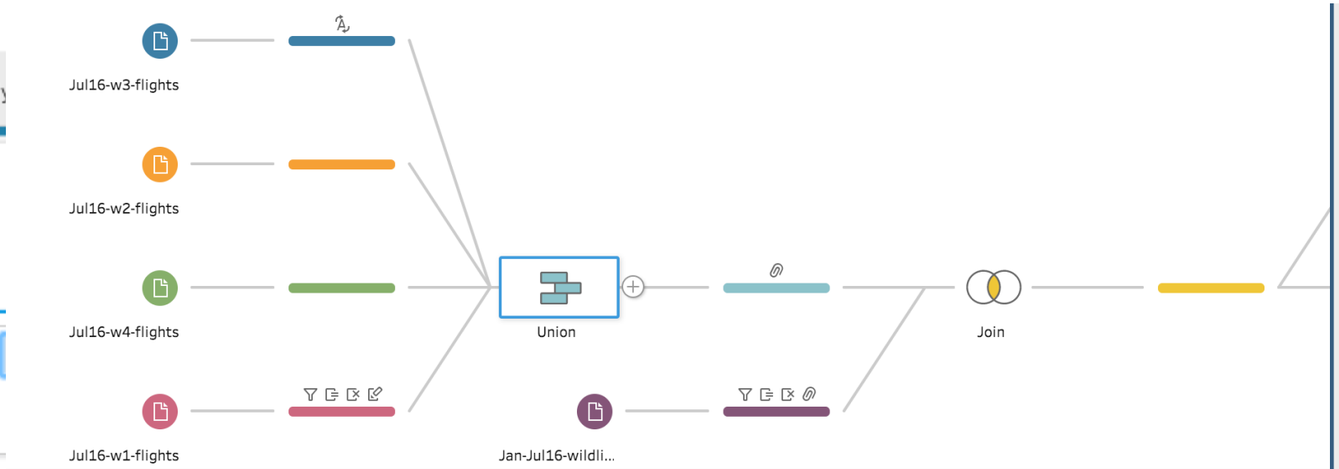
Design Principles

Visual & Direct

Text file-Sales Results 17 Fields 6K Rows ✓ Keep Only

Abc City 109	Abc State 15
null	null
Akron	Connecticut
Allentown	Delaware
Altoona	District of Columbia
Andover	Maine
Atlantic City	Maryland
Auburn	Massachusetts
Baltimore	New Hampshire
Bangor	New Jersey
Bayonne	New York
Belleville	Ohio
Bethlehem	Pennsylvania

Product ID	Ship Mode	Shipping Costs
AAA-AA-00000000	Same Day	-99
AAA-AA-00000000	Same Day	-99
AAA-AA-00000000	Same Day	-99
AAA-AA-00000000	Same Day	-99
AAA-AA-00000000	Same Day	-99
AAA-AA-00000000	Same Day	-99



Union 14 Fields 502K Rows

Inputs

- Transform 1
- Transform 2
- Transform 3
- Transform 4

Resulting Fields

1 Mismatching fields from 14 resulting fields.

Union Results ☐ Show only mismatched fields

Abc Origin 304	# Wheels On 1K	Flight Date 31
ABE	null	06/27/2016
ABI	250	08/01/2016
ABQ	625	
ABR	1,000	
ABY	1,375	
ACK	1,750	
ACT	2,125	
ACV	2,500	
ACY		
ADK		
ADQ		
AEX		

Applied Join Clauses

Clean Notes/Approver		All Orders
Product ID	=	Product ID
Order ID	=	Order ID

Join Type: Right join

Click the graphic to change the join type.

Clean Notes/Approv... All Orders

Summary of Join Results

Click the bar segments to view the included and excluded values.

▨ Mismatched values

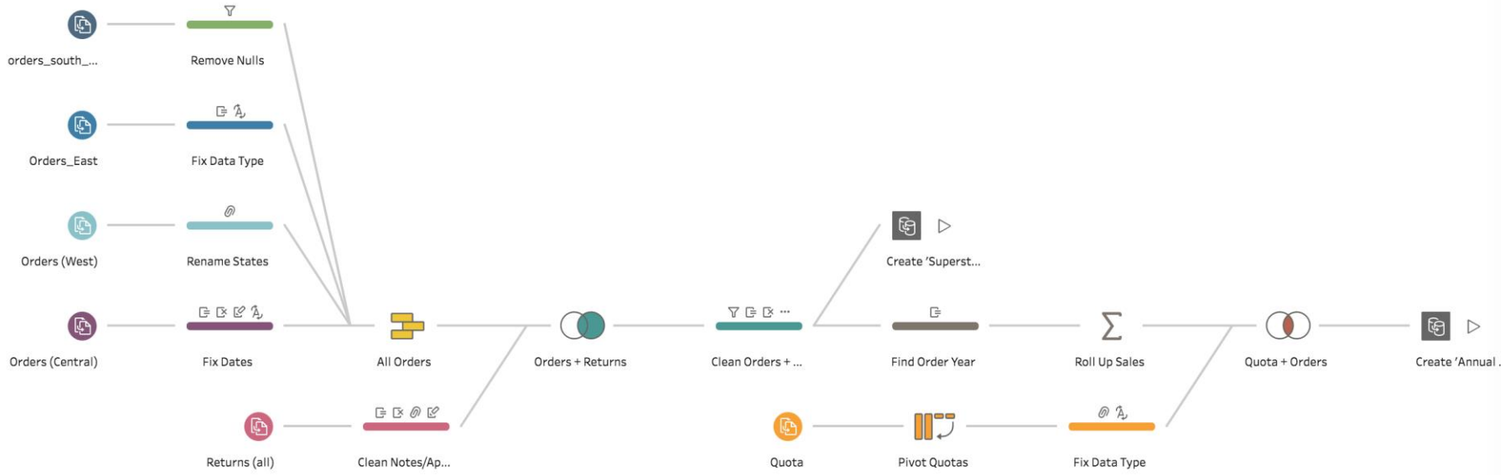
	Included	Excluded
Clean Not...	272	3
All Orders	16,302	0
Join Result	16,302	

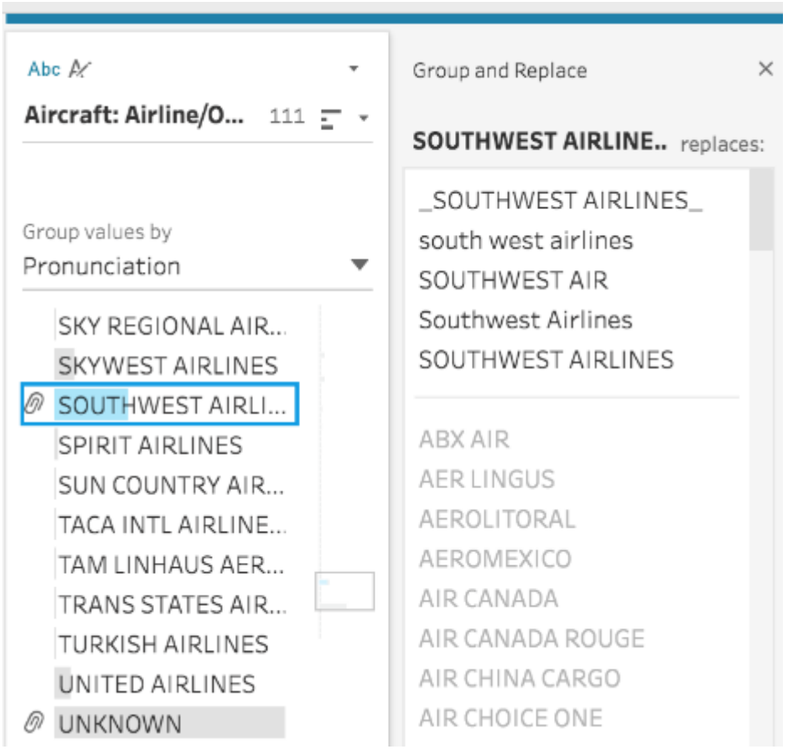
Join Clause Recommendations

Product ID	=	Product Name

Smart

Add algorithms to augment human intelligence





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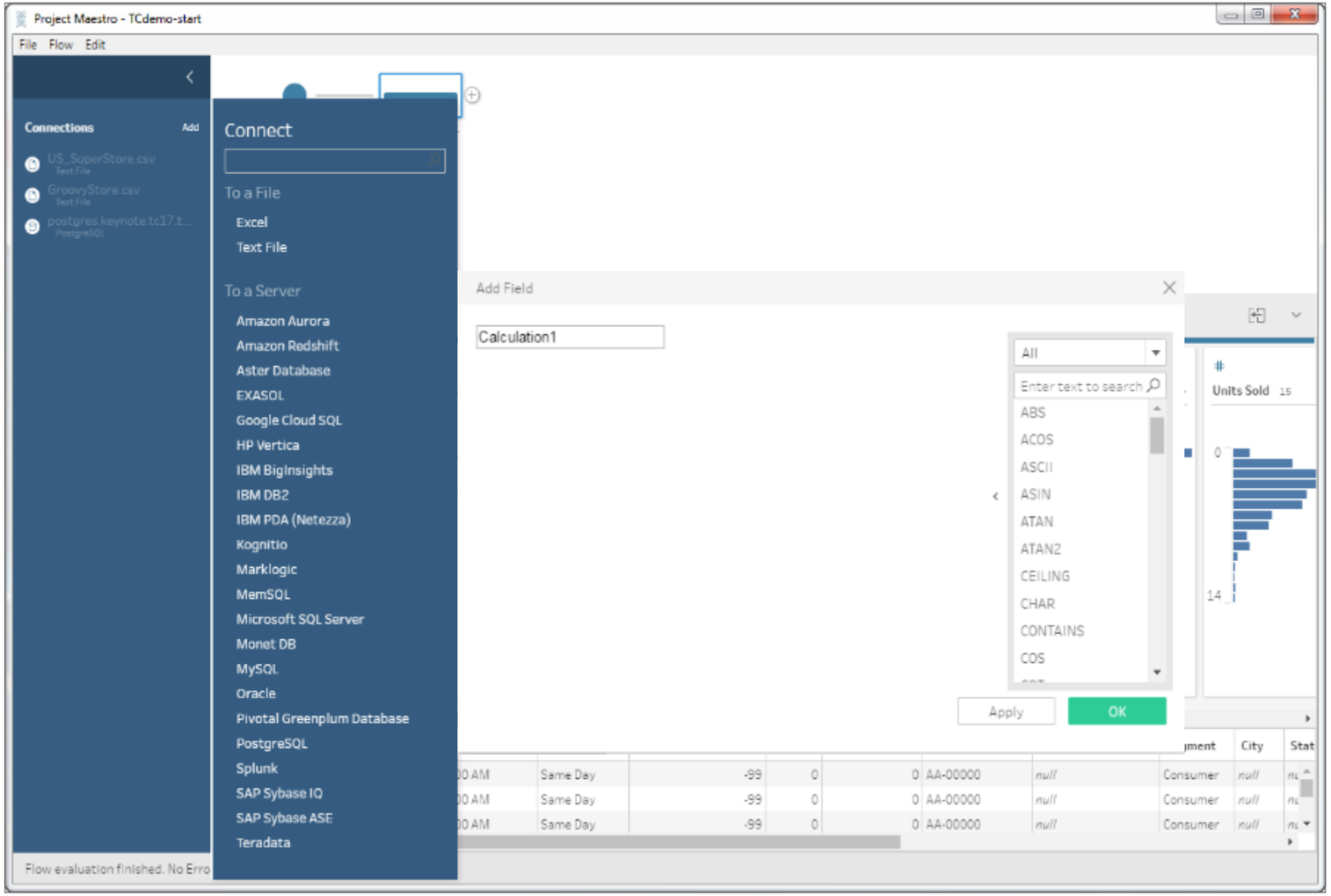
Integrated

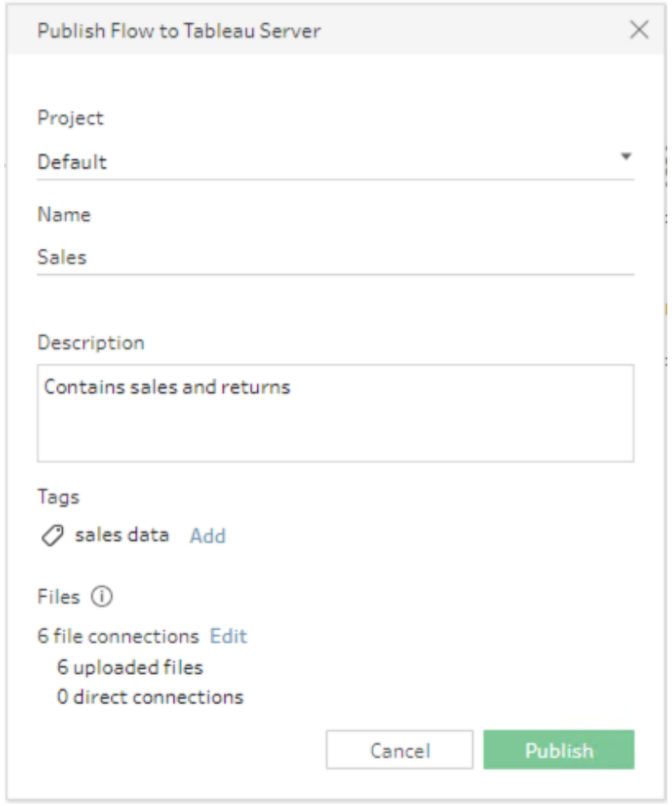


- Open in Tableau
- Common Tableau Platform
- Publish to Tableau (curation, recommendations)

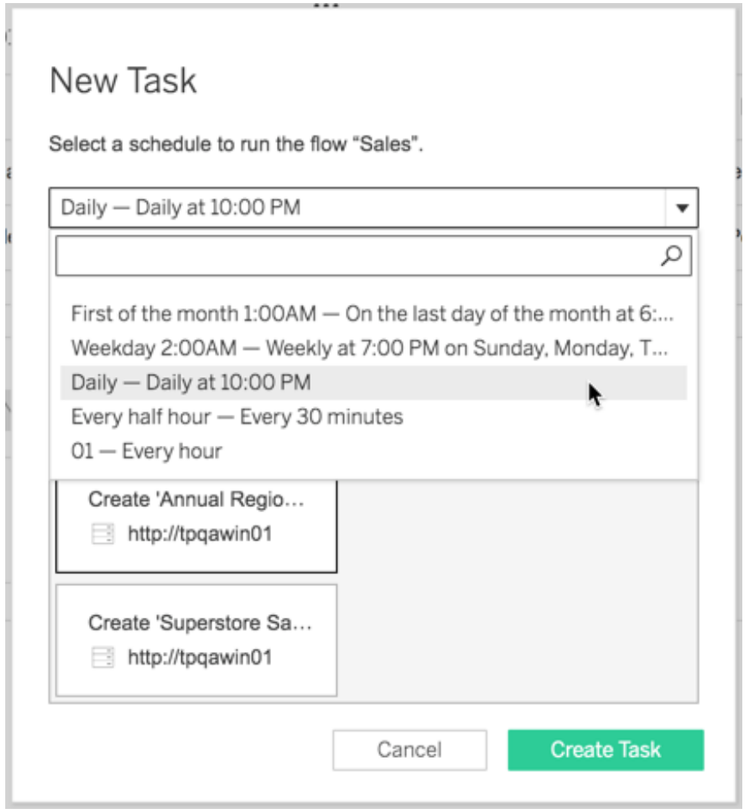
tableau

Operationalize with Prep Conductor

Publish Flows



Schedule Refreshes



Alerts & See History

Run End	Status	Errors
	Pending	
	Pending	
Oct 13, 2018, 11:57 AM	Succeeded	
Oct 13, 2018, 11:57 AM	Succeeded	
Oct 13, 2018, 11:57 AM	Succeeded	
Oct 13, 2018, 11:57 AM	Succeeded	
Oct 13, 2018, 11:56 AM	Succeeded	
Oct 13, 2018, 11:56 AM	Succeeded	
Oct 13, 2018, 11:56 AM	Succeeded	
Oct 13, 2018, 11:56 AM	Succeeded	
Oct 13, 2018, 11:55 AM	Failed	1 error

tableau

Demo

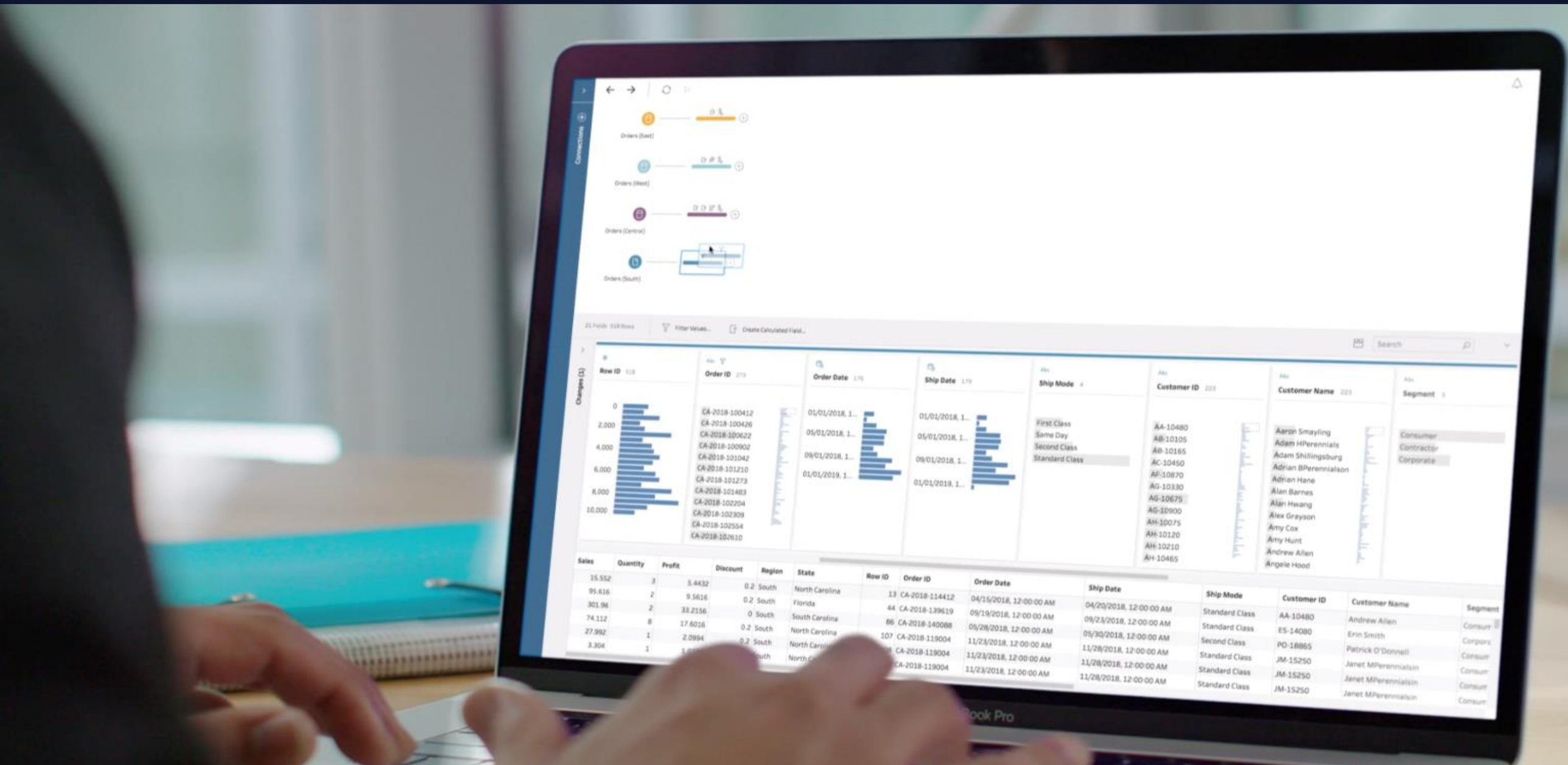

Orders (East)
Orders (West)
Orders (Central)
Orders (South)
Connections
Changes (1)
Row ID
Order ID
Order Date
Ship Date
Ship Mode
Customer ID
Customer Name
Segment
First Class
Same Day
Second Class
Standard Class
Consumer
Corporate
Sales
Quantity
Profit
Discount
Region
State

Tableau Catalog

Visibility

Trust

Discovery

Extensibility

Tableau Catalog

Visibility

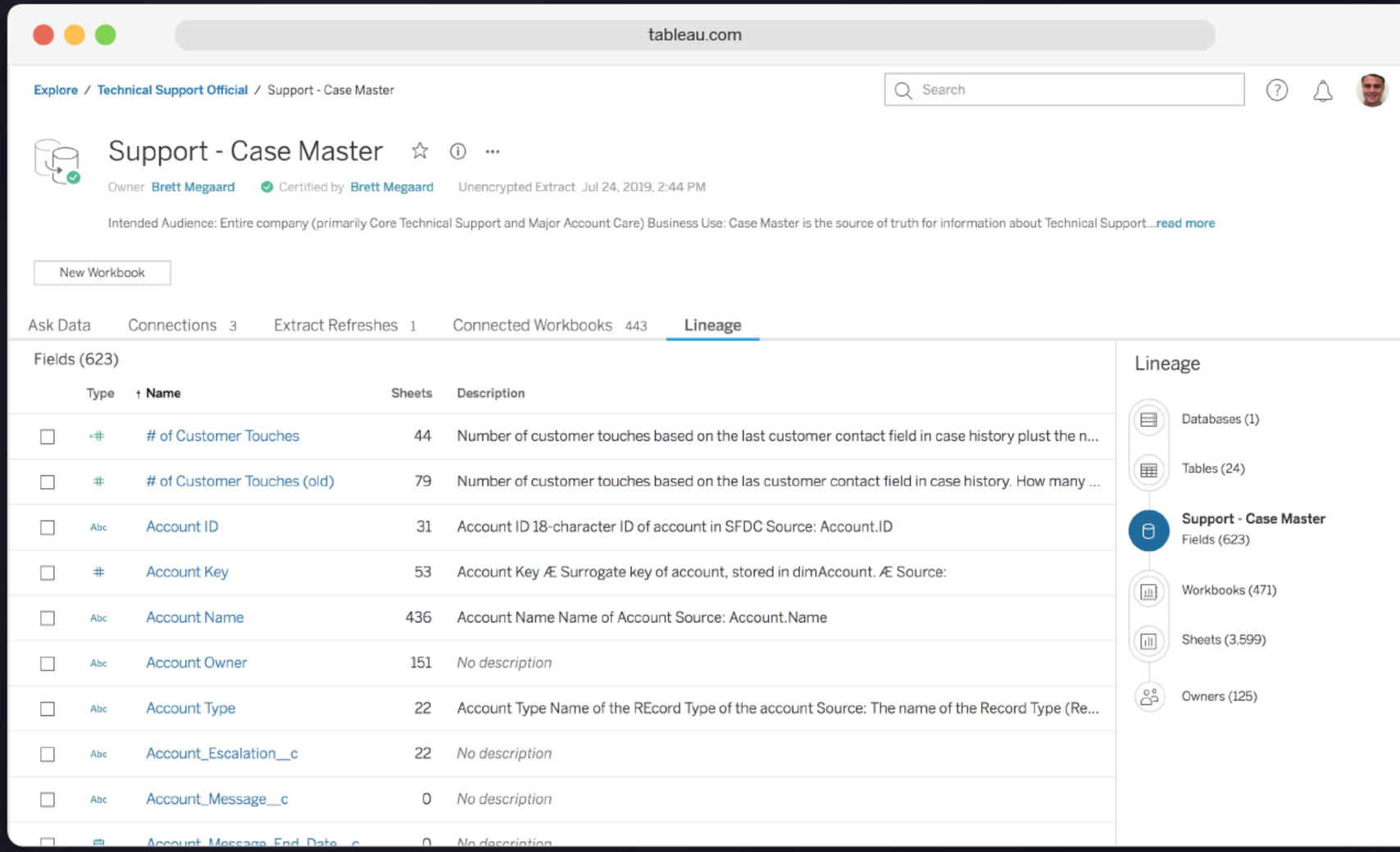
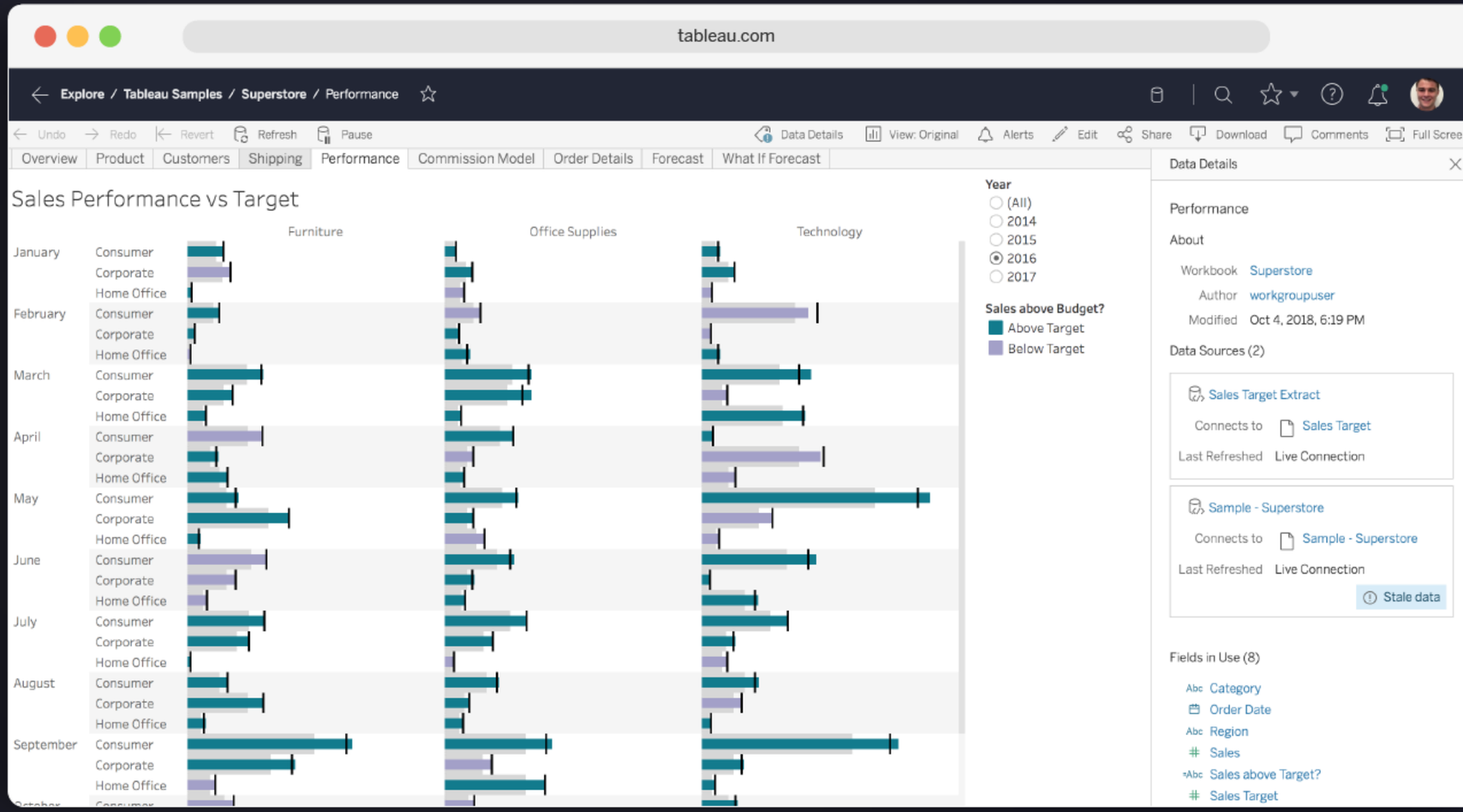


Tableau Catalog

Visibility

Trust



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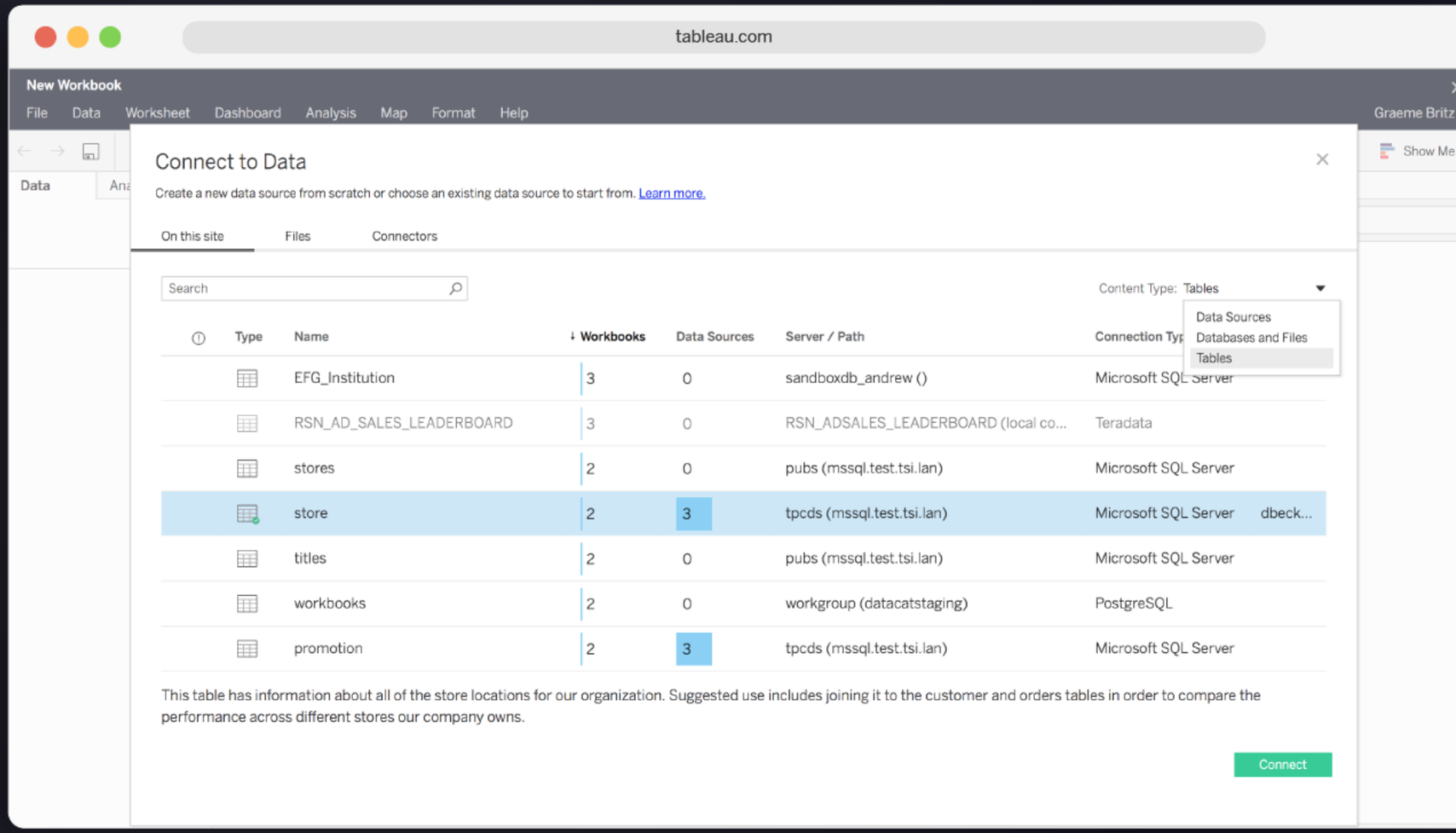

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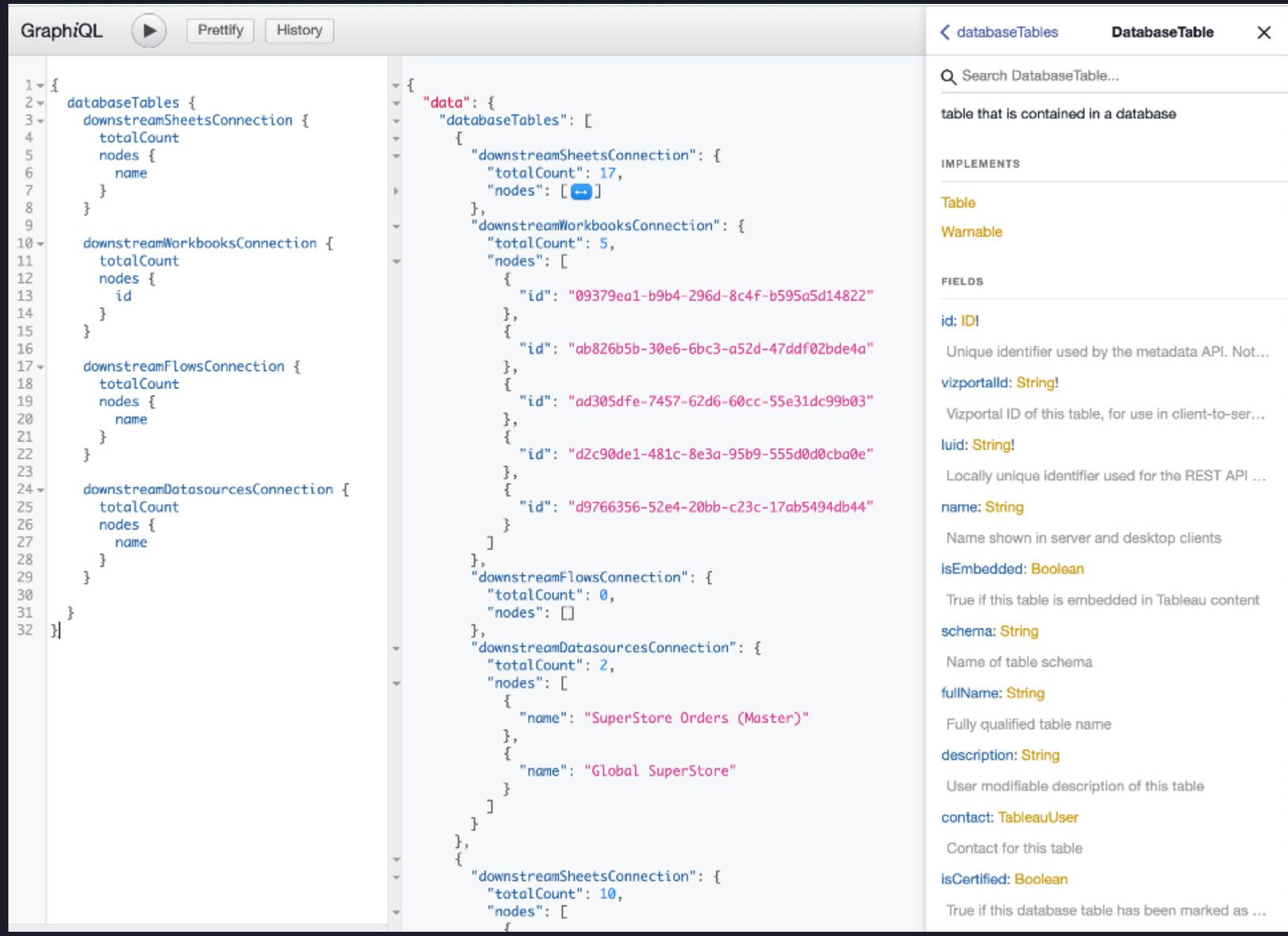

Catalog Demo

Questions?