

Module 2

Requesting Data

This module will discuss the following:

- Implied Prompting
- Multiple Display Commands
- Prefix Operators

Supporting Documents/Files:

- FOCUS Documentation
- CIRS Data Element Dictionary

Overview

This module will describe how to request data using more advanced techniques that will save you time and enable you to produce more sophisticated reports. You will learn how to request data by supplying values when prompted, how to generate reports that display multiple levels of data and how to perform calculation on display fields.

Implied Prompting

Implied prompting is used in report requests so that when they are executed in the Online FOCUS Environment, FOCUS will automatically prompt you for the value of the field. The syntax is:

&fieldname.text.

&	is the place holder for the variable
fieldname	can be any (field) name 1-12 characters in length
.text.	is optional text

- It is used mostly in screening (IF) statements.
- The prompt may extend the full width of the screen.
- If you have multiple prompts, FOCUS will prompt you for the values one at a time.
- Cannot be used for report requests executed in Batch.

Implied Prompting Example

The following request could be used to search for a record in the AC file by employee name. It has two screening statements with implied prompting for employee last name and first name.

Report Request:

```
-* SEARCH FOR EMPLOYEE BY NAME
EX AC
TABLE FILE AC
PRINT AC:SSA
      AC:WNAME
      AC:CLASS
      AC:WORKLOC
IF AC:LASTNAME CONTAINS &AC:LASTNAME. ENTER LAST NAME.
IF AC:FRSTNAME CONTAINS &AC:FRSTNAME. ENTER FIRST NAME.
END
```

Online FOCUS Environment:

```
> > EX LOOKUP
ENTER LAST NAME > SMITH
ENTER FIRST NAME > ANN
```

Report Generated:

AC:SSA	AC:WNAME	AC:CLASS	AC:WORKLOC
-----	-----	-----	-----
123-45-6789	LEE-SMITH, ANN	3312	ADM-AA
222-33-4444	SMITH, JOHANNA	3300	VP-AC-AF
987-65-4321	SMITH, ANN	1035	ANT VALL

Implied Prompting Practice

Use fields from the payment file to write the screening statements with implied prompting for the following criteria.

Class Code

Pay Period

Collective Bargaining Id

Multiple Display Commands

A report request can contain multiple display commands (also known as verb phrases), and their associated sort commands. The syntax is:

```
EX filename  
TABLE FILE filename
```

```
aggregate display command  
sort phrase#1
```

```
detail display command  
sort phrase#1  
sort phrase#2
```

```
END
```

- Up to 16 display commands and their associated sort conditions can be used.
- Aggregate display commands (SUM or COUNT) must be used before detail display commands (PRINT or LIST).
- The first display command does not need to have a sort condition.
- When a sort phrase is used with a display command, the display commands following it must use the same sorting condition in the same order.
- WHERE and IF conditions apply to the records selected for the report as a whole.

Multiple Display Commands Example

The report request below counts the number of positions in each reporting unit and also prints the names of the employees in each unit. The aggregate display command, COUNT, has the sort condition: BY AC:UNIT. That same sort condition must be used on the detail display command, PRINT.

Report Request:

```

-* COUNTS AND NAMES OF EMPLOYEES BY UNIT
EX AC
TABLE FILE AC
COUNT AC:POSITION
    BY AC:UNIT
PRINT AC:WNAME
    BY AC:UNIT
IF RECDLIMIT EQ 10
END
    
```

Report Generated:

UNT	AC:POSITION COUNT	AC:WNAME
---	-----	-----
111	4	ARDVARK, C DONALD GIRAFFE, GARY G YAK, SHEILA M SEAL, RICHARD D
222	6	SNAKE, DAVID L ANT, SYLVIA A CAMEL, TOM N SHARK, PATRICK B GROUNDHOG, MARYL HIPPOPOTAMUS, MICHAEL A

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Multiple Display Commands Practice

Write a report that totals all active/on-leave employee salaries by agency code at your campus. Display employee names and salaries within each agency.

Report Generated:

AGY	TOTAL SALARY	EMPLOYEE NAME	SALARY
---	-----	-----	-----
100	\$10,732.68	ANTEATER, C DONALD	\$799.68
		GOPHER, GARY G	\$678.16
		YAK, SHEILA M	\$635.28
		SHARK, RICHARD	\$877.92
		SEAL, DAVID L	\$1,010.64
		ANT, SYLVIA	\$6,731.00
200	\$4,138.45	CAMEL, TOM N	\$809.28
		SNAKE, PARTRICK B	\$581.28
		GIRAFFE, MARY L	\$1,477.33
		HYENA, MICHAEL A	\$1,270.56

Report Request:

Prefix Operators

Performs calculations on the values of verb fieldnames. Each direct operator is attached to a fieldname, and it only affects that field. The syntax is:

SUM prefix.fieldname

The prefix operators we will review are:

- MAX. Selects the maximum value of a fieldname.
- MIN. Selects the minimum value of a fieldname.
- AVE. Computes the average value of a fieldname.
- CNT. Counts the occurrences of a field.
- PCT. Computes the percent value of final column total.
- PCT.CNT. Computes the percentage value of a count (Format F6.2).
- SUM. Sums the value of the specified fieldname.
- CNT.DST. Counts distinct occurrences for the specified fieldname.

- The column-title will display as two lines, with the prefix operator on the first line and the fieldname on the second.
- Cannot be used to begin a request statement (e.g., CNT.XX:SSA - should be SUM CNT.XX:SSA)
- Cannot be used in IF statements.
- Format will default to the fieldname format (except PCT.CNT. which will be F6.2).

Prefix Operators – Example

The report request below uses prefix operators to identify the minimum, maximum and average base pay for MPP class codes.

Report Request:

```
-* SALARY STATISTICS
EX AC
TABLE FILE AC
SUM   MIN.AC:BASEPAY
      MAX.AC:BASEPAY
      AVE.AC:BASEPAY
BY AC:CLASS
IF AC:CBID EQ M80
END
```

Report Generated:

CLS	MIN AC:BASEPAY	MAX AC:BASEPAY	AVE AC:BASEPAY
---	-----	-----	-----
3300	\$6,838.00	\$16,323.00	\$11,624.71
3306	\$4,500.00	\$11,495.00	\$8,972.60
3307	\$6,830.33	\$8,782.50	\$7,732.66
3312	\$3,348.00	\$9,323.00	\$5,761.47
3313	\$6,839.00	\$6,450.00	\$6,744.24
3314	\$5,002.00	\$5,450.00	\$5,725.66
3318	\$2,220.00	\$6,876.00	\$4,971.85
3320	\$3,717.00	\$3,717.00	\$3,717.00

Prefix Operators - Practice

Write a report that will count the number of active employees by their ethnic group. Also display the percentage each count represents of the total count. The report output is shown below.

Report Generated:

	CNT	PCT.CNT
AC:ETHNICGRP	AC:SSA	AC:SSA
-----	-----	-----
AMI	10	.58
ASN	148	8.54
BLK	77	4.44
HSP	54	3.11
N/A	2	.12
WHT	1443	83.22
TOTAL	1734	100.00

Report Request:

What You Have Learned

In this module you learned how to:

- Request data using implied prompting
- Use multiple display commands (verbs) in a single report request to provide summarized and detail information
- Use prefix operators to perform complex functions on field values