

SPREADSHEET TECHNIQUES TO SPEED SAS CODING

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Users of Mainframe based SAS in the Finance Division of Continental Insurance have developed simple routines using PC based spreadsheet software that aid in the development and prototyping of SAS procedures. These routines reduce the need to retype variables or values in multiple IF THEN statements and values in the PROC FORMAT Step statement.

Spreadsheets and text documents either generated in the department or available through the LAN are manipulated in the spreadsheet environment. On a typical spreadsheet, at least one column contains descriptive information such as titles, category names, company names or account numbers. By eliminating all other columns and blank rows, a list is made. Redundant areas in statements such as IF and THEN, logical expressions and the ; are added to the appropriate columns and copied down the list. The width command is used to format the list to conform to a typical SAS statement.

An exported file of the list, saved in ASCII or text format is uploaded and incorporated into an existing SAS procedure. This process reduces the time required to write a procedure from scratch and also reduces the connect time on a Mainframe account.

The following examples of typical requests and their solutions show many possible uses for this process. These routines give SAS users the ability to manipulate information in the PC area and allow the users to better utilize Mainframe resources.

This process is adaptable to the Base SAS product and the concepts work in any operating system that can accept a file from the PC environment.

EXAMPLE 1

Currency Equivalence Report

NO.	CODE	NAME
1	US	United States
14	AD	Australia Dollar
23	BF	Belgium Franc
37	CN	Canada Dollar
68	DK	Denmark Krone
116	FF	France French Franc
122	DN	Germany Deutsche Mark
145	HK	Hong Kong Dollar
158	IL	Italy Lira
166	JY	Japan Yen
257	NG	Netherlands Guilder
267	NZ	New Zealand Dollar
333	PA	Pakistan Rupee
459	SF	Switzerland Franc
558	PS	United Kingdom Pound
788	EC	ECU
448	SP	Spain Peseta
239	MX	Mexico Peso
458	SK	Sweden Krona
115	FM	Finland Markka
399	SD	Singapore Dollar
279	NK	Norway Krone

NOTE: Please create a temporary variable in SAS called SCURR, consisting of a two letter code and print a listing. GKD

On the monthly SAS extract of the corporate data base, currency codes, CURR, are represented by numbers. The objective of this routine is to create a variable, SCURR, that contains the corresponding two letter code.

SOLUTION 1

```

SCURR = 'XX';
IF CURR = 1 THEN SCURR = 'US';
IF CURR = 14 THEN SCURR = 'AD';
IF CURR = 23 THEN SCURR = 'BF';
IF CURR = 37 THEN SCURR = 'CN';
IF CURR = 68 THEN SCURR = 'DK';
IF CURR = 115 THEN SCURR = 'FM';
IF CURR = 116 THEN SCURR = 'FF';
IF CURR = 122 THEN SCURR = 'DN';
IF CURR = 145 THEN SCURR = 'HK';
IF CURR = 158 THEN SCURR = 'IL';
IF CURR = 166 THEN SCURR = 'JY';
IF CURR = 239 THEN SCURR = 'MX';
IF CURR = 257 THEN SCURR = 'NG';
IF CURR = 267 THEN SCURR = 'NZ';
IF CURR = 279 THEN SCURR = 'NK';
IF CURR = 333 THEN SCURR = 'PA';
IF CURR = 399 THEN SCURR = 'SD';
IF CURR = 448 THEN SCURR = 'SP';
IF CURR = 458 THEN SCURR = 'SK';
IF CURR = 459 THEN SCURR = 'SF';
IF CURR = 558 THEN SCURR = 'PS';
IF CURR = 788 THEN SCURR = 'EC';

```

Directions:

```

Sort block to order numbers
Delete rows
Insert columns
Type: IF CURR =
      THEN SCURR = '
      ';
      SCURR = 'XX';
Adjust width of columns
Copy down
Export to a ASCII or
      TEXT file
Upload to CMS Mainframe
In CMS:
GET Filename Filetype Filemode
into an existing SAS procedure
Save SAS procedure
Execute

```

EXAMPLE 2

Company Codes and Long Names

CODE	TYPE	RATE	LONG NAME	RELATIONSHIP
664	BONDS	AA	ABC COMPANY	HOLDINGS
434	COMMON	AA	XYZ CORPORATION	HOLDINGS
234	PREFERRED	AA	ACME PRODUCTS	HOLDINGS
333	PREFERRED	AA	NO LOAD COMPANY	HOLDINGS
432	PREFERRED	AA	ZERO SUM CORP	HOLDINGS
444	PREFERRED	AAA	BIG EIGHT COMPANY	HOLDINGS
111	PREFERRED	AAA	BIG BLUE	HOLDINGS
421	COMMON	B+	BIG RED	HOLDINGS
432	COMMON	AA	T REX MEATS	NO HOLDINGS
433	COMMON	AAA	FIRE BRANDS	NO HOLDINGS
257	COMMON	AAA	A C RAMONY	NO HOLDINGS
267	COMMON	B+	FIRE ONE CORP	NO HOLDINGS
333	BONDS	B+	FIRE TWO CORP	HOLDINGS
459	BONDS	B+	FIRE THREE CORP	HOLDINGS

NOTE: Please format the output to show both the CODE and the LONG NAME. GKD

On the monthly SAS extract of the corporate data base, company numbers, CONUM, are represented by numbers. The objective of this routine is to format the output listing to show the number and a corresponding name.

SOLUTION 2

```

PROC FORMAT;
  VALUE COMP 664 = 'ABC COMPANY '
             434 = 'XYZ CORPORATION '
             234 = 'ACME PRODUCTS '
             333 = 'NO LOAD COMPANY '
             432 = 'ZERO SUM CORP '
             444 = 'BIG EIGHT COMPANY '
             111 = 'BIG BLUE '
             421 = 'BIG RED '
             432 = 'T REX MEATS '
             433 = 'FIRE BRANDS '
             257 = 'A C RAMONY '
             267 = 'FIRE ONE CORP '
             333 = 'FIRE TWO CORP '
             459 = 'FIRE THREE CORP '

```

Directions:

```

Delete rows
Delete columns: TYPE
                MOODY
                RELATIONSHIP
Insert columns
Type: PROC FORMAT;
                VALUE COMP
                =
                '
Adjust width of columns
Copy down
Add final ;
Export to a ASCII or
                TEXT file
Upload to CMS Mainframe
In CMS:
  GET Fname Ftype Fmode
  into SAS procedure
Add after PROC PRINT;
FORMAT CONUM COMP.;
Save SAS procedure
Execute

```