

## BQ 1: Location/Sales class summary for job quantity and amount

```
CREATE VIEW view_location_sales_class_summary AS
SELECT
    A.location_id
  ,B.location_name
  ,D.time_year AS contract_year
  ,D.time_month AS contract_month
  ,A.sales_class_id
  ,C.sales_class_desc
  ,C.base_price
  ,SUM(A.quantity_ordered) AS sum_quantity_ordered
  ,SUM(A.quantity_ordered * C.base_price) AS sum_job_amount
FROM
    w_job_f A
JOIN
    w_location_d B ON A.location_id = B.location_id
JOIN
    w_sales_class_d C ON A.sales_class_id = C.sales_class_id
JOIN
    w_time_d D ON A.contract_date = D.time_id
GROUP BY
    A.location_id
  ,B.location_name
  ,D.time_year
  ,D.time_month
  ,A.sales_class_id
  ,C.sales_class_desc
  ,C.base_price
ORDER BY
    A.location_id, contract_year ,contract_month ,A.sales_class_id;
```

Snapshot for BQ1

location_id	location_name	contract_year	contract_month	sales_class_id	sales_class_desc	base_price	sum_quantity_ordered	sum_job_amount
1	New York	2013	2	2	Credit Smart	1,6	1556900	2491040
1	New York	2013	2	3	Debit NoSmart	0,8	868900	695120
1	New York	2013	2	4	Credit NoSmart	0,8	1113700	890960
1	New York	2013	2	5	Prepaid NoSmart	0,8	961700	769360
1	New York	2013	3	1	Debit Smart	1,6	613000	980800
1	New York	2013	3	2	Credit Smart	1,6	828600	1325760
1	New York	2013	3	4	Credit NoSmart	0,8	1375800	1100640
1	New York	2013	3	5	Prepaid NoSmart	0,8	162700	130160
1	New York	2013	4	2	Credit Smart	1,6	754600	1207360
1	New York	2013	4	3	Debit NoSmart	0,8	697100	557680
1	New York	2013	4	4	Credit NoSmart	0,8	1225100	980080
1	New York	2013	4	5	Prepaid NoSmart	0,8	309500	247600
1	New York	2013	5	1	Debit Smart	1,6	537900	860640
1	New York	2013	5	2	Credit Smart	1,6	232400	371840

## BQ 2: Location invoice revenue summary

```
CREATE VIEW view_location_invoice_revenue_summary AS
SELECT
    A.location_id
  ,E.location_name
  ,F.time_year AS contract_year
  ,F.time_month AS contract_month
  ,A.job_id
  ,A.unit_price
  ,A.quantity_ordered
  ,SUM(D.invoice_amount) AS sum_invoice_amount
  ,SUM(D.invoice_quantity) AS sum_invoice_quantity
FROM
    w_job_f A
JOIN
    w_sub_job_f B ON A.job_id = B.job_id
JOIN
    w_job_shipment_f C ON B.sub_job_id = C.sub_job_id
JOIN
    w_invoiceline_f D ON C.invoice_id = D.invoice_id
JOIN
    w_location_d E ON A.location_id = E.location_id
JOIN
    w_time_d F ON A.contract_date = F.time_id
GROUP BY
    A.location_id
  ,E.location_name
  ,F.time_year
  ,F.time_month
  ,A.job_id
  ,A.unit_price
  ,A.quantity_ordered
ORDER BY
    A.location_id, F.time_year, F.time_month, A.job_id;
```

Snapshot for BQ2

location_id	location_name	contract_year	contract_month	job_id	unit_price	quantity_ordered	sum_invoice_amount	sum_invoice_quantity
1	New York	2013	2	340280	0,74	961700	663410	839199
1	New York	2013	2	340782	1,58	179600	283768	179600
1	New York	2013	2	341331	0,74	1113700	710992	923432
1	New York	2013	2	341516	1,55	355800	551490	355800
1	New York	2013	2	341803	0,74	868900	562770	760500
1	New York	2013	2	342518	1,47	1021500	1048404	700936
1	New York	2013	3	340754	1,52	828600	1222840	792620
1	New York	2013	3	340997	1,52	613000	821864	540700
1	New York	2013	3	341144	0,78	439000	342420	439000
1	New York	2013	3	341275	0,79	162700	64227	81300
1	New York	2013	3	341897	0,74	936800	652458	831396
1	New York	2013	4	340410	0,76	697100	393756	506100
1	New York	2013	4	340918	1,49	754600	1124354	754600
1	New York	2013	4	341309	0,78	309500	197652	225059

### BQ 3: Location subjob cost summary

```

CREATE VIEW view_location_subjob_cost_summary AS
SELECT
    A.location_id,
    B.location_name,
    D.time_year AS contract_year,
    D.time_month AS contract_month,
    A.job_id,
    COUNT(A.job_id) AS NoSubJob,
    SUM(A.cost_labor) AS sum_cost_labor,
    SUM(A.cost_material) AS sum_cost_material,
    SUM(A.machine_hours * E.rate_per_hour) AS sum_cost_machine,
    SUM(A.cost_overhead) AS sum_cost_overhead,
    (SUM(A.cost_labor) + SUM(A.cost_material) + SUM(A.machine_hours * E.rate_per_hour)
+ SUM(A.cost_overhead)) AS sum_total,
    SUM(A.quantity_produced) AS sum_quantity_produced,
    ROUND((SUM(A.cost_labor) + SUM(A.cost_material) + SUM(A.machine_hours *
E.rate_per_hour) + SUM(A.cost_overhead)) / SUM(A.quantity_produced), 2) AS unit_cost
FROM
    w_sub_job_f A
JOIN
    w_location_d B ON A.location_id = B.location_id
JOIN
    w_job_f C ON A.job_id = C.job_id
JOIN
    w_time_d D ON C.contract_date = D.time_id
JOIN
    w_machine_type_d E ON A.machine_type_id = E.machine_type_id
GROUP BY
    A.location_id,
    B.location_name,
    D.time_year,
    D.time_month,
    A.job_id
ORDER BY
    A.location_id,
    contract_year,
    contract_month;

```

Snapshot for BQ3

location_id	location_name	contract_year	contract_month	job_id	nosubjob	sum_cost_labor	sum_cost_material	sum_cost_machine	sum_cost_overhead	sum_total	sum_quantity_produced	unit_cost
1	New York	2013	2	340280	3	122022,45	63582,58	60970	38025,56	284600,59	961700	0,3
1	New York	2013	2	340782	1	44267,81	15066,49	22120	32016,3	113470,6	179600	0,63
1	New York	2013	2	341331	3	154937,94	54492,32	68190	52018,62	329638,88	1113700	0,3
1	New York	2013	2	341516	1	112503,96	11803,65	77824	18462,12	220593,73	355800	0,62
1	New York	2013	2	341803	3	116489,91	27879,95	69050	43721,33	257141,19	868900	0,3
1	New York	2013	2	342518	11	283871,7	68400,95	162874	85198,96	600345,61	1021500	0,59
1	New York	2013	3	340754	7	279970,63	53864,32	107302	62469,34	503606,29	828600	0,61
1	New York	2013	3	340997	2	254708,23	28460,13	53100	36372,09	372640,45	613000	0,61
1	New York	2013	3	341144	2	72696,62	26023	28230	9990,33	136939,95	439000	0,31
1	New York	2013	3	341275	1	92390,32	7856,45	7700	3367,05	51313,82	162700	0,32
1	New York	2013	3	341897	3	121508	49860,12	73260	32573,72	277201,84	936800	0,3

## BQ 4: Returns by location and sales class

```
create VIEW view_returns_by_sales_location_class AS
SELECT
    A.location_id
  ,B.location_name
  ,D.time_year AS invoice_sent_year
  ,D.time_month AS invoice_sent_month
  ,C.sales_class_id
  ,C.sales_class_desc
  ,SUM(A.quantity_shipped - A.invoice_quantity) AS sum_quantity_returned
  ,SUM(A.invoice_amount) AS sum_amount_return
FROM
    w_invoiceline_f A
JOIN
    w_location_d B ON A.location_id = B.location_id
JOIN
    w_sales_class_d C ON A.sales_class_id = C.sales_class_id
JOIN
    w_time_d D ON A.invoice_sent_date = D.time_id
GROUP BY
    A.location_id
  ,B.location_name
  ,invoice_sent_year
  ,invoice_sent_month
  ,C.sales_class_id
  ,C.sales_class_desc
ORDER BY
    A.location_id
  ,invoice_sent_year
  ,invoice_sent_month
  ,C.sales_class_id;
```

Snapshot for BQ4

location_id	location_name	invoice_sent_year	invoice_sent_month	sales_class_id	sales_class_desc	sum_quantity_returned	sum_amount_return
1	New York	2013	2	2	Credit Smart	0	37044
1	New York	2013	3	2	Credit Smart	12264	1295128
1	New York	2013	3	4	Credit NoSmart	37368	684426
1	New York	2013	3	5	Prepaid NoSmart	57301	663410
1	New York	2013	4	1	Debit Smart	0	821864
1	New York	2013	4	2	Credit Smart	11880	1630234
1	New York	2013	4	3	Debit NoSmart	0	562770
1	New York	2013	4	4	Credit NoSmart	0	124394
1	New York	2013	4	5	Prepaid NoSmart	994	119217
1	New York	2013	5	2	Credit Smart	0	144096
1	New York	2013	5	3	Debit NoSmart	0	152000
1	New York	2013	5	4	Credit NoSmart	68158	1475178
1	New York	2013	5	5	Prepaid NoSmart	27347	142662

## BQ5: Last shipment delays involving date promised

```

CREATE VIEW view_last_shipment_delays_involving_date_promised AS
SELECT
    A.location_id
  ,D.location_name
  ,E.sales_class_id
  ,E.sales_class_desc
  ,C.job_id
  ,C.date_promised
  ,MAX(A.actual_ship_date) AS last_shipment_date
  ,SUM(A.actual_quantity) AS sum_delay_ship_qty
  ,C.quantity_ordered
  ,GETBUSDAYSDIFF(MAX(A.actual_ship_date), C.date_promised) AS
days_diff_last_shipment_promised
FROM w_job_shipment_f A
JOIN w_sub_job_f B ON A.sub_job_id = B.sub_job_id
JOIN w_job_f C ON B.job_id = C.job_id
JOIN w_location_d D ON A.location_id = D.location_id
JOIN w_sales_class_d E ON A.sales_class_id = E.sales_class_id
WHERE A.actual_ship_date > C.date_promised
GROUP BY
    A.location_id
  ,D.location_name
  ,E.sales_class_id
  ,E.sales_class_desc
  ,C.job_id
  ,C.date_promised
  ,C.quantity_ordered
ORDER BY
    A.location_id
  ,E.sales_class_id;

```

Snapshot for BQ5

location_id	location_name	sales_class_id	sales_class_desc	job_id	date_promised	last_shipment_date	sum_delay_ship_qty	quantity_ordered	days_diff_last_shipment_promised
1	New York	4	Credit NoSmart	342151	20150316	20150320	626600	635600	4
2	Atlanta	1	Debit Smart	341637	20141120	20141124	70700	353700	2
2	Atlanta	3	Debit NoSmart	340901	20150127	20150202	218700	364700	4
2	Atlanta	4	Credit NoSmart	341851	20141009	20141014	31600	47500	3
2	Atlanta	4	Credit NoSmart	341871	20140919	20140925	594400	674100	4
2	Atlanta	4	Credit NoSmart	342061	20130902	20130903	175400	1447800	1
3	Chicago	1	Debit Smart	340615	20150318	20150324	289800	501800	4
3	Chicago	1	Debit Smart	341425	20150113	20150116	305300	873200	3
3	Chicago	2	Credit Smart	341546	20140124	20140128	324000	422100	2
3	Chicago	3	Debit NoSmart	341061	20140410	20140411	132300	220500	1
3	Chicago	3	Debit NoSmart	341666	20141024	20141029	238200	816200	3
3	Chicago	5	Prepaid NoSmart	340832	20131122	20131125	491400	718700	1
3	Chicago	5	Prepaid NoSmart	341448	20130903	20130904	219800	1351200	1
3	Chicago	5	Prepaid NoSmart	341646	20141211	20141216	388400	777100	3
3	Chicago	6	Loyalty NoSmart	341076	20130326	20130403	967600	1017800	6
4	Dallas	1	Debit Smart	341491	20140710	20140716	1281300	1417800	4

## BQ 6: First shipment delays involving shipped by date

```

CREATE VIEW view_first_shipment_delays_involving_shipped_by_date AS
SELECT
    A.location_id
  ,D.location_name
  ,E.sales_class_id
  ,E.sales_class_desc
  ,C.job_id
  ,MIN(A.actual_ship_date) AS first_shipment_date
  ,C.date_ship_by
  ,GETBUSDAYSDIFF(C.date_ship_by, MIN(A.actual_ship_date)) AS
days_diff_first_shipment_ship_by
FROM w_job_shipment_f A
JOIN w_sub_job_f B ON A.sub_job_id = B.sub_job_id
JOIN w_job_f C ON B.job_id = C.job_id
JOIN w_location_d D ON A.location_id = D.location_id
JOIN w_sales_class_d E ON A.sales_class_id = E.sales_class_id
GROUP BY
    A.location_id
  ,D.location_name
  ,E.sales_class_id
  ,E.sales_class_desc
  ,C.job_id
  ,C.date_ship_by
ORDER BY
    A.location_id
  ,E.sales_class_id;

```

Snapshot for BQ6

location_id	location_name	sales_class_id	sales_class_desc	job_id	date_promised	last_shipment_date	sum_delay_ship_qty	quantity_ordered	days_diff_last_shipment_promised
1	New York	4	Credit NoSmart	342151	20150316	20150320	626600	635600	4
2	Atlanta	1	Debit Smart	341637	20141120	20141124	70700	353700	2
2	Atlanta	3	Debit NoSmart	340901	20150127	20150202	218700	364700	4
2	Atlanta	4	Credit NoSmart	341851	20141009	20141014	31600	47500	3
2	Atlanta	4	Credit NoSmart	341871	20140919	20140925	594400	674100	4
2	Atlanta	4	Credit NoSmart	342061	20130902	20130903	175400	1447800	1
3	Chicago	1	Debit Smart	340615	20150318	20150324	289800	501800	4
3	Chicago	1	Debit Smart	341425	20150113	20150116	305300	873200	3
3	Chicago	2	Credit Smart	341546	20140124	20140128	324000	422100	2
3	Chicago	3	Debit NoSmart	341061	20140410	20140411	132300	220500	1
3	Chicago	3	Debit NoSmart	341666	20141024	20141029	238200	816200	3
3	Chicago	5	Prepaid NoSmart	340832	20131122	20131125	491400	718700	1
3	Chicago	5	Prepaid NoSmart	341448	20130903	20130904	219800	1351200	1
3	Chicago	5	Prepaid NoSmart	341646	20141211	20141216	388400	777100	3
3	Chicago	6	Loyalty NoSmart	341076	20130326	20130403	967600	1017800	6
4	Dallas	1	Debit Smart	341491	20140710	20140716	1281300	1417800	4