Changes and Enhancements

Version 7 Enhancements

1. Version 6 of SAS/ACCESS software provided SAS/ACCESS interfaces to IMS-DL/I on MVS and on VSE. The VSE operating environment is not supported in Version 7. The MVS operating environment continues to be supported, but is now referred to as the OS/390 environment.

2. Version 6 of the SAS/ACCESS interface view engine provided both a full-screen interface and a line-mode interface for creating descriptor files. The full-screen interface is not supported in Version 7; you can no longer create and edit access and view descriptors by using the Access Descriptor and View Descriptor windows. You must use the line-mode interface.

   For Version 7, four database definition update statements have been added to allow line-mode editing of descriptor files: UPDATE, DELETE, INSERT, and REPLACE. Together with some existing grammar, these statements provide the basis for IMS data definition changes.

3. In Version 7, SAS member names and variable names can be up to 32 rather than 8 characters long. The names can also consist of mixed case alphanumeric characters, although the first character must still be a letter or an underscore. Both the interface view engine and DATA step interface take advantage of the new naming flexibility.

4. The interface view engine has been modified to automatically generate SAS variable names instead of requiring you to assign them with the SASNAME= argument. The new SAS names will be generated from those specified in the ITEM database definition statement. The following guidelines apply:
   - Implementation of the naming conventions must be all or nothing. You cannot mix the Version 6 and Version 7 naming conventions.
   - Short or long name usage on access and view descriptors will be independent of each other. That is, an access descriptor can be specified with short names while a view descriptor derived from it can use long names. Similarly, an access descriptor with long names can be used to generate a view descriptor with the traditional short names.
   - The influence of the ASSIGN and UNIQUE statements is the same in Version 7 as it was in Version 6. That is, if AN=Y, the names generated for the access
descriptor will be used in all view descriptors, regardless of whether short or long names are used. If UN=Y, unique names will be generated as well.

The following statements have also changed as result of the new naming scheme.

- The LIST statement no longer generates a "SAS Name" column.
- The RENAME statement changes the ITEM name instead of the traditional 8-character SAS name, unless you are running in Version 6 mode.

5 For interface view engine customers needing Version 6 compatibility and more flexible variable naming options, Version 7 provides the SAS System option VALIDVARNAME= . The VALIDVARNAME option lets users control what type of variable names will be allowed in a SAS session by converting variable names that do not conform to the necessary format. The SAS System option has four possible values:

- **V6** for Version 6-style, eight-byte “short” names
- **V7** (the default) for mixed-case, “long” names of up to 32 bytes
- **UPCASE** for uppercase names of up to 32 bytes
- **ANY** for names of up to 32 characters of any type. ANY is useful for IMS ITEM names that contain non-standard characters.

The V6 option offers comparable functionality to the Version 6 interface view engine. When any of the other VALIDVARNAME values are specified, the interface view engine generates long names based on the ITEM database definition statement for any nonconforming names. Under these rules, Version 6 programs will run, but WHERE processing is not available. When VALIDVARNAME=V6, any SAS variable names longer than 8-bytes are truncated.

**CAUTION:**

Use care when choosing a VALIDVARNAME format: when a conversion is made, the original variables’ names are not stored. For more information on the VALIDVARNAME SAS System option, see SAS Language Reference: Dictionary.

6 The KEY argument of the GROUP and ITEM database definition statements has another value. The acceptable values are:

- **N** the field is not a key sequence field
- **Y** the field is used as a key sequence field in the IMS DBD
- **U** the field has been specified as a unique key sequence field in the IMS DBD

When KEY=U is used, retrieval calls to IMS will be reduced because the IMS interface view engine knows there is only one segment in the database for this key.