Changes and Enhancements

Introduction

This section describes the host-specific features of SAS software under OS/390 that have been implemented or enhanced since the 6.09 Enhanced Release.

Note: Information about changes and enhancements that were implemented in Version 8 is preceded by V8. All other changes and enhancements described in this section were implemented in Version 7. In other words, if your site upgraded directly from Version 6 to Version 8, then all of the changes and enhancements described here are new to you. If you upgraded from Version 7 to Version 8, then only the items preceded by V8 are new to you. △

Sending Electronic Mail

V8 In Version 8, the new EMAIL device type for the FILENAME statement enables you to send electronic mail from within SAS. For information on this feature, which is experimental in Version 8, see the following SAS Web page:
http://www.sas.com/techsup/download/technote/ts605.html

Output Delivery System

The Output Delivery System (ODS) gives you more efficient and powerful control of output. ODS holds output components in their component parts (data and template) so that numerical data retains its full machine precision.

Spawner

A new spawner in SAS/CONNECT software provides improved script processing. For further information, see *SAS/CONNECT User's Guide*.

Help Browser

SAS System Help for OS/390 will be displayed in an HTML browser that runs on the mainframe. Help files are stored in a new repository called an itemstore. You can create itemstores for user-defined help with PROC ITEMS.

Multivolume Libraries

Data libraries can now be dynamically extended to span multiple volumes up to the limit imposed by the operating system.

Improved Access to Partitioned Data Sets

You can now concurrently write to multiple members of partitioned data sets extended (PDSEs). You can also use wildcard syntax to access members of partitioned data sets (PDSs) and PDSEs.

SAS Language Elements

Data Set Options

- BLKSIZE= is now available as a system option.

Functions

The following functions are new.

DINFO
: returns specified information about a directory in a partitioned data set (PDS), a partitioned data set extended (PDSE), or UNIX System Services.

DOPEN
: opens a directory and returns a directory identifier value.

DOPTNAME
: returns information about directory attributes.

DOPTNUM
: returns the number of information items available for a directory.

FCLOSE
: closes an external file that was opened with FOPEN.

FDELETE
: deletes data sets.

FEXIST
: verifies the existence of an external file associated with a fileref and returns a value.

FILENAME
assigns or deassigns a fileref for an external file.

FILEREF
verifies that a fileref has been assigned and returns a value.

FILEXIST
verifies the existence of an external file based on its physical filename and returns a value.

FINFO
returns the value of a file information item.

FOPEN
opens an external file and returns a file identifier value.

FOPTNAME
returns the name of an item of information for a file.

FOPTNUM
returns the number of available file information items.

LIBNAME
assigns or deassigns a libref for a SAS data library and returns a value.

MOPEN
opens a file by directory ID and member name and returns either the file identifier or 0.

PATHNAME
returns the physical name of a SAS data library or an external file or returns a blank.

SYSGET
returns the values of a specified host-environment variable.

Procedures

For detailed information on the following changes, see “Procedures in the OS/390 Environment” on page 223.

- The following procedures are new:

  PROC DBF
  is now supported in the OS/390 environment. With a license for SAS/ACCESS for PC File Formats, you can use PROC DBF to convert dBASE files to SAS data sets or SAS data sets to dBASE files.

  PROC ITEMS
  enables you to create, modify, and delete itemstores, which are special file formats used to store information relating to the SAS session.

- The following procedures have changed:

  PROC CIMPORT
  no longer supports background color options.

  V8 PROC OPTIONS
  In Version 8, supports the following parameters: DEFINE, GROUP=, OPTION=, and VALUE.

  PROC TAPELABEL
  now produces its output through the Output Delivery System. This procedure also has new DUMP=, BLOCKS, and RECORDS options for specifying dumps to tape.

Statements

FILE
The FILE statement now supports two new options:

LINESIZE=
works with the LRECL= option to specify the maximum number of columns in print files, non-print files, and the SAS log.

PRINT | NOPRINT
specifies whether carriage-control characters are placed in all lines of output that are directed to print files or to the SAS log.

FILENAME
V8 In SAS Version 8, the FILENAME statement supports the EMAIL device type, which allows you to send electronic mail from within SAS.

V8 SYSTASK LIST
lists asynchronous tasks.

V8 WAITFOR
suspends execution of the current SAS session until the specified tasks finish executing.

System Options

- The following system options are new:

V8 DLINITDEFER
suppresses synchronization of VTOC entry at library creation time.

DLTRUNCHK
checks for SAS data library truncation.

FILESYSTEM=
specifies the default file system access method that is used when the filename is ambiguous.

MEMLEAVE=
specifies the amount of memory reserved for use by the operating environment.

MSG=
specifies the partitioned data set that contains SAS messages. (This option replaces SASMSG=.)

MSGCASE
specifies uppercase or lowercase message display.

MSGLOAD
enables message files to be closed and reloaded.

MSGSIZE=
specifies the size of the message storage cache.

SORTALTMSGF
enables sorting with alternate message flags.

SORTBLKMODE
enables block-mode sorting.

SORTBUFMOD
enables modification of the sort utility output buffer.

SORTDEVWARN
enables device type warnings.

SORTUADCON
specifies whether the host sort utility supports passing a user address constant to the E15/E35 exits.

SVC11SCREEN
specifies whether to enable SVC 11 screening to obtain host date and time information.

XCMD
enables the use of operating environment commands in a SAS session

- The following system options are now obsolete:
  - APPCSEC=
  - CODEPASS=
  - CODEPCT=
  - LU0MODE=
  - LU0SEC=
  - TCPSEC=
- The following system options are now documented in *SAS Language Reference: Dictionary* because they no longer have host-specific aspects:
  - CLEANUP
  - COMAMID
  - MAPS=
  - NEWS=
  - REMOTE=
  - RSASUSER

Windows and Commands

The SAS Explorer windowing environment contains the following host-specific windows, all of which are new since SAS Version 6.09E:

DSINFO
provides information about a cataloged physical file.

FILENAME
displays assigned filerefs and their associated filenames.

FNAME
displays allocated DDnames, their associated data set names, and data set information.

LIBNAME
lists all the libraries that are currently assigned in your SAS session.

MEMLIST
displays a member list for a partitioned data set (PDS) or for a series of partitioned data sets in a concatenation.

New or updated windows of the FORM subsystem include:

IBM 3800 Print-File Parameter Frame
requests IBM 3800 print-file parameters.

TSO Print-File Parameter Frame
requests TSO print-file parameters.

New or updated commands include:

DFLTACTION
simulates a mouse double-click.

DLGENDR
ends the SAS session.

EXPLODE
displays the full length of truncated text entry fields.

INCLUDE
copies the contents of an external file into the current window.

TSO
issues a TSO command or invokes a CLIST or a REXX exec from the command line.

WIDGNEXT
moves the keyboard focus from one widget to the next widget.

WIDGPREV
moves the keyboard focus from one widget to the previous widget.

See “Windows and Commands in the OS/390 Environment” on page 434 for information about new commands and the new implementation of the DSINFO, FNAME, and MEMSIZE windows in the SAS Explorer windowing environment.

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