

ASK / 3000

THE NECESSARY COMPLEMENT TO IMAGE/QUERY

- . ASK/3000 may access and report any information from an IMAGE/3000 data base
- . Like QUERY, it enables you to:
 - read,add,modify,delete information
 - select entries
 - generate reports
 but almost every limitation you have met using QUERY has disappeared !
- . With ASK/3000 you can:
 - FIND and REPORT items from different data-sets
 - Access sub-items in any command
 - Call user procedures for solving a problem that cannot be solved with standard parameters
 - Use new report statements as IF, TRAILER or existing statements with greater capacities as HEADER
DETAIL...
 - Use registers associated to Detail, Group or Total statements to perform any calculation
 - Call ASK/3000 from a user program
 - Etc....

QUESTIONS AND ANSWERS ON....ASK/3000.

1. Is ASK COMPATIBLE WITH QUERY ?

Yes, all reports written with QUERY may be run with ASK without any modification.

2. IS IT POSSIBLE TO SELECT RECORDS FROM A DETAIL DATA SET ACCORDING TO THE VALUE OF AN ITEM LOCATED IN A MASTER ?

Yes. The FIND command accepts multidata set criterions and this is true for any type of data set.

3. IS ASK HANDLING SUB-ITEMS ?

Yes. ASK allows you to write and modify sub-items. In all commands a sub-item may replace an item.

4. MAY I SELECT RECORDS ON THE VALUE OF THE FIRST CHARACTER OF AN ITEM ?

Yes. You can mask any non significant character by a "\" and select records on the value of the other;
example : FIND NUMBER = "\2\3\\"

5. CAN ASK SORT ON THE FIRST CHARACTER OF AN ITEM ?

Yes. Sorts can be performed on any substring inside an item (or sub-item). Overlapped keys are allowed.

6. MAY I REPORT ITEMS FROM DIFFERENT DATA SETS ?

Yes. You only have to specify to which data set belongs the desired item.

7. IF A PROBLEM CANNOT BE SOLVED BY ASK/3000 , AM I OBLIGED TO RE-WRITE THE WHOLE REPORT IN STANDARD PROGRAMMING ?

No. You can write a user procedure and call it in any HEADER, TRAILER, DETAIL, GROUP, or TOTAL statement.

8. MAY I EXECUTE CONDITIONALLY A REPORT STATEMENT ?

Yes. A new statement "IF" enables you to manage flags. Any report statement can be conditionally executed according to one of these flags.

9. CAN ASK BE CALLED FROM A USER PROGRAM ?

Yes, You can use ASK's functions in your own program by creating an ASK process, and sending to it the name of an XEQ-file to be executed.

10. MAY I SAVE A VALUE COMPUTED IN A REPORT ?

Yes, You can use the UPDATE function in a register statement to store a register content in an item. For any other storage, you have to write a user procedure.

11. IF SUCCESSIVE REPORTS NEED THE SAME SORTS ON THE SAME DATA SET, CAN ASK SORT THIS SET ONLY ONCE ?

Yes. ASK keeps sort parameters in the select file, and the select-file can be saved as permanent.

ASK knows when it has to perform the sort or not.

12. WHAT ELSE CAN I DO WITH ASK ?

Many things, such as :

- . ROUND results of divisions in packed decimal format.
- . Print dates in EUROPEAN format.
- . Prevent DETAIL, GROUP, TOTAL lines to be spread on 2 pages.
- . Manage ASK output files.
- . Generate TRAILER lines at bottom of pages.
- . Execute registers functions only in GROUP or TOTAL lines.
- . Send messages to the operator.
- . Etc...

Moreover, you can use ASK as a frame for any batch program, by writing a pseudo-report containing sorts, and register statements. You only have to write the code of your application as user procedures.

You will find a summary of ASK capabilities and a detailed example in the next pages.

This example is a typical supplier accounting report. You will find a schema of the data-base, the text of the report and the listing generated by ASK.

13.HOW CAN I BUY ASK ?

First, you can get more information about ASK. If you request it, we will send you free of charge, the reference manual and/or a demo tape (valid two months) to test it on your own site.

14.WHEN CAN I GET ASK ?

ASK is immediately orderable from :

COGELOG
1 res des Quinconces
91190 GIF SUR YVETTE
FRANCE

15.HOW IS ASK MAINTAINED ?

If you happen to find a bug in ASK, send us a detailed "bug-report". When the bug is corrected, every ASK installation will receive a new tape to load on its system. Moreover, a "bug-status-report" will be sent periodically with temporary turn-arounds for yet uncorrected bugs.

16.WHAT WILL HAPPEN IF H.P. MODIFIES ITS SOFTWARE ?

ASK is an SPL-written application program which directly calls IMAGE intrinsics (like any of your data-base application programs). More than 700 sites use the IMAGE subsystem all over the world. This is why HP CANNOT modify IMAGE external specifications. Therefore, ASK will run as long as IMAGE does.

*** DATA BASE SCHEMA EXAMPLE ***

\$CONTROL NOLIST,ERRORS=2,TABLE
\$TITLE "DATA BASE DEFINITION"
<<

*** DATA BASE SCHEMA ***

>>

BEGIN DATA BASE SB;

PASSWORDS:

4 COMPTA;
5 FOURNI;

ITEMS:

<< A C C O U N T I N G E N T R I E S >>

DAY , I1 (/4) ; << ENTRY DAY >>
MONTH, I1 (/4) ; << ENTRY MONTH >>
YEAR , I1 (/4) ; << ENTRY YEAR >>
NENTRY, I1 (/4) ; << ENTRY NUMBER >>
VALUE, P12 (/4) ; << ENTRY VALUE >>
COMMENT, U16 (/4) ; << COMMENT >>

<< S U P P L I E R S >>

NSUPP , U6 ; << SUPPLIER NUMBER >>
SNAME , U34 ; << SUPPLIER NAME >>
STREET, U34 ; << STREET NAME AND NUMBER >>
ZIPCODE , U34 ; << ZIPCODE AND CITY NAME >>

\$PAGE
SETS:

<<

** MSUPP : S U P P L I E R M A S T E R

>>

NAME: MSUPP,AUTOMATIC (/5);

ENTRY:

NSUPP(1); << SUPPLIER NUMBER >>

CAPACITY: 1011;

<<

** DECRM : A C C O U N T I N G E N T R I E S O F T H E M O N T H

>>

NAME: DECRM,DETAIL (4,5/4,5) ;

ENTRY:

DAY,

MONTH,	<< ENTRY MONTH >>
YEAR,	<< ENTRY YEAR >>
NSUPP,	<< SUPPLIER NUMBER >>
NENTRY,	<< ENTRY NUMBER >>
COMMENT,	<< COMMENT >>
VALUE,	<< ENTRY VALUE >>

CAPACITY: 2500;
<<

** DSUPP : S U P P L I E R D E T A I L

>>
NAME: DSUPP,DETAIL (4,5/4,5); << SUPPLIER DETAIL >>

ENTRY:
 NSUPP(MSUPP),
 SNAME,
 STREET,
 ZIPCODE,

CAPACITY: 550;
END.

REPORT

* SUPPLIERS ACCOUNTING REPORT *

* OUTPUT CONTROL WORDS

* -----

LINES=56

EUROPE

NOSPLITGROUP

NOSPLITTOTAL

DYNAMICTRAILER

OUT=LP,"MOUNT SUPPLIER FORM ON LP PLS."

*

* MEANING OF REGISTERS:

* -----

* R1 : SUB TOTAL FOR EACH SUPPLIER

* R2 : GENERAL TOTAL

*

* PERMANENT HEADER

* 'FULLDATE' IS AN USER PROCEDURE THAT PRINTS THE MONTH IN FULL LETTERS

*

H1,PAGENO,69,SPACE A1

H1,"PAGE-NUMBER",65

H2,"SUPPLIERS ENTRIES : PAGE",65

H2,FULLDATE(65),X

H3,48("-"),65

*

* CONDITIONAL HEADER : THESE STATEMENTS ARE THE SAME AS

* THE GROUP STATEMENTS. THEY REPEAT THE GROUP LINES IF A

* PAGE EJECT OCCURS BETWEEN A GROUP AND A TOTAL STATEMENT

*

H4,68("-"),69,SPACE B1,IF F4

H5,"I SUPP # : NAME : ",30,IF F4

H5,NSUPP,18,IF F4

H5,DSUPP.SNAME,66,IF F4

H5,"I",69,IF F4

H6,"I ADDRESS : ",30,IF F4

H6,"I",69,IF F4

H6,DSUPP.STREET,66,IF F4

H7,"I",2,IF F4

H7,"I",69,IF F4

H7,DSUPP.ZIPCODE,66,IF F4

H9,68("-"),69,IF F4

H10,"I DATE I COMMENT I",35,IF F4

H10," DEBIT I CREDIT I",69,IF F4

H11,68("-"),69,IF F4

*

* GROUP: BEGINNING OF FRAME

*

G28,68("-"),69,SPACE B1

G27,"I SUPP # : NAME : ",30

G27,NSUPP,18

G27,DSUPP.SNAME,66

G27,"I",69

G26,"I ADDRESS : ",30

G26,"I",69

```

G26,DSUPP.STREET,66
G25,"I",2
G25,"I",69
G25,DSUPP.ZIPCODE,66
G23,68("-"),69
G22,"I    DATE    I    COMMENT    I",35
G22,"    DEBIT    I    CREDIT    I",69
G21,68("-"),69
G21,SET F4
*
S1,DAY
S2,NSUPP
S3, DSUPP.ZIPCODE
*
* MEANING OF THE FLAGS:
*   F1 : SET = POSITIVE VALUE, CLEAR = NEGATIVE VALUE
*   F2 : SET = POSITIVE SUB-TOTAL, CLEAR = NEGATIVE SUB-TOTAL
*   F3 : SET = POS. GENERAL TOTAL, CLEAR = NEG. GENERAL TOTAL
*   F4 : SET = BETWEEN GROUP/TOTAL, CLEAR = NOT BETWEEN
*
IF,VALUE > "0" THEN SET F1 ELSE CLEAR F1
IF,R1 > "0" THEN SET F2 ELSE CLEAR F2
IF,R2 > "0" THEN SET F3 ELSE CLEAR F3
D1,"I    /    /78 I",13
D1,"I                                I",69
D1,DAY ,5
D1,MONTH,8
D1,COMMENT,31
D1,VALUE,67,E1,IF NOT F1
D1,VALUE,50,E1,IF F1
R1,ADD,VALUE
R2,ADD,R1,T2
*
* SUB-TOTAL ..END OF FRAME
*
T20,68("-"),69
T21,R1,67,E1,IF NOT F2
T21,R1,50,E1,IF F2
T21,"I    BALANCE.....:",35
T21,"I",69
T22,68("-"),69
T22,CLEAR F4
T2,R1
*
* TRAILER: THIS STATEMENT CLOSES A FRAME IF A PAGE EJECT OCCURS
*           BETWEEN A GROUP AND A TOTAL
*
Z1,68("-"),69,IF F4
*
* GENERAL TOTAL
*
TF1,"TOTAL BALANCE .....: ",36,SPACE B2
TF1,R2,67,E1,IF NOT F3
TF1,R2,50,E1,IF F3
E1,"ZZZ,ZZZ,ZZ9.99"
END.

```


*** USER PROCEDURE EXAMPLE ***

```

!JOB JOBUSER,USER,GROUP
!SPL,USLUSER
$CONTROL SUBPROGRAM,SEGMENT=USER,LIST,ADR
BEGIN
<<
  THIS PROCEDURE PRINTS THE CURRENT DATE IN FULL LETTERS
  THE PRINT POSITION IS PASSED THROUGH THE OPTIONAL PARAMETER '
>>
PROCEDURE FULLDATE(DBNAME,ISORT,LINEBUF,REGISTERS,STORAGE,FLAGS,PARAM);
INTEGER ARRAY DBNAME,ISORT,LINEBUF,REGISTERS,STORAGE;
LOGICAL ARRAY FLAGS;
INTEGER PARAM;

  BEGIN
    INTEGER N,D,INDEX,DAY,YEAR;
    BYTE ARRAY OUTPUT(*) = LINEBUF;
    INTEGER ARRAY MONTH'TABLE(0:11);
    INTEGER ARRAY M1(*) = MONTH'TABLE, M2(*) = MONTH'TABLE(1),
      M3(*) = MONTH'TABLE(2), M4(*) = MONTH'TABLE(3),
      M5(*) = MONTH'TABLE(4), M6(*) = MONTH'TABLE(5),
      M7(*) = MONTH'TABLE(6), M8(*) = MONTH'TABLE(7),
      M9(*) = MONTH'TABLE(8), M10(*) = MONTH'TABLE(9),
      M11(*) = MONTH'TABLE(10), M12(*) = MONTH'TABLE(11);
    BYTE ARRAY STRING(0:107) = PB := " JANUARY"," FEBRUARY","
      " APRIL"," MAY"," JUNE"," JULY","
      "SEPTEMBER"," OCTOBER"," NOVEMBER"," DECEMBER";
    INTRINSIC ASCII,CALENDAR;

    M1:=M3:=M5:=M7:=M8:=M10:=M12:=31;          <<INIT. MONT'TABLE>>
    M4:=M6:=M9:=M11:=30;
    D := CALENDAR;
    DAY := D.(7:9);
    YEAR := D.(0:7);
    IF YEAR/4*4 = YEAR THEN M2 := 29 ELSE M2 := 28;
    INDEX := 0;
    DO BEGIN
      N := MONTH'TABLE(INDEX);
      IF DAY-N < 0 THEN GOTO MONTH'FOUND;
      DAY := DAY - N;
      INDEX := INDEX + 1;
      END UNTIL INDEX = 12;
      RETURN;
    MONTH'FOUND:
      MOVE OUTPUT(PARAM-15) := STRING(INDEX*9),(9),2;
      MOVE * := " 19";
      ASCII(YEAR,10,OUTPUT(PARAM-2));
      END;
    END.
    !SEGMENTER
    SL SL
    PURGESL SEGMENT,USER
    USL USLUSER
    ADDSL USER,PMP
    EXIT
    !EOJ

```

SUPPLIERS ENTRIES : OCTOBER 1978

```

-----
I  SUPP #: 190399  NAME      :  PUB SHARK                      I
I                      ADDRESS :  37 RUE DE LA REPUBLIQUE        I
I                      54140 JARVILLE MALGRANGE                I
-----

```

```

-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 21/10/78 I  RECRUTEMENT      I              I      228.00 I
I 22/10/78 I  RECRUTEMENT      I      228.00 I              I
-----
I          BALANCE.....:                                0.00 I
-----

```

```

-----
I  SUPP #: 200099  NAME      :  TRANSWORLD                      I
I                      ADDRESS :  17 RUE CHILDEBERT              I
I                      69002 LYON                                I
-----

```

```

-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 19/10/78 I  78/TH/08/129/Z   I      334.40 I              I
I 22/10/78 I  78/TH/08/129/Z   I              I      2,234.40 I
I 22/10/78 I  78/TH/08/129/Z   I      1,900.00 I              I
-----
I          BALANCE.....:                                0.00 I
-----

```

```

-----
I  SUPP #: 2008    NAME      :  JOJO INC                      I
I                      ADDRESS :  1 RUE DE LA GRANDE TRUANDERIE  I
I                      75004 PARIS                                I
-----

```

```

-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 22/10/78 I  POT DE VIN        I      4,380.05 I              I
I 22/10/78 I  11024              I              I      29,396.41 I
I 25/10/78 I  11024              I      25,016.36 I              I
-----
I          BALANCE.....:                                0.00 I
-----

```

```

-----
I  SUPP #: 1908    NAME      :  VENUS AND SONS                  I
I                      ADDRESS :  16 RUE FERRUS                  I
I                      75014 PARIS                                I
-----

```

```

-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 12/10/78 I  TEST1              I      13.00 I              I
I 13/10/78 I  TEST2              I      3.00 I              I
-----

```

PAGE-NUMBER 2

SUPPLIERS ENTRIES : OCTOBER 78

```

-----
I  SUPP #: 1908      NAME      :  VENUS AND SONS      I
I                      ADDRESS   :  16 RUE FERRUS      I
I                      75014 PARIS      I
-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 13/10/78 I  TEST3      I      2.00      I      I
I 14/10/78 I  TEST4      I      1.00      I      I
I 17/10/78 I  TEST5      I     105.00      I      I
I 18/10/78 I  460178     I     3,785.76      I      I
I 19/10/78 I  460178     I      I      3,785.76      I
-----
I      BALANCE.....:      124.00      I
-----

```

```

-----
I  SUPP #: 180199   NAME      :  BILLY THE KID BANK      I
I                      ADDRESS   :  37 RUE DE VAUVENARGUES      I
I                      75018 PARIS      I
-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 22/10/78 I  1496/78     I     14,736.84      I      I
I 22/10/78 I  1496/78     I     2,593.68      I      I
I 22/10/78 I  1496/78     I      I     17,330.52      I
-----
I      BALANCE.....:      0.00      I
-----

```

```

-----
I  SUPP #: 1909      NAME      :  OUT OF SPACE      I
I                      ADDRESS   :  23 AVENUE DU CHATEAU      I
I                      78000 VERSAILLES      I
-----
I  DATE      I      COMMENT      I      DEBIT      I      CREDIT      I
-----
I 22/10/78 I  37021      I      6.58      I      I
I 22/10/78 I  37021      I      I     44.00      I
I 22/10/78 I  37021      I     37.42      I      I
-----
I      BALANCE.....:      0.00      I
-----

```

TOTAL BALANCE: 124.00