The SAS® System
Release 6.09 Enhanced (TS470)
OpenVMS™ for VAX™ Systems

Please Read Before Beginning Installation

Introduction

Alert Notes list problems that you need to be aware of before installing or using this software. Should you need assistance with the software, we ask that only the SAS Installation Representative or SAS Support Consultant call our Technical Support Division. Sites in the U.S. and Canada may call (919) 677-8008. Other sites should contact their SAS Installation Representative or SAS Support Consultant for the nearest SAS Institute office.

Installation Issues

- Although the latest release of the SAS System for most operating systems is Year 2000 compliant, it is crucial that you read this information and take appropriate action to make sure that your programs and applications that use the SAS System will process dates correctly before, during, and after the Year 2000.

  SAS software (after Release 6.04) uses the YEARCUTOFF= option to determine what century prefix a two-digit year will be associated with. For example, if you specify YEARCUTOFF=1900, all two-digit years processed by SAS applications will be assumed to be between 1900 and 1999; if YEARCUTOFF=1950 is specified, all two-digit years between 50 and 99 are assumed to be in the 1900s, while all two-digit years from 00 to 49 are assumed to be from 2000 to 2049.

  For Version 6 SAS software (after Release 6.04), the default value of YEARCUTOFF= is 1900, unless it has been reset by SAS support personnel at your site. This means that all two-digit years processed by SAS software are assumed to be in the 1900s and processing any date information with values greater than December 31, 1999 may produce incorrect results if they are represented with two-digit years. For Version 7 and the Version 8, Developer's Release of the SAS System, the default value of YEARCUTOFF= is 1920. To provide for correct processing of two-digit years by SAS software, you should determine the value of the YEARCUTOFF= option on your system and modify it if necessary. To determine the value of the YEARCUTOFF= option, simply invoke the SAS System and submit the following statements:

```
proc options option=yearcutoff;
run;
```

The values of the YEARCUTOFF= option will be displayed in the SAS LOG window. If the YEARCUTOFF= option is set to 1900, we suggest modifying it to a value between 1920 and 1950. The optimum value will depend on the range of dates that you typically process with your SAS applications. If you do not anticipate processing date values greater than 2020, you can set YEARCUTOFF=1920; if your SAS applications process dates greater than 2020, you may want to set YEARCUTOFF= to a higher value, such as 1930 or 1950. The process for changing the default value of YEARCUTOFF= (or any system option) depends on your specific operating system - consult the **SAS Companion** for your operating system or the SAS Help facility for specific details.

We also recommend that SAS Installation Representatives and SAS Software Consultants make all SAS software users at their site aware of the default YEARCUTOFF settings for Version 6, Version 7, and the Version 8, Developer's Release. An easy way to do this is to display the information at the top of the SAS LOG window using the NEWS system option. See the **SAS Companion** for your operating system or the SAS Help facility for specific details on using the NEWS option.

For additional details on how the YEARCUTOFF= option works and how to determine the optimum setting for the option, refer to the document **Using the YEARCUTOFF= Option to Interpret Two-Digit Years in Your SAS Applications**, which is available on our Web site at:

http://www.sas.com/techsup/download/technote/ts597.html

If you do not have access to our Web site, you can obtain a copy of the document by contacting our Technical Support Division at (919) 677-8008. (Those of you outside the United States or Canada should contact your local SAS Institute office or subsidiary.) As always, we encourage you to use the latest version of the SAS System. For complete details on the Year 2000 compliance of SAS software products, as well as information and resources for testing your SAS applications for Year 2000 compliance, refer to our Year 2000 compliance Web page at:

http://www.sas.com/y2k

- This media contains software fixes and updates that will upgrade you to the supported maintenance level, (TS470).

  Note: Even though the second option in the installation main menu is labeled `2. Install Source Maintenance Files`, you must choose `3. Install SAS Notes and Load Patches` to load the maintenance (TS470) to your SAS System. Option 2 has become obsolete.

- If you are installing an add-on product to a system that has already been upgraded to TS455, TS460, TS465, or TS470, you *must* re-apply maintenance after installing the new product. Failure to do so will result in a SAS System installation with mismatched maintenance. Unpredictable results will occur when running from such an installation.

- The ICP test for SAS/QC software will fail if you do not have SAS/GRAPH software installed. The difference in the results concerns a title in the output. The reason for this difference is because the TITLE statement processor from Base SAS software includes extra-embedded blanks if the title is split over two lines. The following is an example.

```
title 'This is '
      'a title.'
```

  This will be displayed as the following.

```
This is   a title.
```

  SAS Note V6-SYS.DATA-4391 documents this problem.

- Installation from TK50s on a TK70 drive may not work due to a problem with the TQK70 controllers. If you are installing Release 6.09 Enhanced (TS470) of the SAS System using a TK70 drive and the installation hangs or fails while loading one of the save sets, please contact Digital Equipment Corporation Support. The temporary fix for the problem is to have a Digital Equipment Corporation Representative exchange firmware revision 4 of the TQK70 controller with firmware revision 3.

  Digital Equipment Corporation is currently working on a long-term solution to allow the TQK70 controllers to function correctly.

SAS/ACCESS Interface to Rdb/VMS Software

- If you have upgraded to Rdb/VMS version 4.2 and receive the following error:

```
ERROR: An error occurred attempting to open a cursor. The Rdb/VMS
       error is RDB-E-READ_ONLY, an attempt to update during a
       read only transaction.
```

  while running SAS/ACCESS Interface to Rdb/VMS software, contact Digital Equipment Corporation for the ECO-10 patch for Rdb/VMS version 4.2.

  SAS Note V6-ENGINE-6834 documents this problem.

SAS/ACCESS Interface to SYBASE Software

- The SAS System installation procedure will link with Open Client version 4.60 by default. If you want to link with another version of Open Client, you must execute the following commands after the installation procedure has completed. For example, to link with Open Client version 4.61, you would type in the following:

```
$ set default sas$root:[tools]
$ copy sassyb461.obj sassyb.obj
$ @post_accsyb.com
```

  and follow the instructions indicated in the `POST_ACCSYB.COM` command file.

  Before executing this command file, you must have defined the SAS System logical names for Release 6.09 of the SAS System and SYBASE logical names for your version of Open Client. See the appropriate installation instructions for more information on defining these logical names.

  Note: In order to link with Open Client versions 4.01 or 4.2, use the `SASSYB40.OBJ` file.

Base SAS Software

- To enhance performance accessing macro variables, you can change the default settings for two system options, `MVARSIZE` and `MSYMTABMAX`, on the SAS System command line in an `OPTIONS` statement or in a configuration file. Recommended values include:

```
MVARSIZE=8192
MSYMTABMAX=51200
```

  Refer to SAS Technical Report P-222, Changes and Enhancements to Base SAS Software, Release 6.07 for a description of these system options.

- Observations may be dropped when some procedures access SPSS files directly via the SPSS engine. The loss of observations is caused when a point is attempted by the procedure. The SPSS engine does not execute the point correctly. This problem does not occur where there are fewer than 100 observations.

  This problem may also be apparent in procedures that use BY-group processing. If the procedure reads a BY-group and then points back to the beginning of the BY-group, the point will most likely fail. In this instance, abnormal termination of the procedure is more likely than dropping observations.

  The circumvention for this situation is to create a SAS data set from the SPSS file and run the procedures against the SAS data set.

  SAS Note V6-SPSS.ENG-F008 documents this problem.

- When PROC COPY is used to copy a data set on an OpenVMS for VAX system that was created on an OpenVMS Alpha system, observations will be dropped. Because of the OpenVMS for VAX system limitation to store numeric values in the range of 2.9E-39 to 1.7E-38, numeric values from OpenVMS Alpha outside of this range will be dropped. No error or warning message is produced and it appears that PROC COPY finishes successfully with a note stating the number of observations and variables copied.

  To circumvent the problem, use the DATA step instead of PROC COPY. For the values that are too large to be read on OpenVMS for VAX systems, a WARNING message is generated and the values are set to missing.

  SAS Note V6-COPY-F211 documents this problem.

SAS/ETS Software

- When PROC EXPAND is used to interpolate missing values for some of the variables on a data set, all variables not processed by a CONVERT statement are copied from the input data set to the OUT= data set.

  However, if the ID variable has missing values at the beginning or end of the data set, then the range of observations output to the OUT= data set should be truncated. The copy of the input observations for the variables not processed by a CONVERT statement does not take this into account; therefore, when missing values occur at the beginning or end of the file, then wrong values are copied to the OUT= data set.

  To circumvent the problem, use a WHERE clause or statement to subset the data so observations with missing values for the ID variable are omitted.

  SAS Note V6-EXPAND-C367 documents this problem.

- In PROC MODEL, if you use GMM to estimate the parameters of a model in which a hard-coded negative sign is associated with the intercept term, such as:

  ```
  y = -a + b*x;
  ```

  then PROC MODEL may either return incorrect results or have difficulty converging to a solution.

  To circumvent the problem, reparameterize the model specification so the intercept term does not have a negative sign associated with it.

  SAS Note V6-MODEL-C938 documents this problem.

SAS/FSP Software

- If you edit a character variable whose value cannot be entirely displayed in the FSVIEW window because the width of the variable is longer than the width of the FSVIEW window, the updated data value saved to the data set may be truncated to only those characters that were displayed in the FSVIEW window.

  To circumvent the problem, use the FSEDIT window to edit these character values.

  SAS Note V6-FSVIEW-C730 documents this problem.

SAS/INSIGHT Software

- Incorrect numeric results can occur if, for a single data set, a graph or analysis window is open and a new DISTRIBUTION, FIT, or MULTIVARIATE analysis is requested using a list of GROUP variables that is different from the list of GROUP variables used for the previous graph or analysis. To avoid the problem, close all windows based on one GROUP before opening a window using a different GROUP.

  SAS Note V6-INSIGHT-B315 documents this problem.

- A model without an intercept can be fitted by deselecting the Intercept button in the Fit[YX] dialog box. If there is only one independent variable in the model, the resulting analysis window contains a plot of the dependent variable by the independent. By selecting either of the following menu picks:

  1. Curves then Pred. Confidence Curves
  2. Curves then Mean Confidence Curves

  confidence curves for the mean or predicted values are added to the plot. However, with no-intercept models, these confidence curves are incorrect and are too narrow.

  SAS Note V6-INSIGHT-A666 documents this problem.

SAS/QC Software

- In PROC CAPABILITY, if data in the key cell (top left cell) of a comparative histogram are outside the range of midpoints specified with a MIDPOINTS= option on a COMPHISTOGRAM statement, then these outlying points will be missing from the plot in the key cell. This does not happen when cells other than the key cell contain data beyond specified midpoints. In this situation, the procedure correctly extends the midpoint list to accommodate the data ranges in all cells. Note that if outliers occur in the key cell and non-key cells, then the procedure will only extend the axis enough to accommodate the non-key cell data and points may still be missing from the key cell.

  To circumvent this problem, specify midpoints that span the range of data values in the key cell or use the default horizontal axis scaling by omitting the MIDPOINTS= option.

  SAS Note V6-CAPABILITY-C519 documents this problem.

- When the options MU=EST and SIGMA=EST are specified together on the NORMAL option of the PROBPLOT or QQPLOT statements in PROC CAPABILITY and the ROTATE option is also specified, the parameter estimates in the distribution reference line legend and the reference line itself are incorrect in both high and low resolution output. The distribution line may be missing altogether with the following warning issued in the SAS LOG window:

  ```
  WARNING: The distribution line does not appear in the plotting area.
  ```

  To circumvent this problem, omit either the ROTATE option or both the MU=EST and SIGMA=EST normal distribution options.

  SAS Note V6-CAPABILITY-D436 documents this problem.

SAS/STAT Software

- In PROC ANOVA and PROC GLM, the REGWF multiple comparison test was incorrectly implemented in the MEANS statement. The underlying problem was that our implementation incorrectly assumed that only contiguous subsets for the groups ordered by sample means needed to be tested for equality, as is the case with REGWQ. In general, for REGWF, all subsets of means must be tested for equality.

  SAS Note V6-SYS.PROC-C294 documents this problem.

- In PROC ANOVA and PROC GLM, the critical values for the REGWQ multiple comparison test should be monotone non-decreasing in the number of means. Occasionally, they are not if the error degrees of freedom is "relatively small". A reference that discusses this issue is *Multiple Comparisons: Theory and Methods* by Jason Hsu (1996). The publisher is Chapman & Hall.

  SAS Note V6-SYS.PROC-C295 documents this problem.

- In PROC GLM, the critical values for the DUNCAN's test should be monotone non-decreasing in the number of means. Occasionally they are not, if the CLASS variable has many LEVELS. This is a machine-dependent problem, but no machine should have a problem with fewer than 30 means.

  To circumvent the problem, try other multiple comparison tests, such as TUKEY, LSD.

  SAS Note V6-GLM-C842 documents this problem.

- Prior to Release 6.12 of the SAS System, in PROC GLM if one specifies more than SS2, SS3, SS4 on the MODEL statement, the degrees of freedom (DF) for all of them are the same and equal to the DF for the highest SS computed.

  For example, if:

  ```
  MODEL Y=A B A*B/SS1 SS2 SS3 SS4
  ```

  PROC GLM will report the SS4 DF for the SS2 and SS3 DF.

  This is a problem when the true DF for the different SS options are not equal to the DF for the highest SS computed. To see if one has encountered this problem, it will be necessary to run a separate GLM for each type of SS requested on the MODEL statement and compare the DF to those reported when more than one SS is specified on the MODEL statement.

  To circumvent the problem, specify a separate GLM for each type of SS requested.

  SAS Note V6-GLM-C889 documents this problem.

- In PROC GLM or PROC MIXED, if the LSMEANS are correlated, then the p-values reported in the PDIFF table with ADJUST=SIMULATE or ADJUST=DUNNETT may be incorrect. This behavior will only happen in rare circumstances.

  SAS Note V6-SYS.PROC-C298 documents this problem.

- In PROC MIXED, using the V= option with the SUBJECT= option on the RANDOM statement will cause the procedure to print the incorrect values for the log-likelihood based statistics and for the residual variance estimate. Correct values for these statistics can be obtained by rewriting the RANDOM statement without the SUBJECT= specification.

  SAS Note V6-MIXED-C252 documents this problem.

- In PROC MIXED, incorrect results can be reported from the CONTRAST or ESTIMATE statements when multiple RANDOM statements are used. At least one of the RANDOM statements must use the GROUP= option for this problem to occur.

  The only workaround for this problem is to recode your RANDOM statements without using the GROUP= option.

  SAS Note V6-MIXED-C520 documents this problem.

- In PROC MIXED, incorrect predicted values from the P or PM options or incorrect values for the dependent variable can be reported in the PREDICTED table when multiple RANDOM statements are used with non-nested SUBJECT= effects.

  There is no circumvention for this problem.

  SAS Note V6-MIXED-C557 documents this problem.

- In PROC MIXED, the RATIOS column in models with a RANDOM statement and TYPE=FA(0) will be incorrect. The square root of the residual variance is used to calculate the ratios, rather than the residual variance itself. To circumvent this problem, use the NOPROFILE option on the PROC MIXED statement.

  SAS Note V6-MIXED-C661 documents this problem.

- In PROC MIXED, the standard errors of fixed effects in a GLM model (a model with no RANDOM or REPEATED statements) will be incorrect when the NOPROFILE option is used. There is no circumvention for this problem.

  SAS Note V6-MIXED-C780 documents this problem.

- In PROC GENMOD, when the DIST=BINOMIAL option is used in conjunction with the FREQ statement, the DF and VALUE/DF columns in the Criteria for Assessing Goodness of Fit table are incorrect. The values of the FREQ variable are incorrectly ignored when computing degrees of freedom in binomial models. Correct values can be obtained by replicating each observation as many times as its FREQ value and running PROC GENMOD without the FREQ statement.

  SAS Note V6-GENMOD-C144 documents this problem.

- In PROC NLIN, derivatives of the _WEIGHT_ variable (including the differences used in the DUD method) are not calculated with respect to the parameters. Thus, if your _WEIGHT_ variable is a function of the parameters, there is no contribution to the gradient and/or the Hessian of the objective function (SSE). This is the desired effect if you are performing an iteratively re-weighted least squares analysis. However, if you are performing an estimation using a LOSS function, this may not be the desired effect.

  SAS Note V6-NLIN-D106 documents this problem.

- The compiler used in PROC CALIS and PROC GENMOD will compute incorrect analytic derivatives when a SUM statement is used in the model specification. The SUM statement is often used in a summation DO loop. For example, the following code would return an incorrect derivative for y:

```
y=0;
do i=1 to 3;
   y + x + a;
end;
```

  To circumvent the problem, replace the SUM statement with an assignment statement to define the summation. The above example would be modified as:

```
y=0;
do i=1 to 3;
   y=y + x + a;
end;
```

  SAS Note V6-SYS.PROC-D515 documents this problem.

- In PROC CANCORR, if you specify the PCORR (partial correlations) option and do not also specify certain combinations of other options, the output from the PCORR option ("Partial Correlations Removing the Effects of All Other Regressors from Both Regressor and Criterion") will be incorrect.

  To get the correct output from the PCORR option, you must specify any of the following combinations of options:

```
PCORR VDEP ALL or
PCORR WDEP ALL or
PCORR SQPCORR or
PCORR SQSPCORR
```

  SAS Note V6-CANCORR-D507 documents this problem.

- If you specify more than one within-subjects factor in the REPEATED statement (for example, REPEATED TIME 2, TRIAL 2;), and if you specify interaction(s) of between- and within-subjects factors on the MODEL statement (for example, group*_response_), then the tests of these interactions will be incorrect in the Analysis of Variance table. Also, the parameter estimates, while correct, are not correctly organized in the Analysis of Weighted-Least-Squares Estimates table. PROC CATMOD generates the correct design matrix columns, but if a between*within interaction requires more than one column, those columns are not consecutive in the matrix. Consequently, they are not in the order stated in the Analysis of Weighted-Least-Squares Estimates table and the wrong contrast of parameters is tested in the Analysis of Variance table. By examining the design matrix, you can find the columns belonging to the interaction and then produce a correct test of it using the CONTRAST statement. One symptom of this problem is that tests of these interactions change if you change the order of the within-subjects factors in the _RESPONSE_= option of the REPEATED statement.

  SAS Note V6-CATMOD-F655 documents this problem.

- The Factor Score Regression Coefficients produced by the FACTOR statement in PROC CALIS are incorrect. (These coefficients are also in the OUTSTAT= data set - the observations correspond to _TYPE_='SCORE'.)

  To obtain correct results, rewrite the FACTOR code using LINEQS code and use the Latent Variable Score Regression Coefficients.

  SAS Note V6-CALIS-F227 documents this problem.

SAS/TUTOR Software

- The *Course Guide* and the *Course Management System Guide* that accompany each SAS/TUTOR course will be sent under separate cover to the designated Training Coordinator for your site.