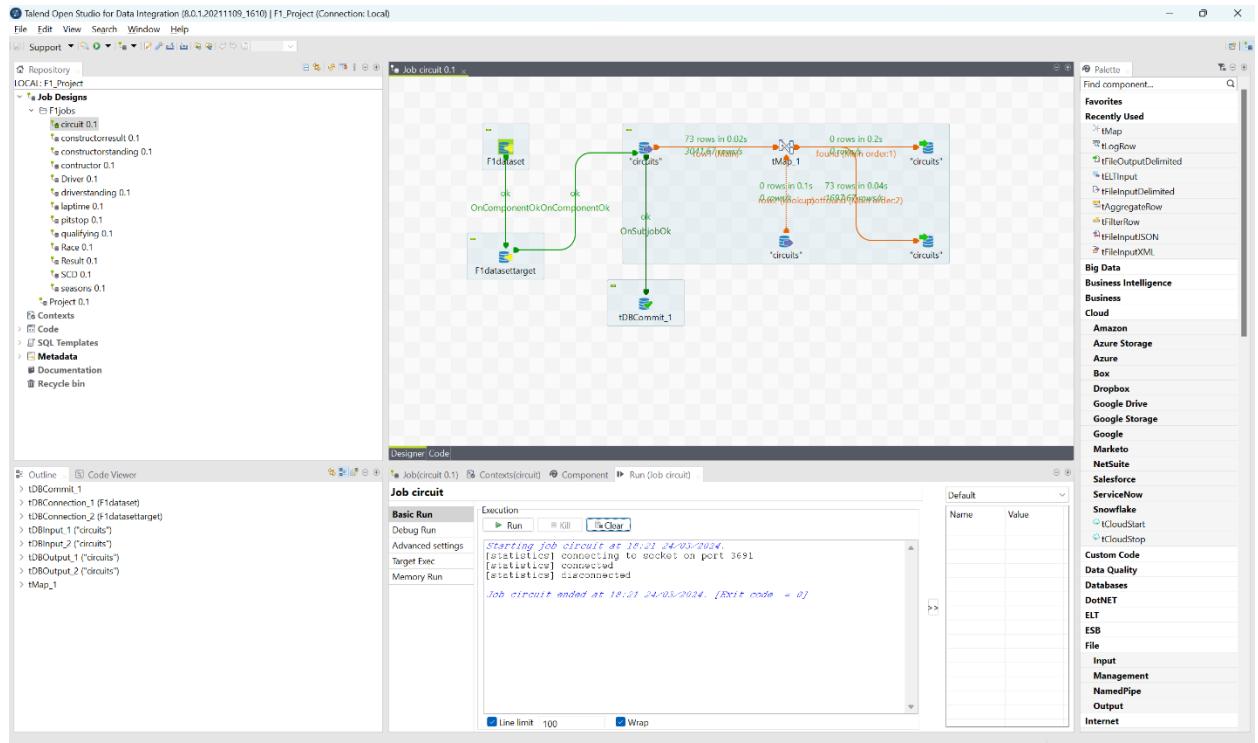


Talend Implementation control and data flows

1. Circuits Dimension



Circuits Dimension T Mapping

The screenshot shows the Talend Open Studio interface for a tMap component. It consists of several panels:

- Row Definitions:** Two rows are defined: **row1** and **row2**.
 - row1:** Contains columns for circuitkey, circuitid, circuitref, name, location, country, lat, _long, and alt.
 - row2:** Contains a **Property** column with a **Value** of "Load once". It also includes sections for **Match Model** (Unique match), **Join Model** (Inner Join), and **Store temp data** (false). An **Expr key** section maps row1.name to a complex expression involving circuitkey, circuitid, circuitref, name, location, country, lat, _long, and alt.
- Mapping Grid:** A central grid showing connections between columns from row1 and row2. Arrows indicate the flow of data from row1 to row2.
- Schema Editors:** Two schema editors are shown below the rows.
 - row1 Schema:** Maps columns to types: circuitkey (int), circuitid (int), circuitref (String), name (String), location (String), country (String), lat (String), _long (String), and alt (String).
 - found Schema:** Maps columns to types: circuitkey (int), circuitid (int), circuitref (String), name (String), location (String), country (String), lat (String), _long (String), and alt (String).
- Buttons:** At the bottom right are **Apply**, **Ok**, and **Cancel** buttons.

Circuits Dimension Output

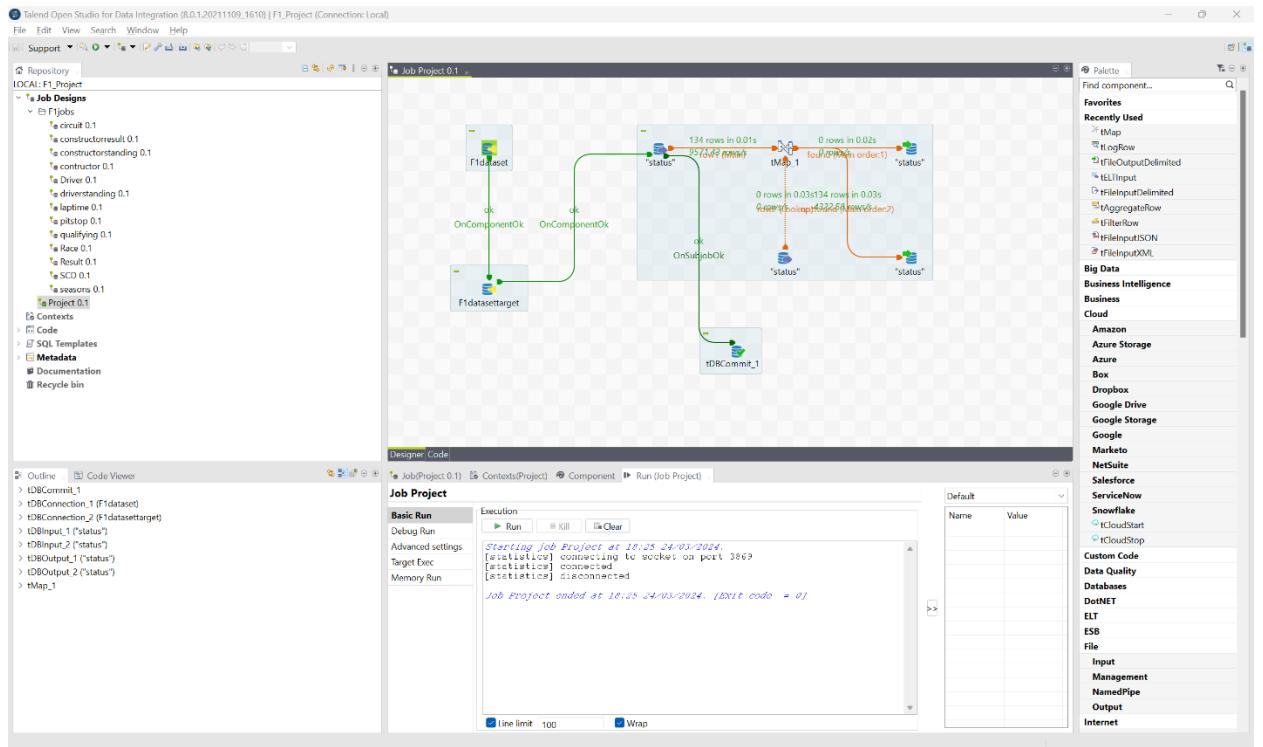
Data Output Messages Notifications

Table View: Shows 12 rows of data from the dimension output:

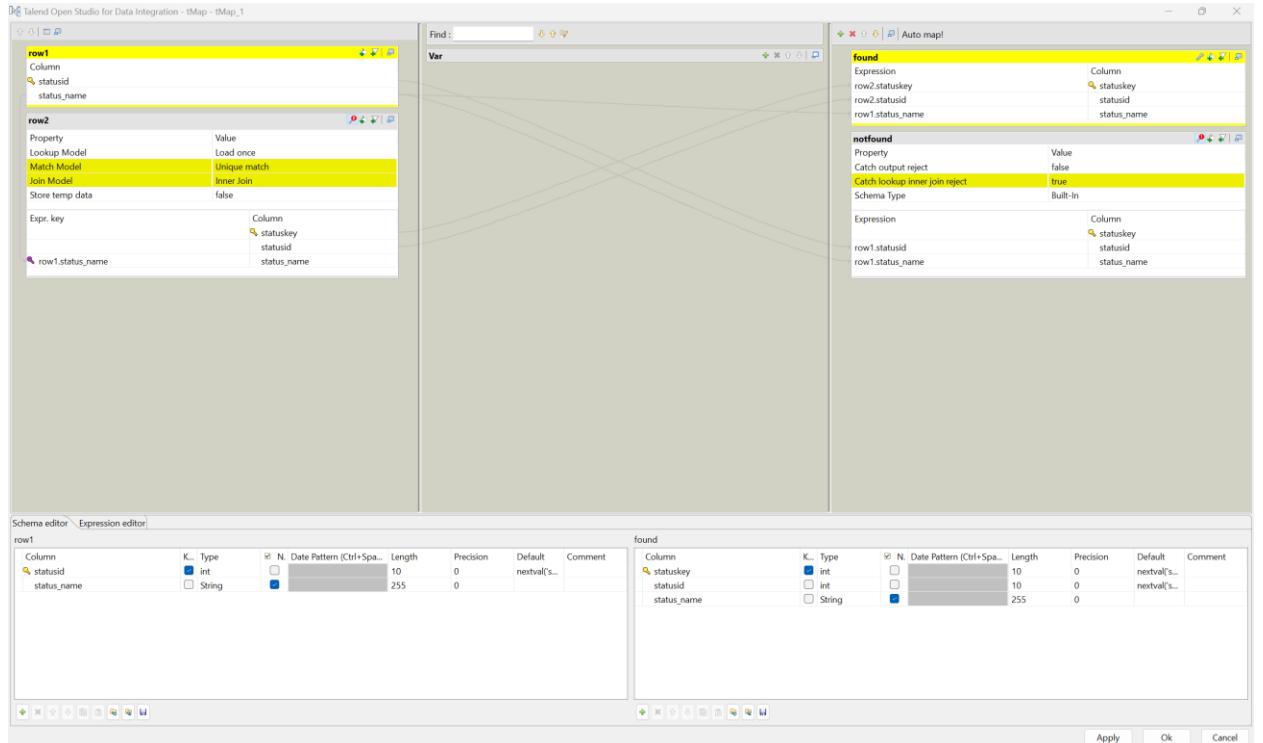
	circuitkey [PK] integer	circuitid integer	circuitref character varying (250)	name character varying (250)	location character varying (250)	country character varying (250)	lat character varying (250)	long chara
1	1	1	albert_park	Albert Park Grand Prix Circuit	Melbourne	Australia	-37.8497	144.9
2	2	2	sepang	Sepang International Circuit	Kuala Lumpur	Malaysia	2.76083	101.7
3	3	3	bahrain	Bahrain International Circuit	Sakhir	Bahrain	26.0325	50.51
4	4	4	catalunya	Circuit de Barcelona-Catalunya	Montmel	Spain	41.57	2.261
5	5	5	istanbul	Istanbul Park	Istanbul	Turkey	40.9517	29.40
6	6	6	monaco	Circuit de Monaco	MonteCarlo	Monaco	43.7347	7.420
7	7	7	villeneuve	Circuit Gilles Villeneuve	Montreal	Canada	45.5	-73.5
8	8	8	magny_cours	Circuit de Nevers Magny-Cours	Magny Cours	France	46.8642	3.165
9	9	9	silverstone	Silverstone Circuit	Silverstone	UK	52.0786	-1.01
10	10	10	hockenheimring	Hockenheimring	Hockenheim	Germany	49.3278	8.565
11	11	11	hungaroring	Hungaroring	Budapest	Hungary	47.5789	19.24
12	12	12	valencia	Valencia Street Circuit	Valencia	Spain	39.4589	-0.33

Total rows: 73 of 73 Query complete 00:00:00.122 Ln 1, Col 23

2. Status Dimension



Status Dimension T Mapping



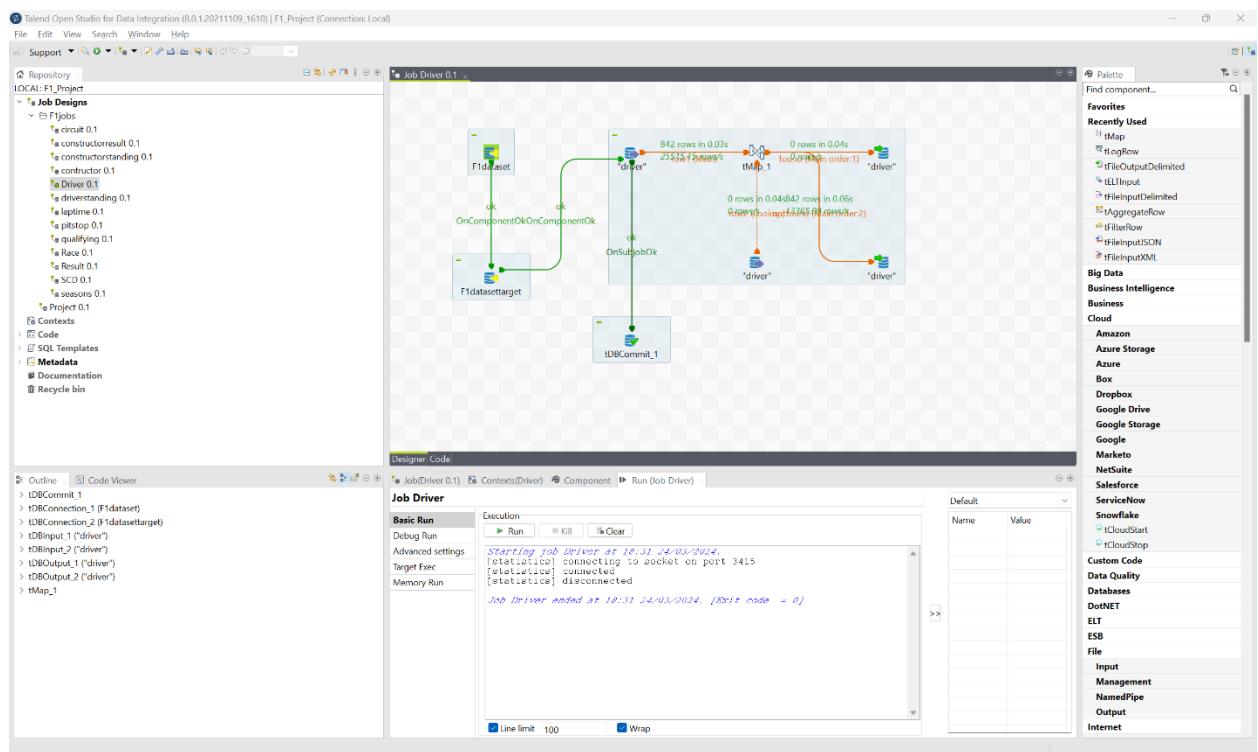
Status Dimension Output

Data Output Messages Notifications

	statuskey [PK] integer	statusid integer	status_name character varying (255)
1	1	1	Finished
2	2	2	Disqualified
3	3	3	Accident
4	4	4	Collision
5	5	5	Engine
6	6	6	Gearbox
7	7	7	Transmission
8	8	8	Clutch
9	9	9	Hydraulics
10	10	10	Electrical
11	11	11	+1 Lap
12	12	12	+2 Laps

Total rows: 134 of 134 Query complete 00:00:00.149 Ln 1, Col 21

3. Driver Dimension



Driver Dimension T Mapping

The screenshot shows the Talend Open Studio interface for a tMap component. It consists of several panels:

- Row 1 Schema Editor:** Shows columns: driverkey, driverid, driverref, number, code, forename, surname, dob, nationality.
- Row 2 Schema Editor:** Shows properties: Lookup Model (Load once), Match Model (Unique match), Join Model (Inner Join), Store temp data (false). Expr. key is set to row1.driverid, which maps to columns: driverkey, driverid, driverref, number, code, drivername, dob, nationality.
- Variables Panel:** A Var table with an expression: row1.forename + " " + row1.surname, type String, variable drivename.
- Found Panel:** A table listing columns from the second schema: driverkey, driverid, driverref, number, code, drivername, dob, nationality.
- NotFound Panel:** A table with a single entry: Catch lookup inner join reject set to true.
- Schema Type Panel:** A table listing columns from the second schema: driverkey, driverid, driverref, number, code, drivername, dob, nationality.
- Bottom Buttons:** Apply, Ok, Cancel.

Driver Dimension Output

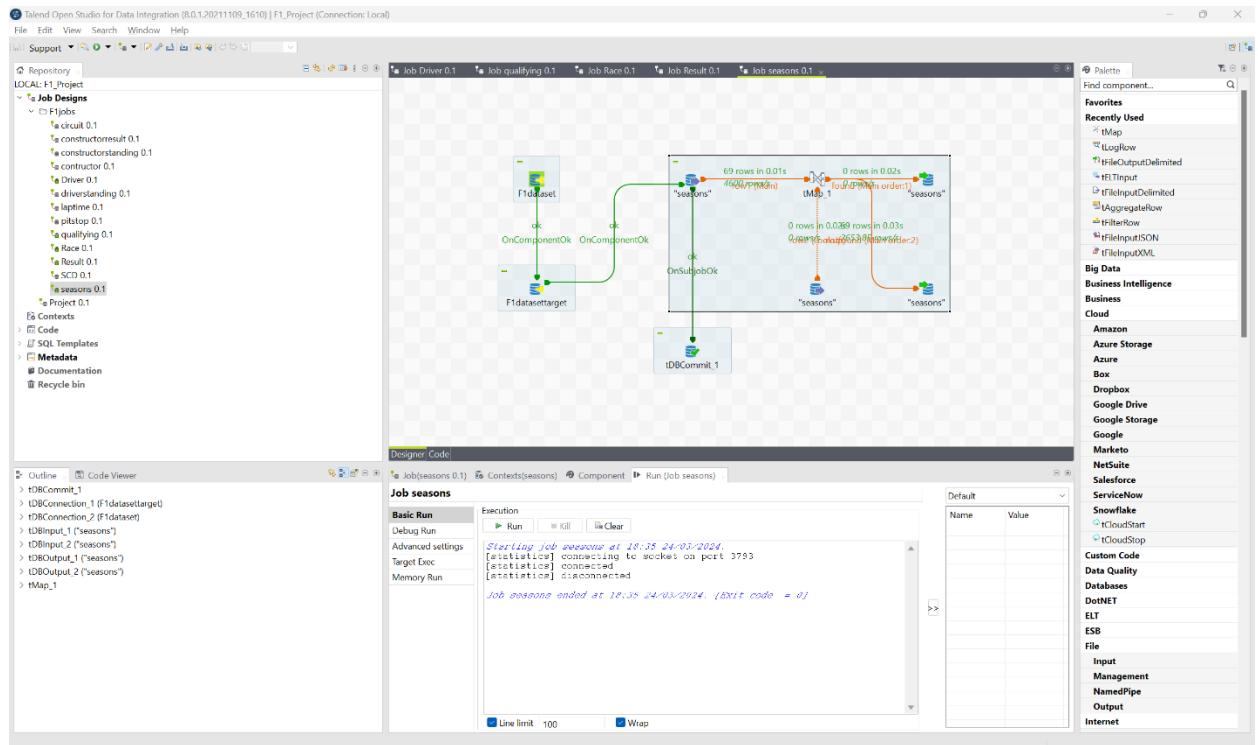
Data Output Messages Notifications

driverkey [PK] integer driverid integer driverref character varying (255) number integer code character varying (255) drivername character varying (255) dob character varying (250) nationality character varying (255)

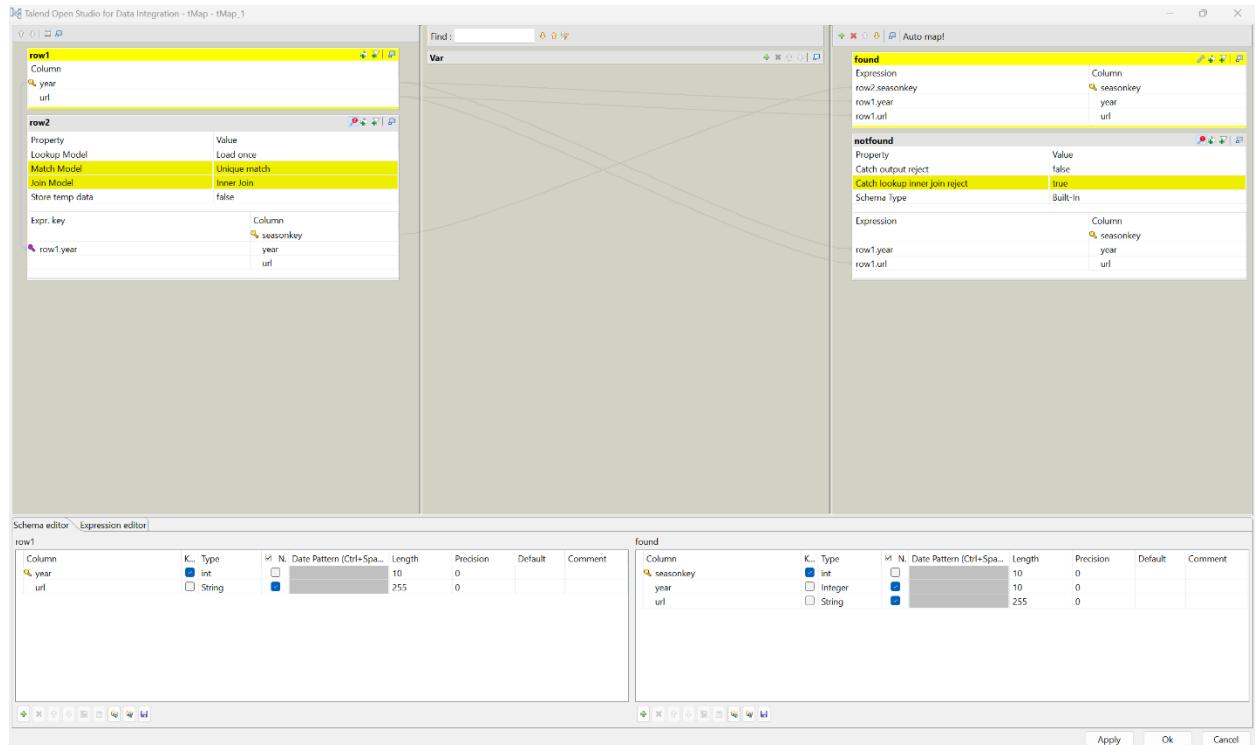
	driverkey [PK] integer	driverid integer	driverref character varying (255)	number integer	code character varying (255)	drivername character varying (255)	dob character varying (250)	nationality character varying (255)
1	1	1	hamilton	44	HAM	Lewis Hamilton	7/1/1985	British
2	2	2	heidfeld	[null]	HEI	Nick Heidfeld	10/5/1977	German
3	3	3	rosberg	6	ROS	Nico Rosberg	27/06/1985	German
4	4	4	alonso	14	ALO	Fernando Alonso	29/07/1981	Spanish
5	5	5	kovvalainen	[null]	KOV	Heikki Kovalainen	19/10/1981	Finnish
6	6	6	nakajima	[null]	NAK	Kazuki Nakajima	11/1/1985	Japanese
7	7	7	bourdais	[null]	BOU	Sbastien Bourdais	28/02/1979	French
8	8	8	raikkonen	7	RAI	Kimi Rnen	17/10/1979	Finnish
9	9	9	kubica	[null]	KUB	Robert Kubica	7/12/1984	Polish
10	10	10	glock	[null]	GLO	Timo Glock	18/03/1982	German
11	11	11	sato	[null]	SAT	Takuma Sato	28/01/1977	Japanese
12	12	12	piquet_ir	[null]	PIQ	Nelson Piquet Jr	25/07/1985	Brazilian

Total rows: 842 of 842 Query complete 00:00:00.151 Ln 1, Col 21

4. Seasons Dimension



Season Dimension T Mapping



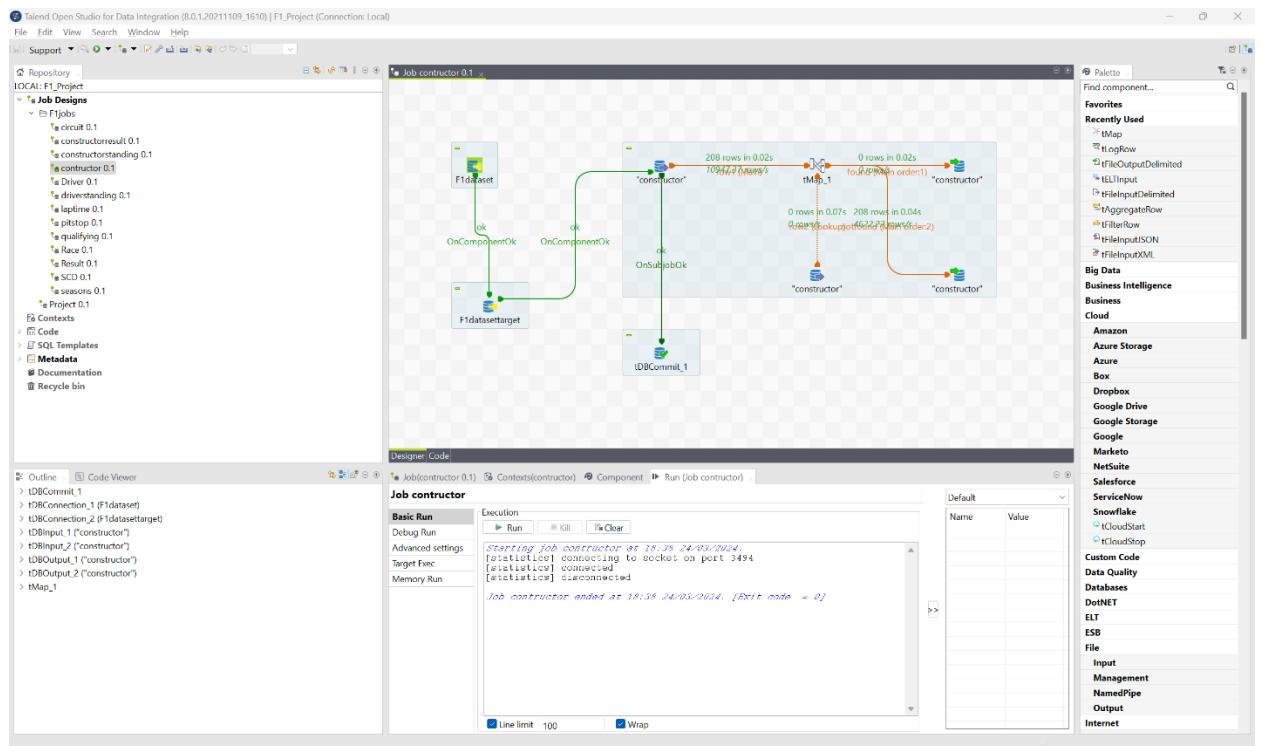
Season Dimension Output

Data Output Messages Notifications

The screenshot shows a data output window with the following details:

- Table Headers:** seasonkey [PK] integer, year integer, url character varying (255).
- Table Rows:** 12 rows, each containing a season key, year, and a URL.
- Total Rows:** 69 of 69.
- Query Status:** Query complete 00:00:00.119.
- Text at Bottom:** Ln 1, Col 22.

5. Constructor Dimension



Constructor Dimension T Mapping

The screenshot shows the Talend Open Studio interface for a tMap component named tMap_1. The interface is divided into several panels:

- Row Editor (Top Left):** Displays two rows, row1 and row2. Row1 contains columns: constructorid, constructorref, name, and nationality. Row2 contains properties: Lookup Model (Load once), Match Model (Unique match), Join Model (Inner join), and Store temp data (false). An Expr. key section shows row1.constructorid.
- Variables (Top Middle):** A list of variables with their types and descriptions.
- Found (Top Right):** A list of found columns with their types and descriptions. It includes expressions like row2.constructorkey, row2.constructorid, row2.constructorref, row1.name, and row1.nationality.
- Properties (Bottom Middle):** Properties for the tMap component, including Catch output reject (false), Catch lookup inner join reject (true), and Schema Type (Built-in).
- Schema Editor (Bottom Left):** Shows the schema for row1 and row2, defining columns like constructorkey, constructorid, constructorref, name, and nationality with their respective data types (int or String) and lengths.
- Expression Editor (Bottom Right):** Shows the schema for the found columns with their data types and lengths.

Constructor Dimension Output

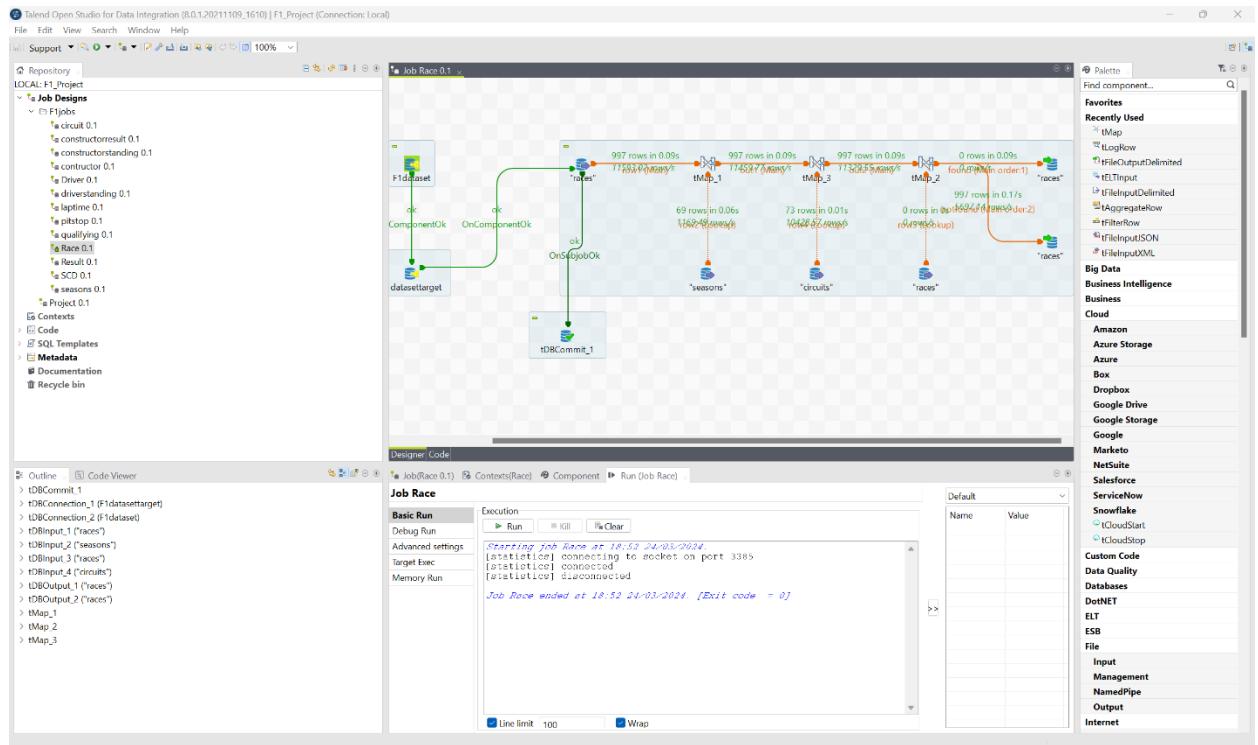
Data Output Messages Notifications

File Database File Clipboard Print Help

	constructorkey [PK] integer	constructorid integer	constructorref character varying (255)	name character varying (255)	nationality character varying (255)
1	1	1	mclaren	McLaren	British
2	2	2	bmw_sauber	BMW Sauber	German
3	3	3	williams	Williams	British
4	4	4	renault	Renault	French
5	5	5	toro_rosso	Toro Rosso	Italian
6	6	6	ferrari	Ferrari	Italian
7	7	7	toyota	Toyota	Japanese
8	8	8	super_aguri	Super Aguri	Japanese
9	9	9	red_bull	Red Bull	Austrian
10	10	10	force_india	Force India	Indian
11	11	11	honda	Honda	Japanese
12	12	12	spyker	Spyker	Dutch

Total rows: 208 of 208 Query complete 00:00:00.120 Ln 1, Col 26

6. Races Dimension



Races Dimension T Mapping

Column	K_ Type	N. Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
circuitkey	<input type="checkbox"/> Integer					
round	<input type="checkbox"/> String					
name	<input type="checkbox"/> String					
date	<input type="checkbox"/> Date					
time	<input type="checkbox"/> String					
raceid	<input type="checkbox"/> Integer					
seasonkey	<input type="checkbox"/> Integer					

Column	K_ Type	N. Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
row3.racekey	<input checked="" type="checkbox"/> int		10	0		
row3.raceid	<input type="checkbox"/> int		10	0		
row3.seasonkey	<input type="checkbox"/> Integer		250	0		
row3.round	<input type="checkbox"/> String		255	0		
row3.circuitkey	<input type="checkbox"/> Int		10	0		
row3.name	<input type="checkbox"/> String		255	0		
row3.date	<input type="checkbox"/> Date		13	0		
row3.time	<input type="checkbox"/> String		250	0		

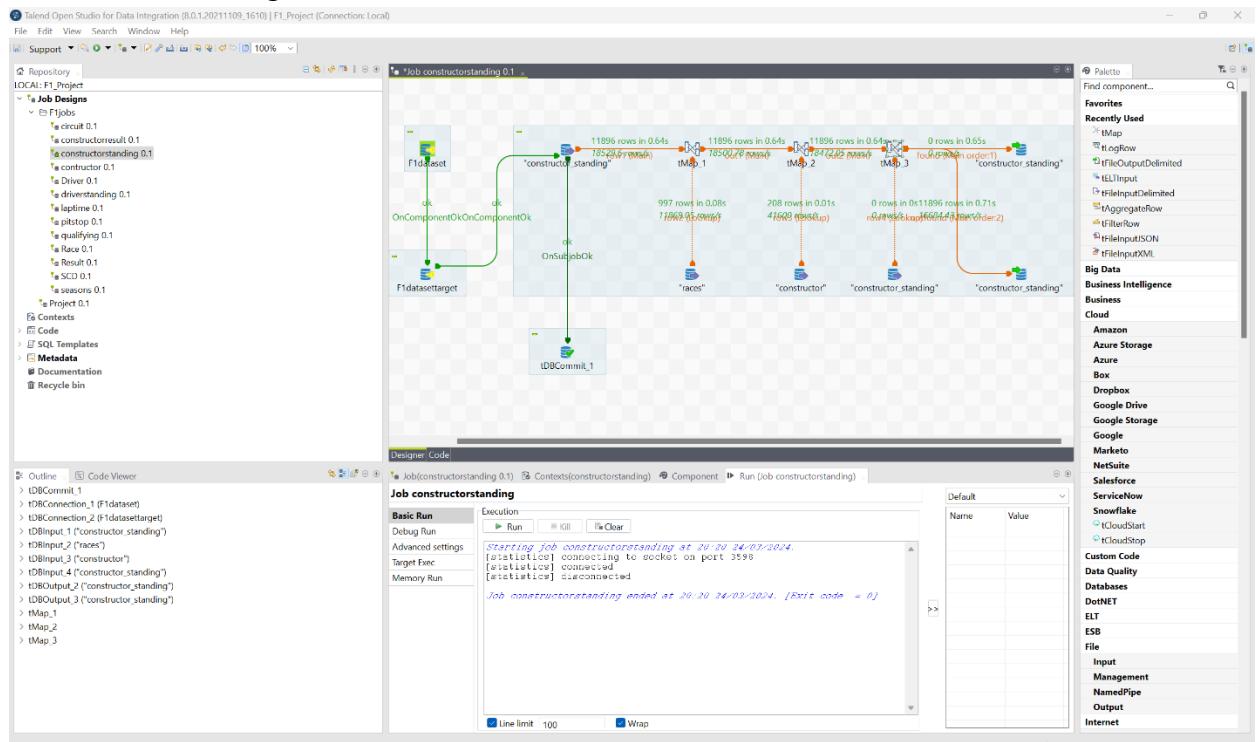
Races Dimension Output

Data Output Messages Notifications

	racekey [PK] integer	raceid integer	seasonkey integer	round character varying (250)	circuitkey integer	name character varying (255)	date date	time character varying (250)
1	1	1	1	1		1 Australian Grand Prix	2009-03-29	6:00:00
2	2	2	1	2		2 Malaysian Grand Prix	2009-04-05	9:00:00
3	3	3	1	3	17	3 Chinese Grand Prix	2009-04-19	7:00:00
4	4	4	1	4		3 Bahrain Grand Prix	2009-04-26	12:00:00
5	5	5	1	5		4 Spanish Grand Prix	2009-05-10	12:00:00
6	6	6	1	6		6 Monaco Grand Prix	2009-05-24	12:00:00
7	7	7	1	7		5 Turkish Grand Prix	2009-06-07	12:00:00
8	8	8	1	8		9 British Grand Prix	2009-06-21	12:00:00
9	9	9	1	9		20 German Grand Prix	2009-07-12	12:00:00
10	10	10	1	10		11 Hungarian Grand Prix	2009-07-26	12:00:00
11	11	11	1	11		12 European Grand Prix	2009-08-23	12:00:00
12	12	12	1	12		13 Belgian Grand Prix	2009-08-30	12:00:00

Total rows: 997 of 997 Query complete 00:00:00.216 Ln 1, Col 20

7. Constructor Standing Dimension



Constructor Standing Dimension T Mapping

Talend Open Studio for Data Integration - tMap - tMap_3

out2

Column	constructorkey	racekey	constructorstandingid	points	position	positiontext	wins
--------	----------------	---------	-----------------------	--------	----------	--------------	------

row4

Property	Value
Lookup Model	Load once
Match Model	Unique match
Join Model	Inner Join
Store temp data	false

Expr. key

Column	constructorstandingkey	constructorstandingid	racekey	constructorkey	points	position	positiontext	wins
--------	------------------------	-----------------------	---------	----------------	--------	----------	--------------	------

found

Expression	Column
row4.constructorstandingkey	constructorstandingkey
row4.constructorstandingid	constructorstandingid
out2.racekey	racekey
out2.constructorkey	constructorkey
out2.points	points
out2.position	position
out2.positiontext	positiontext
out2.wins	wins

notfound

Property	Value
Catch output reject	false
Catch lookup inner join reject	true
Schema Type	Built-In

Expression

Column	constructorstandingkey	constructorstandingid	racekey	constructorkey	points	position	positiontext	wins
--------	------------------------	-----------------------	---------	----------------	--------	----------	--------------	------

Schema editor

Column	K_	Type	N_	Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
constructorkey		Integer						
racekey		Integer						
constructorstandingid		Integer						
points		Double						
position		Integer						
positiontext		String						
wins		Integer						

Expression editor

Column	K_	Type	N_	Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
constructorstandingkey		int			10	0	nextval('c...	
constructorstandingid		int			10	0	nextval('c...	
racekey		int			10	0	nextval('c...	
constructorkey		int			10	0	nextval('c...	
points		Double			17	17		
position		Integer			10	0		
positiontext		String			255	0		
wins		Integer			10	0		

Constructor Standing Dimension Output

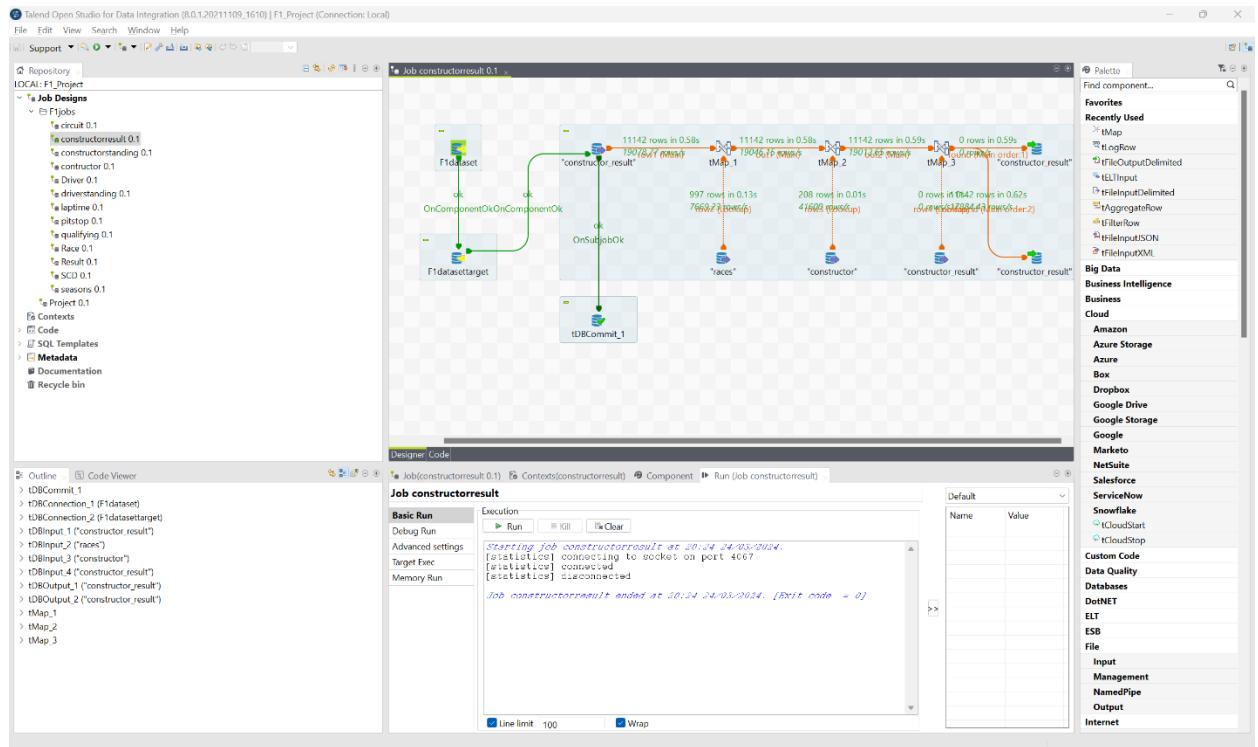
Data Output Messages Notifications

constructorstandingkey [PK] integer **constructorstandingid integer** **racekey integer** **constructorkey integer** **points double precision** **position integer** **positiontext character varying (255)** **wins integer**

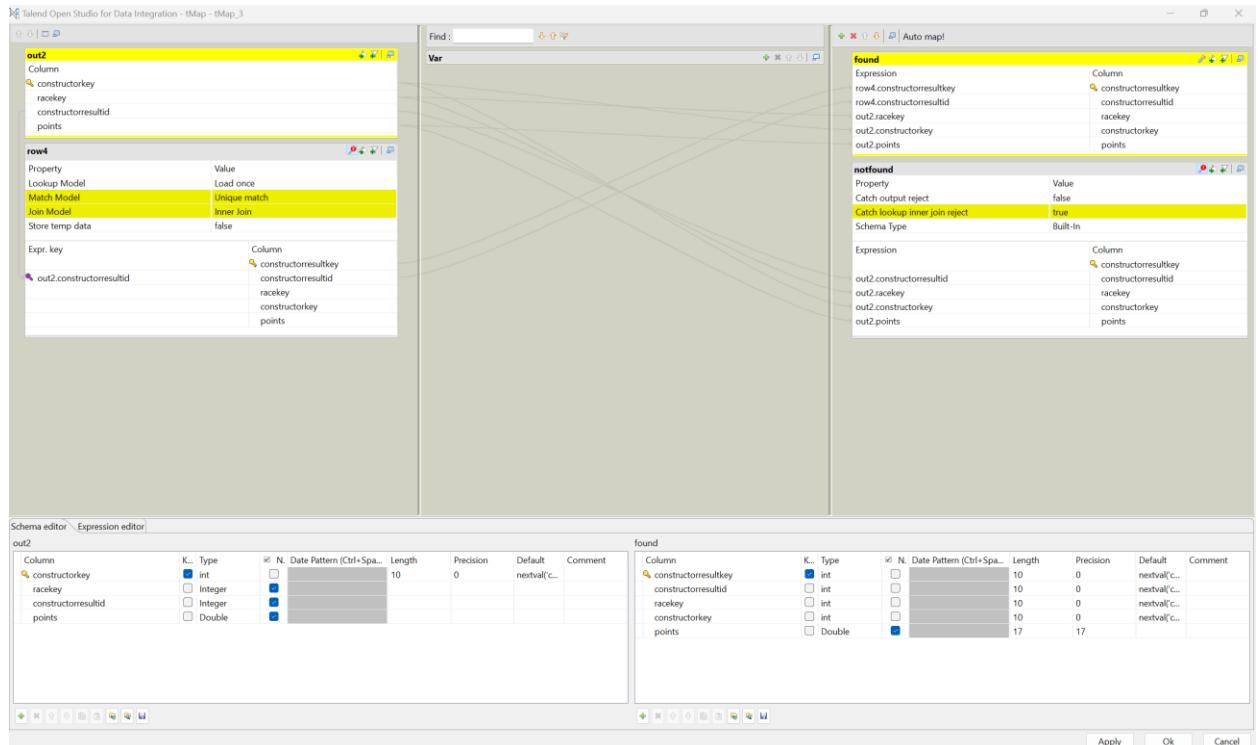
	constructorstandingkey [PK] integer	constructorstandingid integer	racekey integer	constructorkey integer	points double precision	position integer	positiontext character varying (255)	wins integer
1		1	1	18	1	14	1	1
2		2	2	18	2	8	3	0
3		3	3	18	3	9	2	0
4		4	4	18	4	5	4	0
5		5	5	18	5	2	5	0
6		6	6	18	6	1	6	0
7		7	7	19	1	24	1	1
8		8	8	19	2	19	2	0
9		9	9	19	3	9	4	0
10		10	10	19	4	6	5	0
11		11	11	19	5	2	8	0
12		12	12	19	6	11	3	1

Total rows: 1000 of 11896 Query complete 00:00:00.155 Ln 1, Col 35

8. Constructor Result Dimension



Constructor Result Dimension T Mapping



Constructor Result Dimension Output

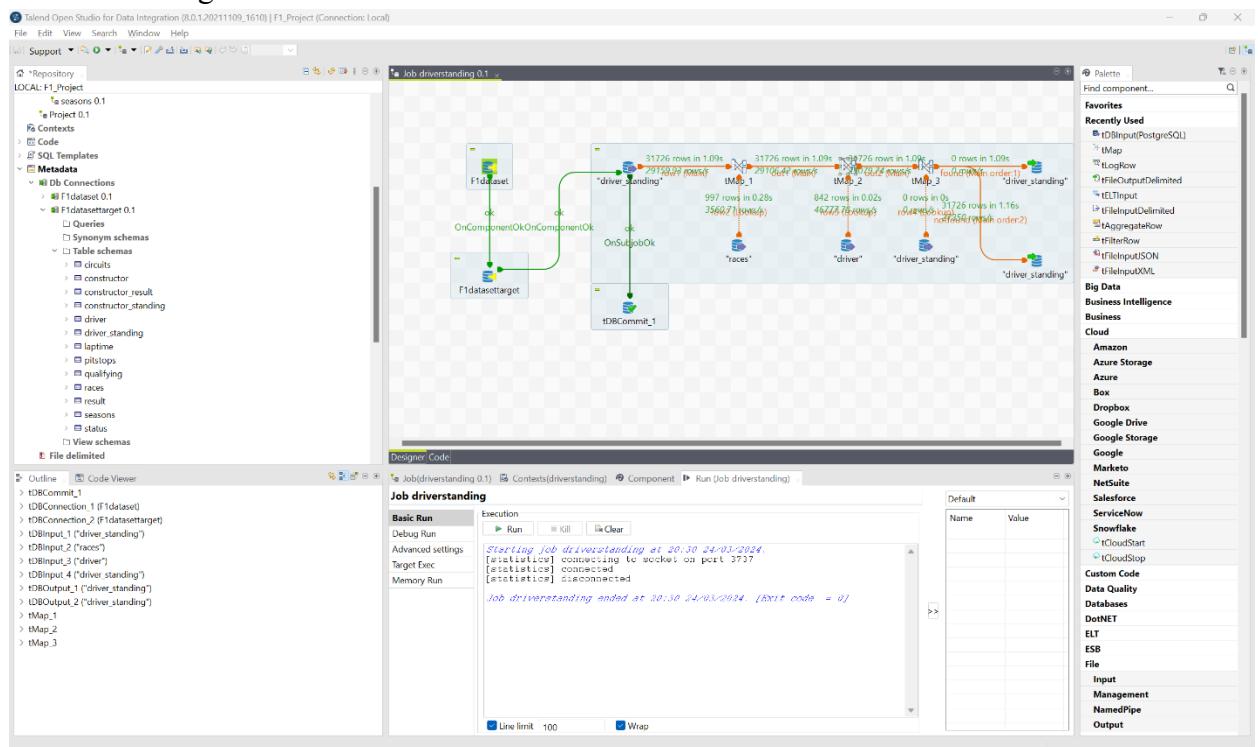
Data Output Messages Notifications

The screenshot shows a table titled 'ConstructorResultDimensionOutput' with columns: constructorresultkey [PK] integer, constructorresultid integer, racekey integer, constructorkey integer, and points double precision. The data consists of 12 rows, each representing a constructor result with its corresponding race key, constructor key, and points.

	constructorresultkey [PK] integer	constructorresultid integer	racekey integer	constructorkey integer	points double precision
1		1	18	1	14
2		2	18	2	8
3		3	18	3	9
4		4	18	4	5
5		5	18	5	2
6		6	18	6	1
7		7	18	7	0
8		8	18	8	0
9		9	18	9	0
10		10	18	10	0
11		11	18	11	0
12		12	19	6	10

Total rows: 1000 of 11142 Query complete 00:00:00.142 Ln 1, Col 33

9. Driver Standing Dimension



Driver Standing Dimension T Mapping

Talend Open Studio for Data Integration - tMap - tMap_3

out2

Column	Value
driverkey	
racekey	
driverstandingsid	
points	
position	
positiontext	
wins	

row4

Property	Value
Lookup Model	Load once
Match Model	Unique match
Join Model	Inner Join
Store temp data	false

Expr. key

Column	Value
out2.driverstandingsid	driverstandingskey driverstandingsid racekey driverkey points position positiontext wins

found

Column	Value
row4.driverstandingskey	driverstandingskey
row4.driverstandingsid	driverstandingsid
out2.racekey	racekey
out2.driverkey	driverkey
out2.points	points
out2.position	position
out2.positiontext	positiontext
out2.wins	wins

notfound

Property	Value
Catch output reject	false
Catch lookup inner join reject	true
Schema Type	Built-In

Expression

Column	Value
out2.driverstandingsid	driverstandingskey driverstandingsid racekey driverkey points position positiontext wins

Schema editor

out2

Column	K_	Type	N	Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
driverkey	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('d...')	
racekey	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('r...')	
driverstandingsid	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('d...')	
points	<input type="checkbox"/>	Double	<input checked="" type="checkbox"/>	double	17	17	nextval('p...')	
position	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('p...')	
positiontext	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>	string	255	0	nextval('p...')	
wins	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('w...')	

found

Column	K_	Type	N	Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
driverstandingskey	<input checked="" type="checkbox"/>	int	<input checked="" type="checkbox"/>	int	10	0	nextval('d...')	
driverstandingsid	<input type="checkbox"/>	int	<input checked="" type="checkbox"/>	int	10	0	nextval('d...')	
racekey	<input type="checkbox"/>	int	<input checked="" type="checkbox"/>	int	10	0	nextval('r...')	
driverkey	<input type="checkbox"/>	int	<input checked="" type="checkbox"/>	int	10	0	nextval('d...')	
points	<input type="checkbox"/>	Double	<input checked="" type="checkbox"/>	double	17	17	nextval('p...')	
position	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('p...')	
positiontext	<input type="checkbox"/>	String	<input checked="" type="checkbox"/>	string	255	0	nextval('p...')	
wins	<input type="checkbox"/>	Integer	<input checked="" type="checkbox"/>	int	10	0	nextval('w...')	

Driver Standing Dimension Output

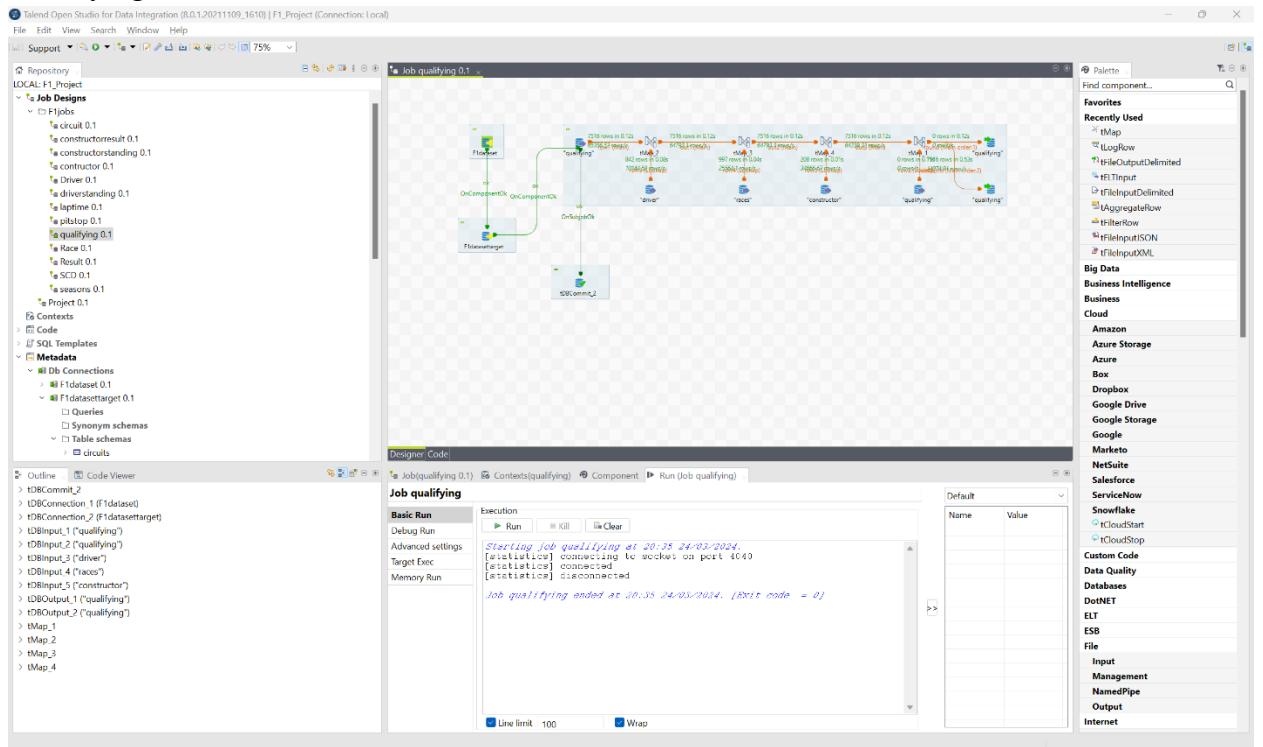
Data Output Messages Notifications

Schema Editor

	driverstandingskey [PK] integer	driverstandingsid integer	racekey integer	driverkey integer	points double precision	position integer	positiontext character varying (255)	wins integer	
1	1	1	18	1	10	1	1	1	
2	2	2	18	2	8	2	2	0	
3	3	3	18	3	6	3	3	0	
4	4	4	18	4	5	4	4	0	
5	5	5	18	5	4	5	5	0	
6	6	6	18	6	3	6	6	0	
7	7	7	18	7	2	7	7	0	
8	8	8	18	8	1	8	8	0	
9	9	9	19	1	14	1	1	1	
10	10	10	19	2	11	3	3	0	
11	11	11	19	3	6	6	6	0	
12	12	12	19	4	6	7	7	0	

Total rows: 1000 of 31726 Query complete 00:00:00.199 Ln 1, Col 30

10. Qualifying Dimension



Qualifying Dimension T Mapping

Column	K... Type	N. Date Pattern (Ctrl+Space)	Length	Precision	Default	Comment
constructorkey	<input type="checkbox"/> Integer		10	0		
racekey	<input type="checkbox"/> Integer		10	0		
driverkey	<input type="checkbox"/> Integer		10	0		
number	<input type="checkbox"/> Integer		10	0		
position	<input type="checkbox"/> String		255	0		
q1	<input type="checkbox"/> String		255	0		
q2	<input type="checkbox"/> String		255	0		
q3	<input type="checkbox"/> String		255	0		
qualifyingid	<input type="checkbox"/> Integer		10	0		

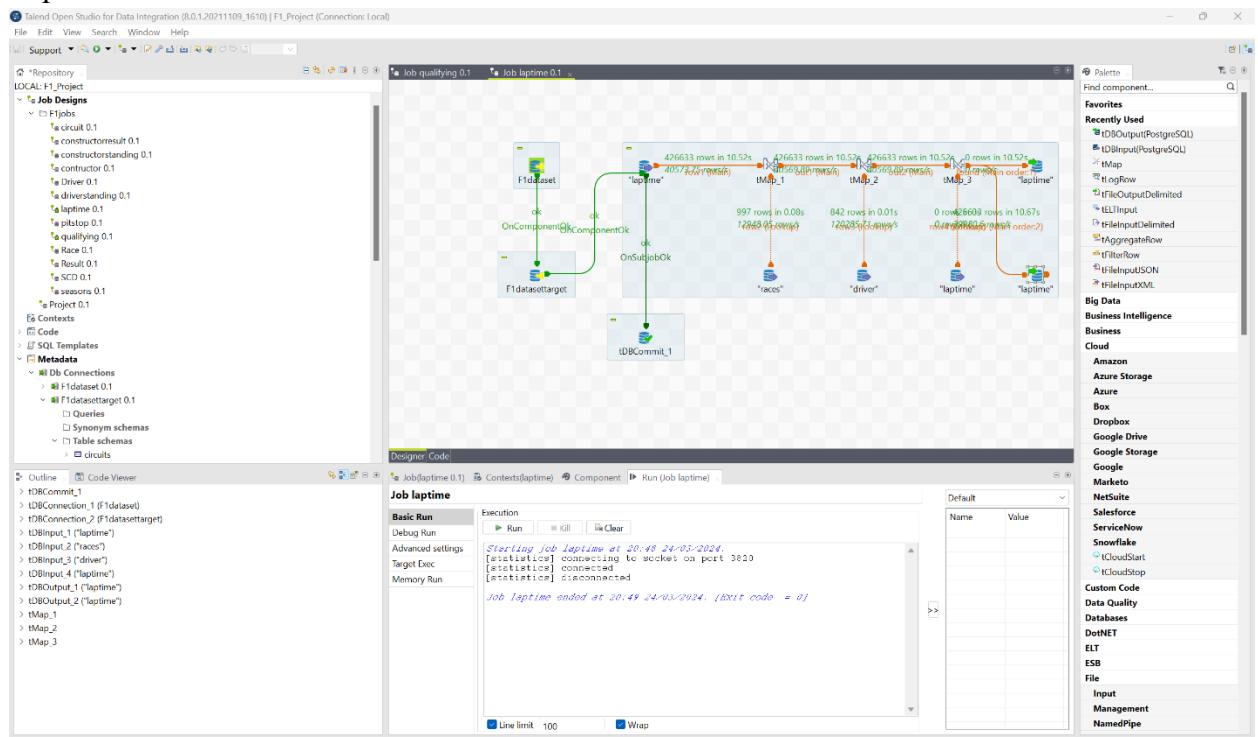
Qualifying Dimension Output

Data Output Messages Notifications

	qualifyingkey [PK] integer	qualifyingid integer	racekey integer	driverkey integer	constructorkey integer	number integer	position integer	q1 character varying (255)	q2 character varying (255)	q3 character varying (255)
1	1	1	18	1	1	22	1	01:26.6	01:25.2	01:26.7
2	2	2	18	9	2	4	2	01:26.1	01:25.3	01:26.9
3	3	3	18	5	1	23	3	01:25.7	01:25.5	01:27.1
4	4	4	18	13	6	2	4	01:26.0	01:25.7	01:27.2
5	5	5	18	2	2	3	5	01:26.0	01:25.5	01:27.2
6	6	6	18	15	7	11	6	01:26.4	01:26.1	01:28.5
7	7	7	18	3	3	7	7	01:26.3	01:26.1	01:28.7
8	8	8	18	14	9	9	8	01:26.4	01:26.1	01:29.0
9	9	9	18	10	7	12	9	01:26.9	01:26.2	01:29.6
10	10	10	18	20	5	15	10	01:26.7	01:25.8	[null]
11	11	11	18	22	11	17	11	01:26.4	01:26.2	[null]
12	12	12	18	4	4	5	12	01:26.9	01:26.2	[null]

Total rows: 1000 of 7516 Query complete 00:00:00.180 Ln 1, Col 25

11. Lap time Dimension



Lap time Dimension T Mapping

The screenshot shows the Talend Open Studio interface for a tMap component. The top section displays the mapping logic between 'out2' and 'row4'. The 'out2' schema includes columns: driverkey, racekey, lap_number, position, time, and milli_sec. The 'row4' schema includes properties for Lookup Model (Load once), Match Model (Unique match), and Join Model (Inner Join). The 'Expr. key' section maps 'out2.racekey' and 'out2.driverkey' to a combined key. The 'found' and 'notfound' sections define the schema for the output rows. Below the mapping logic, the 'Schema editor' and 'Expression editor' tabs are visible, showing the detailed column definitions for both 'out2' and 'row4'.

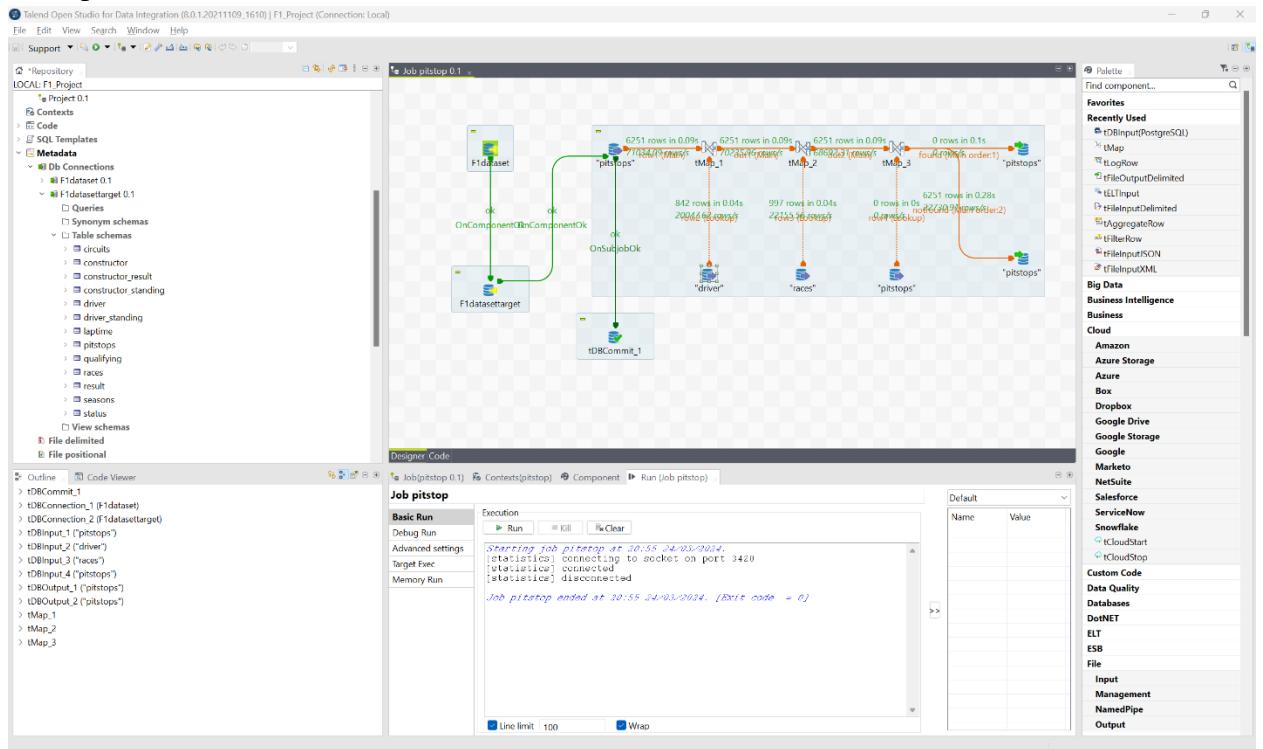
Lap time Dimension Output

Data Output Messages Notifications

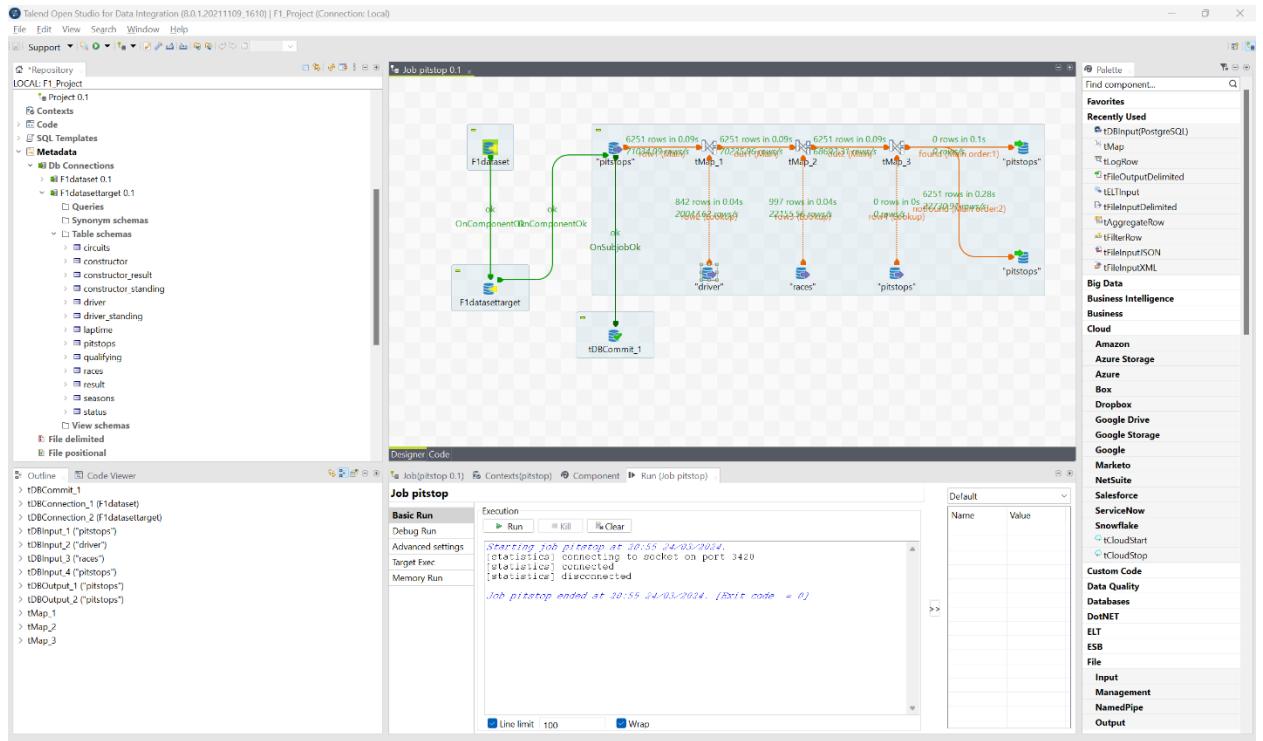
	laptimekey [PK] integer	racekey integer	driverkey integer	lap_number integer	position integer	time character varying	milli_sec integer
1	1	840	20	1	1	1:38.109	98109
2	2	840	20	2	1	1:33.006	93006
3	3	840	20	3	1	1:32.713	92713
4	4	840	20	4	1	1:32.803	92803
5	5	840	20	5	1	1:32.342	92342
6	6	840	20	6	1	1:32.605	92605
7	7	840	20	7	1	1:32.502	92502
8	8	840	20	8	1	1:32.537	92537
9	9	840	20	9	1	1:33.240	93240
10	10	840	20	10	1	1:32.572	92572
11	11	840	20	11	1	1:32.669	92669
12	12	840	20	12	1	1:32.902	92902

Total rows: 1000 of 426633 Query complete 00:00:00.590 Ln 1, Col 22

12. Pitstop Dimension



Pitstop Dimension T Mapping



Pitstop Dimension Output

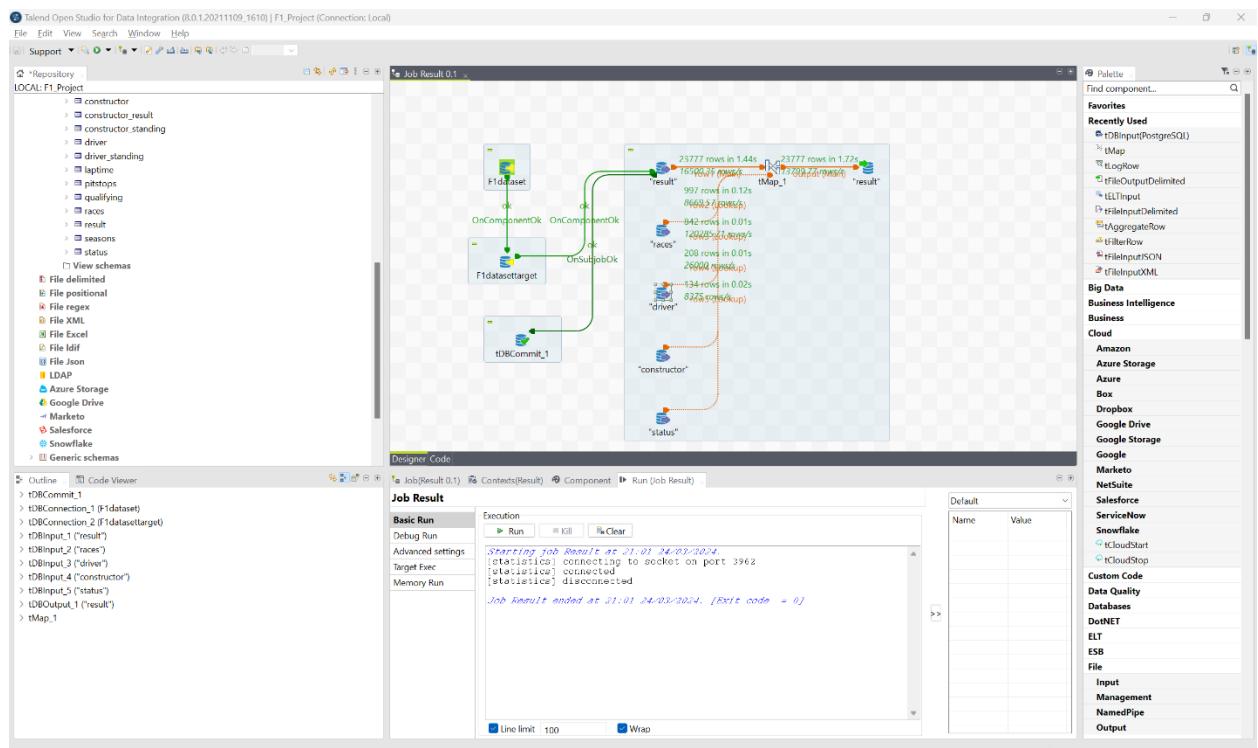
Data Output Messages Notifications

The screenshot shows a data grid with the following columns:

	pitstopkey [PK] integer	racekey integer	driverkey integer	stop integer	lap_number integer	time character varying (250)	milli_sec integer
1	1	840	153	1	1	17:05:23	26898
2	2	840	30	1	1	17:05:52	25021
3	3	840	17	1	11	17:20:48	23426
4	4	840	4	1	12	17:22:34	23251
5	5	840	13	1	13	17:24:10	23842
6	6	840	22	1	13	17:24:29	23643
7	7	840	20	1	14	17:25:17	22603
8	8	840	814	1	14	17:26:03	24863
9	9	840	816	1	14	17:26:50	25259
10	10	840	67	1	15	17:27:34	25342
11	11	840	2	1	15	17:27:41	22994
12	12	840	1	1	16	17:28:24	23227

Total rows: 1000 of 6251 Query complete 00:00:00.152 Ln 1, Col 23

13. Result Fact Table



Result Fact Table T Mapping

The screenshot shows the Talend Open Studio interface for a tMap component. On the left, there are two rows of schema definitions: 'row1' and 'row2'. 'row1' contains columns for raceid, driverid, constructorid, number, grid, position, positiontext, positionorder, points, laps, time, milliseconds, fastestlap, rank, fastestlaptime, fastestlapspeed, and statuskey. 'row2' has a 'Match Model' set to 'All matches' and a 'Join Model' set to 'Left Outer Join'. In the center, a mapping canvas displays connections between columns from 'row1' and 'row2'. On the right, the 'output' schema is defined with columns for resultkey, racekey, driverkey, constructorkey, number, grid, position, positiontext, positionorder, points, laps, time, milliseconds, fastestlap, rank, fastestlaptime, fastestlapspeed, and statuskey. The 'output' schema is identical to 'row1'.

Result Fact Table Output

Data Output														Messages		
	resultkey [PK] integer	racekey integer	driverkey integer	constructorkey integer	number integer	grid integer	position integer	positiontext character varying (255)	positionorder integer	points double precision	laps integer					
1	1	18	1	1	22	1	1	1	1	10	58					
2	2	18	2	2	3	5	2	2		2	58					
3	3	18	3	3	7	7	3	3		3	58					
4	4	18	4	4	5	11	4	4		4	58					
5	5	18	5	1	23	3	5	5		5	58					
6	6	18	6	3	8	13	6	6		6	58					
7	7	18	7	5	14	17	7	7		7	58					
8	8	18	8	6	1	15	8	8		8	58					
9	9	18	9	2	4	2	[null]	R		9	47					
10	10	18	10	7	12	18	[null]	R		10	48					
11	11	18	11	8	18	19	[null]	R		11	32					
12	12	18	12	4	6	20	[null]	R		12	30					

Total rows: 1000 of 23777 Query complete 00:00:00.236

Ln 1, Col 21

14. SCD

