

**CHAPTER 9**

**REPORTING WITH INQUIRE**

# REPORTING WITH INQUIRE

Often you want to select certain information from your data files and produce a report quickly. INQUIRE is designed to make that process as easy as possible. You need enter only a few commands to obtain a report with a business-like format. INTAC takes care of all unspecified aspects of the report format through the file definitions. You may define and redefine reports interactively and spontaneously (even changing just-entered requests).

Yet INQUIRE is powerful enough to form the main reporting tool in many business applications. It can extract and compare data from multiple INTAC data files. Simple calculations may be performed and new data items defined. Commands used to produce a report can be saved for later use on a repetitive basis.

If report requirements are beyond the capabilities of the INQUIRE facility, the INTAC report program generator (GE) should be used. Use GE for reports when BASIC code is required to select records, to include calculations in the logic section, or to produce special output formats. Even when additional BASIC code is not needed, you may prefer GE for many reports because it offers a greater variety of print formats than INQUIRE. (See Chapter 10, GE)

## INITIATING AN INQUIRE SESSION

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Before you begin an INQUIRE session, it is helpful to have available printouts of the INTAC file definitions (obtained with the LI command) for all files you will be using. Begin the INQUIRE session by entering the INTAC environment and giving the command

COMMAND? **IN**

You will be prompted by the following series of questions (numbered on these pages for convenient reference).

### 1. COMMAND SOURCE <KB:>?

Indicate whether you will be entering INQUIRE commands interactively or from a previously-saved command file.

#### RESPONSES:

carriage      Commands are to be entered interactively.  
return

filename      Commands are to be taken from the file filename. An extension of .INQ

is assumed if none is given. This file is created by the SAVE command in a previous INQUIRE session.

## 2. FILES?

Enter the names of up to 3 INTAC files to be used by INQUIRE. The names are separated by one or more spaces. For each file, an extension of .INT is assumed, if none is given. The first file named (FILE1) is the primary file and the others are secondary files (FILE2, FILE3).

## 3. FILE n INDEX NUMBER <1>?

From secondary FILEn, enter the index number that should be used to link the files and to direct record selection. (Indexes are listed by number at the end of the FILEn definition listing.)

## 4. INDEX ITEMS?

From preceding files, enter the item names or numbers (separated by spaces) that will be used to develop the index value for secondary FILEn. In other words, enter items in FILE1 that correspond to the index item on FILE2 (or FILE2 items to FILE3 index).

Questions 3 and 4 are paired questions and are repeated for files 2 and 3.

### EXAMPLE:

INTAC

TM  
INTAC  
Interactive Data Management and Retrieval - VERSION: APR-82  
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COMMAND? IN

INQUIRE INTO AN INTAC FILE

COMMAND SOURCE <KB:>?  
FILES? ASSET DEPT  
FILE 2 INDEX NUMBER <1>? 1  
INDEX ITEMS? DEPT.NO

As a result of these commands, INTAC will move sequentially through primary FILE1, ASSET.INT. INTAC will find a DEPT.NO value for each record, even if the value is simply a null. You as the user may use INQUIRE commands to limit selection of records, for example, to a specified range of DEPT.NO values. Whenever INTAC reaches a record on ASSET.INT that meets your selection criteria, it will retrieve the corresponding record from secondary FILE2, DEPT.INT, using INDEX1 in FILE2.

## 5. INQ CMD?

Type the INQUIRE command you wish to perform. Any INQUIRE command may be abbreviated to the first 3 letters of the command. After each command is entered, this question is repeated and you may enter another INQUIRE command or you may give the command STOP to end the INQUIRE session.

## QUALIFIED ITEM NAMES

In a multi-file database management system, some data items with the same name will occur in more than one file. You can distinguish a data item name in one file from the same name in another file by preceding the name with a file notation. The format for this qualified data item name is

`Fn.dataitemname`

where F is an abbreviation for FILE and n is the relative number of the file as you answered question 2 above. (The data item number may also be qualified.)

EXAMPLE: INQ CMD? SHOW DESCRIPTION F2 .DEPT .NO F2 .3

## MISALIGNED DATA ITEMS

If a numerical data item is too large for the print format specified in the file definition, data items on the report may be slightly misaligned. The numeric data item may be preceded by a question mark. To correct this problem, increase the print format for the data item in the file definition by using the MODIFY facility.

IN

## SUMMARY OF INQUIRE COMMANDS

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Commands in the following table are arranged in the order in which INTAC lists them when you type HELP. You will normally enter commands in this order, although commands may later be changed by using RESET or by entering the command again with new values. Note that INTAC stores commands until GO is entered.

---

COMMAND	DESCRIPTION	DEFAULT
PROMPT	Specifies items to be prompted for.	None
SET	Assigns a new value to a prompted item.	None
SORT	Specifies the sort sequence of the report.	record number order
RANGE	Specifies a search range in a given index to limit the selection.	All records on FILE1
SELECT	Specifies the record selection criteria.	All records on FILE1
FIND	Executes previously entered SELECT and RANGE statements to give count of records retrieved	
SHOW	Specifies the data items to be printed. May be used for simple calculations.	All data items from each file (up to 32)
BREAK	Specifies break items, major to minor.	None
TOTAL	Specifies the data items to be totaled.	None
SKIP	Specifies line spacing at selected breaks.	None
NEW-PAGE	Specifies page spacing at selected breaks.	None
TITLE	Specifies up to four report titles.	None
COMMA/ NOCOMMA	Specifies whether commas are to be printed in real numbers.	COMMA
FORM/ NOFORM	Specifies whether form feed or line count is used for page ejecting.	FORM

---

LINES	Specifies the number of lines per page.	66
NEGATIVE	Specifies format of negative numbers.	L
WIDTH	Specifies the print line width.	80
GO	Executes a SELECT and any previously entered SORT command; prints the records using SHOW and other commands.	n/a
LIST	Prints a list of the current values for the INQUIRE commands.	n/a
HELP	Prints a table of all INQUIRE commands.	n/a
SHOW ?	Prints item numbers, names, types, and print formats from each file.	n/a
SAVE	Saves the current INQUIRE commands in a command file for future use.	n/a
RESET	Resets all INQUIRE commands to their respective defaults.*	n/a
STOP or \	Ends the INQUIRE session.	n/a

---

\* Commands may also be reset individually as explained in the command descriptions at the end of this chapter.

IN

## HOW TO USE INQUIRE

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INQUIRE offers both simplicity and flexibility as commands are entered. Defaults (based upon the file definitions) exist for all commands so that you may enter as few commands as desired. In fact, after specifying the files, you may simply enter GO and take advantage of the defaults to obtain a complete list of all items from all records. As you work, you may set and reset commands to achieve many variations of the report.

To limit the collection of records to be printed, enter the SELECT and/or RANGE commands. The SELECT and/or RANGE commands are not executed until a GO command is given.

INTAC stores commands until the GO command signals that they are to be performed. This delay in execution of commands permits commands to be changed by reentry or resetting to the default value during the INQUIRE session. There are three ways to reset commands: use of RESET, entry of the command on a line by itself, and (for commands with prompts) use of RESET in response to a prompt. The command RESET restores the defaults for all commands. Individual commands may be reset to their defaults as indicated in the command descriptions at the end of this chapter. As explained in the descriptions, some commands are dependent upon earlier commands. Resetting an earlier command automatically resets all dependent commands to default values.

After defining the report, enter the GO command to execute it. INQUIRE offers several alternative ways of directing the output of the report. You may display it on the screen or direct it to a file or to a printer. If you direct the report to a file, you may create a new file, append it to an existing file, or replace an existing file. See the GO command for explanation of these procedures.

## INQUIRE EXAMPLE

The following is a typical INQUIRE session. The LIST command is used to display the command defaults. Commands are entered, including a four-line TITLE command that is later reentered to change the first line of the title. At the end, the report is run and the INQUIRE commands are saved in file MKTATS. At a later session, the user may obtain the same report by typing in the filename MKTATS.INQ in response to the IN prompt, COMMAND SOURCE <KB:>? Further discussion of the BREAK command as used here follows the complete session.

### INTAC

```
      TM
INTAC
Interactive Data Management and Retrieval - VERSION: APR-82
(c) COPYRIGHT 1979 BY ROSS SYSTEMS, INC.
```

```
COMMAND? IN
INQUIRE INTO AN INTAC FILE
```

```
COMMAND SOURCE <KB:>?
FILES? ASSET DEPT
FILE 2 INDEX NUMBER <1>? 1
INDEX ITEMS? DEPT.NO
INQ CMD? LIST
```

```
FILE1 ASSET.INT
FILE2 DEPT.INT INDEX1 DEPT.NO
PROMPT
SORT
RANGE
SELECT
SHOW F1.1;F1.12 F2.1;F2.4
BREAK
TOTAL
SKIP
NEW-PAGE
TITLE
COMMA
FORM
LINES 66
NEGATIVE L
WIDTH 80
```

IN



INQ CMD? RANGE  
INDEX NUMBER <0>?2  
STARTING VALUE:  
DEPT.NO <ALL>?4001  
ENDING VALUE:  
DEPT.NO <EOF>? 5001  
INQ CMD? SORT DEPT.NO PUR.YEAR  
INQ CMD? SHOW DEPT.NAME:"DEPT NAME","AND NO" MANAGER DESCRIPTION ORIG.COST  
PUR.YEAR NULINE DEPT.NO  
INQ CMD? BREAK DEPT.NAME MANAGER PUR.YEAR DEPT.NO  
INQ CMD? TOTAL ORIG.COST ON DEPT.NAME PUR.YEAR  
INQ CMD? PROMPT  
PROMPT? LAST.YEAR I "ENTER LAST YEAR TO PRINT"  
PROMPT?  
INQ CMD? SELECT  
SELECT? PUR.YEAR 1 <=LAST.YEAR  
SELECT?  
INQ CMD? SKIP 2 ON DEPT.NO, 1 ON PUR.YEAR  
INQ CMD? TITLE  
TITLE1? "TRI-CITY COMPANY ASSETS"  
TITLE2? "MARKETING DIVISION ASSETS"  
TITLE3? " "  
TITLE4? "PURCHASED THROUGH YEAR " + LAST.YEAR  
INQ CMD? TITLE1 "TRI-CITY COMPANY"  
  
INQ CMD? GO  
ENTER LAST YEAR TO PRINT? 72  
15 RECORDS SELECTED  
OUTPUT TO <KB:>?

TRI-CITY COMPANY  
MARKETING DIVISION ASSETS

PURCHASED THROUGH YEAR 72

DEPT NAME AND NO	MANAGER	DESCRIPTION	ORIG. COST	PUR YR
EDUCATION 4001	LANG	TELEVISION 24"	899.56	71
		DESK	0.00	
		OVERHEAD PROJECTOR	0.00	
		TYPEWRITER	750.89	
		TYPING STAND	65.73	
			-----	---
			1,716.18	71
4001		DRAFTING CHAIR	69.00	72
		DRAWING LAMP	85.00	
		BLUE PRINT FILE	299.00	
			-----	---
			453.00	72
			-----	---
EDUCATION			2,169.18	
ADVERTISING 5001	POWERS	BULLETIN BOARD	55.78	71
		CONFERENCE TABLE	563.45	
		FLIP CHART STAND	45.87	
			-----	---
			665.10	71
5001		BOOKCASES 42"	79.00	72
		POSTURE BACK STENO	69.00	
		CREDENZA	479.00	
		SECRETARIAL DESK	595.00	
			-----	---
			1,222.00	72
			-----	---
ADVERTISING			1,887.10	
			-----	---
			4,056.28	

INQ CMD? SAVE MKTATS  
INQ CMD? STOP

## BREAK STATEMENT IN EXAMPLE SESSION

There are two reasons to include an item in a BREAK statement: 1. so that you can give commands for totals or line skipping at these breaks, and 2. to suppress redundant printing of the same value to achieve a nicer-looking report. If you include an item for purposes of doing totals or line skips, you will also want to include the item in a SORT statement. If you include the item only because you want to suppress redundant printing, you may or may not wish to include the item in the SORT statement.

How you arrange items in the BREAK statement depends upon which items you want to print at the breaks. INQUIRE allows you to enter and reenter commands until you get the appearance you want. Use a RANGE command to limit the number of records while you are experimenting with format.

In the session example, the BREAK and SORT statements are as follows:

```
INQ CMD? BREAK DEPT.NAME MANAGER PUR.YEAR DEPT.NO
INQ CMD? SORT DEPT.NO PUR.YEAR
```

The planner did not want the department or the manager name to be printed redundantly. DEPT.NAME is placed first in the BREAK statement so that the department name will appear on the department total line.

To show the redundant effect, the following example uses only the SORT items in the BREAK statement and the TOTAL and SKIP commands are reentered accordingly. The resulting report (shown only partially) is difficult to read because of the redundant printing of the DEPT.NAME and MANAGER.

```
INQ CMD? BREAK DEPT.NO PUR.YEAR
INQ CMD? TOTAL ORIG.COST ON DEPT.NO PUR.YEAR
INQ CMD? SKIP 2 ON DEPT.NO, 1 ON PUR.YEAR
INQ CMD? GO
```

DEPT NAME AND NO	MANAGER	DESCRIPTION	ORIG.COST	PUR YR
EDUCATION 4001	LANG	TELEVISION 24"	899.56	71
EDUCATION	LANG	DESK	0.00	
EDUCATION	LANG	OVERHEAD PROJECTOR	0.00	
EDUCATION	LANG	TYPEWRITER	750.89	
EDUCATION	LANG	TYPING STAND	65.73	
			-----	---
			1,716.18	71

In the case study, there is a one-to-one relationship between DEPT.NO and DEPT.NAME so that sorting might have been on either item, producing reports sorted either in numerical order or alphabetical order.

# INQUIRE COMMAND DESCRIPTIONS

---

**BREAK** item1 item2 ... itemn[:n1,n2]

The **BREAK** command is used to specify break fields which control **TOTAL**, **SKIP** and **NEW-PAGE** commands. The break fields are listed from major to minor break field. The first field will control **BREAK1**, the second **BREAK2**, and so on. You may name a maximum of 8 control break fields. The field may be any item from **FILE1**, **FILE2**, or **FILE3** that has been specified in a previous **SHOW** command. (For a full discussion of report breaks, see chapter 10, GE)

An item may be given as an item name or an item number. Item numbers will refer to **FILE1**, unless qualified names, such as **F3.2** are used.

Note that **BREAK** items print on the report only when the values change. Therefore, you may want to include an item in the **BREAK** list simply to suppress redundant printing of the same value to achieve a nice looking format. In the chapter example, **MANAGER** and **DEPT.NAME** have been included as breaks in order to suppress redundant printing.

You may specify a part of a string item to be a break field. This is done by following the item name with :n1,n2 where n1 is the starting position of the break field within the item, and n2 is the length of the break field.

The **BREAK** command should be specified before any **TOTAL**, **SKIP**, or **NEW-PAGE** commands. Note that entering a new **BREAK** command or the command **BREAK** without any items cancels any previous entries for these other commands.

**EXAMPLE:**

```
INQ CMD? BREAK DEPT.NAME MANAGER PUR.YEAR DEPT.NO
INQ CMD? BREAK DEPT.NAME:4,2
```

The second example results in a break based upon the fourth and fifth letters in the department name.

## COMMA/NOCOMMA

The **COMMA/NOCOMMA** command determines whether or not commas will be printed in numbers greater than 999.

**DEFAULT:** COMMA

## FIND

The FIND command executes any SELECT or RANGE commands and reports the number of records retrieved, without printing a report. The first FIND command also requests values for any prompt items.

## FORM/NOFORM

The FORM/NOFORM command determines whether or not to use the form-feed character (CONTROL L) to perform page ejects. FORM should be used for reports being printed on the line printer or on any terminal that has form-feed capability. If NOFORM is used, INTAC prints the number of blank lines needed to position page headings at the top of the next page, using the number of lines per page specified in the LINES command.

DEFAULT: FORM

## GO

The GO command causes the following action to take place:

1. Any SELECT and RANGE commands are executed (unless they have already been executed).
2. The SORT command is executed if one has been given.
3. The following question is asked:

OUTPUT TO <KB:>?

Enter the name of the file or device to which the output is to be directed:

Enter carriage return to show the report on the terminal.

Enter a filename to direct output to a file. If no extension is given, .RPT is assumed.

FORMAT: filename/APPEND (or APP)  
/REPLACE (or REP)

where APPEND appends report to existing report of same name and REPLACE replaces existing report of the same name.

## EXAMPLES:

OUTPUT TO <KB:>? DEPT.RPT/APPEND  
OUTPUT TO <KB:>? DEPT.RPT/REPLACE

If you want to print the report on a high-speed printer, follow the procedure appropriate to your computer's operating system, RSTS/E or VMS.

## RSTS/E OPERATING SYSTEMS

Enter LP: if you wish the list to be printed on the system line printer, or LPn: to use

an alternate line printer, where n is the number of the line printer. These device names may be followed by any of the RSTS/E system QUE specifications for number of copies, etc.. See the 11/70 Users Guide for details.

## VMS OPERATING SYSTEMS

In response to the question OUTPUT TO <KB:>? enter a filename to print the report to a file (see above options APPEND and REPLACE). Then print the file with the desired options. See the VAX 11/780 Users Guide for details.

4. The data is printed as defined on the SHOW, TOTAL and other commands.

Note that CTL C may be typed to terminate printing and return to the INQ CMD? prompt.

## HELP

The HELP command prints a table of all INQUIRE commands and their options. Note that a question mark may be typed instead of the word HELP.

## LINES n

The LINES command indicates the number of lines per page. For continuous printing with no paging, specify a number larger than the number of lines on the report. The LINES command may be reset to its default by entering the command LINES without a specification.

DEFAULT: 66

## LIST

The LIST command prints the values for all the INQUIRE commands entered thus far in the INQUIRE session and the defaults for all other commands.

## NEGATIVE L, R, or P

The NEGATIVE command specifies the format to be used for negative numbers, as follows:

NEGATIVE L	minus sign on left	-36
NEGATIVE R	minus sign on right	36-
NEGATIVE P	parentheses	(36)

The default is NEGATIVE L. This default may be reset by entering the command NEGATIVE without a following specification.

## NEW-PAGE [ON]breakitem1 ... breakitemn

The NEW-PAGE command is used to specify page spacing at selected breaks. Only one NEW-PAGE command may be given. However, that one command may specify multiple break items.

NEW-PAGE entered on a line by itself cancels a previous-entered NEW-PAGE command.

EXAMPLE: INQ CMD? NEW-PAGE ON DEPT.NO

## PROMPT item type ("prompting message")

The PROMPT command is used to specify items whose values are to be obtained by keyboard input when the report is run. The values may then be used in the SELECT command to limit the records selected. For example, a company might want a list of assets purchased through a certain year. The person running the report would be prompted for the last year to print. An appropriate SELECT command would request records associated with purchase years less than or equal to the last year input at the keyboard.

The prompted item may be used in titles, as shown in the case study example earlier in the chapter.

When the PROMPT command is typed, INTAC will display the word PROMPT and will accept PROMPT statements until a carriage return is typed. The type is an INTAC data type (S, R, I, or D) as described in Chapter 3, page 3-3, CR. The "prompting message" is a phrase of your choice up to 32 characters to request keyboard input. If the optional prompting message is omitted, the itemname will be used as the prompt.

EXAMPLE:

```
INQ CMD? PROMPT
PROMPT? LAST.YEAR I "ENTER LAST YEAR TO PRINT"
PROMPT?
```

Note that text entered on the same line as the command PROMPT will be ignored.

Values for PROMPT items are only requested by the first GO command. Use the SET command to assign new values to PROMPT items for reruns in the same INQUIRE session.

Entering RESET at the PROMPT? message will remove all prompts. You may then redefine all of your prompts.

## RANGE

The efficiency of selecting records can be improved by specifying a particular range within a file index (for example, the FILE1 index DEPT.NO) that is to be searched. You may specify the particular index to be searched. RANGE works only on FILE1 when multiple files are specified. In response to the RANGE command, the following questions are asked:

```
INDEX NUMBER <0>?
```

Enter the index number to be used in searching the file. Index 0, the record number, is the

default. Using Index 0 is very helpful in testing the format of an INQUIRE report to be run on a very large database.

Entering RESET will remove the RANGE command and cause INTAC to search all records in file1.

```
STARTING VALUE:
  item1 <ALL>?
  item2
  .
  .
  .
  itemn
```

Enter the starting value for each data item in the specified index. Only data records with index values greater than or equal to the starting value will be searched when a GO command is executed.

```
ENDING VALUE:
  item1 <EOF>?
  item2
  .
  .
  .
  itemn
```

Enter the ending value for each data item in the specified index. Entering a carriage return will specify EOF, or end of file. Only data records with index values less than or equal to the ending value will be searched when a GO command is executed. If the default value of ALL is taken for STARTING VALUE you will not be prompted for ENDING VALUE.

IN

EXAMPLE (with Index # 2):

```
INQ CMD? RANGE
INDEX NUMBER <0>? 2
STARTING VALUE:
DEPT.NO <ALL>? 4001
ENDING VALUE:
DEPT.NO <EOF>? 5001
```

The example above will select all records for Departments 4001 through 5001 from the file.

EXAMPLE (with Index #0):

```
INQ CMD? RANGE
INDEX NUMBER <0>? 0
STARTING VALUE:
RECORD NUMBER <ALL>? 1
ENDING VALUE:
RECORD NUMBER <EOF>? 25
```

The example above will select records 1 through 25 from the ASSET file, allowing testing of the report format.



RESET may be used in response to INDEX NUMBER <0>? to remove a previously entered RANGE command.

DEFAULT: All records (no range)

## RESET

Entering the RESET command will reset all INQUIRE commands to their respective defaults.

## SAVE filename

The SAVE command is used to store the value for all the commands entered thus far in the INQUIRE session.

The filename is the name of the file in which the information is to be stored. An extension of .INQ is assumed if none is given and any existing file with that name is written over.

The saved file can be used at a later time to perform the same inquiry without retyping all of the commands by entering the filename in response to COMMAND SOURCE <KB:>?

## SELECT

The SELECT command is used to enter the record selection criteria. These criteria are the conditions that will be used to test each record to determine if it should be selected for printing. For example, an integer might be tested to see if it lies within a range of integers; a string might be tested against another string to see if it contains certain letters.

When the SELECT command is typed, INTAC will prompt with SELECT?, and will accept SELECT statements until a carriage return is typed. Note that text entered on the same line as the SELECT command will be ignored.

Entering RESET will reset the SELECT command to the default (all records, no selection).

In response to SELECT? you may enter a condition or a compound condition. The condition may be spread over several SELECT? prompts as shown in the following example.

### EXAMPLE:

```
INQ CMD? SELECT
SELECT? PUR.YEAR <=LAST.YEAR AND
SELECT? DEPT.NO=4001 OR
SELECT? DEPT.NO=5001
SELECT?
```

The example actually contains one long condition broken into three lines. Note that conditions may be joined by AND or OR and that the data item is repeated after AND and OR.

```
SELECT? PUR.YEAR <=LAST.YEAR AND DEPT.NO=4001 OR DEPT.NO=5001
```

You may break the condition at any place other than in the middle of a word or a string enclosed in quotes.

#### EXAMPLE:

```
INQ CMD? SELECT
SELECT? DESCRIPTION>>
SELECT? "CHAIR"
SELECT? OR DESCRIPTION>>"STEND" AND ASSET.CODE=P
SELECT?
```

Conditions are of the form

```
element condition element
```

The elements may be item names, item numbers, prompted items, or constants. Item numbers must be specified in qualified format, for example, F1.5 means item 5 from file 1. String constants must be in quotes. Date constants must be enclosed in quotes or in @ signs; for-example: @4/11/79@

The condition is a symbol with meanings as follows:

Symbol	Meaning
<	LESS THAN
>	GREATER THAN
=	EQUAL TO
<=	LESS THAN OR EQUAL TO
>=	GREATER THAN OR EQUAL TO
<>	NOT EQUAL TO
>>	CONTAINS (STRINGS ONLY)

Compare strings with strings, numbers with numbers, etc. Parenthesis can be used to form more complicated conditions.

DEFAULT: All records (no selection)

#### SET item value

The SET command is used to assign a new value to a PROMPT item. Values for PROMPT items are only requested by the first subsequent FIND or GO command. If the report is rerun, INTAC will normally use the values already entered. To modify these values and rerun the report in the same INQUIRE session, use the SET command.

In the following example, a FIND command causes INTAC to request input of LAST.YEAR. An error is made, resulting in zero records. The SET command is used to correct the error and a LIST shows that the correct year has been accepted.

## EXAMPLE:

```
INQ CMD? FIND
ENTER LAST YEAR TO PRINT? 70
O RECORDS SELECTED
INQ CMD? SET LAST YEAR 72
INQ CMD? LIST

FILE1 ASSET.INT
FILE2 DEPT.INT INDEX1 DEPT.NO
PROMPT
LAST.YEAR I "ENTER LAST YEAR TO PRINT" 72
```

## SHOW element1 [NULINE(n)][element2...element3][/ND][/SB]

The SHOW command is used to specify a series of data items to print. Up to 32 data items can be shown. SHOW can also be used to specify print formats, print positions, and column headings for the data items. The NULINE option can be used to print items on more than one line.

You can use INQUIRE to do simple calculations by using arithmetic operators (+, -, \*, /) with items. Note that you must also indicate a print format for the resulting numeric figure. (See below, print format.)

If you request more items than can be fit physically across the page at your terminal width setting, items will wrap around and be difficult to read. When wrapping occurs, you can increase the terminal and page width settings (the terminal command depends upon your hardware; the page width is an INTAC INQUIRE command), use the NULINE option, or reset the SHOW command to request fewer items.

Use the /ND (no detail) option to suppress printing of records at the detail level if only summary totals are to be printed.

The /SB (show break items) option is used to show the values of all break items for each record displayed in the inquiry. Normally, break items will be displayed only when the value of the designated break item changes or when a page break occurs.

The NULINE option allows you to format a request so that some items appear on a new line or lines. The following section first discusses commands without NULINE and then discusses SHOW commands with NULINE.

The format for each element in the SHOW command without the NULINE option is:

```
item[:xx,yy.z,"hdg1","hdg2","hdg3","hdg4"]
```

**item** May be an item name or item number (including prompted items), or a pair of numeric items joined by an arithmetic operator (+, -, \*, /). Item numbers will refer to FILE1, unless qualified item numbers, such as F2.3, are used. A set of consecutive items may be indicated by using a semicolon(;). For example: 1;3 means 1 through 3.

**xx** Optional print specification for string items. Indicates starting character position in string item to be shown. If omitted, the default starting character

position will be the first character. If this option is used, the length of the string to be printed should be specified in the following print format field.

yy.z Print format. If omitted, the print format in the INTAC file definition will be used. (The print format must be specified when the SHOW command has included requests for data items that are not in the files. Three such cases are: 1. if a print specification has been used, 2. if an arithmetic operator is used to join items, or 3. if a prompt item is to be displayed.)

yy total width of printed field, including commas, decimal points, sign, or parentheses. (If the total width actually exceeds the width indicated here in the command, INTAC will print percent signs in the report to signal the error.) This field is also used to specify the length of the string to be printed when a starting character is indicated in the previous field.

z the number of decimal places in floating point numbers.

hdgn Report column headings. Headings may be up to 32 characters long. To break a long heading into two or more lines, enter each line as a separate heading. Enter one to four headings, each enclosed in quotes and separated from each other by a comma. If omitted, the headings in the INTAC file definition will be used. If no heading is given there, the item name will be used.

#### EXAMPLES:

1. Command: INQ CMD? SHOW DESCRIPTION DEPT.NO  
Result:

DESCRIPTION	DEPT NO
DESK	4001
TYPING STAND	4001
TYPEWRITER	4001
OVERHEAD PROJECTOR	4001
TELEVISION 24"	4001

2. (with starting character of string)

Command:

INQ CMD? SHOW DESCRIPTION:3,8,"STRING","CHAR 3 THRU 8"

Result

```
STRING
CHAR 3 THRU 8
-----
SK
PING STA
PEWRITER
ERHEAD P
LEVISION
```

This feature is useful for truncating data items.

### 3. (with arithmetic operator and print format)

#### Command

```
INQ CMD? SHOW ORIG.COST ORIG.COST/LIFE:8.2,"ANNUAL","COST"
```

#### Result

ORIG.COST	ANNUAL COST
85.00	28.33
65.73	13.15

*ANNUAL COST is a calculated item.*

The format for each element in the SHOW command with the NULINE option is:

```
[:POSnn]  
NULINE(n) item[:COLnn],xx,yy.z  
[none]
```

**NULINE(n)** Option indicating that the item is to be displayed on a new print line of the inquiry report. This option may be abbreviated to NUL. All following items are also printed on the new print line. No heading will print for items following NULINE. Multiple NULINES may be contained in one SHOW command.

(n) = Number of lines to be advanced to the next print line. Must be contained in parenthesis. If (n) is omitted, one line is advanced.

**POSnn** (Option is restricted to items listed after NULINE.) Position on line where item value is to be printed. May contain any integer value between 1 and the total report width. (Note that the format indicates no space between item and :POSnn) You will need to experiment to see where to place items since you must take into account the print formats for data items, the spacing desired between items, and the page width. If your report is very complicated, use a formatting ruler to determine print position. The POS option is especially useful when the SHOW command requests fewer items on the previous lines than on the NULINE. See discussion below of results when neither POS nor COL is specified. Also note in the example that the user has entered a long list of data item names without pressing carriage return; the names wrap around to the next line automatically when the terminal width is exceeded. This wrapping does not affect the resulting report.

EXAMPLE:

Command

INQ CMD? SHOW DEPT.NAME DESCRIPTION:"DESCRIPTION AND", "ANNUAL COST" NULINE(1) ORIG.COST/LIFE:POS14,8.2

Result

DEPT NAME	DESCRIPTION AND ANNUAL COST
EDUCATION	TYPING STAND 13.15

COLnn

(Option restricted to items listed after NULINE.) Indicates column in which value of NULINE item is to be printed on report. The column number is determined by the items requested in the SHOW command. For example, if you request that 5 items be printed on the first line, you may specify that second line NULINE items be printed in columns 1 through 5. You will need to experiment to achieve the report format you want. See discussion below of results if neither COL nor POS is specified.

EXAMPLE:

Command:

INQ CMD? SHOW DEPT.NO DEPT.NAME NULINE(1) MANAGER:COL2

Result:

DEPT NO	DEPT NAME
4001	EDUCATION LANG
5001	ADVERTISING POWERS

none

If neither POS nor COL is specified, INTAC positions NULINE items beneath items on the preceding lines, beginning in column 1.

EXAMPLE:

INQ CMD? SHOW DEPT.NAME:"DEPT NAME", "AND NO" DESCRIPTION ORIG.COST PUR.YEAR NULINE DEPT.NO

DEPT AND NO	NAME DESCRIPTION	ORIG.COST	PUR YR
EDUCATION 4001	TYPING STAND	65.73	71

Entering SHOW without any items will reset the SHOW command along with resetting BREAK, TOTAL, and SKIP. (These commands depend upon the SHOW command.)

DEFAULT: All data items will be printed.

## SHOW ?

The SHOW ? command displays a list of items, their names, types and print formats for all files in use in the current INQUIRE session. (The example has been cut to show only the first three items.)

```
INQ CMD? SHOW ?

FILE: ASSET.INT
ITEM ITEM NAME          TYPE FORMAT
-----
  1  DEPT.NO            INTG     6
  2  ASSET.NO           ZSTR     5
  3  DESCRIPTION        STRG    22
```

## SKIP n1 [ON]breakitem1...breakitemn, n2 [ON]breakitem1...breakitemn

The SKIP command is used to specify line spacing at selected control breaks. The symbol n is the number of lines to skip at the specified break. Multiple items may be included in the SKIP command and the command may contain several SKIP specifications separated by commas. A breakitem is a data item that has been included in the BREAK statement. Enter the item name or item number. (If item names are identical in two or more files, use qualified item names such as F2.DEPT.)

### EXAMPLE:

```
INQ CMD? BREAK ON DEPT.NO DEPT.NAME PUR.YEAR
INQ CMD? SKIP 1 ON DEPT.NO
INQ CMD? SKIP 1 ON 1 2, 2 ON 3
```

The second example causes INTAC to skip one line on the breaks after items 1 and 2 as listed in the FILE1 file definition and to skip 2 lines on item 3.

Entering SKIP by itself will cancel the previously-entered SKIP command. Remember that entering a new BREAK command will cancel the SKIP command.

## SORT item1 item2 ... itemn[:n1,n2]

The SORT command is used to indicate the sequence in which to sort the selected records for the report.

Enter a list of up to eight data itemnames that are to be used to sort the file. (It is possible to refer to items by their numbers in the file definition. However, it is clearer to use data item names.) The sort will normally be in ascending order (from low to high). A descending sort for any item may be obtained by preceding the item with a minus sign. The items are listed from major to minor sort fields. If item names are identical in two or more files, use qualified item names such as F2.DEPT.

EXAMPLE (Ascending Sort):

Command

INQ CMD? SORT DEPT.NO PUR.YEAR

DEPT NO	DEPT NAME	DESCRIPTION	ORIG.COST	PUR YR
6001	SECURITY	DESK	1,000.00	71
		TABLES	5,000.00	
7001	RESEARCH	SECRETARY DESK 5'	1,096.52	71
		CREDENZA	850.00	73
7501	INDUSTL PROD	WORK TABLE 8'	546.76	71
8001	HOME PROD	EXEC DESK	567.45	71

EXAMPLE (Descending Sort):

Command

INQ CMD? SORT -DEPT.NO -PUR.YEAR

DEPT NO	DEPT NAME	DESCRIPTION	ORIG.COST	PUR YR
8001	HOME PROD	EXEC DESK	567.45	71
7501	INDUSTL PROD	WORK TABLE 8'	546.76	71
7001	RESEARCH	CREDENZA	850.00	73
		SECRETARY DESK 5'	1,096.52	71
6001	SECURITY	TABLES	5,000.00	71
		DESK	1,000.00	

EXAMPLE (qualified item name):

INQ CMD? SORT F2.DEPT.NO PUR.YEAR

You may specify a part of a string item to be a sort field. This is done by following the item name with :n1,n2 where n1 is the starting position of the sort field within the item, and n2 is the length of the sort field.

EXAMPLE (5th thru 7th characters as sort field):

Command

INQ CMD? SORT DEPT.NAME:5,7

DEPT NO	DEPT NAME	DESCRIPTION	ORIG.COST	PUR YR
6001	SECURITY	DESK	1,000.00	71
		TABLES	5,000.00	
5001	ADVERTISING	SECRETARIAL DESK	595.00	72
		CONFERENCE TABLE	563.45	71
7501	INDUSTL PROD	WORK TABLE 8'	546.76	71

Entering SORT with no items will reset the sorting status to the normal default (that is, no sort).

DEFAULT: No sorting (Records will be in record order.)



STOP or \

The STOP command ends the INQUIRE session and returns the user to the INTAC command level. A backslash may be entered instead of the word STOP.

TITLE[n] "text for title" [ + item]

Use the TITLE command to specify report titles to be printed at the top of each page. With INQUIRE you can use up to four lines of titles. Each title line can be a text message or a data item or it can be a text message combined with up to four data items.

The ability to use data items means that you can let INTAC fill in the value based upon the values contained in one of the files or upon prompted items.

Titles are centered within the width of the report. The maximum width of any title line (including the lengths of data item) is the width of the report. You must put your text messages in quotes. Do not put quotes around data items. Text may be separated from data items with a plus sign + and the plus sign must be preceded and followed by spaces: "text here" + ITEM

EXAMPLE:

```
INQ CMD? TITLE
TITLE1? "TRI-CITY COMPANY"
TITLE2? DIVISION + " DIVISION ASSETS"
TITLE3? "PURCHASED THROUGH YEAR " + LAST.YEAR
TITLE4?
INQ CMD?
```

Entering a carriage return, RESET, or RES in response to the prompt TITLE1? will reset the TITLE command.

Title lines may also be entered individually by entering TITLE followed by title information or by entering TITLE suffixed by a particular line number (between 1 and 4). Entering TITLE[n] followed by title information will replace any title line currently specified for the particular line number. Entering TITLE[n] on a line by itself will reset the particular subtitle. The following example will generate a blank line for TITLE3.

EXAMPLE:

```
INQ CMD? TITLE3
INQ CMD?
```

DEFAULT: no title

TOTAL item1 item2 ...itemn [ON breakitem1 ... breakitemn]

The TOTAL command is used to specify data items to be totaled on the report at selected control breaks. The items to be totaled must be data items or two or more items connected with arithmetic operators (+, -, \*, /). The items must have been specified in the SHOW command. They must be numeric items, and must not be break items. A maximum of 40 items can be totaled. A set of consecutive items may be indicated by using a semicolon (;).

## EXAMPLES:

```
INQ CMD? TOTAL ORIG.COST ON DEPT.NAME PUR.YEAR
```

Entering a new BREAK command cancels any previously entered TOTAL command. Totals are always printed at the end of the report if a TOTAL command is given. The break item value and all totals are printed on each total line.

Entering TOTAL without entering items resets the TOTAL command to the default (no totals specified).

Note that specifying item 0 (the record number) as a TOTAL item prints a count of the number of records. (Item 0 must also be specified in the SHOW command.)

## EXAMPLE:

```
INQ CMD? TOTAL ORIG.COST
INQ CMD? TOTAL 0 ORIG.COST ON DEPT.NAME
```

## WIDTH n

The WIDTH command indicates page width in characters. From this, INTAC determines how many columns will fit on a page. It may also be necessary to set terminal width to avoid line wrapping. Entering the command name will reset any width specification to its default.

DEFAULT: 80

IN