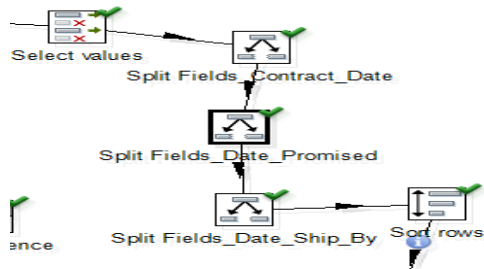
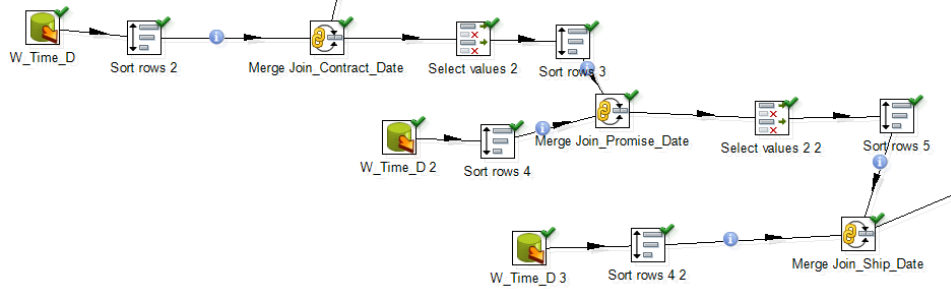


[illegible]



4. Find Time_Id from Time Dimension For each of three dates



5. Calculate Date Diff

Calculator

Step name: Date_Differences

#	New field	Calculation	Field A	Field B	Field C	Value type	Length	Precision	Remove	Conversion mask	Decimal sym
1	Diff_Promise_minus_Contract	A - B	RowNum_Promise_Date	RowNum_Contract_Date		None			N		
2	Diff_Promise_minus_Ship	A - B	RowNum_Promise_Date	RowNum_Ship_Date		None			N		

Help OK Cancel

6. Invalid Date Diff(Add to Error_Log) Filter by Condition and Add non matching rows

he condition:

Diff_Promise_minus_Contract >= [14]

AND

Diff_Promise_minus_Contract <= [30]

AND

Diff_Promise_minus_Ship >= [2]

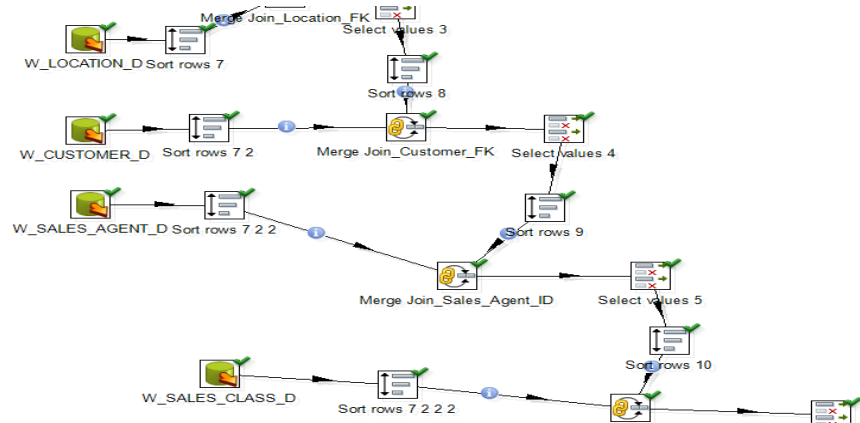
AND

Diff_Promise_minus_Ship <= [7]

6	6	61016	(null)	Invalid Dates
7	7	60879	(null)	Invalid Dates
8	8	60950	(null)	Invalid Dates
9	9	60968	(null)	Invalid Dates
10	10	60835	(null)	Invalid Dates
11	11	60837	(null)	Invalid Dates
12	12	61255	(null)	Invalid Dates
13	13	61108	(null)	Invalid Dates
14	14	61220	(null)	Invalid Dates
15	15	60782	(null)	Invalid Dates
16	16	61062	(null)	Invalid Dates
17	17	61065	(null)	Invalid Dates
18	18	60789	(null)	Invalid Dates
19	19	61192	(null)	Invalid Dates
20	20	61042	(null)	Invalid Dates
21	21	61103	(null)	Invalid Dates
22	22	60725	(null)	Invalid Dates

7. Check FKs For Location_ID, Customer_ID Ordered By,Sales_Agent_ID,Sales_Class_ID

For Getting Rejected Rows , Do a left outer join for each merge with Tables Input.



8. Where FK's Values are not matched(Add to ERROR_LOG Table)

Conditions are used to find non matching rows

The condition:

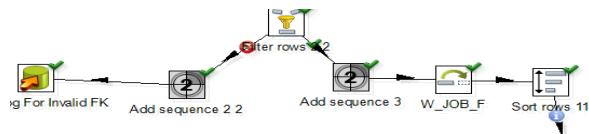
```

Time_ID_Contract_Date IS NOT NULL
AND
Time_ID_Promise_Date IS NOT NULL
AND
Time_ID_Ship_Date IS NOT NULL
AND
LOCATION_ID_FK IS NOT NULL
AND
CUST_KEY_FK IS NOT NULL
AND
SALES_AGENT_ID_FK IS NOT NULL
AND
SALES_CLASS_ID_FK IS NOT NULL

```

23	23	61145	(null)	Invalid Referential Integrity
24	24	60939	(null)	Invalid Referential Integrity
25	25	61086	(null)	Invalid Referential Integrity
26	26	60802	(null)	Invalid Referential Integrity
27	27	60735	(null)	Invalid Referential Integrity
28	28	61122	(null)	Invalid Referential Integrity
29	29	61212	(null)	Invalid Referential Integrity
30	30	61129	(null)	Invalid Referential Integrity
31	31	60677	(null)	Invalid Referential Integrity
32	32	60889	(null)	Invalid Referential Integrity
33	33	60946	(null)	Invalid Referential Integrity
34	34	61201	(null)	Invalid Referential Integrity
35	35	60771	(null)	Invalid Referential Integrity
36	36	61134	(null)	Invalid Referential Integrity
37	37	60984	(null)	Invalid Referential Integrity
38	38	60742	(null)	Invalid Referential Integrity
39	39	60775	(null)	Invalid Referential Integrity
40	40	61224	(null)	Invalid Referential Integrity
41	41	61099	(null)	Invalid Referential Integrity
42	42	61051	(null)	Invalid Referential Integrity
43	43	60796	(null)	Invalid Referential Integrity
44	44	61135	(null)	Invalid Referential Integrity
45	45	60684	(null)	Invalid Referential Integrity
46	46	60667	(null)	Invalid Referential Integrity
47	47	60894	(null)	Invalid Referential Integrity
48	48	61141	(null)	Invalid Referential Integrity
49	49	61072	(null)	Invalid Referential Integrity
50	50	60680	(null)	Invalid Referential Integrity
51	51	60829	(null)	Invalid Referential Integrity
52	52	61060	(null)	Invalid Referential Integrity
53	53	61127	(null)	Invalid Referential Integrity
54	54	60978	(null)	Invalid Referential Integrity
55	55	61131	(null)	Invalid Referential Integrity
56	56	60988	(null)	Invalid Referential Integrity
57	57	60967	(null)	Invalid Referential Integrity

9. Now add the rows which satisfied the above conditions to Job Table



Mappings:

SALES_AGENT_ID --> SALES_AGENT_ID
 SALES_CLASS_ID --> SALES_CLASS_ID
 LOCATION_ID --> LOCATION_ID
 CUST_ID_ORDERED_BY --> CUST_ID_ORDERED_BY
 NUMBER_OF_SUBJOBS --> NUMBER_OF_SUBJOBS
 UNIT_PRICE --> UNIT_PRICE
 QUANTITY_ORDERED --> QUANTITY_ORDERED
 QUOTE_QTY --> QUOTE_QTY
 JOB_ID --> JOB_ID
 Time_ID_Contract_Date --> CONTRACT_DATE
 Time_ID_Promise_Date --> DATE_PROMISED
 Time_ID_Ship_Date --> DATE_SHIP_BY

Updated Job Table(543 rows are added)

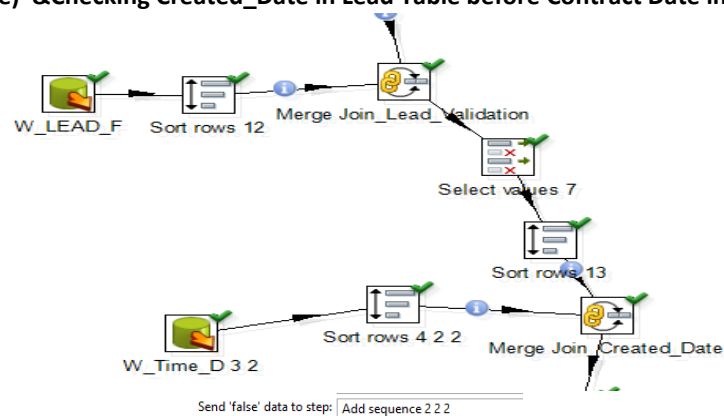
Execution Results

Execution History | Logging | Step Metrics | Performance Graph | Metrics | Preview data

First rows | Last rows | Off

#	CHANGE_ID	Contract_Year	Contract_Month	Contract_Day	SALES_AGENT_ID	SALES_CLASS_ID	LOCATION_ID
1	61082	2015	4	28	1122	1	5
2	61153	2015	8	6	1125	1	6
3	60662	2015	3	24	1135	1	4
4	61132	2015	5	7	1142	1	12
5	60908	2015	4	30	1154	1	4
6	61158	2015	5	5	1156	1	2
7	61010	2015	9	10	1162	1	10
8	60800	2015	4	3	1176	1	1
9	60920	2015	7	20	1178	1	1
10	61204	2015	4	9	1185	1	5
11	60963	2015	8	14	1186	1	2
12	60781	2015	8	6	1189	1	3
13	61199	2015	3	19	1190	1	8
14	60666	2015	6	18	1195	1	7
15	60869	2015	4	29	1201	1	10
16	60931	2015	9	7	1204	1	11
17	61057	2015	8	6	1206	1	8
18	61233	2015	9	11	1209	1	1
19	60767	2015	7	17	1217	1	6
20	60693	2015	4	29	1222	1	1
21	60805	2015	2	16	1229	1	6
22	61231	2015	7	21	1231	1	8
23	60858	2015	3	24	1243	1	12
24	61119	2015	6	30	1251	1	2

10. Lead Validation(Now using the added rows in Job Table) (Check for Lead_ID(Validity By Merging with Lead Table) &Checking Created_Date in Lead Table before Contract Date in Job)



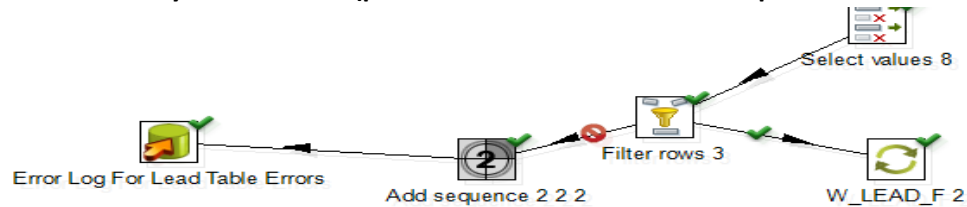
The condition:

☐
 Time_ID_Created_Date < Time_ID_Contract_Date
 AND
 LEAD_ID_FK IS NOT NULL

11. Using this filter condition , adding false rows to Error_Log_table

58	58	60893	1000323	Invalid Update To Lead Table
59	59	60790	1000532	Invalid Update To Lead Table
60	60	60954	1000270	Invalid Update To Lead Table
61	61	61226	1000219	Invalid Update To Lead Table
62	62	60891	1000269	Invalid Update To Lead Table

12. Finally rows that satisfy all conditions(pass all validations are used to update the Lead Table)



538 rows are updated

Execution Results

Execution History | Logging | Step Metrics | Performance Graph | Metrics | Preview data

● First rows ○ Last rows ○ Off

#	CHANGE_ID	Contract_Year	Contract_Month	Contract_Day	SALES_AGENT_ID	SALES_CLASS_ID	LOCATION_ID
1	60845	2015	3	4	1526	3	5
2	60723	2015	3	10	1481	5	3
3	60761	2015	2	10	1494	6	2
4	60828	2015	1	23	1384	5	6
5	60992	2015	3	9	1605	6	12
6	61177	2015	3	20	1240	5	7
7	61205	2015	1	29	1192	6	7
8	61247	2015	3	5	1149	2	3
9	60814	2015	3	26	1295	4	8
10	60839	2015	3	13	1471	3	3
11	61033	2015	3	25	1432	4	12
12	61043	2015	3	20	1598	6	9
13	60720	2015	3	30	1254	6	9
14	60731	2015	2	4	1377	6	8
15	60865	2015	3	17	1151	4	11
16	60878	2015	1	30	1322	2	7
17	61143	2015	1	29	1318	1	8
18	60695	2015	2	13	1514	3	1
19	60818	2015	1	30	1330	3	9
20	60887	2015	3	9	1150	4	4
21	60934	2015	3	9	1447	6	5
22	61089	2015	1	19	1456	1	9
23	61146	2015	3	9	1230	2	1
24	60926	2015	2	3	1417	2	7

13. Final View of W_LEAD_F(3600 rows)

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Filter:

	LEAD_ID	QUOTE_QTY	QUOTE_PRICE	LEAD_SUCCESS	JOB_ID	CREATED_DATE	CUST_ID	LOCATION_ID	SALES_AGENT_ID	SALES_CLASS_ID
1	394326	1018100	1.47 Y		314464	20140128	2535	3	1154	2
2	394327	385400	1.55 Y		314465	20130902	2686	10	1582	2
3	394328	940700	0.74 Y		314466	20130823	2571	5	1561	6
4	394329	1073200	1.47 Y		314467	20140328	2687	4	1476	2
5	394330	669900	1.52 N		(null)	20130524	2768	12	1313	2
6	394331	1031800	0.74 Y		314468	20140806	2876	12	1177	4
7	394332	138000	0.79 Y		314469	20131015	2522	12	1206	6
8	394333	474800	0.78 Y		314470	20130228	2791	4	1157	3
9	394334	290400	0.78 Y		314471	20131227	2635	3	1468	4
10	394335	763700	0.75 Y		314472	20141020	2664	5	1412	6
11	394336	989200	0.74 Y		314473	20140618	2882	1	1324	6
12	394337	210600	1.58 Y		314474	20140228	2760	11	1386	1
13	394338	65900	0.8 Y		314475	20140911	2840	5	1298	5
14	394339	195800	0.79 Y		314476	20140110	2642	2	1135	3
15	394340	218600	0.79 Y		314477	20130924	2770	7	1573	4
16	394341	171100	0.79 N		(null)	20130403	2695	12	1548	5
17	394342	984000	1.49 Y		314478	20140219	2590	4	1293	2
18	394343	143400	1.58 Y		314479	20140522	2749	12	1306	1
19	394344	1061100	1.47 Y		314480	20131217	2949	7	1356	1
20	394345	1061300	1.47 Y		314481	20131203	2666	3	1149	2
21	394346	426500	0.78 Y		314482	20130417	2827	4	1377	4
22	394347	468300	0.78 Y		314483	20140526	2947	9	1559	4

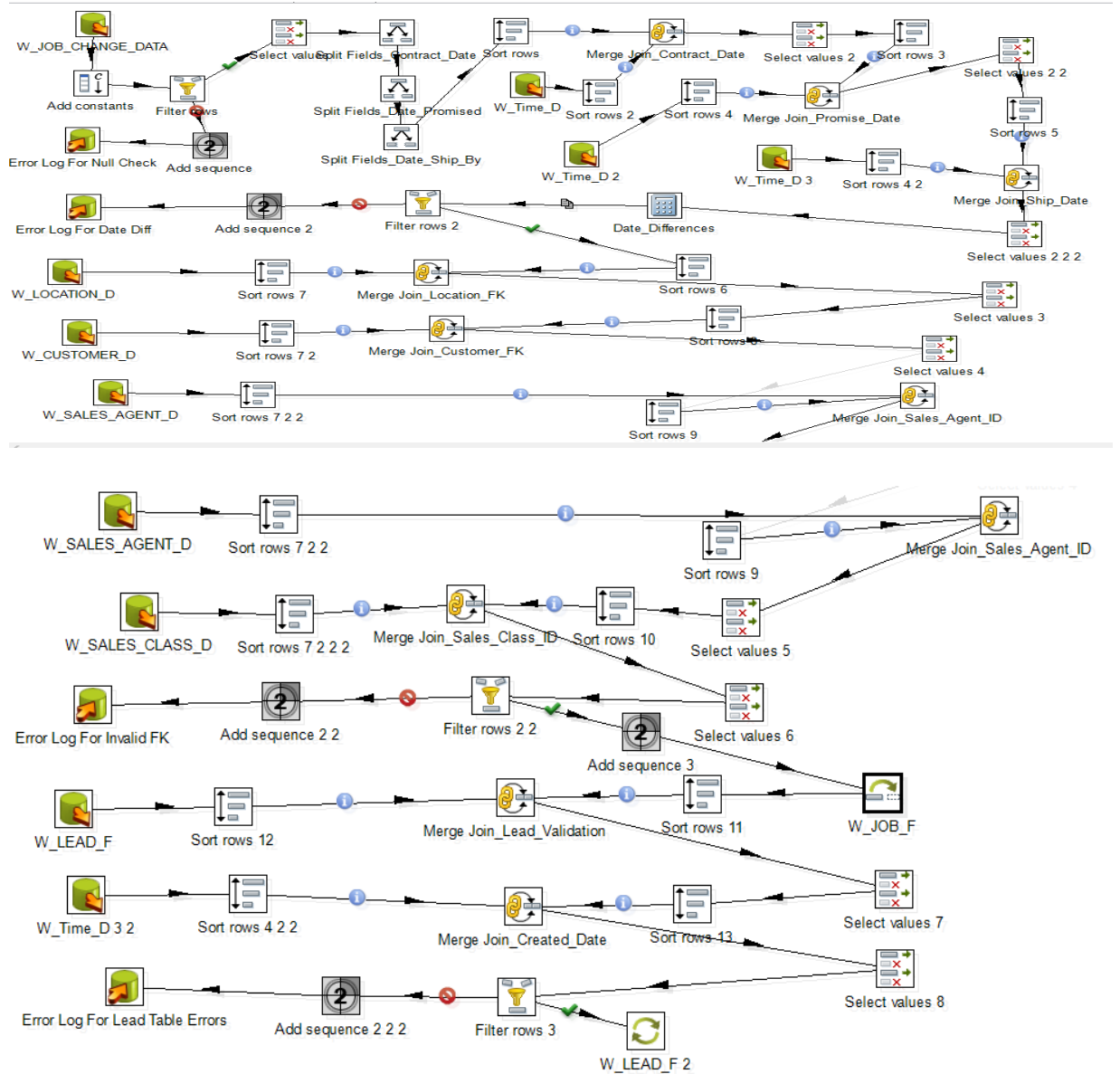
14. Final View of W_ERROR_LOG(62 rows)

Start Page W_ERROR_LOG			
Columns	Data	Model	Constraints Grants Statistics Triggers Flashback Dependence
			Sort... Filter:
LOG_ID	CHANGE_ID	JOB_ID	NOTE
1	1	61186	(null) Null values are found
2	2	61077	(null) Null values are found
3	3	61090	(null) Null values are found
4	4	61202	(null) Null values are found
5	5	60798	(null) Null values are found
6	6	61016	(null) Invalid Dates
7	7	60879	(null) Invalid Dates
8	8	60950	(null) Invalid Dates
9	9	60968	(null) Invalid Dates
10	10	60835	(null) Invalid Dates
11	11	60837	(null) Invalid Dates
12	12	61255	(null) Invalid Dates
13	13	61108	(null) Invalid Dates
14	14	61220	(null) Invalid Dates
15	15	60782	(null) Invalid Dates
16	16	61062	(null) Invalid Dates
17	17	61065	(null) Invalid Dates
18	18	60789	(null) Invalid Dates
19	19	61192	(null) Invalid Dates
20	20	61042	(null) Invalid Dates
21	21	61103	(null) Invalid Dates
22	22	60725	(null) Invalid Dates
43	43	60796	(null) Invalid Referential Integrity
44	44	61135	(null) Invalid Referential Integrity
45	45	60684	(null) Invalid Referential Integrity
46	46	60667	(null) Invalid Referential Integrity
47	47	60894	(null) Invalid Referential Integrity
48	48	61141	(null) Invalid Referential Integrity
49	49	61072	(null) Invalid Referential Integrity
50	50	60680	(null) Invalid Referential Integrity
51	51	60829	(null) Invalid Referential Integrity
52	52	61060	(null) Invalid Referential Integrity
53	53	61127	(null) Invalid Referential Integrity
54	54	60978	(null) Invalid Referential Integrity
55	55	61131	(null) Invalid Referential Integrity
56	56	60988	(null) Invalid Referential Integrity
57	57	60967	(null) Invalid Referential Integrity
58	58	60893	1000323 Invalid Update To Lead Table
59	59	60790	1000532 Invalid Update To Lead Table
60	60	60954	1000270 Invalid Update To Lead Table
61	61	61226	1000219 Invalid Update To Lead Table
62	62	60891	1000269 Invalid Update To Lead Table
23	23	61145	(null) Invalid Referential Integrity
24	24	60939	(null) Invalid Referential Integrity
25	25	61086	(null) Invalid Referential Integrity
26	26	60802	(null) Invalid Referential Integrity
27	27	60735	(null) Invalid Referential Integrity
28	28	61122	(null) Invalid Referential Integrity
29	29	61212	(null) Invalid Referential Integrity
30	30	61129	(null) Invalid Referential Integrity
31	31	60677	(null) Invalid Referential Integrity
32	32	60889	(null) Invalid Referential Integrity
33	33	60946	(null) Invalid Referential Integrity
34	34	61201	(null) Invalid Referential Integrity
35	35	60771	(null) Invalid Referential Integrity
36	36	61134	(null) Invalid Referential Integrity
37	37	60984	(null) Invalid Referential Integrity
38	38	60742	(null) Invalid Referential Integrity
39	39	60775	(null) Invalid Referential Integrity
40	40	61224	(null) Invalid Referential Integrity
41	41	61099	(null) Invalid Referential Integrity
42	42	61051	(null) Invalid Referential Integrity
43	43	60796	(null) Invalid Referential Integrity

15. Final View of W_JOB_F (3070 rows)

Start Page W_JOB_F										
Columns	Data	Model	Constraints	Grants	Statistics	Triggers	Flashback	Dependencies	Details	Partitions
										Indexes SQL
										Actions...
JOB_ID	CONTRACT_DATE	SALES_AGENT_ID	SALES_CLASS_ID	LOCATION_ID	CUST_ID_ORDERED_BY	DATE_PROMISED	DATE_SHIP_BY	NUMBER_OF_SUBJOBS	UNIT_PRICE	
1	314007	20140711	1208	2	2	2812	20140818	20140814	2	1.52
2	314008	20140321	1279	2	6	2926	20140501	20140422	2	1.52
3	314009	20140225	1497	3	3	2618	20140407	20140403	1	0.78
4	314010	20131108	1229	2	2	2723	20131129	20131125	2	1.52
5	314011	20140820	1181	3	3	2824	20140922	20140915	3	0.74
6	314012	20130530	1346	3	9	2736	20130711	20130708	3	0.74
7	314013	20140101	1231	5	2	2860	20140129	20140127	2	0.76
8	314014	20141230	1498	3	1	2700	20150129	20150123	3	0.74
9	314015	20140122	1551	6	9	2757	20140221	20140213	1	0.8
10	314016	20130522	1230	5	1	2834	20130625	20130621	4	0.78
11	314017	20140826	1457	5	6	2861	20140919	20140915	2	0.77
12	314018	20130401	1561	2	5	2569	20130503	20130429	1	1.6
13	314019	20140520	1463	4	10	2769	20140616	20140606	1	0.79
14	314020	20130607	1341	2	8	2693	20130708	20130701	1	1.54
15	314021	20130503	1515	5	4	2984	20130528	20130522	4	0.74
16	314022	20150108	1198	5	5	2921	20150209	20150130	2	0.76
17	314023	20130829	1270	6	9	2549	20131003	20131001	3	0.76
18	314024	20140107	1172	3	12	2723	20140211	20140204	9	0.73
19	314025	20150306	1372	1	6	2508	20150331	20150325	4	1.47
20	314026	20130805	1136	5	11	2645	20130903	20130829	2	0.78
21	314027	20141201	1320	6	6	2897	20141231	20141226	3	0.74
22	314028	20140508	1429	4	1	2926	20140610	20140604	4	0.75

Transformation is as follows:



Execution Results are as follows:

Execution Results												
Execution History Logging Step Metrics Performance Graph Metrics Preview data												
#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)
1	W_JOB_CHANGE_DATA	0	0	600	600	0	0	0	0	Finished	0.6s	1,033
2	Add constants	0	600	600	0	0	0	0	0	Finished	0.5s	1,141
3	Filter rows	0	600	600	0	0	0	0	0	Finished	0.5s	1,130
4	Add sequence	0	5	5	0	0	0	0	0	Finished	0.6s	8
5	Error Log For Null Check	0	5	5	0	5	0	0	0	Finished	1.2s	4
6	W_Time_D	0	0	1500	1500	0	0	0	0	Finished	0.8s	1,803
7	Sort rows 2	0	1500	1500	0	0	0	0	0	Finished	0.9s	1,693
8	Select values	0	595	595	0	0	0	0	0	Finished	0.5s	1,106
9	Split Fields_Contract_Date	0	595	595	0	0	0	0	0	Finished	0.6s	1,022
10	Sort rows	0	595	595	0	0	0	0	0	Finished	0.8s	701
11	Merge Join_Contract_Date	0	2095	595	0	0	0	0	0	Finished	1.2s	1,713
12	Split Fields_Date_Promised	0	595	595	0	0	0	0	0	Finished	0.6s	1,002
13	Split Fields_Date_Ship_By	0	595	595	0	0	0	0	0	Finished	0.6s	980
14	Select values 2	0	595	595	0	0	0	0	0	Finished	1.2s	485
15	W_Time_D 2	0	0	1500	1500	0	0	0	0	Finished	1.0s	1,446
16	Sort rows 4	0	1500	1500	0	0	0	0	0	Finished	1.0s	1,451
17	Sort rows 3	0	595	595	0	0	0	0	0	Finished	1.3s	467
18	W_Time_D 3	0	0	1500	1500	0	0	0	0	Finished	1.1s	1,379
19	Sort rows 4 2	0	1500	1500	0	0	0	0	0	Finished	1.1s	1,407
20	Merge Join_Promise_Date	0	2095	595	0	0	0	0	0	Finished	1.6s	1,311
21	Select values 2 2	0	595	595	0	0	0	0	0	Finished	1.6s	372
22	Sort rows 5	0	595	595	0	0	0	0	0	Finished	1.6s	364
23	Add sequence 2	0	17	17	0	0	0	0	0	Finished	2.0s	8

Execution Results

Execution History | Logging | Step Metrics | Performance Graph | Metrics | Preview data

#	Stepname	Copynr	Read	Written	Input	Output	Updated	Rejected	Errors	Active	Time	Speed (r/s)	input/c
24	Error Log For Date Diff	0	17	17	0	17	0	0	0	Finished	2.0s	8	
25	Merge Join_Ship_Date	0	2095	595	0	0	0	0	0	Finished	2.0s	1,055	
26	Select values 2 2 2	0	595	595	0	0	0	0	0	Finished	2.0s	299	
27	Date_Differences	0	595	595	0	0	0	0	0	Finished	2.0s	299	
28	Filter rows 2	0	595	595	0	0	0	0	0	Finished	2.0s	297	
29	W_LOCATION_D	0	0	12	12	0	0	0	0	Finished	0.2s	52	
30	Sort rows 7	0	12	12	0	0	0	0	0	Finished	0.2s	57	
31	W_CUSTOMER_D	0	0	500	500	0	0	0	0	Finished	0.7s	690	
32	Sort rows 7 2	0	500	500	0	0	0	0	0	Finished	0.7s	673	
33	W_SALES_AGENT_D	0	0	500	500	0	0	0	0	Finished	0.6s	782	
34	Sort rows 7 2 2	0	500	500	0	0	0	0	0	Finished	0.6s	794	
35	W_SALES_CLASS_D	0	0	6	6	0	0	0	0	Finished	0.2s	35	
36	Sort rows 7 2 2 2	0	6	6	0	0	0	0	0	Finished	0.1s	53	
37	Sort rows 6	0	578	578	0	0	0	0	0	Finished	2.1s	275	
38	Merge Join_Location_FK	0	590	578	0	0	0	0	0	Finished	2.4s	243	
39	Select values 3	0	578	578	0	0	0	0	0	Finished	2.4s	238	
40	Sort rows 8	0	578	578	0	0	0	0	0	Finished	2.5s	233	
41	Merge Join_Customer_FK	0	1078	578	0	0	0	0	0	Finished	2.8s	385	
42	Select values 4	0	578	578	0	0	0	0	0	Finished	2.8s	206	
43	Sort rows 9	0	578	578	0	0	0	0	0	Finished	2.8s	203	
44	Merge Join_Sales_Agent_ID	0	1078	578	0	0	0	0	0	Finished	3.2s	340	
45	Select values 5	0	578	578	0	0	0	0	0	Finished	3.2s	182	
46	Sort rows 10	0	578	578	0	0	0	0	0	Finished	3.2s	178	
47	Merge Join_Sales_Class_ID	0	584	578	0	0	0	0	0	Finished	3.5s	165	
48	Select values 6	0	578	578	0	0	0	0	0	Finished	3.5s	163	
49	Add sequence 2 2	0	35	35	0	0	0	0	0	Finished	3.6s	10	
50	Error Log For Invalid FK	0	35	35	0	35	0	0	0	Finished	3.6s	10	
51	Filter rows 2 2	0	578	578	0	0	0	0	0	Finished	3.6s	163	
52	Add sequence 3	0	543	543	0	0	0	0	0	Finished	3.7s	148	
53	W_JOB_F	0	543	543	543	543	0	0	0	Finished	4.6s	119	
54	Sort rows 11	0	543	543	0	0	0	0	0	Finished	4.6s	118	
55	W_LEAD_F	0	0	3600	3600	0	0	0	0	Finished	1.2s	2,946	
56	Sort rows 12	0	3600	3600	0	0	0	0	0	Finished	1.5s	2,483	
57	Merge Join_Lead_Validation	0	4143	543	0	0	0	0	0	Finished	4.9s	839	
58	Select values 7	0	543	543	0	0	0	0	0	Finished	4.9s	110	
59	W_Time_D 3 2	0	0	1500	1500	0	0	0	0	Finished	1.1s	1,369	
60	Sort rows 4 2 2	0	1500	1500	0	0	0	0	0	Finished	1.1s	1,352	
61	Sort rows 13	0	543	543	0	0	0	0	0	Finished	5.0s	108	
62	Merge Join_Created_Date	0	2043	543	0	0	0	0	0	Finished	5.3s	382	
63	Select values 8	0	543	543	0	0	0	0	0	Finished	5.4s	101	
64	Add sequence 2 2 2	0	5	5	0	0	0	0	0	Finished	5.4s	1	
65	Error Log For Lead Table Errors	0	5	5	0	5	0	0	0	Finished	5.5s	1	
66	Filter rows 3	0	543	543	0	0	0	0	0	Finished	5.4s	101	
67	W_LEAD_F 2	0	538	538	538	0	538	0	0	Finished	5.6s	96	