Query 1: Employee and Benefits 1 Tables

This is a simple query which demonstrates: (1) how to select the data you wish to display; (2) why you need to join tables; (3) how to use qualifiers to specify the population you want; (4) why home department is usually not good as selection criteria; and (5) why you always need to consider qualifying employment status to screen out separated employees.

We use this exercise to demonstrate the basics of using the BIQuery query tool in the clinic. The exercise demonstrates how to select columns for display, how to qualify the attributes, and the spreadsheet on which results are displayed. We demonstrate how to show the results as a report in BIQuery, and how to edit report headings and column headings. We look at the information on the “Show Query” screen, which is captured on each of the pages of this handout, to document the queries that are run in the clinic.
Query 2: Distribution of Payroll Expense

This query demonstrates the type of data in the current expense distribution table. This query demonstrates typical selection criteria by expense distribution year month, selection of typical columns to display, and how to specify sort criteria and column order. The Expense Distribution - Current table contains two fiscal years of data plus fiscal-year-to-date. If older data are needed, the Expense Distribution – All table should be used.

In the clinic we run the report first without qualifying the DOS code to demonstrate the types of transactions, like SKL, that are in the QDB but do not carry expense transfer page/line numbers and are not displayed on the printed payroll expense distribution reports that departments receive. Then we run the query again after specifying DOS codes of transactions that we don’t want to see (SKL, SLA, CTO, CTA).
Query 3: Expense Distribution – Vacation Accrual Assessment

This query demonstrates summing a particular type of benefit charge (vacation accrual assessment) by account/fund/sub in a specified department for a specified month. The vacation assessment amount is qualified as “not equal to 0” in order to filter out rows that have no assessment associated with them (for example terminal vacation payments).
Query 4: Department List of Current Staff Employees by Appointment Type and REG Description of Service Code

This query generates a list of current employees and their appointment and distribution information. It demonstrates sorting (by appointment type), reinforces the need to specify employment status, distribution department code and DOS code (REG for staff).

We use this query in the clinic to demonstrate how you can use report writers like BIQuery to suppress duplicates, subtotal by appointment type and add a grand total.
Query 5: Department List of Current Academic Employees with DOS Codes BRX and BRS for School of Medicine or with DOS Codes REG and RGA for Campus Academic Departments

You can use the same query as in Query 4, delete display of appointment type and change DOS codes to BRX and BRS for a list of academic employees in the School of Medicine, or change DOS codes to REG and RGA for a list of academic employees in other campus academic departments.

This query demonstrates the ease with which you can take a saved query and change it to select a different population.
Query 6: Campus Addresses of Academic Senate Members Sorted by Series

This query demonstrates selection of employees by academic title code groupings (such as senate members) available in the employee_title table. It also demonstrates sorting by academic series.
Query 7: Campus Addresses of Staff Employees in Non-Exempt Titles

This query demonstrates use of the employee_title table to identify employees who are eligible to be paid overtime (non-exempt employees). The query is similar to Query 6 in that you choose the same columns to display from the employee and employee_appt tables. However, when you join to the employee_title table, specify ttl_ovtm_exmp_code = N to select only employees with current titles that are not exempt from FLSA regulations regarding overtime.
Query 8: One Employee’s Appointment and Distribution History

We do this query in the clinic to demonstrate the type of historical data available for appointments and distributions and to show how the current data flag identifies the appointment(s) and distribution(s) currently on the EDB.

We select the employee's ID, full name, appointment history, and distribution history from the relevant tables.
Query 9: Employees Who Received a Merit Increase on 10/1/01

This query demonstrates use of the Action Code History table to select employees according to a past personnel action and display all available appointment and distribution information.
Query 10: Payroll Audit Record - Leave Accrual and Usage

This query demonstrates use of the employee_pay_audit and employee_ern_audit tables to display leave accrual and leave usage for employees within a home department.

Specifying the acru_ind code as ‘Y’ bypasses employee records that do not have leave accrual activity for the specified pay compute.
Query 11: Payroll Audit Record  - Hours and Pay by FAU for a Specified Pay Date

This query demonstrates use of the employee_pay_audit and employee_ern_audit tables to display productive and non-productive hours and gross pay for all employees in a specified FAU for a specified pay date.
Query 12: CSER and GL Balances Tables – Calculating a Projected Account Balance

This query demonstrates use of the employee_cser_dtl to display total prior, current, committed and projected salary costs for a specified FAU as of a specified ledger month and year. The query joins the employee_cser_dtl table in PP QDB to the gl_balances table in FS QDB to display the year-to-date appropriation for the FAU.

By adding a calculated column to the report that subtracts the sum of the tot_sal_amt from the ytd_appropriation, a potential surplus or overdraft can be projected for the FAU.

In Hummingbird’s BiQuery, a calculated column can be added to a report. First, specify the query as in the above example, run it and show it as a report.
Next, select “Add Calculated Column” from the Report Menu, and a pop-up box will be displayed.

In the ‘Name of Column’ field type ‘Projected Balance’ to name the new column. In the ‘Items’ field select ‘Columns’. Double click on ‘ytd_appropriation’ in the scroll box below the Items field, and it will be displayed in the ‘Expression’ field. With your mouse, select ‘-’ from the keypad on the screen and then double click on ‘SUM tot_sal_amt’. The resultant formula in the ‘Expression’ field should appear similar to the example in the screen print above.

Select OK. The projected surplus or overdraft will be calculated in the new Projected Balance column on the report.
Query 13: Using FS Lookup Tables - Selecting Expense Distribution Activity by Fund Type

This query demonstrates joins that may be made to FS QDB tables. For a specified month, it returns expense distribution activity for fund numbers that are within the Federal (FD) fund group range. The query joins the Expense Distribution - Current table in PP QDB to the fund table in FS QDB.
Query 14: Calculate FTE from the Expense Distribution Table

There is no easy way to calculate position FTE from appointment and distribution data because of the number of duplicate or concurrent rows in most records. However, it is possible to calculate actual FTE based on what employees are paid from the expense distribution data.

To perform this calculation using BIQuery, you can generate a report of regular type pay from the expense distribution table and then add a calculated column to the report that divides the paid hours for each employee by the total number of working hours in the month.

First, specify the query as in the above example, run it and show it as a report. Next, suppress duplicate employee id's and names, subtotal by employee and add a grand total to get a subtotal of the paid hours column by person as well as total paid hours for the month.

Then from the report menu, select “Add Calculated Column”.

```sql
SHOW
EDW (Current) emp_exp_dist_ym, EDW (Current) employee_id, EDW (Current) emp_name, EDW (Current) pay_per_end_date, EDW (Current) pay_trans_date, EDW (Current) title_code, EDW (Current) pay_adj_ind, EDW (Current) dos_earnings_type, EDW (Current) paid_hours, EDW (Current) paid_percent, EDW (Current) dist_payrate_hour, EDW (Current) paid_omt, EDW (Current) opt_type

GROUP BY

SORT BY

WHERE
emp_exp_dist_ym = '200202' and dept_code_account = 2853 and dos_earnings_type = 'REG'

SELECT tbl_emp_exp_dist.emp_exp_dist_ym, tbl_emp_exp_dist.employee_id, tbl_emp_exp_dist.emp_name, tbl_emp_exp_dist.pay_per_end_date, tbl_emp_exp_dist.pay_trans_date, tbl_emp_exp_dist.title_code, tbl_emp_exp_dist.pay_adj_ind, tbl_emp_exp_dist.dos_earnings_type, tbl_emp_exp_dist.paid_hours, tbl_emp_exp_dist.paid_percent, tbl_emp_exp_dist.dist_payrate_hour, tbl_emp_exp_dist.paid_omt, tbl_emp_exp_dist.opt_type FROM tbl_emp_exp_dist WHERE (tbl_emp_exp_dist.emp_exp_dist_ym = '200202') and (tbl_emp_exp_dist.dept_code_account = 2853) and (tbl_emp_exp_dist.dos_earnings_type = 'REG')
```
In the Name of Column field type ‘FTE’ to name the new column. In the Items field select Columns. Double click on paid_hours in the scroll box below the Items field, and it will be displayed in the Expression field. With your mouse, select ‘/’ from the keypad on the screen and then the number of working hours in the month with two zeros after the decimal. (For departments that have only biweekly paid employees, the number of working hours is always 160.00. For departments that have both monthly and biweekly paid employees, use the actual number of working hours in the month.) The formula should appear similar to the example in the screen print above.

Select OK. The FTE will be calculated in the new FTE column beside each row. However, the data will not be formatted correctly, so you will need to specify the display format.
To format the FTE results, select one of the FTE calculations on the report. From the Report Menu select Format, then Numeric, then 99,999.00 from the Predefined Formats scroll box, as in the above screen print, and hit OK.

The FTE column should display results on your report in a format such as ‘1.00’ for full time and ‘0.50’ for half time.
Query 15: IAP Assessments

This is a query to match the data in the PPP5332 – The IAP Report – assessment total by fund (group). Title Unit Code and Appointment Rep Code.
Query 16: IAP Usage

This is a query to match the data in the PPP5332 – The IAP Report – usage totals by fund (group), Title Unit Code and Appointment Rep Code.
Query 17: Anticipated Payments per Payday

This query shows who is going to be paid on a payday, the disposition of the pay, hours worked and not worked, accrual information, and net pay.