# **Business Intelligence Paper for SCSUG 2012 Educational Forum**

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### ABSTRACT

This paper is about identical SAS/IntrNet code for test and production environments.

## **INTRODUCTION**

The Texas Education Agency, TEA, like many other organizations has two web reporting websites for dynamic content: a test website that is available behind the TEA's firewall and enables the content owner to view the web page before it is put into production, and a production website that is available to the public. Having SAS/IntrNet code that is the same for the test and production web reporting environments makes managing web reports less complex because the data the web report is based becomes the primary variable. The SAS/IntrNet code that is presented in this paper uses an environmental symbol that is passed to SAS from the website that sent the web reporting request to determine whether the test data or the production data should be reported. Also, knowledge of BASE SAS and SAS macros and SAS IntrNet code will make is easier to understand and apply the concepts presented in this paper.

## SAS CODE

Table A displays SAS code that is stored in two separate SAS programs. The 1<sup>st</sup> SAS code (testprod.sas) contains a macro (testprod) that sets a libname based on the value of the environmental symbol that is passed to SAS from the website that sent the web reporting request (&\_envir) and the value of the last nodes of libname's paths are macro variables &test (sof2012\_nf/dev) and &prod (sof2012\_nf) that come from the 2<sup>nd</sup> SAS code (sof2012\_nf.sas). Also, the 2<sup>nd</sup> SAS code is a portion of the SAS IntrNet web reporting code that includes the 1<sup>st</sup> SAS code which makes editing the 1<sup>st</sup> SAS code easier and calls the macro in the 1<sup>st</sup> SAS code.

#### Table A

"/home/sas/sfin/funding/prod/testprod.sas"
options symbolgen macrogen;
%macro testprod(test,prod);
%if &\_envir = test %then libname SOF ''/home/sas/sfin/funding/data/&test.'';
%if &\_envir = prod %then libname SOF ''/home/sas/sfin/funding/data/&prod.'';
%mend testprod;
Portion of sof2012\_nf.sas - SAS IntrNet code:

filename testprod ''/home/sas/sfin/funding/prod/testprod.sas''; %inc testprod; %testprod(sof2012\_nf/dev,sof2012\_nf);

Table B contains a sample of the symbols that are passed to SAS from the website that sent the web reporting request and please note the that the value of the environmental variable (\_envir) indicates which website sent the request.

#### Table B

Sample of symbols passed to SAS from the test website "\_envir" = "test" "\_program" = "sfin.sof2012\_nf.sas" "district" = "227901" Sample of symbols passed to SAS from production website "\_envir" = "prod" "\_program" = "sfin.sof2012\_nf.sas" "district" = "227901"

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environmental variable (\_envir) is equal to "test" and the libname SOF is set to the "dev" path so the test data is the basis of the web report.

### Table C

#### SAS IntrNet log on development website

8 +filename testprod "/home/sas/sfin/funding/prod/testprod.sas"; 9 +%inc testprod; NOTE: %INCLUDE (level 2) file TESTPROD is file /home/sas/sfin/funding/prod/testprod.sas. 10 +options symbolgen macrogen; 11 +% macro testprod(test,prod); 12 +% if & envir = test % then libname SOF "/home/sas/sfin/funding/data/&test."; 13 +% if &\_envir = prod % then libname SOF "/home/sas/sfin/funding/data/&prod."; 14 +% mend testprod; 15 + NOTE: %INCLUDE (level 2) ending. NOTE: %INCLUDE (level 1) resuming. 16 +%testprod(sof2012\_nf/dev,sof2012\_nf); SYMBOLGEN: Macro variable \_ENVIR resolves to test SYMBOLGEN: Macro variable TEST resolves to sof2012\_nf/dev SYMBOLGEN: Macro variable ENVIR resolves to test MACROGEN(TESTPROD): libname SOF "/home/sas/sfin/funding/data/sof2012 nf/dev" NOTE: Libref SOF was successfully assigned as follows: Engine: V9Physical Name: /home/sas/sfin/funding/data/sof2012 nf/dev

Table D is the SAS IntrNet log for a web reporting request coming from the production web site and please note that the environmental variable (\_envir) is equal to "prod" and the libname SOF is set to the "production" path so the production data is the basis of the web report.

### Table D

SAS IntrNet log on production website
8 +filename testprod "/home/sas/sfin/funding/prod/testprod.sas";
9 +%inc testprod;
NOTE: %INCLUDE (level 2) file TESTPROD is file /home/sas/sfin/funding/prod/testprod.sas.
10 +options symbolgen macrogen;
11 +%macro testprod(test,prod);
12 +%if &_envir = test % then libname SOF "/home/sas/sfin/funding/data/&test.";
13 +%if &_envir = prod %then libname SOF "/home/sas/sfin/funding/data/&prod.";
14 +% mend testprod;
15 +
NOTE: %INCLUDE (level 2) ending.
NOTE: %INCLUDE (level 1) resuming.
16 +%testprod(sof2012_nf/dev,sof2012_nf);
SYMBOLGEN: Macro variable _ENVIR resolves to prod
SYMBOLGEN: Macro variable _ENVIR resolves to prod
SYMBOLGEN: Macro variable PROD resolves to sof2012_nf
MACROGEN(TESTPROD): libname SOF "/home/sas/sfin/funding/data/sof2012_nf"
NOTE: Libref SOF was successfully assigned as follows:
Engine: V9
Physical Name: /home/sas/sfin/funding/data/sof2012_nf

## CONCLUSION

This paper covered SAS/IntrNet code that makes managing web reports less complex because it is the same for the test and production web reporting environments which causes the data the web report is based to become the primary variable.

# **CONTACT INFORMATION**

Your comments and questions are valued and encouraged. Contact the author at:

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