## QueryCalc

## Sample Forms $\&$ Reports

## High-Speed, high-efficiency report writing on the HP3000



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Graphics is clearly a secondary consideration in writing a report. Being able to get the data out of the databases and onto a piece of paper easily and efficiently will always be the most important aspect of report writing, It is in the writing of reports that the HP3000 pays for itself. Writing a report is the point at which all prior effort and expense becomes a return-on-investment. And until businessappropriate reports are written, your machine has not served its purpose.

Graphics are not necessary to report writing. But graphics do significantly change the way you view your data, as well as the HP3000 itself. People understand information more easily and more fully when it is presented visually. However, if you are going to create graphics on the HP 3000 , the graphics should be: (i) done in a manner so that no load is imposed on the HP3000, (ii) done so simply that no one feels that they must be a graphics artist to use the product, and (iil) done well.

QueryCalc is the first (and only) major report writer on the HP3000 to employ PostScript graphics. The advantages to PostScript are both obvious and very subtle. The portion that is obvious lies in the quality of the output you see here. But the part that is less visible, but even more substantial, resides in the way by which PostScript is executed.

In all graphic implementations, a bit-map (a large memory array) must be built. If you build the bit-map in the host computer, you not only impose a significant computational load on the host CPU, you also generate truly significant download times. In PostScript, the bit-mapped image is not built in the host HP3000 but rather in the printer. Graphics which formerly incurred a substantial computational penalty to create are now basically invisible to the HP3000 and download times are reduced by 100 times, from minutes to seconds.

By putting graphics on the HP3000, several extremely beneficial advantages in system design are realized. Among the most important is that the pressure to repeatedly download data from the HP3000 into a PC is immediately relieved. Cllent/server, although promoted with great promise a few years ago, has demonstrated itself to be enormously troublesome. But the most condemnatory aspect of the client/server approach is that the PC must now become the primary command initiatorsequencer for all data flow. What you lose when you adopt client/server for production data analysis are four attributes: (i) simplicity, (ii) speed, (iil) reliability, and most importantly, (iv) automatability. In great contrast, when the graphics are done on the HP3000 and in QueryCalc, the process of generating high-quality, business-appropriate graphical reports can be done with great efficiency, night-after-night, completely automatically, with no further human intervention.

Graphics-based reports are easier to read, easler to look at, and thus studied longer. An enormous amount of information can be put on a single plece of paper and still have it easlly read and understood. And example of this effect is seen the 'Balance Sheet Comparison' example shown in this portfolio. This simple report uses 225 print columns, but retains excellent ledgibility.



Logos may be adjusted in scale from 1-250\% in one percent increments. Each application of the logo may be independently colored to the user's wishes.

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## SAMPLE SUMMARY REPORT

## CATEGORY EXPENSE ANALVSIS BY MONTH

| Year: 1993 |  |  |  | quality consiruction crafted wilh mide |  |  |  |  |  |  | Nov | Dec | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct |  |  |  |
| WV: 502 | 0.00 | 389.72 | 154.03 | 0.00 | 318.91 | 95.22 | 109.68 | 156.61 | 137.91 | 111.64 | 125.94 | 0.00 | 133.31 |
| W, 5 503 | 50.00 | 45.00 | 40.00 | 40.00 | 50.00 | 40.00 | 75.00 | 50.00 | 60.00 | 80.00 | 70.00 | 45.00 | 53.75 |
| What: 26 | 32.87 | 32.87 | 32.87 | 32.87 | 32.87 | 32.87 | 32.87 | 32.87 | 32.87 | 32.87 | 28.75 | 28.75 | 32.18 |
|  | 100.00 | 200.00 | 113.28 | 222.29 | 224.72 | 225.11 | 100.00 | 0.00 | 214.92 | 417.25 | 170.04 | 50.00 | 169.80 |
|  | 739.80 | 930.61 | 1,004.53 | 2,852.62 | 1.178 .24 | 1,368.87 | 98.33 | 1,013.61 | 747.38 | 1,317.51 | 459.75 | 323.49 | 1,002.90 |
| - 525 | 467.80 | 465.80 | 212.80 | 490.79 | 772.80 | 860.08 | 572.04 | 744.34 | 154.57 | 603.83 | 3,674.23 | 41.95 | 755.09 |
|  | 1,390.47 | 2,064.00 | 1,557.51 | 3,638.57 | 2,577.54 | 2,622.15 | 987.92 | 1,997.43 | 1,347.65 | 2,563.10 | 4,528.71 | 489.19 |  |

Year: 1994
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| Category | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 502 | 145.77 | 97.05 | 111.48 | 116.68 | 220.91 | 150.32 | 154.53 | 0.00 | 235.78 | 228.44 | 0.00 | 156.33 | 134.77 |
| 503 | 70.00 | 65.00 | 65.00 | 75.00 | 55.00 | 65.00 | 30.00 | 75.42 | 125.70 | 100.56 | 100.56 | 125.70 | 79.41 |
| Waxay 526 | 28.75 | 28.75 | 28.75 | 28.75 | 28.75 | 28.75 | 28.75 | 28.75 | 28.75 | 9.75 | 0.00 | 0.00 | 22.37 |
| $53 \sqrt{51}$ | 100.00 | 100.00 | 100.00 | 161.61 | 338.23 | 0.00 | 252.21 | 194.25 | 0.00 | 0.00 | 0.00 | 0.00 | 103.86 |
| Wax ${ }^{2} 4$ | 280.59 | 559.11 | 655.56 | 761.83 | 1,659.65 | 170.29 | 236.79 | 956.75 | 105.25 | 679.31 | 172.53 | 332.31 | 547.50 |
| 5, 625 | 41.95 | 2,291.95 | 1,076.95 | -70.49 | 1,181.10 | 151.10 | 951.10 | 491.10 | 377.58 | 1,987.04 | 969.83 | 377.58 | 818.90 |
| , ${ }_{\text {, }}$ | 667.06 | 3,141.86 | 2,037.74 | 1,073.38 | 3,483.64 | 565.46 | 1.653 .38 | 1,746.27 | 873.06 | 3,005.10 | 1,242.92 | 991.92 |  |

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| Category | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $502$ | 347.05 | 46.53 | 105.53 | 153.21 | 110.66 | 135.42 | 141.85 | 154.93 | 287.33 | 133.55 | 0.00 | 0.00 | 134.67 |
| $503$ | 100.80 | 100.80 | 126.00 | 100.80 | 100.80 | 75.99 | 76.08 | 76.08 | 86.59 | 76.08 | 0.00 | 0.00 | 76.67 |
|  | 113.25 | 37.75 | 37.75 | 37.75 | 37.75 | 37.75 | 37.75 | 37.75 | 37.75 | 37.75 | 0.00 | 0.00 | 37.75 |
| WV:533 | 3.75 | 0.00 | 0.00 | 151.92 | 0.00 | 0.00 | 0.00 | 0.00 | 47.25 | 28.90 | 0.00 | 0.00 | 19.32 |
| , \% 624 | 261.92 | 380.77 | 230.47 | 551.74 | 365.21 | 558.47 | 781.96 | 161.59 | 246.47 | 596.38 | 0.00 | 0.00 | 344.58 |
| $625$ | 32.66 | 722.66 | 132.66 | 726.56 | 466.05 | 35.91 | 1,676.47 | 3,057.68 | 678.91 | 1,620,39 | 641.26 | 0.00 | 815.93 |
|  | 859.43 | 1,288.51 | 632,41 | 1.721 .98 | 1,080.47 | 843.54 | 2,714.11 | 3,488.03 | 1,384.30 | 2,493.05 | 641.20 | 0.00 |  |

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BALANCE SHEET COMPARISON
As of Febnumy 2 , 1999

All numbers in light print are the result of direct high-speed query questions into MAGE (IurbolMAGE, IMASE/SQL) databoses.

## ASSETS

SECURED LOANS VISA LOANS SIGNATURELOANS REAL ESTATELOANS

TOTAL LOANS
ALLOWANCE FOR LOAN LOSS
NET LOANS
TOTAL CASH
TOTAL INVESTMENTS
GROSS FIXED ASSETS ACCUMULATED DEPRECIATION NET FIXED ASSETS

ACCOUNTS RECEIVABLE PREPAID EXPENSES ACCRUED INCOME OTHER ASSETS

TOTAL OTHER ASSETS TOTAL ASSETS

## LIABILITIES

ACCOUNTS PAYABLE R/E ESCROW PAYABLES EED FUNDS PURCHASED TAXES PAYABLE ACCRUED EXPENSES UNDISTRIBUTED PAYROLLS OTHER LIABILTIIES

TOTAL. LIABILITIES
REAL ESTATE ESCROW REGULAR SHARE ACCOUNTS SHARE DRAET ACCOUNTS IRA ACCOUNTS CERTIICATES OF DEPOSIT

## TOTAL SHARES

STATUTORY RESERVE UNDIVIDED EARNINGS NET INCOME

## TOTAL EQUITY

LAABMATIES \& EQUITY


# SCHEDULE OF INDIRECT COSTS 

For the Year Ending Today

Operating Expenses:
Salaries ~ officers
Salaries - supervisor
Payroll taxes
Supplies and tools
Gas and oil
Truck maintenance
Truck rental
Truck insurance
Equipment maintenance
Equipment insurance
Telephone
Taxes and licenses
Truck depreciation
Equipment depreciation

Occupancy Expenses:
Rent
12,791.08
Utilities
2,380.27
Cleaning service
Property insurance
Building maintenance.
1,482.14
532.75

Improvements depreciation
389.73

Administrative Expenses:
Salaries - officers
210,800.00
Salaries - office
$50,834.76$
Payroll taxes 17,706.76
Employee benefits -- health/accident $23,468.80$ $\begin{array}{lr}\text { Employee benefits } \cdots \text { other } & 1,270.97\end{array}$ Computer expenses
Computer expenses
$10,826.90$
$8,505.14$
fffce suppltes 8.505 .14
2,35758

Bidding expenses 2,357.58
Travel and entertainment 8,360.08
Advertising and promotion $11,907.38$
$1,788.67$ Insurance
Dues and subscriptions
Legal and accounting
$1,788.67$
$6,470.76$
Contributions
8,886.04
Taxes and licenses
Miscellanteous administrative
ife insurance
Office equipment depreciation
3,396.12
623.00 867.91

1,377.50
4,719.46

## Specific Expenses

General Expenses


SAMPLE GRAPHICS




# How Are Graphics Done in QueryCalc? 

Surprisingly simply. Because QueryCalc is constructed as a 26 -page, three-dimensional spreadsheet, there exists a cell gridwork inside QueryCalc. This grid is used to easily specify the upper-left and lower-right corners of boxes, lines, graphs, and logos. You can see this grid on the following page, which is printed with an optional grid map.

The few steps necessary to put a graphic together are exceptionally simple. The first and most important step always lies with establishing the proper query questions on the spreadsheet page.

Truck 17,345.00
Computer 156,321.60
Gas and oil
2,493.56
@using invoices, sum of amount when jobnum=8404 and year=95

The second step involves drawing boxes around the text. In this instance, two boxes were specified. A typical command would be:
/BOX A5:D9
The default box thus created is a white box with a black boundary.


The boxes are then edited using the /EO (edit object) command. Any number of modifications may be made to the defined objects. In this case, a 'bricks' pattern with a color blend (black to red) was chosen for the back box. A golden gradient fill with shallow bezels and a black shadow was chosen for the forward box.



## PATTERN DEMONSTRATOR


low contrast
high contrast
low contrast
high contrast

low contrast WEAVE
low contrast
high contrast

low contrast HORIZONTALS

high contrast
low contrast
high contrast
VERTICALS


low contrast STARS
high contrast
low contrast
high contrast


## Production Note:

This entire porffolio was put together on an HP3000, using only QueryCalc and a standard HP terminal (HP700/92) and printed to HP LaserJet 4M and Tektronix Phaser 560 printers connected as printer devices (term type 18) to the HP3000.

