HP System Dictionary/XL Utilities

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Preface

Manual Organization

This manual is the standard reference manual for users of the System Dictionary utilities listed below. It includes both reference information and step-by-step operating instructions for these utilities.

- 1. IMAGE/V Database Definition Loader Utility (SDDBD)
- 2. IMAGE/V Database Creation Utility (SDDBC)
- 3. VPLUS/V Forms Definition Loader Utility (SDVPD)

The manual is organized as follows:

- Chapter 1 Introduction to SDDBD This chapter provides an overview of the SDDBD utility.
 Chapter 2 Running the SDDBD Program This chapter describes the SDDBD program and provides step-by-step instructions for its use.
 Chapter 3 SDDBD Commands This chapter describes the SDDBD commands, and includes their syntax and parameters.
- Chapter 4 **Loading of IMAGE Definitions** This chapter includes detailed information on how structure information is mapped from IMAGE/XL into System Dictionary.
- Chapter 5 **Introduction to SDDBC** This chapter provides an overview of the SDDBC utility.
- Chapter 6 **Running the SDDBC Program** This chapter describes the SDDBC program and provides step-by-step instructions for its use.
- Chapter 7 **SDDBC Commands** This chapter describes the SDDBC commands, and includes their syntax and parameters.
- Chapter 8 **Schema Generation Process** This chapter includes detailed information on how an IMAGE/V database schema is created from IMAGE definitions in System Dictionary.
- Chapter 9 **Introduction to SDVPD** This chapter provides an overview of the SDVPD utility.
- Chapter 10 **Running the SDVPD Program** This chapter describes the SDVPD program and provides step-by-step instructions for its use.
- Chapter 11 **SDVPD Commands** This chapter describes the SDVPD commands, and includes their syntax and parameters.
- Chapter 12 Loading VPLUS/V Definitions This chapter includes detailed

information on how VPLUS definitions are mapped into System Dictionary.

Appendix A **SDDBD Error Messages** This appendix is a complete list of SDDBD errors, and includes at least one possible cause of each error and a recommended action for each cause.

Appendix B **SDDBD Command Abbreviations** This appendix includes a list of SDDBD command words and their abbreviations.

Appendix C **SDDBC Error Messages** This appendix is a complete list of SDDBC errors, and includes at least one possible cause of each error and a recommended action for each cause.

Appendix D **SDDBC Command Abbreviations** This appendix includes a list of SDDBC command words and their abbreviations.

Appendix E **SDVPD Error Messages** This appendix is a complete list of SDVPD errors, and includes at least one possible cause of each error and a recommended action for each cause.

Appendix F **SDVPD Command Abbreviations** This appendix includes a list of SDVPD command words and their abbreviations.

Audience

The intended users of this manual will be those individuals who will use the HP System Dictionary/XL utilities described in this manual. These individuals may be:

- Dictionary/XL Administrators
- Database Administrators
- General Users

Users may find knowledge of the HP 3000 operating and file systems useful, as well as knowledge of the HP 3000 TurboIMAGE Database Management subsystem.

Resources

In addition to this manual, System Dictionary users may need to consult the following manuals:

5958-8527	Managing Your Information Network: A Data Dictionary Primer
32256-90001	HP System Dictionary/XL SDMAIN Reference Manual
32256-90002	HP System Dictionary/XL Intrinsics Reference Manual
32256-90004	HP System Dictionary/XL General Reference Manual, Volume 1
32256-90005	HP System Dictionary/XL General Reference Manual, Volume 2
32257-90001	HP System Dictionary/XL COBOL Definition Extractor Reference Manual
30391-90050	TurboIMAGE Reference Manual
32217-90002	HP IMAGE Reference Manual
32216-90001	SQL Reference Manual

32216-90005	HP SQL Database Administration Guide
30000-90079	VPLUS Reference Manual
30000-90042	QUERY/XL Reference Manual
36216-90003	KSAM Reference Manual
32247-90001	Transact/V Reference Manual
5953-7553	HP 3000 General Information Manual
32650-90003	MPE XL Commands Reference Manual
32650-90028	MPE XL Intrinsics Reference Manual
32650-90010	Program Design and Optimization
32650-90011	Programmer's Utilities and Tools
32650-90022	Native Language Support Reference Manual
03000-90012	EDIT/V Reference Manual
31502-90001	Pascal/XL Reference Manual
31502-90002	Pascal/XL Programmer's Guide
31500-90001	COBOL II/XL Reference Manual
31500-90002	COBOL II/XL Programmer's Guide
5957-4685	HP FORTRAN 77 Reference Manual
31501-90001	HP FORTRAN 77/XL Reference Manual Supplement
5957-4686	HP FORTRAN 77/XL Programmer's Guide
31501-90002	HP FORTRAN 77/XL Programmer's Guide Supplement
30000-90024	SPL Reference Manual

1 Introduction to SDDBD

Product Overview

The System Dictionary IMAGE/V Database Definition Loader Utility loads structure information about an IMAGE/V database into System Dictionary from an IMAGE/V database root file. This manual describes the operation of this utility.

Chapter 2, "Running the SDDBD Program," describes the files used by SDDBD, the run options, error handling, and other information you may need when executing the utility. Chapter 3 describes the syntax and parameters of SDDBD commands, while Chapter 4 describes the loading process. Appendix A lists SDDBD command abbreviations, while Appendix B is a list of all SDDBD error messages with their probable causes, and actions to take for each cause.

Introduction to SDDBD

Product Overview

2 Running the SDDBD Program

Introduction

The program called SDDBD loads the IMAGE/V database information into System Dictionary from an IMAGE/V database root file. This chapter explains how to define files used in conjunction with the program and run SDDBD in either session mode or batch mode.

SDDBD Files

The Input File

SDDBD accepts input from the file, SDIN. It can also take input from another MPE file by redirecting SDIN with a file equation prior to issuing the RUN command:

```
:FILE SDIN=input file
```

If SDIN does not exist, or has not been redirected to another file, \$STDINX (or your terminal) will be used as the input file.

The log file (see "The Log File" below) can be saved and renamed and then used as the input file the next time SDDBD is run.

SDOUT Report File

SDDBD records the summarized information about the entities added, replaced, etc., in a file with the formal file designator, SDOUT. SDOUT can also be redirected to another MPE file by using the following file equation:

```
:FILE SDOUT = output file
```

When SDDBD is run, if SDOUT is not found and there is no file equation for SDOUT, then SDDBD creates SDOUT as a temporary file. Upon termination of the program, the contents of this temporary file will be output to \$STDLIST, and the file is deleted thereafter.

On the other hand, if an old SDOUT is found, the user in session mode will be asked to confirm overwriting of the old file. In jobs, the old file is automatically overwritten.

SDOUT Report

When the output is formatted, each record in the report has the following format:

```
<Entity name> <IMAGE Alias> <Entity type> <Attributes> <Action>
```

Attribute Output Format. Attributes are listed for the IMAGE data items, data sets, and records. The format for each of these attribute types is shown below. **Data Item Attribute Format.** For IMAGE data items, the attributes are formatted as follows:

```
<element-type> (<byte-length>, <display-length>, <count>)
```

Data Set Attribute Format. The attributes for data sets are formatted as follows:

```
<image-dataset-type>
```

The available data set types are:

M for manual master data sets

A for automatic master data sets

D for detail data sets

Record Attribute Format. The attributes for records are formatted as follows:

<blanks > (<byte-length>)

Action Report. SDOUT report lists the action that occurred for each entity as it was encountered during the loading process. The Action column in the report may show one of the values listed below:

SKIPPED The new definition was skipped because a SKIP was requested for conflict

occurrences.

REPLACED The existing definition was modified to the new definitions' attribute

values.

ADDED The new definition was successfully added to the System Dictionary.

TERMINATED The loading process terminated at this entity because of a conflict. The

entity with the TERMINATED action was not loaded.

ERROR An error has occurred while loading the definition. This usually represents

a more serious error.

OLD USED A compatible entity definition was found in the dictionary, and the new

entity definition was not loaded. The relationships were still established

using the old definition.

The Log File

When SDDBD is executed, all valid commands are logged to a file with the formal file designator, SDLOG. This enables you to save the commands and use them at a later date.

The REDO command and any invalid commands are not logged, but the command edited and executed through REDO is logged. In addition, any responses to prompts (either valid or invalid) will be omitted from the log file.

When SDDBD is run in a session, if SDLOG already exists, SDDBD will ask for permission to overwrite the old log file. If the response is negative, logging is disabled. In batch mode, the old file is automatically overwritten. If no old log file is found and no file equation for SDLOG is found, SDDBD will create the file. This file is temporary, however, and must be saved to become a permanent file. If SDLOG is newly created, you will receive a message telling you to save the file upon termination of the program.

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SDDBD Run Options

When SDDBD is run, one of several run options may be specified through use of the PARM parameter of the RUN command. This parameter allows you to control SDDBD's error handling. Using this parameter, you may specify the exact number of errors that may be encountered before the program is aborted. If, for example, two errors are acceptable, but more than two errors is not, then the PARM parameter will specify the number 3. An example of the RUN command with the PARM parameter follows:

RUN SDDBD.SDXL.SYS; PARM=3

Three sets of values are accepted for the run option:

- -1 Parse-only option. Only command syntax is checked. No dictionary or IMAGE database is opened.
- Execute and do not terminate regardless of the number of errors. Program continues until an EXIT command is issued. All errors are reported, but non-fatal errors will not terminate the program. This is the default option.
- n Terminate when n errors have been detected. Both syntactical and operational errors are counted. If a fatal error is encountered, the program may abort before the error count is reached. Not recognized in session mode.

When the program aborts due to too many errors, an error message is issued, and the program sets the system Job Control Word to a value >= FATAL.

Error Handling

SDDBD recognizes three different categories of errors: 1) syntax errors, 2) operational errors, and 3) fatal errors. SDDBD responds to these errors in different ways, depending upon the category.

Syntax errors are errors caused either by mistyping a command or by specifying an illegal command construction. When these errors are detected, a caret pointer is displayed pointing to the location of the error, along with an error message.

Operational errors are caused by commands that request invalid operations. For example, requesting LOAD when no dictionary is open is an operational error. An error message is displayed in response to these errors.

Fatal errors are those errors which are usually disc-related errors over which the program has very little or no control. When such an error is detected, the program is terminated. Failure to open \$STDINX is such an error. When a fatal error is detected by the system, the Job Control Word is assigned a value greater than or equal to FATAL

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Control Y Handling

[[CONTROL]] Y is enabled in session mode when any of the following is true:

- · When SDDBD is expecting a command
- · When SDDBD is in the REDO command
- When SDDBD is displaying HELP messages

If [[CONTROL]] Y is entered, SDDBD displays:

```
< Control Y >
```

and reissues the first level command prompt (>). Once the loading process starts, [[CONTROL]] Y is disabled until the completion of the loading.

Session Mode vs. Batch Mode

SDDBD can be run either in session mode or in batch mode. Some differences exist, however, between the two modes.

When running in batch mode, both [[CONTROL]] Y and the REDO command are disabled. When running in session mode, any run option other than 0 or -1 is ignored. The default value of the OPTION parameter is also different between sessions and jobs. In sessions, the default value for this parameter is PROMPT, while in jobs, it is SKIP.

Furthermore, in jobs, any old SDOUT and SDLOG files are automatically overwritten, while in sessions, the user is asked to confirm.

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Running the Program

The program is located in the file SDDBD.PUB.SYS. The program can be loaded and run by issuing the command:

RUN SDDBD.PUB.SYS

No file equates are needed. If the program is successfully loaded, it will print out the banner:

HP System Dictionary SDDBD HP32256v.uu.ff - (C) Hewlett Packard Co. 1985

3 SDDBD Commands

Introduction

This chapter includes descriptions of all SDDBD commands with their syntax, parameters, and examples. These commands are listed alphabetically for your ease of use.

A HELP command is provided for a quick reference to SDDBD commands. Using this command, you can either get a list of all available commands, or a detailed description of a particular command.

MPE Commands

MPE commands can be issued without leaving SDDBD. Whenever the caret prompt (>) for a command is present, an MPE command is issued by entering a colon (:) followed by the desired command. SDDBD passes the command on to the operating system to be processed. After the command has been completed, control is returned and the user is again prompted with the caret prompt (>) to continue.

You can extend an MPE command over multiple lines by attaching the ampersand continuation character (&) to the end of the line. However, unlike other SDDBD multi-line commands, you should not attach the ending period.

MPE commands that can be issued from SDDBD are the ones which are supported by the MPE COMMAND intrinsic. Refer to the *MPE XL Intrinsics Reference Manual* (32650-90028) for a list of these commands.

COMMENT Command

The COMMENT command provides the means to enter description text into the command stream. It allows the use of text to document what is happening in the job stream without having any affect on the operation of the utility. COMMENT may be used whenever the command prompt (>) is present.

The command is a very simple one. It consists of the command word COMMENT followed by zero or more characters. The program ignores all characters on the line and simply writes them to the log file for documentation. The program then prompts for the next command. Note that this command does not need to end in a period and so must be contained on a single line. Multi-line comments can be used by prefacing each line with the COMMENT command.

Syntax

COMMENT [.]

Parameter: None

Example:

> COMMENT

> COMMENT This command file is used to load the

> COMMENT base definition for the IMAGE database

> COMMENT named "PERSON" .

>

DEFINE Command

Before the database definition can be loaded, dictionary must be opened. When opening the dictionary for the first time, the scope name and scope password are required.

Syntax

```
DEFINE [;DICTIONARY=dictionary-filename]
      [;SCOPE=scope-name]
      [;PASSWORD=[scope-password]]
      [;OPEN-MODE=open-mode]
      [;NAME-MODE=name-mode]
      [;DOMAIN=[domain-name]]
      [;VERSION=[version-name]]
      {.}
```

Parameters

dictionary-filename:

Filename of the dictionary to be opened. The default for this parameter is SYSDIC if not specified when opening the dictionary.

scope-name:

Name of the scope by which the definitions are to be loaded. This parameter is required when opening the dictionary for the first time.

scope-password:

Gives access to the scope. Any characters are allowed in a password. If a character in the password is NOT valid in other System Dictionary names (i. e., is on the restricted list), the password must be entered inside a pair of quotes to allow recognition of the `restricted' characters. Specify two consecutive quotes ("") to include a quote as a part of the password.

If the SCOPE parameter is specified and the PASSWORD parameter is not, you will be prompted for the password. For security reasons, the echo is turned off and you are given three chances to enter the correct password. If you are running the program interactively and the correct password is not entered after three tries, the DEFINE command will terminate and you will be returned to the highest prompt level. If you are running the program in batch mode and the correct password is not entered after three tries, the program will terminate. The password is always read from \$STDIN.

open-mode:

Specifies which mode to open the dictionary with. The valid choices are:

```
shared-update exclusive-update
```

Default is to open the dictionary in shared-update mode. If the dictionary is opened in exclusive-update mode, you will have exclusive access to the dictionary and others will be denied access.

name-mode:

Specifies which group of names (internal or external) the user wishes to use. The valid choices are:

```
internal external
```

Default is to use the external name mode.

domain-name:

Name of the dictionary domain in which the dictionary is to be opened. If not specified, the default is the common domain. Use the SHOW command to initially examine the default value of the DEFINE and IMAGE parameters. A blank entry for this parameter represents the common domain. If you are in another domain and you want to get back to the common domain, specify "DOMAIN=;" with no value.

version-name:

Name of version within the dictionary domain. Use the SHOW command to initially examine the value of this parameter. A blank entry represents the latest test version. The latest test version can be specified by entering "VERSION=;".

Example: (Creating the initial environment)

```
> DEFINE DICTIONARY=sysdic;
>> SCOPE=manager;
>> PASSWORD=Mgr*;
>> OPEN-MODE=shared-update.
```

>

EXIT Command

To terminate SDDBD, enter EXIT. The EXIT command closes the dictionary and other opened files before terminating the program.

Syntax

EXIT [.]

Parameters: None

Example:

> EXIT.

END OF PROGRAM

: <I>(back to MPE)

HELP Command

For a quick reference of SDDBD commands, a HELP command is available. The HELP command can be used either to get a list of all available SDDBD commands or to get a detailed description of a specific command.

Syntax

```
HELP [command] [.]
```

Parameters:

command: Name of the command

If more HELP messages are requested than can fit on one screen, the following message is displayed:

```
Continue (Y/N)? >
```

Respond "Y" if you wish to see more messages.

If your HELP command contains a subject with no HELP message available, an error message is issued, and the general HELP messages are displayed.

Example 1. Quick reference of commands

```
> HELP
```

The output of the above command will look like this:

```
MAIN HELP SCREEN
```

Commands accepted by SDDBD:

```
COMMENT <COM > - Provide a line of comment text in the command stream
DEFINE <DEF > - Establish the System Dictionary environment
             > - Terminate the program
EXIT
HELP
       <H
             > - Display commands
             > - Establish the Image environment to load from
IMAGE
       <IM
LOAD
             > - Load values from an Image database to System Dictionary
       <L
      <REDO > - Edit and execute the previous command
REDO
RESET
             > - Reset all the DEFINE and IMAGE parameters
SHOW
             > - Display the current values of DEFINE and IMAGE parameters
       <SH
```

Example 2. Syntax for the DEFINE command

```
> HELP DEFINE.
```

The output of the above command will look like this:

```
HELP MESSAGES FOR DEFINE & lt; DEF> COMMAND:
```

The DEFINE command enables you to open the System Dictionary.

```
DEFINE <DEF>
SYNTAX:
              [;DICTIONARY <DICT> = dictionary-name ]
              [;SCOPE <S>
                                = scope-name
              [;PASSWORD <P>
                                = [scope-password]]
              [;DOMAIN <D>
                                = [domain-name]
              [;VERSION <V>
                                = [version-name]
                                                  ]
              [;OPEN-MODE <OM> = open-mode
                                                   ]
              [;NAME-MODE <NM>
                                = name-mode
                                                   ]
                   = SHARED-UPDATE <SU> or EXCLUSIVE-UPDATE <EU>
       open-mode
                     = EXTERNAL <EXT> or INTERNAL <INT>
       name-mode
```

IMAGE Command

The IMAGE command is used to specify the IMAGE database whose definitions are to be loaded into the dictionary.

Syntax

Parameters:

data-base-name: Name of the IMAGE database whose definitions are to be loaded. Any previously opened database is closed and the new database is opened. In order to open the database, at least one of the three parameters, DATABASE, PASSWORD, or OPEN-MODE, must be specified.

password:

The IMAGE database password which gives access to the database. Any previously opened database will be closed and the database specified by the new password will be opened.

If you intend to include any SDDBD separator characters (" ", ";", "=", ".") in the password, you must enclose the password in quotes. If you want to include a quote in the password, use two consecutive quotes ("").

The database creator password (";") can be specified by entering "PASSWORD=;", i.e., the parameter with no value.

If the IMAGE command specified contains the DATABASE parameter, and not the PASSWORD the password is prompted for. You will be given three chances to give a correct password. If you fail to do so in session mode, no IMAGE database will be opened, and the command prompt (>) is displayed. In batch mode, if you fail to give the correct password, the program will be immediately terminated. When the password is prompted for, SDDBD reads the password value from \$STDINX regardless of whether the input has been redirected or not.

open-mode:

The IMAGE database open mode. As with the PASSWORD or DATABASE parameters, any old database is closed and the new database is opened. The default is 8 (read access). See the *IMAGE Database Management*

System Reference Manual (32215-90003) for more information on the available IMAGE database open modes.

back-reference-flag: Sets the value of the back-reference-flag attribute on the record contains element relationship. Valid values are:

ON OFF

If BACK-REFERENCE = ON, then the back-reference-flag attribute is set to true. If BACK-REFERENCE = OFF, back-reference-flag is set to false. The default is ON.

If BACK-REFERENCE = ON, the values of the following relationship attributes are to be retrieved from the element entity:

```
element-type
display-length
decimal
blank
justify
edit-mask (variable length)
entry-text (variable length)
heading-text (variable length)
```

Note that the back-reference-flag attribute only documents the location from which the attributes should be retrieved. The System Dictionary intrinsics will not go to the entity to retrieve the above attributes, even if back-reference-flag is set to true. It is each program's responsibility to perform this "detour" when retrieving the relationship attributes.

If, however, back-reference-flag is set to false, the relationship level attribute values are to be retrieved directly from the relationship.

It is useful to set back-reference-flag to ON when you wish to document the fact that the relationship attributes should always be retrieved from the element entity. In this way, any changes in the entity attribute values will automatically be reflected on the relationship level.

sensitivity: The sensitivity attribute with which each IMAGE definition is loaded. The following values are valid:

READ
MODIFY
PRIVATE

The default is READ.

compatibility -option Enables different sets of attributes to be checked for determining compatibility of old element definitions. The following options are available:

IMAGE-COMPATIBILITY

COMPLETE

If IMAGE-COMPATIBILITY is selected, then SDDBD will check only the count, byte-length, and element-type attribute values for compatibility. If COMPLETE is selected, then SDDBD will also check the display-length attribute value for compatibility. The default is IMAGE-COMPATIBILITY.

flow-control-option: Determines the manner in which loading will be handled when conflicts arise.

The following values are available:

PROMPT Displays the following prompt when a conflict is found:

Skip, Replace, enter New name, or Terminate (S/R/N/T)? >

SKIP The new definition is skipped and not loaded.

REPLACE The new definition will replace the old definition. The old

definition and all the relationships involving it will be

permanently deleted.

NEW A prompt for a new name is issued. The name entered will

become the name of the entity and the original name is

assigned to the image-alias attribute.

TERMINATE The loading process terminates immediately.

PROMPT is the default for session mode; whereas, SKIP is the default for batch mode.

QUIET VERBOSE Allows monitoring of the loading process, if desired. VERBOSE produces a message for each entity and relationship processed. To suppress the reporting of the entities and relationships that are successfully loaded, specify the QUIET option. The default is QUIET.

Example:

```
>IMAGE DATABASE=supply;
>>PASSWORD=ship;
>>OPEN-MODE=8;
>>BACK-REFERENCE=OFF;
>>SENSITIVITY=PRIVATE;
>>OPTION=NEW;
>>VERBOSE.
```

>

LOAD Command

The LOAD command starts the definition loading process.

Syntax

LOAD [.]

Parameters: None

REDO Command

The REDO command allows you to correct errors or to make changes to the last command you issued. When you issue the REDO command, you will enter an editing mode and the first line of the command will be displayed for modification.

To modify the command, position the cursor using the space bar, under the character to be modified and enter one of the subcommands listed below.

SDDBD interprets any character other than the ones listed below as a replacement character. For example, if you type "MODIFY" below a character, since M is not a valid edit command, "MODIFY" will replace the six characters on the line above.

Subcommand Description

- A Appends one or more characters to the end of the current line, regardless of the position of the command.
- B Breaks the line into two lines, moving the character that is above the cursor and all following characters to the next line. The second line becomes the current edit line.
- D Deletes the character above the D. If you repeat D, each character above each D is deleted. You may also use a D below the first and last character to be deleted with spaces in between.
- E Exits the REDO editing mode without executing the edited command. The command that you were editing when you entered E is still considered to be the last one.
- H Lists all available editing sub-commands in redo mode. Your current editing line is then redisplayed.
- I Inserts one or more characters immediately preceding the character that is above the cursor. You can combine a DELETE and INSERT edit by using D's followed by an I and the characters to be inserted.
- L Lists the complete command as it is currently edited and then redisplay the line you are currently editing.
- R Replaces the characters above the cursor with the new characters you enter. The first character to be replaced is the one above the R.
- X Executes the current command as it has been edited.
- +n Places you on the next line of the command you are editing. You can enter + followed by a number n, for the number of lines you want to skip forward. If no number is entered, the default is to move forward one line.
- -n Places you on the previous line of the command you are editing. You can enter followed by a number n, for the number of lines you want to skip backward. If no number is entered, the default is to is to move backward one line.

[[RETURN]]

Places you on the next line of the command you are editing, if you are not currently on the last line of the command. If you are on the last line, executes the command as it has been edited.

Example:

RESET Command

This command resets all the DEFINE and IMAGE parameters to the initial state. If a parameter has a default value, the default value is assigned to it. If a parameter has no default value, the parameter value becomes void (as represented by '***' in the SHOW command). The dictionary and the IMAGE database are both closed.

Syntax

RESET [.]

Parameters: None

SHOW Command

SHOW displays the values of all the DEFINE and IMAGE parameters. Default values are displayed for those parameters that are not specifically assigned a value. If a parameter does not have an existing default value (e.g., the DATABASE parameter for the IMAGE command) and no value has been specifically assigned to the parameter, asterisks (***) are displayed.

Syntax

SHOW [.]

Parameters: None

Example:

>SHOW

```
DEFINE command parameters:
```

DICTIONARY = SYSDIC SCOPE = DA

DOMAIN = MARSHA

VERSION = V1

OPEN-MODE = EXCLUSIVE-UPDATE

NAME-MODE = EXTERNAL

IMAGE command parameters:

DATABASE = ***

OPEN-MODE = 8

BACK-REFERENCE = ON

SENSITIVITY = READ

COMPATIBILITY-LEVEL = IMAGE-COMPATIBILITY

OPTION = PROMPT

QUIET

Loading of IMAGE Definitions

The process described below assumes that OPTION = PROMPT was specified. When other values are specified (for example, OPTION = SKIP), operation is identical to responding with an appropriate answer at the option prompt for each conflict (for example, "S" for OPTION = SKIP). When loading the database definitions, SDDBD does not load any of the image-class related information, because the IMAGE intrinsics do not provide the information.

IMAGE Database Name

SDDBD will load the database definitions as image-database entities in the System Dictionary. For databases, a conflicting entity is defined as an entity whose definition is incompatible to the existing definition in the dictionary. Hence, SKIP, REPLACE, TERMINATE, and NEW options are effective only for the databases that have an incompatible definition in the dictionary.

On the other hand, if a compatible database is found in the dictionary, the old definition is automatically used, and the following message is issued:

```
Compatible definition for database ! used (SDWARN 2508)
```

When a database is found which is incompatible with an existing System Dictionary definition, the result is determined by the value of the OPTION parameter of the IMAGE command. If the value for this parameter

is PROMPT, however, then the following message and prompt are issued:

```
Incompatible definition exists for database ! (SDWARN 2509) Skip, Replace, enter New name, or Terminate (S/R/N/T) ?
```

A response of "S" keeps the old entity and continues the loading process. If an "R" is entered, the new entity replaces the old. Entering a "T" terminates the loading process. If the user responds with "N", the following prompt to rename the IMAGE database is issued:

```
New Image database name >
```

The name entered must be unique in the version and domain with which the System Dictionary is opened. If the name already exists, the above message is displayed and the option prompt reissued. The option prompt is also reissued if the user enters a [[RETURN]]. The name will replace the old entity name, and the old entity name will become the value for the image-alias attribute.

IMAGE Data Items

SDDBD will load the data items defined in the IMAGE database as element entity type in the System Dictionary. The attributes initialized for each definition are:

<u>IMAGE/V attribute</u>	System Dictionary attribute
item type	element-type
sub-item length	byte-length
sub-item count	count

The byte-length value is derived from the sub-item length as follows:

Item type	Sub-item length	Byte-length
D,I,J,K,R	n	2*n
U,X,Z	n	n
P	n	n / 2

In addition, the sensitivity and display-length attributes are also set. The sensitivity attribute is set to the value specified in the IMAGE command. The display-length attribute, which is used for display information on output, is derived from the Item Type and Sub-item Length IMAGE information as follows:

Item type	Sub-item length	Byte-length
I,J,K	1	4
I,J,K	2	9
I,J,K	>= 4	18
D,R	2	6
D,R, 10	>= 4	10
U,X,Z	n	n

Compatible and Incompatible Data Items. For data items, a conflicting entity is defined as an entity which has an **incompatible definition** which already exists in the dictionary. Hence, SKIP, REPLACE, TERMINATE, and NEW options are effective only for the data items that have an incompatible definition in the dictionary.

On the other hand, if a compatible data item is found in the dictionary, the following message is issued, and the old definition is automatically used:

```
Compatible definition for element ! used (SDWARN 2502)
```

For elements, a **compatible definition** is defined as an old definition with the same name such that its values for those attributes specified in the COMPATIBILITY-LEVEL option of the IMAGE command match those of the new definition.

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Each time a data item in the IMAGE database is found to be incompatible with an existing System Dictionary element, the result is determined by the value of the OPTION parameter of the IMAGE command. If the value for this parameter is PROMPT, however, then the following message and prompt are issued:

```
Incompatible definition exists for element ! (SDWARN 2503) Skip, Replace, enter New name, or Terminate (S/R/N/T)? >
```

A response of "S" will skip the current element. If "R" is given, the old entity is replaced by the new one. If "T" is entered, the loading process terminates. If the user enters "N", the following prompt is displayed:

```
New primary element name >
```

The new name must be a unique element name. The IMAGE/V name is entered as an image-alias attribute for the new element. If a [[RETURN]] is entered at the prompt, the option prompt is again displayed.

IMAGE Data Sets

After loading the definitions of the data items into System Dictionary, SDDBD will load the definitions of the data sets in the IMAGE/V database. The utility first creates an entity of type IMAGE-DATASET with the IMAGE/V data set name. When creating IMAGE data set entities, the following attributes are initialized:

Attribute

Value obtained from

value of sensitivity parameter of the IMAGE command image-dataset-type

IMAGE/V database root file

Compatible and Incompatible Data Sets. For IMAGE data sets, a **compatible definition** is defined to be an old definition that contains the same IMAGE data set type, and data item composition. In order to see if an old definition has the same composition as the new definition, all records related to the data set with the contains relationship class will be examined. For each such record, SDDBD examines if the list of data items related to the record is the same as the list of all data items contained in the data set (new definition). If so, then the old definition is said to have the same data item composition as the new. In addition, for master sets, SDDBD sees if the old definition has the image-dataset key element relationship with the search item. Only when all these conditions are met, is the old definition compatible with the new.

If a compatible data set definition is found in the system dictionary, the following message is issued, and the old entity is automatically used:

```
Compatible definition for data set ! used (SDWARN 2504)
```

If an incompatible definition is found then the following message and prompt are issued by SDDBD:

```
Incompatible definition exists for data set ! (SDWARN 2505) Skip, Replace, enter New name, or Terminate (S/R/N/T)? >
```

If "S" is specified, the old definition is used, and the new data set definition is not added. However, SDDBD will still attempt to create a record definition with the data set name, and all relationships involving the data set. If "R" is entered, the old entity is replaced with the new. If "T" is entered, the loading process terminates immediately. If the user enters "N", the following prompt is issued:

```
New primary data set name >
```

The new name must be unique. The IMAGE/V data set name will be entered as the attribute value for the image-alias attribute. If a [[RETURN]] is entered, the option prompt is reissued.

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After the successful loading of the new IMAGE data set definition or the discovery of a compatible definition, SDDBD creates the image-database contains image-dataset relationship. The following table shows how the attributes are initialized:

Attribute

Value assigned

sensitivity

From user command

capacity

That of IMAGE data set

image-alias

That of IMAGE data set, if a new name was given for the data set

blocking-factor

That of the IMAGE data set

For each manual master data set, the image-dataset key element relationship is created with the data set's search item.

Records

After loading an IMAGE data set definition, SDDBD creates a record entity. Note that when processing the data set definition, if a compatible definition was found, no record is created. In fact, SDDBD assumes that the existence of a compatible data set definition implies the existence of a compatible record definition. Also note that even if a conflicting data set definition is skipped, the corresponding record definition will be created.

For record definitions, a **compatible definition** is defined to be an old definition that has the same byte-length and the same element composition.

The record being created has the same entity name as the data set. As with data items and data sets, when an incompatible record definition is found in the dictionary, the following message and prompt are issued:

```
Incompatible definition exists for record ! (SDWARN 2507) Skip, Replace, enter New name, or Terminate (S/R/N/T)? >
```

If you respond with "S" to the option, no record definition is created, but all relationships involving the record are established. If you respond with "R", the old definition is replaced with the new. If you respond with "N", the following prompt is issued:

```
New primary record name >
```

The new name must be unique within the current domain and version. The original record name (entity name of the data set) is assigned to the image-alias attribute. The record definition has the following attributes associated with it:

Attribute Value assigned
sensitivity From user command
byte-length That of the IMAGE data set

After loading the record definition, the IMAGE-DATASET contains RECORD relationship is created. Furthermore, with each data item belonging to the data set, the RECORD contains ELEMENT relationship is created. When creating the RECORD contains ELEMENT relationship, the back-reference-flag attribute is initialized with the value of the BACK-REFERENCE parameter.

IMAGE Paths

For each access path in the database, SDDBD creates the image-dataset element image-dataset image-database CHAINS relationship. The first IMAGE-DATASET is the detail data set. The first element is the search item. The second element is the sort item. If no sort item exists for the path, the blank entity (/) is assigned to the second element. The second IMAGE-DATASET is for the master data set, and the IMAGE-DATABASE is the database. If the path is a primary path, then the primary-flag attribute is set to true.

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5 Introduction to SDDBC

Product Overview

The System Dictionary IMAGE Database Creation Utility is a program which creates an IMAGE/V database schema and root file using IMAGE database definitions defined in System Dictionary. This manual describes the operation of this utility.

Chapter 6, "Running the SDDBC Program," describes the files used by SDDBC, the run options, user input rules, and other information you may need when executing the utility. Chapter 7 describes the syntax and parameters of the SDDBC commands, while Chapter 8 is a description of the creation process. Appendix C lists SDDBC command abbreviations, while Appendix D is a list of all SDDBC error messages with their probable causes and action to take for each cause.

Introduction to SDDBC

Product Overview

6 Running the SDDBC Program

Introduction

The program called SDDBC creates an IMAGE/V data base schema and root file using IMAGE data base definitions defined in System Dictionary. This chapter explains how to define files used in conjunction with the program and run SDDBC in either session mode or batch mode.

SDDBC Files

SDDBC uses the formal file designators SDIN as the input file and SDLOG as the log file. File equates are allowed for both files.

The Input File

SDDBC accepts input from the file SDIN. The default for SDIN is \$STDINX. Redirecting SDIN to a file, whether in session or batch mode, causes SDDBC to accept input from the specified file. The specified file must be an unnumbered file or SDDBC will not execute correctly. Redirection is achieved by using the following MPE file equation:

```
:FILE SDIN = command file
```

The next time SDDBC is executed, the input will be accepted from the file, command file.

The Log File

When SDDBC is executed, all valid commands, with the exception of the REDO command, are logged to the file SDLOG. A valid command is a command without parse errors. If [[CONTROL]] Y is entered in the middle of a command, then the entire command is not logged. SDLOG gives the user the foundation for running SDDBC with previously inputted commands.

When SDLOG is redirected to a file other than itself, all input entered for that session will be saved in the specified file. If the file does not exist, then SDDBC will build it as a fixed length temporary ASCII file with record size 80 bytes. If the file already exists, then SDDBC will ask for permission to overwrite it. To redirect SDLOG to a file, use the following MPE commands:

```
:FILE SDLOG = command file
:RUN SDDBC.PUB.SYS
```

If SDLOG has not been redirected to a file, then SDLOG is session temporary. An MPE SAVE command may be used to save SDLOG as a permanent file. An example of this is:

```
:RUN SDDBC.PUB.SYS
:SAVE SDLOG
:RENAME SDLOG, LOGFILE
```

The file LOGFILE, now contains the previously entered input. User responses are not logged.

Run Options

When SDDBC is run, one of several options may be specified through the use of the PARM parameter. These options deal with the processing of the commands and the handling of any errors encountered. The parameter values and their meanings follow:

```
-1 - Parse-Only
0 - Execute and do not abort regardless of the number of errors
(Default)
1 - Execute and abort on the first error
>1 - Execute and abort only if the specified number of errors are found
```

Parse-Only Option

When SDDBC is run with the parse-only option, the dictionary is not opened and the schema and root file for an IMAGE data base are not created. The commands issued are only parsed to catch syntax errors.

Execute and Do Not Abort Option

If the PARM parameter is not specified, the default is not to abort regardless of the number of errors encountered. All the errors are reported, but non-fatal errors will not terminate the program.

Execute and Abort Options

The execute and abort options allow flexibility for the user to specify the exact number of errors that are considered acceptable. Both syntactical and operational errors are counted. The program may abort before the error count is reached if a fatal error is encountered.

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Job Control Word

Upon exiting from SDDBC, the Job Control Word (JCW) is set according to the termination condition of the system:

```
0 - Program terminated normally with EXIT
FATAL - Program terminated abnormally before an EXIT
```

This allows the batch mode user to test for the termination condition and act accordingly.

JCW is set to FATAL (equivalent to -32768) whenever the system must terminate before executing an EXIT statement. This can occur under the following circumstances:

- The number of errors encountered exceeded the number specified by the user.
- A fatal MPE file system error was encountered.

Running the Program

The SDDBC program may be run in session or batch mode. This section describes how to run SDDBC.

Running SDDBC in Session Mode

To run the program in session mode, enter the following MPE command:

```
RUN SDDBC.PUB.SYS
```

SDDBC will respond with the banner:

```
HP System Dictionary SDDBC HP32256v.uu.ff - (C) Hewlett-Packard Co. 1985
```

A prompt character (>) is displayed, indicating that SDDBC is ready for a command. At this point, the user may enter HELP to get a list of valid commands, COMMENT to make a comment, DEFINE to define the Dictionary Environment, RESET to reset the Dictionary and Image Environment to default, REDO to redo the previous command, SHOW to show the environment, or EXIT to terminate the program. If any other command is entered, SDDBC will issue an error message.

SDDBC Prompts

PROMPT DESCRIPTION

- > Command prompt. SDDBC is expecting a command.
- >> Command continuation prompt. SDDBC is expecting a clause to complete the command.

Running SDDBC in Batch Mode

SDDBC may also be run in batch mode. To do so, create a job file, such as the one below, using an editor:

```
!JOB SDJOB, PETE.ACCTS
!FILE SDIN = COMMANDS
!CONTINUE
!RUN SDDBC.PUB.SYS;PARM=10
!IF JCW = FATAL THEN
! TELL PETE.ACCTS Fatal Dictionary Error
!ELSE
! TELL PETE.ACCTS Dictionary Job Completed
!ENDIF
!EOJ
```

SDDBC reads commands from an input file, SDIN, which has been redirected to the file named COMMANDS.

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Running the SDDBC Program Running the Program

The PARM parameter is used to specify the action of the job if an error is encountered. In the above example, the program is aborted if 10 errors are found. Refer to the heading in this chapter, "Run Options", for more details on the PARM parameter.

Finally, the Job Control Word (JCW) shows whether the system executed successfully or terminated abnormally.

User Input Rules

Special Character Responses

The following characters have special meanings when used in response to an SDDBC prompt:

CHARACTER DESCRIPTION

[[CONTROL]] X Ignores the line on which the [[CONTROL]] X was typed.

The system types three exclamation points (!!!) and then

waits for the user to reenter the data for the line.

[[CONTROL]] Y Returns to the highest prompt (>) level. In response to the

>> prompt, terminates the command without executing. In response to the > prompt, no action is taken, but the >

prompt is reissued.

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User Input Rules

Special Character Responses

The following characters have special meanings when used in response to an SDDBC prompt:

CHARACTER DESCRIPTION

[[CONTROL]] X Ignores the line on which the [[CONTROL]] X was typed.

The system types three exclamation points (!!!) and then

waits for the user to reenter the data for the line.

[[CONTROL]] Y Returns to the highest prompt (>) level. In response to the

>> prompt, terminates the command without executing. In response to the > prompt, no action is taken, but the >

prompt is reissued.

System Dictionary Command Language

The general format of the System Dictionary Command Language for SDDBC is:

- · a command
- · one or more keyword clauses (if required)

The System Dictionary Command Language is free formatted, which means the command and keyword clauses may appear on the same or different lines. Commands and keyword clauses are considered to be phrases and the order of these phrases is important. The command must precede the keyword clauses, but the keyword clauses are non-positional. This means that among themselves, keyword clauses may be entered in any order, thus relieving the user from having to follow any particular sequence. For example, it does not matter if keyword-clause1 is entered before or after keyword-clause2.

Phrases

command SDDBC-defined name which specifies the action to be

taken

keyword clause A qualifying value. A keyword followed by an equal sign

(=), followed by a keyword value list. A keyword is an SDDBC-defined name. A keyword value list is zero or more values separated by commas. Values are user-defined names. Keyword clauses are separated by semicolons.

Punctuation Characters

CHARACTER DESCRIPTION

. Command terminator. The period is used to signify the end of a string of characters denoting a command. It is optional for the one word commands: COMMENT, CREATE, EXIT, HELP, REDO, RESET, SHOW.

Separates items in a list. The comma is used to separate values in a keyword value list.

; Separates keyword clauses. If there are two or more keyword clauses, there must be semicolons between them.

= Specifies a keyword and a keyword value list pair. For example, DICTIONARY = sysdic

Used with the CONTROL keyword clause to specify the beginning of a keyword value list.

Used with the CONTROL keyword clause to specify the end of a keyword value list.

" Used around character string values (use two " to represent an embedded " in the string). Optional around passwords as long as the value can be accepted as a valid name to the System Dictionary (i.e., no punctuation or

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invalid characters embedded); otherwise, it is required.

[[]] Blanks must be used to separate a command and its keyword clauses. Any number of blanks may appear between any name and any punctuation character.

[[RETURN]] Treated the same as a blank. Wherever a blank is legal, a [[RETURN]] is legal. (Except within a quoted scope password.)

7 SDDBC Commands

Introduction

This chapter includes descriptions of all SDDBC commands with their syntax, parameters, and examples. These commands are listed alphabetically for your ease of use.

A HELP command is provided for a quick reference to SDDBC commands. Using this command, you can either get a list of all available SDDBC commands, or a detailed description of a particular command.

MPE Commands

MPE commands can be issued without leaving SDDBC. Whenever the prompt for a command (>) is present, an MPE command is issued by entering a colon (:) followed by the command desired. SDDBC passes the command on to the operating system to be processed. After the command has been completed, control is returned and the user is prompted (>) to continue.

MPE commands that can be issued from SDDBC are the ones which are supported by the MPE COMMAND intrinsic. Refer to the *MPE XL Intrinsics Reference Manual* (32650-90028) for a list of these commands.

COMMENT Commands

The COMMENT command provides the means to enter description text into the command stream. It allows the use of text to document what is happening in the job stream without having any affect on the operation of the utility. COMMENT may be used whenever the command prompt (>) is present.

The command is a very simple one. It consists of the command word COMMENT followed by zero or more characters. The system ignores all characters on the line and simply writes them to the log file for documentation. The system then prompts for the next command. Note that this command does not need to end in a period and so must be contained on a single line. Multi-line comments can be used by prefacing each line with the COMMENT command.

Syntax

```
COMMENT [.]
```

Parameter: None

Example

```
> COMMENT
> COMMENT This command file is used to create the schema
> COMMENT and root files for 'STORE' database.
> COMMENT
>
```

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CREATE Command

Starts the schema and root file creation process. In order for this command to execute, the dictionary must be opened by using the DEFINE command and the database for which a schema and root file are to be created must be specified by using the IMAGE command. ([[CONTROL]] Y is disabled.)

Syntax

CREATE [.]

Parameter: None

Example:

> CREATE

>

DEFINE COMMAND

Before the schema and root file for an Image database can be created, the dictionary must be opened. When opening the dictionary, the scope name and scope password are required. Once the dictionary is opened, one can redefine other options to change the environment while in a session.

Syntax

```
DEFINE [;DICTIONARY=dictionary-filename]
    [;SCOPE=scope-name]
    [;PASSWORD=[scope-password]]
    [;OPEN-MODE=open-mode]
    [;NAME-MODE=name-mode]
    [;DOMAIN=[domain-name]]
    [;VERSION=version-name]
    [;STATUS=version-status]
    {.}
```

Parameters

dictionary-filename: Filename of the dictionary to be opened. The default for this parameter is SYSDIC if not specified when opening the dictionary.

scope-name: Name of the scope to retrieve definitions from. This parameter is required when opening the dictionary.

scope-password: Gives access to the scope. Any characters are allowed in a password. If a character in the password is NOT valid in other System Dictionary names (i. e., is on the restricted list), the password must be entered inside a pair of quotes to allow recognition of the 'restricted' characters.

If the SCOPE parameter is specified and the PASSWORD parameter is not, you will be prompted for the password. For security reasons, the echo is turned off and you are given three chances to enter the correct password. If you are running the program interactively and the correct password is not entered after three tries, the DEFINE command will terminate and you will be returned to the highest prompt level. If you are running the program in batch mode and the correct password is not entered after three tries, the program will terminate. The password is always read from \$STDIN.

open-mode: Specifies which mode to open the dictionary with. The valid choices are:

read-allow-read
read-only
shared-update
exclusive-update

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Default is to open the dictionary in read-only mode. After the dictionary is opened, this parameter can be used to change the open mode.

name-mode:

Specifies which group of names (internal or external) the user wishes to use. The valid choices are:

internal external

Default is to use the external name mode.

domain-name: Name of the dictionary domain to be used for creating or retrieving definitions. If not specified, the default is the common domain. If you're in another domain and you want to get back to the common domain, specify DOMAIN= with no value.

version-name: Name of version to be used on creating or retrieving definitions. If not specified, the version status parameter is used to determine the default version.

version-status: Used to default the version to the latest test, production, or archival version of definitions. The valid choices are:

> Test Production Archival

Default is to the production version of definitions.

Example: (Creating the initial environment)

```
> DEFINE DICTIONARY=sysdic;
>> SCOPE=manager;
>> PASSWORD=Mgr*;
>> OPEN-MODE=shared-update.
```

EXIT Command

To terminate SDDBC enter EXIT. The EXIT command closes the dictionary and other opened files before terminating the program.

Syntax

EXIT [.]
Parameter: None

Example:

> EXIT.

: (back to MPE)

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HELP Command

For a quick reference of SDDBC commands, a HELP command is available. The HELP command can be used either to get a list of all available SDDBC commands or to get a detailed description of a specific command.

Syntax

```
HELP [command] [.]
```

Parameters:

command: Name of the command

Example 1. Quick reference of commands

> HELP

The output of the above command will look like this:

```
MAIN HELP SCREEN
     Commands accepted by SDDBC:
     COMMENT <COM > - Provide a line of comment text in the command stream
                  > - Start creation process for schema and root file
     CREATE
             <DEF > - Define/redefine the dictionary environment
     DEFINE
                  > - Terminate the program
     EXIT
    HELP
             <H
                  > - Display commands
     IMAGE
             <TM > - Define the Image environment for schema and root file
creation
    REDO
             <REDO> - Edit and execute the previous command
                  > - Reset Dictionary and Image environment to default
     RESET
     SHOW
             <SH > - Display the status of the current environment
     Enter 'HELP command-name' for more information
```

Example 2. Syntax for the DEFINE command

> HELP DEFINE.

The output of the above command will look like this:

```
Define/Redefine the dictionary environment
               DEFINE <DEF>
                             [;DICTIONARY <DICT> =
dictionary-name]
                               [;SCOPE <S> = scope-name]
                               [;PASSWORD <P> = [scope-password]]
                               [;OPEN-MODE <OM> = open-mode]
                               [;NAME-MODE <NM> = name-mode]
                               [;DOMAIN <D> = [domain-name]]
                               [;VERSION <V> = version-name]
                               [;STATUS <STAT> = version-status]
               open-mode
                               = READ-ALLOW-READ <RAR>, READ-ONLY <RO>,
                                 SHARED-UPDATE <SU>, EXCLUSIVE-UPDATE <EU>
               name-mode
                              = EXTERNAL <EXT> or INTERNAL <INT>
               version-status = TEST <T>, PRODUCTION <P> or ARCHIVAL <A>
```

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IMAGE Command

The IMAGE command is used to specify the database and the information used by the schema processor when generating a schema and root file.

Syntax

```
IMAGE [;DATABASE=data-base-name]
    [;CONTROL=(control-list)]
    [;SCHEMA=schema-file-name]
    [;OUTPUT=output-listing]
    [;NAME=primary-or-alias]
    [;CONFLICT=action-on-conflict]
    [;COMMENT=comment-option]
    [;ORDER=order-by-set-type-option]
    {.}
```

Parameters

data-base-name:

Primary name of the database for which a schema and root file are to be created. A definition for this database must already exist in the dictionary.

control-list:

The options used by the schema processor when the schema is processed. These options are the same ones as described for the \$CONTROL COMMAND in the IMAGE/V Reference Manual, except for BLOCKMAX. Note that the BLOCKMAX option is defined differently here.

BLOCKMAX=nnnn sets the maximum physical block length (in words) for a data set. If you do not include this parameter, the default value for Image is used. If you enter BLOCKMAX= without a value, the value declared in the dictionary is used."

Enter the options separated by commas as described in the IMAGE/V Reference Manual. You need not enter the word '\$control' as it will be assigned automatically by SDDBC. SDDBC does not scan for invalid options. Once you specify to create the schema and root file, the invalid options are detected by the Schema Processor.

schema-file-name:

The schema will be written to the specified file. If the file does not exist, a new file is created. If the file exists, you will be asked for permission to overwrite it. The default is to write the schema to the temporary file SDSCHEMA.

output-listing:

Specifies where the output listing of the schema generated

by DBSCHEMA should be sent. Valid values are:

TERMINAL sends the listing to the terminal.

PRINTER sends the listing to the line printer.

NULL suppresses the listing.

filename sends the listing to the specified file. If the file does not

exist, a new file is created. If the file exists, you will be

asked for permission to overwrite it.

*filename sends the listing to the file identified in the back

referenced file equation.

The default is to send the listing to the terminal.

primary-or-alias: Use primary names or alias names defined in System

Dictionary as Image data names in Schema. Valid values

are:

PRIMARY

ALIAS

If PRIMARY is specified, all names written to the schema file will be the primary names. If alias is specified, then IMAGE-ALIAS names will be used. If this parameter is not specified, the default is to use IMAGE-ALIAS names. See Chapter 4 for more details on IMAGE-ALIAS names.

action-on-conflict:

The length of a System Dictionary name can be up to 32 characters long. But an Image data name can only be 16 characters long maximum. Thus, when generating the schema, dictionary names longer than 16 characters will be truncated to 16 characters. Conflicts can result when names are truncated. There are three options available to handle the conflicting names. Valid options are:

PROMPT

TERMINATE

SUBSTITUTE

If the PROMPT option is chosen, you will be prompted for new names when a conflict occurs. Responses to the prompts issued for conflicts will be read from \$STDINX. Option TERMINATE will terminate the creation process when a conflict occurs. Option SUBSTITUTE allows SDDBC to assign unique names whenever a conflict occurs, by overriding the last character(s) of the conflicting name with a unique number starting from 1. Whenever a name longer than 16 characters is truncated, or a substitution occurs, SDDBC will write a warning message of the name change giving the System Dictionary name and the new truncated name. If you do not specify

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anything, the default is SUBSTITUTE.

comment-option:

Option to generate comment lines or not. Valid values are:

TRUE FALSE

If not specified, default is TRUE.

order-by-set-type-option: Option to generate data sets by data set type in the order of AUTOMATIC, MANUAL, and DETAIL. The valid values are:

> TRUE FALSE

If not specified, the default is TRUE. If this option is set to FALSE, the data sets will be generated in the order they are retrieved.

Example:

```
> IMAGE DATABASE=supply;
>> CONTROL=(LIST, ERRORS=10, TABLE);
>> SCHEMA=schemab;
>> OUTPUT=terminal;
>> NAME=ALIAS.
```

REDO Command

The REDO command allows you to correct errors or to make changes to the last command you issued. When you issue the REDO command, you will enter an editing mode and the first line of the command will be displayed for modification.

To modify the command, position the cursor using the space bar, under the character to be modified and enter one of the subcommands listed below.

SDDBC interprets any character other than the ones listed below as a replacement character. For example, if you type "CAT" below a character, since C is not a valid edit command, "CAT" will replace the three characters on the line above.

Subcommand Description

- A Appends one or more characters to the end of the current line, regardless of the position of the command.
- B Breaks the line into two lines, moving the character that is above the cursor and all following characters to the next line. The second line becomes the current edit line.
- D Deletes the character above the D. If you repeat D, each character above each D is deleted. You may also use a D below the first and last character to be deleted with spaces in between.
- E Exits the REDO editing mode without executing the edited command. The command that you were editing when you entered E is still considered to be the last one.
- H Lists all available editing sub-commands in redo mode. Your current editing line is then redisplayed.
- I Inserts one or more characters immediately preceding the character that is above the cursor. You can combine a DELETE and INSERT edit by using D's followed by an I and the characters to be inserted.
- L Lists the complete command as it is currently edited and then redisplay the line you are currently editing.
- R Replaces the characters above the cursor with the new characters you enter. The first character to be replaced is the one above the R.
- X Executes the current command as it has been edited.
- +n Places you on the next line of the command you are editing. You can enter + followed by a number n, for the number of lines you want to skip forward. If no number is entered, the default is to move forward one line.
- -n Places you on the previous line of the command you are editing. You can enter followed by a number n, for the number of lines you want to skip backward. If no number is entered, the default is to is to move backward one line.

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[[RETURN]] Places you on the next line of the command you are editing, if you are not currently on the last line of the command. If you are on the last line, executes the command as it has been edited.

Example:

```
> DEFINE DICTIONARY=sysdic;
>> SCOPPE=manager;
>> PASSWORD=Mgr*;
>> OPEN-MODE=shared-update.
    Invalid keyword SCOPPE was specified (SDERR xxxx)
> redo
>> DEFINE DICTIONARY=sysdic;
>> +
>> SCOPPE=manager;
>> d
>> SCOPE=manager;
>> x
```

RESET Command

This command resets all the information specified by the DEFINE and IMAGE commands to their initial state. If a parameter has a default value, then the default value is reassigned to it. The dictionary is closed.

Syntax

RESET [.]

Parameter: None

Example:

> RESET.

>

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Show Command

Show the current state of the environment. All the information that can be specified by the DEFINE and IMAGE commands is listed.

Syntax

SHOW [.]

Parameter: None

Example:

> SHOW

Dictionary : SYSDIC
Scope : MANAGER

Open-Mode : SHARED-UPDATE

Name-Mode : EXTERNAL

Domain : DOMAIN1

Version : VERSION1

Version-Status : PRODUCTION

Database : SUPPLY

Control : LIST, ERRORS=10, TABLE

Schema : SCHEMAB
Output : TERMINAL
Name : ALIAS

Conflict : SUBSTITUTE

Comment : FALSE Set Type Order : TRUE

>

Schema Generation Process

This chapter describes how SDDBC creates the schema based on definitions in the System Dictionary. The description is organized in a fashion that follows the overall schema structure. If you are not familiar with schema structure, refer to the section in the *Turbo IMAGE/V Reference Manual* (32215-90050) entitled "Defining a Database."

Database

SDDBC searches the IMAGE-DATABASE entity for the database specified in the IMAGE command. This entity is used as the database name in the schema. The attribute value of image-database-type is used to determine if the database is a TurboIMAGE database.

Passwords

To get the user classes and passwords for the database, SDDBC searches the IMAGE-DATABASE contains IMAGE-CLASS relationships. The user class numbers and passwords are obtained from the attributes class-number and password of the image-class entity. SDDBC sorts the password information by class-number and writes the user class numbers and passwords to the password part of the schema file.

Items

To get all the items in the database, SDDBC first searches all the data sets related to the specified database by finding the IMAGE-DATABASE contains IMAGE-DATASET relationships. The record layout of the IMAGE-DATASET is then found by using the IMAGE-DATASET contains RECORD relationships. There can be more than one record layout per data set. If there is more than one layout for the data set, SDDBC uses the primary record layout which is indicated by the IMAGE-DATASET contains RECORD attribute primary-record. If there is more than one record layout and none of them are the primary record layout, then SDDBC will use the first record layout as retrieved from the dictionary. If there is more than one primary record layout, SDDBC will use the first primary record as retrieved from the dictionary. The items are obtained by following the RECORD contains ELEMENT relationships. The attribute element-type of the RECORD contains ELEMENT relationship is used as the type designator of an item definition. If the attribute back-reference is true, then the element-type attribute is retrieved from the element entity itself.

The element entities are then retrieved, and attribute count is used as sub-item count, and attribute byte-length is used to derive the sub-item length as follows:

<u>Item type</u>	<u>Byte-length</u>	<u>Sub-item length</u>
D,I,J,K,R	n	n + 1 / 2
U,X,Z	n	n
P	n	2 * n

The sub-item length of the data item is rounded to an integral number of words in length regardless of the type designator and its unit of measure. This is to conform with the standards set by IMAGE/V.

To get the read and write class lists for an item definition, SDDBC searches the ELEMENT contains IMAGE-CLASS relationships. The class list is appended next to the data item in the item part of an item definition.

SDDBC then writes all the data items in sorted order (of item names) to the item part of the schema file.

Data Sets

SDDBC gets the data sets and all related data items within each data set from System Dictionary as described previously under "Items". Based upon the ORDER option, the data sets are generated in the order of either AUTOMATIC, MANUAL, and DETAIL, or in the order of retrieval. If data sets are generated by set type order, within each type they are generated in the order they were retrieved. The order of the items in the data set is determined by the relationship-position attribute in the RECORD contains ELEMENT relationship. The search item, master set name and sort item name of a DETAIL data set is obtained from five-way chain relationships image-dataset, element, element, image-dataset, image-database. The attribute primary-flag in this chain relationship indicates whether it is a primary path or not. Through this chain relationship, the path count for the search item in MASTER sets is also obtained. The search item of a MANUAL master set is identified by the image-dataset key element relationship.

To get the read and write class lists for each data set, SDDBC searches the IMAGE-DATASET contains IMAGE-CLASS relationships. The class list is appended next to the data set name in the set part of the schema.

SDDBC supports TurboIMAGE creations by generating the device class if defined in the dictionary for the data set header line. This information is retrieved from the IMAGE-DATASET uses DEVICE-CLASS relationship.

The capacity of a data set is obtained from the attribute capacity of IMAGE-DATABASE contains IMAGE-DATASET.

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Schema Comment Lines

When generating the schema, SDDBC uses the variable length attribute description as comment lines whenever possible to document the definitions as they are generated. These include descriptions about the database entity, IMAGE-DATABASE contains IMAGE-CLASS relationships, element entities, dataset entities, and RECORD contains ELEMENT relationships.

Alias Name Option

If name option is ALIAS, data names are generated from the dictionary as described below.

For database name, the IMAGE-ALIAS name of the database entity is used. If IMAGE-ALIAS name does not exist, then the primary name will be used.

For data item name, the IMAGE-ALIAS name from relationship of relationship-type RECORD contains ELEMENT is used. If the IMAGE-ALIAS name does not exist at the relationship level or the IMAGE-ALIAS names from different relationships for the same item are not the same, then the IMAGE-ALIAS name of the ELEMENT entity is used. If the IMAGE-ALIAS name does not exist at the ELEMENT entity level, then the primary name of the element will be used. Also if the IMAGE-ALIAS name conflicts with another item name, then the primary name of the element will be used.

Similar rules apply for data set name. First, SDDBC will try to use the IMAGE-ALIAS name from relationship of relationship type IMAGE-DATABASE contains IMAGE-DATASET. If the IMAGE-ALIAS name at the relationship level does not exist, then the IMAGE-ALIAS name of the DATA SET entity will be used. If the IMAGE-ALIAS name at the DATA SET entity level does not exist then the primary name of the data set will be used. Also if the IMAGE-ALIAS name conflicts with another data set name, then the primary name of the data set will be used.

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Schema File Processing

If there is no error when the schema is generated, SDDBC will automatically invoke the Schema Processor IMAGE utility, DBSCHEMA, to process the schema. Refer to the *IMAGE/V Reference Manual* (32215-90003) for details about schema processing. If you only want to create a schema but not the root file, you can enter a NOROOT option in the IMAGE command using the CONTROL keyword. Otherwise a root file will be generated by DBSCHEMA if no errors are encountered.

9 Introduction to SDVPD

The System Dictionary VPLUS/V Forms Definition Loader Utility loads information about VPLUS/V forms into System Dictionary from a VPLUS/V forms file. This manual describes the operation of this utility. Chapter 10, "Running the SDVPD Program," describes the files used by SDVPD, the run options, error handling, and other information you may need when executing the utility. Chapter 11 describes the syntax and parameters of the SDVPD commands, while Chapter 12 describes the loading process. Appendix E lists SDVPD command abbreviations, while Appendix F is a list of all SDVPD error messages with their probable causes and action to take for each cause.

Running the SDVPD Program

The System Dictionary VPLUS/V Forms Definition Loader, SDVPD, loads the VPLUS/V forms information into System Dictionary from the VPLUS/V forms file. This chapter explains how to run SDVPD, defines the files used by the SDVPD program, and explains the available run options.

SDVPD Files

Input File

SDVPD accepts input from the file, SDIN. It can also take input from another MPE file by redirecting SDIN with a file equation prior to issuing the RUN command:

```
:FILE SDIN=input file
```

If SDIN does not exist, or has not been redirected to another file, \$STDINX (or your terminal) will be used as the input file.

The log file (see "The Log File" below) can be saved and renamed and then used as the input file the next time SDVPD is run.

SDOUT Report File

SDVPD records the summarized information about the entities added, replaced, etc., in a file with the formal file designator, SDOUT. SDOUT can also be redirected to another MPE file by using the following file equation:

```
:FILE SDOUT = output file
```

When SDVPD is run, if SDOUT is not found and there is no file equation for SDOUT, then SDVPD creates SDOUT as a temporary file to collect report information. Upon termination of the program, the information gathered in SDOUT is output to \$STDLIST, and the temporary SDOUT is deleted thereafter.

On the other hand, if an old SDOUT is found, the user in session mode will be asked to confirm overwriting of the old file. In jobs, the old file is automatically overwritten.

SDOUT Report Format

When the output is formatted, each record in the report has the following format:

```
<Entity name> <VPLUS Alias> <Entity type>
```

Attribute Output Format. Attributes are listed only for the elements and have the following format:

```
<element-type> (<byte-length>, <display-length>,
```

Action Report. SDVPD output lists the action that occurred for each entity as it was encountered during the loading process. The Action column in the report may show one of the values listed below:

SKIPPED The new definition was skipped because a SKIP was requested for conflict

occurrences.

REPLACED The existing definition was modified to the new definition's attribute

values.

ADDED The new definition was successfully added to the System Dictionary.

TERMINATED The loading process terminated at this entity because of a conflict. The

entity with the TERMINATED action was not loaded.

ERROR An error has occurred while loading the definition. This usually represents

a more serious error.

OLD USED A compatible entity definition was found in the dictionary, and the new

entity definition was not loaded. The relationships were still established

using the old definition.

Log File

When SDVPD is executed, all valid commands are logged to a file with the formal file designator, SDLOG. This enables you to save the commands and use them at a later date. When SDVPD is run in a session, if SDLOG already exists, SDVPD will ask for permission to overwrite the old log file. If the response is negative, logging is disabled. In batch mode, the old file is automatically overwritten. If no old log file is found and no file equation for SDLOG is found, SDVPD will create the file. This file is temporary, however, and must be saved to become a permanent file. If SDLOG is newly created, you will receive a message telling you to save the file upon termination of the program.

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Run Options

When SDVPD is run, one of several run options may be specified through use of the PARM parameter of the RUN command. This parameter allows you to control SDVPD's error handling. Using this parameter, you may specify the exact number of errors that may be encountered before the program is aborted. If, for example, two errors are acceptable, but more than two errors is not, then the PARM parameter will specify the number 3. An example of the RUN command with the PARM parameter appears below:

RUN SDVPD.PUB.SYS; PARM=3

Three sets of values are accepted for the run option:

- -1 Parse-only option. Only command syntax is checked. No dictionary or VPLUS forms file is opened.
- Execute and do not terminate regardless of the number of errors. Program continues until an EXIT command is issued. All errors are reported, but non-fatal errors will not terminate the program. This is the default option.
- n Terminate when n errors have been detected. Both syntactical and operational errors are counted. If a fatal error is encountered, the program may abort before the error count is reached. Not recognized in session mode.

When the program aborts due to too many errors, an error message is issued, and the program sets the system Job Control Word to a value >= FATAL.

Error Handling

SDVPD recognizes three different categories of errors: 1) syntax errors, 2) operational errors, and 3) fatal errors. SDVPD responds to these errors in different ways, depending upon the category.

Syntax errors are errors caused either by mistyping a command or by specifying illegal command construction. When these errors are detected, a caret pointer is displayed pointing to the location of the error, along with an error message.

Operational errors are caused by commands that request invalid operations. For example, requesting LOAD when no dictionary is open is an operational error. An error message is displayed in response to these errors.

Fatal errors are those errors which are usually disc-related errors over which the program has very little or no control. When such an error is detected, the program is terminated. Failure to open \$STDINX is such an error. When a fatal error is detected by the system, the Job Control Word is assigned a value greater than or equal to FATAL.

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Control Y Handling

[[CONTROL]] Y is enabled in session mode when any of the following is true:

- When SDVPD is expecting a command
- · When SDVPD is in the REDO command
- When SDVPD is displaying HELP messages

If [[CONTROL]] Y is entered, SDVPD displays:

```
< Control Y >
```

and reissues the first level command prompt (>). Once the loading process starts, [[CONTROL]] Y is disabled until the completion of the loading.

Running the Program

The SDVPD program is located in the PUB group of the SYS account. The program can be loaded and run by issuing the command:

```
RUN SDVPD.PUB.SYS
```

No file equates are needed. If the program is successfully loaded, it will print out the banner:

HP System Dictionary SDVPD HP32256v.uu.ff -(C) Hewlett Packard Co. 1985

Session Mode vs. Batch Mode

SDVPD can be run either in session mode or in batch mode. Some differences exist, however, between the two modes.

When running in batch mode, both [[CONTROL]] Y and the REDO command are disabled. When running in session mode, any run option other than 0 or -1 is ignored.

The default value of the OPTION parameter is also different between sessions and jobs. In sessions, the default value for this parameter is PROMPT, while in jobs, it is SKIP.

Furthermore, in jobs, any old SDOUT and SDLOG are automatically overwritten, while, in sessions, the user is asked to confirm.

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Running the SDVPD Program Running the Program

11 SDVPD Commands

This chapter includes descriptions of each SDVPD command with their syntax, parameters, and examples. These commands are listed alphabetically for your ease of use.

A command is provided for a quick reference to SDVPD commands. Using this command, you can either get a list of all available SDVPD commands, or a detailed description of a particular command.

MPE Commands

MPE commands can be issued without leaving SDVPD. Whenever the caret prompt (>) for a command is present, an MPE command is issued by entering a colon (:) followed by the desired command. SDVPD passes the command on to the operating system to be processed. After the command has been completed, control is returned and the user is again prompted with the caret prompt (>) to continue.

You can extend an MPE command over multiple lines by attaching the ampersand continuation character (&) to the end of the line. However, unlike other SDVPD multi-line commands, you should not attach the ending period.

MPE commands that can be issued from SDVPD are the ones which are supported by the MPE COMMAND intrinsic. Refer to the *MPE XL Intrinsics Reference Manual* (32650-90028) for a list of these commands.

COMMENT Command

The COMMENT command provides the means to enter description text into the command stream. It allows the use of text to document what is happening in the job stream without having any affect on the operation of the utility. COMMENT may be used whenever the command prompt (>) is present.

The command is a very simple one. It consists of the command word COMMENT followed by zero or more characters. The program ignores all characters on the line and simply writes them to the log file for documentation. The program then prompts for the next command. Note that this command does not need to end in a period and so must be contained on a single line. Multi-line comments can be used by prefacing each line with the COMMENT command.

Syntax

```
COMMENT [.]
Parameters: None
```

Example:

```
> COMMENT
> COMMENT This command file is used to load the forms
> COMMENT file definition for the VPLUS forms file
> COMMENT named "PERSONNL".
```

DEFINE Command

Before the forms file definitions can be loaded, the dictionary must be opened. When opening the dictionary for the first time, the scope name and scope password are required.

Syntax

```
DEFINE [;DICTIONARY=dictionary-filename]
    [;SCOPE=scope-name]
    [;PASSWORD=[scope-password]]
    [;OPEN-MODE=open-mode]
    [;NAME-MODE=name-mode]
    [;DOMAIN=[domain-name]]
    [;VERSION=[version-name]]
    {.}
```

Parameters:

dictionary-filename:

Filename of the dictionary to be opened. The default for this parameter is SYSDIC if not specified when opening the dictionary.

scope-name:

Name of the scope by which the definitions are to be loaded. This parameter is required when opening the dictionary for the first time.

scope-password:

Gives access to the scope. Any characters are allowed in a password. If a character in the password is NOT valid in other System Dictionary names (i. e., is on the restricted list), the password must be entered inside a pair of quotes to allow recognition of the 'restricted' characters. Specify two consecutive quotes ("") if a double quotation mark is desired as part of the password.

If the SCOPE parameter is specified and the PASSWORD parameter is not, you will be prompted for the password. For security reasons, the echo is turned off and you are given three chances to enter the correct password. If you are running the program interactively and the correct password is not entered after three tries, the DEFINE command will terminate and you will be returned to the command prompt. If you are running the program in batch mode and the correct password is not entered after three tries, the program will terminate. The password is always read from \$STDIN.

open-mode:

Specifies which mode to open the dictionary with. The valid choices are:

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shared-update
exclusive-update

Default is to open the dictionary in shared-update mode. If the dictionary is opened in exclusive-update mode, you will have exclusive access to the dictionary and others will be denied access.

name-mode:

Specifies which group of names (internal or external) the user wishes to use. The valid choices are:

internal
external

Default is to use the external name mode.

domain-name:

Name of the dictionary domain in which the dictionary is to be opened. If not specified, the default is the common domain. Use the SHOW command to initially examine the default value of the DEFINE and IMAGE parameters. A blank entry for this parameter represents the common domain. If you are in another domain and you want to get back to the common domain, specify "DOMAIN=;" with no

value.

version-name:

Name of the version in the domain in which the dictionary is to be opened. Use the SHOW command to initially examine the value of this parameter. A blank entry represents the latest test version. The latest test version can be specified by entering "VERSION=;".

Example: Creating the initial environment

```
> DEFINE DICTIONARY=sysdic;
```

>> SCOPE=manager;

>> PASSWORD=Mgr*;

>> OPEN-MODE=shared-update.

>

EXIT Command

To terminate SDVPD, enter EXIT. The EXIT command closes the dictionary and other opened files before terminating the program.

Syntax

EXIT [.]

Parameters: None

Example:

```
> EXIT.
END OF PROGRAM
: (back to MPE)
```

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HELP Command

For a quick reference of SDVPD commands, a HELP command is available. The HELP command can be used either to get a list of all available SDVPD commands or to get a detailed description of a specific command.

Syntax

```
HELP [command] [.]
```

Parameters:

command: Name of the command

If more HELP messages are requested than can fit on one screen, the following message is displayed:

```
Continue (Y/N)? >
```

Respond "Y" if you wish to see more messages.

If your HELP command contains a subject with no HELP message available, an error message is issued, and the general HELP messages are displayed.

Example 1. Quick reference of commands

```
> HELP
```

The output of the above command will look like this:

```
<COM > - Provide a line of comment text in the command stream
COMMENT
DEFINE
          <DEF > - Establish the System Dictionary environment
EXIT
               > - Terminate the program
HELP
          <H
               > - Display commands
LISTFORMS <LF > - List the forms in the currently forms file
               > - Load values from a Vplus forms file to System Dictionary
LOAD
          <REDO> - Edit and execute the previous command
REDO
RESET
               > - Reset all the DEFINE and VPLUS parameters
         <SH > - Display the current values of DEFINE and VPLUS parameters
SHOW
VPLUS
          <PP > - Establish the Vplus environment to load from
```

Enter HELP command-name for more information about a specific command

Example 2. Syntax for the DEFINE command

```
> HELP DEFINE.
```

The output of the above command will look like this:

HELP MESSAGES FOR DEFINE <DEF> COMMAND: The DEFINE command enables you to open the System Dictionary.

```
SYNTAX:
          DEFINE <DEF>
              [;DICTIONARY <DICT> = dictionary-name ]
              [;SCOPE <S>
                                 = scope-name
              [;PASSWORD <P>
                                 = [scope-password]]
                                 = [domain-name]
              [;DOMAIN <D>
              [;VERSION <V>
                                 = [version-name] ]
              [;OPEN-MODE <OM> = open-mode
              [;NAME-MODE <NM> = name-mode
                                                   ]
                      = SHARED-UPDATE <SU> or EXCLUSIVE-UPDATE <EU>
      open-mode
                      = EXTERNAL <EXT> or INTERNAL <INT>
      name-mode
```

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LISTFORMS Command

LISTFORMS lists the names of the forms contained in the currently open forms file. The form name, form number, and the number of fields in the form are listed for each form. If no form file is open, any attempt to list form names produces an error.

Syntax

LISTFORMS {.}

Parameters: None

LOAD Command

The LOAD command starts the VPLUS forms file definition loading process. To load specific forms from the forms file, specify the form names after the command. To load all forms definitions from the forms file, issue the command with no forms names following it.

Syntax

```
LOAD [ formname1formname2... formname3] {.}

Parameters:

formname:Name of the VPLUS forms to be loaded
```

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REDO COMMAND

The REDO command allows you to correct errors or to make changes to the last command you issued. When you issue the REDO command, you will enter an editing mode and the first line of the command will be displayed for modification.

To modify the command, position the cursor using the space bar, under the character to be modified and enter one of the subcommands listed below.

SDVPD interprets any character other than the ones listed below as a replacement character. For example, if you type "MODIFY" below a character, since M is not a valid edit command, "MODIFY" will replace the six characters on the line above.

Subcommand Description

one line.

A	Appends one or more characters following the subcommand to the end of the current line.
В	Breaks the line into two lines, moving the character that is above the cursor and all following characters to the next line. The second line becomes the current edit line.
D	Deletes the character above the D. If you repeat D, each character above each D is deleted. You may also use a D below the first and last character to be deleted with spaces in between.
E	Exits the REDO editing mode without executing the edited command. The command that you were editing when you entered E is still considered to be the last one.
Н	Lists all available editing sub-commands in redo mode. Your current editing line is then redisplayed.
I	Inserts one or more characters immediately preceding the character that is above the cursor. You can combine a DELETE and INSERT edit by using D's followed by an I and the characters to be inserted.
L	Lists the complete command as it is currently edited and then redisplay the line you are currently editing.
R	Replaces the characters above the cursor with the new characters you enter. The first character to be replaced is the one above the R.
X	Executes the current command as it has been edited.
+n	Places you on the next line of the command you are editing. You can enter + followed by a number n, for the number of lines you want to skip forward. If no number is entered, the default is to move forward one line.
-n	Places you on the previous line of the command you are editing. You can enter followed by a number n, for the number of lines you want to skip backward. If no number is entered, the default is to is to move backward

[[RETURN]] Places you on the next line of the command you are editing, if you are not currently on the last line of the command. If you are on the last line, executes the command as it has been edited.

Example:

```
> DEFINE DICTIONARY=sysdic;
>> SCOPPE=manager;
>> PASSWORD=Mgr*;
>> OPEN-MODE=shared-update.
SCOPPE=manager;
^
Unknown DEFINE parameter (SDERR 3110)
Text from the error to the end of command ignored (SDWARN 3101)
> redo
DEFINE DICTIONARY=sysdic;
+
SCOPPE=manager;
    d
SCOPE=manager;
x
>
```

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RESET Command

This command resets all the DEFINE and VPLUS parameters to the initial state. If a parameter has a default value, the default value is assigned to it. If a parameter has no default value, the parameter value becomes void (as represented by '***' in the SHOW command). The dictionary and the VPLUS forms file are both closed.

Syntax

RESET [.]

Parameters: None

SHOW Command

SHOW displays the values of all the DEFINE and VPLUS parameters. Default values are displayed for those parameters that were not specifically assigned a value. If a parameter without an existing default value (e.g., FORMSFILE parameter for the VPLUS command) has not been initialized, asterisks (***) are displayed.

Syntax

SHOW [.]

Parameters: None

Example:

```
> SHOW
```

DEFINE command parameters:

DICTIONARY = SYSDIC

SCOPE = DA

DOMAIN = MARSHA

VERSION = V1

OPEN-MODE = EXCLUSIVE-UPDATE

NAME-MODE = EXTERNAL

VPLUS command parameters:

FORMSFILE = INVENTORY

SENSITIVITY = READ

CHAR = OFF

HYPHEN = OFF

CHECK-ELEM-TYPE = ON

COMPATIBILITY-LEVEL = VPLUS-COMPATIBILITY

OPTION = PROMPT

QUIET

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VPLUS Command

The VPLUS command is used to specify the VPLUS forms file whose definitions are to be loaded into System Dictionary, plus other parameters related to the definition loading process.

Syntax

```
VPLUS [;FORMSFILE=formsfile-name]
    [;SENSITIVITY=sensitivity]
    [;CHAR=char-conv-option]
    [;HYPHEN=hyphen-option]
    [;COMPATIBILITY-LEVEL=compatibility-option]
    [;CHECK-ELEM-TYPE=check-elem-type-option]
    [;OPTION=flow-control-option]
    [;QUIET]
    [;VERBOSE]
    {.}
```

Parameters:

formsfile-name:

Name of the VPLUS forms file whose definitions are to be loaded into System Dictionary. Note that when you issue a VPLUS command, the forms file is open only when the FORMSFILE parameter is included. There is no default for this parameter.

sensitivity:

Specifies the sensitivity attribute with which each VPLUS definition is loaded. The following attributes are available:

READ
MODIFY
PRIVATE

The default is READ.

char-conv-option:

Enables conversion of data types of all non-character forms file fields in System Dictionary into either type "X" or type "9". The following options are available:

OFF X or ON

When OFF is selected, no conversion is done. When X or ON is selected, all non-character fields in the dictionary are converted to type "X" and the byte-length attribute value is set to that of the display-length attribute value.

When "9" is selected, all fields of VPLUS character type DIG that are in the dictionary are converted to type "9" and all other VPLUS fields are converted to type "X". When 9 is selected, the byte-length attribute value is also set to that of the display-length attribute value. The default is OFF.

hyphen-option:

Enables conversion of underscores to hyphens. This parameter should be set to ON if the forms file's element definitions will be used by other subsystems that do not recognize the underscore as a part of a name (e. g., IMAGE). The following options are available:

ON OFF

The default is OFF.

check-elem-type-option:

Specifies whether element type checking should be included in determining compatibility of old element definitions. The following options are available:

ON OFF

If ON is selected, the element type of the old element definitions will be checked. The old definition will be considered compatible only if the element types are the same. However, if this parameter is OFF, the element type is not included in the determination of compatibility of old element definitions. As a result, more compatible element definitions may be encountered if OFF is specified. The default is ON.

compatibility-option:

Enables different sets of attributes to be checked for determining compatibility of old element definition. The following options are available:

VPLUS-COMPATIBILITY

COMPLETE

If VPLUS-COMPATIBILITY is selected then SDVPD will check only the display-length attribute value for compatibility. If COMPLETE is selected then SDVPD will check the display-length, element-type, byte-length, and decimal attribute values for compatibility. The default is VPLUS-COMPATIBILITY.

flow-control-option:

Determines the manner in which loading will be handled when conflicts arise.

The following values are available:

PROMPT Displays the following prompt when a conflict is found:

Skip, Replace, enter New name, or

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Terminate (S/R/N/T)? >

SKIP The new definition is skipped and not loaded.

REPLACE The new definition will replace the old definition. The old

definition and all the relationships involving it will be

permanently deleted.

NEW A prompt for a new name is issued. The name entered will

become the name of the entity and the original name is

assigned to the vplus-alias attribute.

TERMINATE The loading process terminates immediately.

PROMPT is the default for session mode; whereas, SKIP is

the default for batch mode.

QUIET VERBOSE: Allows monitoring of the loading process, if desired.

VERBOSE produces a message for each entity and relationship processed. To suppress reporting of the entities and relationships successfully loaded, specify the

QUIET option.

Example:

```
> VPLUS
>> FORMSFILE = earnings;
>> SENSITIVITY = read;
>> CHAR = OFF;
>> HYPHEN = ON;
>> OPTION = SKIP;
>> QUIET.
>
```

12 Loading VPLUS/V Definitions

The process described below assumes that OPTION = PROMPT was specified. Operation when other values are specified is obvious from the explanations below because, in a sense, the PROMPT option includes all other options. For example, OPTION = SKIP is identical to specifying "S" at the option prompt for each conflict.

VPLUS/V Forms File

At first, SDVPD creates an entity of type FORMSFILE, using the name of the VPLUS/V forms file. Each formsfile is used in creating the subsequent FORMSFILE contains FORM relationship. If the entity already exists, the following message and prompt are issued:

```
Forms file ! already defined in dictionary (SDWARN 3001) Skip, Replace, enter New name, or Terminate (S/R/N/T)? >
```

A response of "S" keeps the old entity and continues the loading process. If an "R" is entered, the new entity replaces the old. "T" terminates the loading process immediately. If the user responds with an "N", the following prompt to rename the forms file is issued:

```
New forms file name >
```

The name entered must be unique in the version and domain with which System Dictionary is opened. If the name already exists, the above message is displayed and the option prompt reissued. The option prompt is also reissued if the user enters a [[RETURN]] at the new name prompt. The name will replace the old entity name, and the old entity name will become the value for the vplus-alias attribute.

Forms

SDVPD will load the definitions of the forms in the forms file selected by the user. The utility will create an entity of type FORM. In addition, for each form, relationships of the type FORMSFILE contains FORM will be created. The fields which compose the form will then be related to the form.

If the form name is already in System Dictionary, then the following message and prompt are issued:

```
Form ! already exists (SDWARN 3002)
Skip, Replace, enter New name, or Terminate (S/R/N/T)? >
```

If the user responds with an "S", the existing form in System Dictionary is used. If the user responds with an "R", SDVPD replaces the old form entity with the new one. A response of "T" terminates the loading process. If the user responds with an "N", SDVPD prompts for a new form name:

```
New form name >
```

The new name must be unique. The original VPLUS/V form name will be used as the attribute value for the vplus-alias attribute. Note that the same vplus-alias attribute value is also included in the FORMSFILE contains FORM relationship.

Fields

SDVPD will load the fields defined in a form as element entity types in System Dictionary. The System Dictionary attributes which are initialized are sensitivity, element-type, byte-length, display-length, and decimal. Sensitivity is initialized to the value specified in

the VPLUS command. Element type is determined from the table below:

VPLUS/V Data Type	System Dictionary/XL Element Data Type
DIG (1 <= s <= 9)	I+
DIG (9 < s)	P+
IMPn (1 <= s <= 10)	I
IMPn (10 < s)	P
NUMn (1 <= s <= 10)	I
NUMn (10 < s)	P
NUM	R
CHAR	X
DATE	X

where s is the size of the VPLUS field and n the decimal places.

On the other hand, byte-length, display-length, and decimal are determined from the field data type and the field length as follows: $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^$

VPLUS Data Type	Field-size	Display-length	Byte-length	Decimal
CHAR	S	s	S	0
NUM	1	1	4	0
NUM	2 <= s <=6	s - 1	4	0
NUM	7 <= s	s - 1	8	0
NUMn	1	1	2	n
NUMn	2 <= s <= 5	s - 1	2	n
NUMn	6 <= s <= 10	s - 1	4	n
NUMn	11 <= s	s - 1	(s + 1) / 2	n
DIG	1 <= s <= 4	S	2	n
DIG	5 <= s <=9	S	4	0
DIG	10 <= s	S	(s + 2) / 1	0
IMPn	1	1	2	0
IMPn	2 <= s <= 5	s - 1	2	n
IMPn	6 <= s <=10	s - 1	4	n
IMPn	11 <= s	s - 1	(s + 1) / 2	n

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Each field is related to its form through the FORM contains ELEMENT relationship. The attributes field-enhancement, field-type, display-length, element-type, field-number, decimal, and byte-offset are initialized for the relationship.

Compatible and Incompatible Elements. For elements, a compatible definition is defined as an old definition of the same name such that its values for those attributes specified in the COMPATIBILITY-LEVEL option of the VPLUS command match those of the new definition. Furthermore, if the CHECK-ELEM-TYPE parameter of the VPLUS command is ON, the element-type attribute values must also match, regardless of the value of the COMPATIBILITY-LEVEL parameter. If these conditions are not met, the old definition is said to be incompatible with the new.

SDVPD considers an incompatible element as a conflicting entity. Hence, the SKIP, REPLACE, TERMINATE, and NEW options are effective when incompatible elements are found.

While loading element definitions, if a compatible element is found, SDVPD issues the following message:

```
Compatible definition for element ! used (SDWARN 3003)
```

and uses this definition to create any relationship involving the element.

On the other hand, if an incompatible definition is found, SDVPD issues:

```
Incompatible definition exists for element ! (SDWARN 3004) Skip, Replace, enter New name, or Terminate (S/R/N/T)? >
```

If the user responds with "S", the new element is not added and the old element is used in creating the subsequent FORM contains ELEMENT relationship. If "T" is specified, then the loading process terminates immediately. If the user specifies "N", the following prompt is displayed:

```
New primary element name >
```

The new element name must be unique. The new name becomes the entity name for the element, while the original field name is entered as a vplus-alias attribute for both the element entity definition and the FORM contains ELEMENT relationship.

A SDDBD Error Messages

The following is a complete listing of SDDBD errors listed in order by error number. The list includes at least one possible cause of the error and a recommended action for each cause.

The list is divided into the following groups:

Message Number	Error Type
2501–2602	SDDBD Warning Messages
2601-2821	SDDBD Error Messages

Some System Dictionary error messages list a cause as "An unexpected subsystem error has occurred." If this is one of the causes for the message you have received, System Dictionary has probably encountered an error in TurboIMAGE/V, or SORT/V, or possibly detected a system error (MPE XL). In this case, you should report the problem to the Dictionary Administrator or System Manager, who should try to determine its cause and fix it if possible. If they need assistance in solving the problem, they should contact a Hewlett-Packard Response Center.

Some System Dictionary error messages list an action of "Refer to the associated error." In this case, an additional message related to a System Dictionary intrinsic, the MPE V system, the Pascal Run-Time Library, the Native Language Subsystem, or TurboIMAGE will be displayed. Refer to the documentation on these subsystems for additional information on the problem.

Some System Dictionary error messages list an action of "Notify the Dictionary Administrator." In this case, System Dictionary has encountered an error that requires the attention of the Dictionary Administrator or System Manager. If the DA or System Manager needs assistance in solving the problem, they should contact a Hewlett-Packard Response Center.

Some of these messages, as shown in this manual, include an exclamation point (!). This character serves as a substitution character, and stands for a parameter (such as a file name) which will be displayed as part of the actual message instead of the !

SDDBD WARNING Messages (2501–2602)

2501 MESSAGE: Image database! already defined in dictionary (SDWARN 2501)

CAUSE: A database definition with the same name already exists in the dictionary.

ACTION: None necessary. SDDBD will take the action specified in the OPTION clause of the IMAGE command.

2502 MESSAGE: Compatible definition for element! used (SDWARN 2502)

CAUSE: An element definition with the same display-length, count, and element-type attribute values already exists in the dictionary.

ACTION: None necessary. SDDBD will use the existing entity definition in the dictionary instead of trying to create it, and continue processing.

2503 MESSAGE: Incompatible definition exists for element! (SDWARN 2503)

CAUSE: An element definition with different unmatching values already exists in the dictionary.

ACTION: None necessary. SDDBD will take the action specified in the OPTION clause of the IMAGE command.

2504 MESSAGE: Compatible definition for data set! used (SDWARN 2504)

CAUSE: A data set definition with the same definition and same set of relationships already exists in the dictionary.

ACTION: None necessary. SDDBD will use the existing entity definition in the dictionary instead of trying to create it, and continue processing.

2505 MESSAGE: Incompatible definition exists for data set! (SDWARN 2505)

CAUSE: The data set entity has a different set of attributes values, or has a different set of elements related to it.

ACTION: None necessary. SDDBD will take the action specified in the OPTION clause of the IMAGE command.

2506 MESSAGE: Compatible definition for record ! used (SDWARN 2506)

CAUSE: An record definition with the same definition and same set of relationships already exists in the dictionary.

ACTION: None necessary. SDDBD will use the existing entity definition in the dictionary instead of trying to create it, and continue processing.

2507 MESSAGE: Incompatible definition exists for record ! (SDWARN 2507)

CAUSE: The record entity in the dictionary has a different byte-length attribute value, or has a different set of elements related to it.

ACTION: None necessary. SDDBD will take the action specified in the OPTION clause of the IMAGE command.

2508 MESSAGE: Compatible definition for database! used (SDWARN 2508)

CAUSE: A database definition of the same type already exists in the dictionary.

ACTION: None necessary. SDDBD will use the existing entity definition in the dictionary instead of trying to create it, and then will continue processing.

2509 MESSAGE: Incompatible definition exists for database! (SDWARN 2509)

CAUSE: The database entity in the dictionary has a different value for attribute image-database-type.

ACTION: None necessary. SDDBD will take the action specified in the OPTION parameter of the IMAGE command.

2510 MESSAGE: Conflicting entity SKIPped (SDWARN 2510)

CAUSE: SDDBD is informing the user of the action taken on the conflicting entity.

ACTION: None necessary. SDDBD will continue processing.

2511 MESSAGE: Conflicting entity being REPLACEd with the new (SDWARN 2511)

CAUSE: SDDBD is informing the user of the action taken on the conflicting entity.

ACTION: None necessary. SDDBD will continue processing.

2512 MESSAGE: Loading process TERMINATEs due to a conflict (SDWARN 2512)

CAUSE: SDDBD is informing the user of the action taken on the conflicting entity.

ACTION: None necessary. SDDBD will terminate processing.

2513 MESSAGE: Above relationship already exists (SDWARN 2513)

CAUSE: SDDBD is informing the user that the relationship is already in the dictionary.

ACTION: None necessary. SDDBD will continue processing.

2520 MESSAGE: Logging disabled (SDWARN 2520)

CAUSE: SDDBD cannot log the commands the user will enter, because the user decided not to overwrite an old SDLOG, or because SDLOG could not be opened.

ACTION: If the command logging is important, exit the program immediately, take care of the problem, and reenter SDDBD.

2521 MESSAGE: New log file! is temporary. Save it for future use (SDWARN 2521)

CAUSE: SDDBD is informing the user of the status of the SDLOG file.

ACTION: None necessary. The SDLOG file is created in the temporary domain. If the user wishes to save the file, the user should issue a SAVE SDLOG command before terminating his MPE session.

2602 MESSAGE: Text from the error to the end of command ignored (SDWARN 2602)

CAUSE: SDDBD ignores the rest of the command from the first error.

ACTION: Use REDO to fix the command, or reenter the command, fixing the error, and try executing the command.

SDDBD ERROR MESSAGES (2601–2821)

2601 MESSAGE: Unknown SDDBD command (SDERR 2601)

CAUSE: The user has given SDDBD an unrecognizable command.

ACTION: The user should give a command that SDDBD recognizes; these commands are listed in the manual, and can also be obtained by entering the HELP command.

2603 MESSAGE: Expecting 'Y' or 'N' answer (SDERR 2603)

CAUSE: The user entered a response other than Y or N to the prompt.

ACTION: Enter Y or N.

2604 MESSAGE: Illegal response to option prompt (SDERR 2604)

CAUSE: The user did not enter a valid response to the prompt.

ACTION: The valid responses are S for Skip, R for Replace, T for Terminate, and N for new name.

2605 MESSAGE: Command ending period is missing (SDERR 2605)

CAUSE: A period is needed to terminate a multi-line command.

ACTION: Use REDO to add a period, or reenter the command with a period at the end.

2606 MESSAGE: Expecting equal sign (SDERR 2606)

CAUSE: The user left out an = character from the command.

ACTION: Use the REDO command to put an = character into the command or reenter the command with an = in the proper place.

2607 MESSAGE: Parameter separating semi-colon missing (SDERR 2607)

CAUSE: A; character is needed to separate the parameter clauses.

ACTION: Use the REDO command to put a; character into the command or reenter the command with a; in the proper place.

2608 MESSAGE: Superfluous parameters found after command ending period (SDERR 2608)

CAUSE: Characters were found after the period terminating the command.

ACTION: Use the REDO command to delete the characters after the end of the command, or reenter the command without the characters after the period character.

2609 MESSAGE: Command does not take any argument (SDERR 2609)

CAUSE: No parameters are needed with the command.

ACTION: Use the REDO command to delete the parameter clause, or reenter the command without the parameter clause.

2620 MESSAGE: Unknown DEFINE parameter (SDERR 2620)

CAUSE: The parameter being specified is not recognizable by SDDBD.

ACTION: Use the HELP DEFINE command to list the set of valid parameters, or look under the DEFINE command in the manual for the valid parameters.

2621 MESSAGE: Expecting dictionary name (SDERR 2621)

CAUSE: The dictionary name was not supplied in the DICTIONARY parameter.

ACTION: Use the REDO command to add the dictionary name, or reenter the command with the dictionary name.

2622 MESSAGE: Expecting scope name (SDERR 2622)

CAUSE: The scope name is not supplied in the SCOPE parameter.

ACTION: Use the REDO command to add the scope name, or reenter the command with the scope name.

2624 MESSAGE: Illegal open mode (SDERR 2624)

CAUSE: The open mode supplied is not valid.

ACTION: The open mode should be either EXCLUSIVE-UPDATE or SHARED-UPDATE.

2625 MESSAGE: Illegal name mode (SDERR 2625)

CAUSE: The name mode supplied is not valid.

ACTION: The name mode should be either INTERNAL or EXTERNAL.

2630 MESSAGE: Unknown IMAGE parameter (SDERR 2630)

CAUSE: The parameter keyword supplied in the command is not valid.

ACTION: Use the HELP IMAGE command to list the set of valid parameters, or look under the IMAGE command in the manual for the valid parameters.

2631 MESSAGE: Expecting Image database name (SDERR 2631)

CAUSE: The IMAGE database name is required in the command.

ACTION: The IMAGE database name should be added to the command.

2632 MESSAGE: Expecting Image database open mode (SDERR 2632)

CAUSE: The IMAGE database open mode was not supplied.

ACTION: Add the IMAGE database open mode to the command. The database open mode is a value between 1 and 8 as specified in the IMAGE manual.

2633 MESSAGE: Illegal database open mode value (SDERR 2633)

CAUSE: The IMAGE database open mode value is not valid.

ACTION: Supply a value between 1 and 8.

2634 MESSAGE: Expecting ON/OFF switch (SDERR 2634)

CAUSE: The value supplied for the parameter is not valid.

ACTION: The value should be either ON or OFF.

2635 MESSAGE: Illegal sensitivity value (SDERR 2635)

CAUSE: The value supplied for the sensitivity PARAMETER is not valid.

ACTION: The valid values are READ, MODIFY or PRIVATE.

2636 MESSAGE: Illegal option specification (SDERR 2636)

CAUSE: The value supplied for the OPTION parameter is not valid.

ACTION: The valid values are PROMPT, SKIP REPLACE, NEW or TERMINATE.

2637 MESSAGE: Illegal compatibility-level value (SDERR 2637)

CAUSE: The COMPATIBILITY-LEVEL parameter of the IMAGE command is assigned an illegal value.

ACTION: Issue the REDO command to replace the COMPATIBILITY-LEVEL parameter value to either IMAGE-COMPATIBILITY or COMPLETE.

2701 MESSAGE: Could not close the dictionary (SDERR 2701)

CAUSE: The dictionary could not be closed.

ACTION: Notify the Dictionary Administrator.

2702 MESSAGE: Could not open the dictionary (SDERR 2702)

CAUSE: The dictionary could not be opened.

ACTION: If some other user was accessing the dictionary exclusively, wait until he changes the open mode. If a serious system error is suspected, notify the System Manager and Dictionary Administrator.

2703 MESSAGE: No dictionary open (SDERR 2703)

CAUSE: No dictionary has been specified to load the definitions into.

ACTION: Specify a dictionary using the DEFINE command.

2704 MESSAGE: Could not open the dictionary because of invalid scope password (SDERR 2704)

CAUSE: The scope password supplied in the DEFINE command is incorrect.

ACTION: If the password is being prompted, give the correct password at the prompt. Otherwise, use REDO to insert the correct password into the command or reenter the whole command.

2710 MESSAGE: Could not close the database (SDERR 2710)

CAUSE: The IMAGE database could not be closed.

ACTION: Notify the System Manager.

2711 MESSAGE: Could not open the database (SDERR 2711)

CAUSE: The IMAGE database could not be opened.

ACTION: If your database open mode is incompatible with that of other users, attempt to open the database in a compatible mode. If a system error is suspected, notify the System Manager.

2712 MESSAGE: No database open (SDERR 2712)

CAUSE: No IMAGE database has been specified to load the definitions from.

ACTION: Specify an IMAGE database using the IMAGE command.

2713 MESSAGE: Error while retrieving data set list (MODE 203, SDERR 2713)

CAUSE: An IMAGE error was encountered in retrieving the list of data sets in the IMAGE database. (DBINFO mode 203)

ACTION: Notify the Database Administrator.

2714 MESSAGE: Error while retrieving data set information (MODE 202, SDERR 2714)

CAUSE: An IMAGE error was encountered in retrieving an IMAGE data set definition. (DBINFO mode 202)

ACTION: Notify the Database Administrator.

2715 MESSAGE: Error while retrieving data set info from alias file (SDERR 2715)

CAUSE: A file system error has been encountered while reading from a temporary file containing alias and attribute information.

ACTION: Notify the System Manager and the Dictionary Administrator if a serious error is suspected.

2726 MESSAGE: Error while retrieving data item list in data set (MODE 104, SDERR 2726)

CAUSE: An IMAGE/V error has been encountered in retrieving the list of data items contained in a data set. (DBINFO mode 104)

ACTION: Notify the Database Administrator.

2727 MESSAGE: Error while retrieving data item list in database (MODE 103, SDERR 2727)

CAUSE: An IMAGE/V error has been encountered in retrieving the list of data items defined in the IMAGE/V database. (DBINFO mode 103)

ACTION: Notify the Database Administrator.

2728 MESSAGE: Error while retrieving data item information (MODE 102, SDERR 2728)

CAUSE: An IMAGE/V error has been encountered in retrieving data type and length information on a data item. (DBINFO mode 102)

ACTION: Notify the Database Administrator.

2729 MESSAGE: Error while retrieving data item info from alias file (SDERR 2729)

CAUSE: A file system error has been encountered in reading from a temporary file containing information on data item aliases and attributes.

ACTION: Notify the System Manager and the Dictionary Administrator if a serious error is suspected.

2730 MESSAGE: Unknown IMAGE data item type (SDERR 2730)

CAUSE: An invalid data item type was found on an IMAGE data item.

ACTION: Notify the Database Administrator.

2731 MESSAGE: Error while retrieving master set's key item (MODE 302, SDERR 2731)

CAUSE: The password and open mode with which the IMAGE database was opened does not give access to the manual set's key item. (DBINFO mode 302)

ACTION: Open the database as the creator or with a password which allows access to all items and data sets. In addition, certain IMAGE open modes allowing read access only restricts access to items, whereas the IMAGE open modes allowing write access relaxes the restrictions. If the current open mode seems to cause this problem, reopen the data base in an open mode that gives you access to the key item.

2732 MESSAGE: Error while retrieving data set's path list (MODE 301, SDERR 2732)

CAUSE: An IMAGE/V error has been encountered in retrieving a list of paths for a data set. (DBINFO mode 301)

ACTION: Notify the Database Administrator.

2733 MESSAGE: Security violation (SDERR 2733). Cannot access file!

CAUSE: The master data set related to an IMAGE path is not available to you.

ACTION: Reopen the database with a password that has an access to the data set and reload the definitions.

2734 MESSAGE: Error while retrieving detail set's primary path (MODE 302, SDERR 2734)

CAUSE: The password and open mode with which the IMAGE database was opened does not give access to the data set's primary path information. (DBINFO mode 302)

ACTION: Open the database as the creator or with a password which allows access to all items and data sets. In addition, certain IMAGE open modes allowing read access only restricts access to items, whereas the IMAGE open modes allowing write access relaxes the restrictions. If the current open mode seems to cause this problem, reopen the database with an open mode that grants you more access.

2735 MESSAGE: Error while opening old SDLOG. Logging disabled (SDERR 2735)

CAUSE: An MPE file system error was detected when attempting to open the existing SDLOG file.

ACTION: The commands you enter will not be logged, as the logging is disabled. If the command logging is important, exit the program immediately, take care of the problem, and reenter SDDBD. If a more serious problem is suspected, notify the System Manager.

2736 MESSAGE: Error while creating new SDLOG. Logging disabled (SDERR 2736)

CAUSE: A MPE file system error was detected when attempting to create a new SDLOG file.

ACTION: The commands you enter will not be logged, as the logging is disabled. If the command logging is important, exit the program immediately, take care of the problem, and reenter SDDBD. If a more serious problem is suspected, notify the System Manager.

2737 MESSAGE: Error while opening old SDOUT. Report defaulting to \$STDLIST (SDERR 2737)

CAUSE: An MPE file system error was detected when attempting to open the existing SDOUT file.

ACTION: SDDBD will now attempt to open a temporary SDOUT, as if SDOUT was not redirected to a file. Hence, upon termination of the program, the report will be output to the \$STDLIST. If the SDOUT redirection is important, exit the program immediately, take care of the problem, and reenter SDDBD. If a more serious problem is suspected, notify the System Manager.

2738 MESSAGE: Error while creating new SDOUT. Report defaulting to \$STDLIST (SDERR 2738)

CAUSE: An MPE file system error was detected when attempting to creating a new SDOUT file.

ACTION: SDDBD will now attempt to open a temporary SDOUT, as if SDOUT were not redirected to a file. Hence, upon termination of the program, the report will be output to the \$STDLIST. If the SDOUT redirection is important, exit the program immediately, take care of the problem, and reenter SDDBD. If a more serious problem is suspected, notify the System Manager.

2739 MESSAGE: Error while opening temporary SDOUT. SDOUT not opened (SDERR 2739)

CAUSE: An MPE file system error is encountered while opening a temporary file that will collect SDOUT report information.

ACTION: SDDBD will not collect SDOUT report information at all. If the report information is important, exit the program immediately, take care of the problem, and reenter SDDBD. If a more serious problem is suspected, notify the System Manager.

2740 MESSAGE: Error while setting EOF on message buffer file (SDREDO:SDERR 2740)

CAUSE: An MPE file system error is encountered while setting the "end of file" to the message buffer file. The message buffer file is used to fetch multi-lined messages from the message catalog. SDDBD uses the temporary file SDREDO as the message buffer file.

ACTION: SDDBD will not be able to access this multi-line message. If a serious problem is suspected, notify the System Manager.

2741 MESSAGE: Error while reading from message buffer file (SDREDO:SDERR 2741)

CAUSE: An MPE file system error is encountered while reading from the message buffer file.

ACTION: SDDBD will immediately stop processing this multi-line message. If a serious problem is suspected, notify the System Manager.

2745 MESSAGE: Error while loading above relationship for path (SDERR 2745)

CAUSE: A System Dictionary error occurred while attempting to load the CHAIN relationship for an IMAGE/V path.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2746 MESSAGE: Error loading above relationship between database and data set (SDERR 2746)

CAUSE: A System Dictionary error occurred while attempting to load the IMAGE-DATABASE contains IMAGE-DATASET relationship involving the entities listed.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2747 MESSAGE: Error while loading above relationship between data set and record (SDERR 2747)

CAUSE: A System Dictionary error occurred while attempting to load the IMAGE-DATASET contains RECORD relationship involving the entities listed.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2748 MESSAGE: Error while loading above relationship between record and data item (SDERR 2748)

CAUSE: A System Dictionary error occurred while attempting to load the RECORD contains ELEMENT relationship involving the entities listed.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2749 MESSAGE: Error while loading above relationship between data set and key (SDERR 2749)

CAUSE: A System Dictionary error occurred while attempting to load the IMAGE-DATASET key ELEMENT relationship involving the entities listed.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2751 MESSAGE: Error while retrieving old definition for ! database (SDERR 2751)

CAUSE: SDDBD could not retrieve the image-database entity.

ACTION: Check the intrinsic error message(s) and act accordingly. See if you have read access to the old element.

2752 MESSAGE: Duplicate internal database name! found in external name mode (SDERR 2752)

CAUSE: While attempting to create the IMAGE-DATABASE definition, SDDBD found an old definition with the same internal name. However, because the current name mode is external, SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, the SDGetEnt call to determine if the old definition is compatible with the new will, be skipped. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2753 MESSAGE: Duplicate external database name! found in internal name mode (SDERR 2753)

CAUSE: While attempting to create the IMAGE-DATABASE definition, SDDBD found an old definition with the same internal name. However, because the current name mode is internal, SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, the SDGetEnt call to determine if the old definition is compatible with the new will, be skipped. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2754 MESSAGE: Error occurred while replacing entity! (SDERR 2754)

CAUSE: A System Dictionary error occurred while attempting to replace the entity.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected. See if you have modify access to the entity SDDBD is attempting to replace.

2755 MESSAGE: Scope owner does not have MODIFY access to ! (SDERR 2755)

CAUSE: A System Dictionary error occurred while attempting to modify the entity.

ACTION: Reopen the dictionary with a scope that has the modify access to the entity.

2756 MESSAGE: Entity name! invalid (SDERR 2756)

CAUSE: An invalid entity name was given.

ACTION: When giving a name, do not include characters unacceptable to the intrinsics.

2757 MESSAGE: Error while loading database definition for ! (SDERR 2757)

CAUSE: SDDBD could not load the database definition.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2758 MESSAGE: Error while loading data item definition for ! (SDERR 2758)

CAUSE: SDDBD could not load the data item definition.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2759 MESSAGE: Error while retrieving old definition for ! element (SDERR 2759)

CAUSE: SDDBD could not retrieve attributes of an old element.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected. See if you have read access to the old element.

2760 MESSAGE: Duplicate internal ELEMENT name! found in external name mode (SDERR 2760)

CAUSE: While attempting to create the ELEMENT definition, SDDBD found an old definition with the same internal name. However, because the current name mode is external. SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, the SDGetEnt call to determine if the old definition is compatible with the new will be skipped. Instead, SDDBED will take action immediately according to the value of the OPTION parameter.

2761 MESSAGE: Duplicate external ELEMENT name! found in internal name mode (SDERR 2761)

CAUSE: While attempting to create the ELEMENT definition, SDDBD found an old definition with the same external name. However, because the current name mode is internal. SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, the SDGetEnt call to determine if the old definition is compatible with the new will be skipped. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2762 MESSAGE: Error while loading data set definition for ! (SDERR 2762)

CAUSE: SDDBD could not load the data set definition.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2763 MESSAGE: Error while retrieving old definition for ! data set (SDERR 2763)

CAUSE: SDDBD could not retrieve attributes of an old data set.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected. See if you have read access to the old data set and the relationships involving it.

2764 MESSAGE: Duplicate internal DATA SET name! found in external name mode (SDERR 2764)

CAUSE: While attempting to create the IMAGE-DATASET definition, SDDBD found an old definition with the same internal name. However, because the current name mode is external, SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, SDDBD will skip the step to determine if the old definition is compatible with the new. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2765 MESSAGE: Duplicate external DATA SET name! found in internal name mode (SDERR 2765)

CAUSE: While attempting to create the IMAGE-DATASET definition, SDDBD found an old definition with the same external name. However, because the current name mode is internal, SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, SDDBD will skip the step to determine if the old definition is compatible with the new. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2766 MESSAGE: Error while loading record definition for ! (SDERR 2766)

CAUSE: SDDBD could not load the record definition.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2767 MESSAGE: Error while retrieving old definition for ! record (SDERR 2767)

CAUSE: SDDBD could not retrieve attributes of an old record.

ACTION: Check the intrinsic error message(s) and notify the Dictionary Administrator or the System Manager if a serious error is suspected. See if you have read access to the old record and the relationships involving it.

2768 MESSAGE: Duplicate internal RECORD name! found in external name mode (SDERR 2768)

CAUSE: While attempting to create the RECORD definition, SDDBD found an old definition with the same internal name. However, because the current name mode is external. SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, SDDBD will skip the step to determine if the old definition is compatible with the new. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2769 MESSAGE: Duplicate external RECORD name! found in internal name mode (SDERR 2769)

CAUSE: While attempting to create the RECORD definition, SDDBD found an old definition with the same external name. However, because the current name mode is internal. SDDBD cannot retrieve the old definition.

ACTION: Because SDDBD cannot retrieve the old definition, SDDBD will skip the step to determine if the old definition is compatible with the new. Instead, SDDBD will take action immediately according to the value of the OPTION parameter.

2770 MESSAGE: No command to REDO (SDERR 2770)

CAUSE: REDO cannot be issued as a first command to SDDBD.

ACTION: Do not issue REDO as a first command.

2771 MESSAGE: REDO is not allowed in non-interactive mode (SDERR 2771)

CAUSE: REDO command is not allowed in a non-interactive environment.

ACTION: Do not issue REDO in a non-interactive environment.

2772 MESSAGE: Illegal use of REDO (SDERR 2772)

CAUSE: REDO command cannot be used to edit the command into another REDO.

ACTION: Do not edit the command into another REDO through REDO.

2773 MESSAGE: Command line out of range. Ignored (SDERR 2773)

CAUSE: The +/- REDO subcommand issued results in a line outside of the bounds of the currently edited command.

ACTION: Make sure that the number specified with the +/- subcommand is within the bounds of the edited command.

2774 MESSAGE: Illegal command after delete. Ignored (SDERR 2774)

CAUSE: Only the I subcommand is allowed after the D subcommand. You issued a series of D's followed by a character other than I.

ACTION: Issue the subcommand in a correct format.

2775 MESSAGE: String to insert too long to fit (SDERR 2775)

CAUSE: The I subcommand is issued with a string which is too long to fit into the line being edited.

ACTION: Break the line with the B subcommand, and then add the string.

2776 MESSAGE: Redo sub-command is followed by unallowed characters (SDERR 2776)

CAUSE: The REDO subcommand that does not take any argument is followed by other characters.

ACTION: Make sure that you did not mean to replace corresponding part of the command line with the string.

2777 MESSAGE: Move forward/backward issued with a non-integral argument (SDERR 2777)

CAUSE: The +/- REDO subcommand is issued with a non-numeric argument.

ACTION: If you really meant to issue the +/- subcommand, reissue the subcommand with a correct number following it.

2790 MESSAGE: No help on subject! Displaying general help instead (SDERR 2790)

CAUSE: One of the subject names specified with the HELP command is not an SDDBD command key word.

ACTION: Check the subject name pointed by ^, and see if it is misspelled

2791 MESSAGE: MPE command execution error (SDERR 2791). Error code: !"

CAUSE: An MPE command is issued with an illegal argument.

ACTION: Check the command argument, and see if it is correct.

2792 MESSAGE: No such MPE command (SDERR 2792). Error code: !"

CAUSE: An unknown MPE command is issued.

ACTION: Make sure that the command issued can be executed through the command intrinsic.

2796 MESSAGE: Error occurred while forming the upshift table (SDERR 2796)

CAUSE: NLInfo NL intrinsic invocation failed.

ACTION: Notify the System Manager.

2797 MESSAGE: Entity! inaccessible or owned by other scope in other version (SDERR 2797)

CAUSE: The entity exists and you do not have read access to it.

ACTION: None necessary. SDDBD will use the OPTION parameter of the IMAGE command to determine what to do.

CAUSE: The entity exists in another version of the domain and is owned by a different scope.

ACTION: None necessary. SDDBD will use the OPTION parameter of the IMAGE command to determine what to do.

2799 MESSAGE: SDDBD version incompatible with that of SD intrinsics (SDERR 2799)

CAUSE: The program's version number is different from the intrinsic's version.

ACTION: Notify the Dictionary Administrator.

2800 MESSAGE: Program aborts due to too many errors (SDERR 2800)

CAUSE: The program detected the number of errors specified through the run-option.

ACTION: Check your input and see where the errors have occurred.

2801 MESSAGE: \$STDINX open error. Program is aborted (SDERR 2801)

CAUSE: An error occurred while opening \$STDINX.

ACTION: If the STDIN = clause was issued on the RUN command, see if the file equated to STDIN actually exists and if the file is not being exclusively accessed by some other user. If a serious problem is suspected, notify the System Manager.

2802 MESSAGE: Error while reading from input file. Program aborted (SDERR 2802)

CAUSE: A disc error occurred while reading from the program input file.

ACTION: Check the file system error message. Notify the System Manager if a serious problem is suspected.

2803 MESSAGE: Premature EOF reached on input file. Program aborted (SDERR 2803)

CAUSE: The EOF is found while reading on the input file.

ACTION: Edit SDIN file to correct the problem. Be sure to include the EXIT command before the EOF.

2804 MESSAGE: Error while writing to SDLOG. Program aborted (SDERR 2804)

CAUSE: A disc error occurred while writing to SDLOG.

ACTION: Check the file system error message given. See if the disc is full. If a serious problem is suspected, notify the System Manager.

2805 MESSAGE: Error while closing SDLOG. Program aborted (SDERR 2805)

CAUSE: A disc error occurred while closing SDLOG.

ACTION: Check the file system error message. Notify the System Manager if a serious disc error is suspected.

2806 MESSAGE: Error while reading from SDOUT. Program aborted (SDERR 2806)

CAUSE: A disc error occurred while reading from temporary SDOUT to output the report onto the \$STDLIST.

ACTION: Check the file system error message. Notify the System Manager if a serious disc error is suspected.

2807 MESSAGE: Error while writing to SDOUT. Program aborted (SDERR 2807)

CAUSE: A disc error occurred while writing to SDOUT.

ACTION: Check the file system error message. Notify the System Manager if a serious disc error is suspected.

2808 MESSAGE: Error while closing SDOUT. Program aborted (SDERR 2808)

CAUSE: A disc error occurred while closing SDOUT.

ACTION: Check the file system error message. Notify the System Manager if a serious disc error is suspected.

2809 MESSAGE: Error while opening temporary file SDTMP. Program aborted (SDERR 2809)

CAUSE: A disc error occurred while opening SDDBD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the System Manager if a serious error is suspected.

2810 MESSAGE: Error while reading from temporary file SDTMP. Program aborted (SDERR 2810)

CAUSE: A disc error occurred while reading from SDDBD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the System Manager if a serious error is suspected.

2811 MESSAGE: Error while writing to temporary file SDTMP. Program aborted (SDERR 2811)

CAUSE: A disc error occurred while writing to SDDBD temporary file, SDTMP.

ACTION: Check the file system error message. See if the disc is full. Notify the System Manager and the Dictionary Administrator if a serious problem is suspected.

2812 MESSAGE: Error while deleting temporary file SDTMP. Program aborted (SDERR 2812)

CAUSE: A disc error occurred while deleting SDDBD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the System Manager or the Dictionary Administrator if a serious error is suspected.

2813 MESSAGE: Error while opening temporary file SDREDO. Program aborted (SDERR 2813)

CAUSE: A disc error occurred while opening SDDBD temporary file, SDREDO.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2814 MESSAGE: Error while reading from temporary file SDREDO. Program aborted (SDERR 2814)

CAUSE: A disc error occurred while reading from temporary file SDREDO. SDDBD reads from SDREDO when the user enters E or [[CONTROL]] Y while in REDO.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2815 MESSAGE: Error while writing to temporary file SDREDO. Program aborted (SDERR 2815)

CAUSE: A disc error occurred while writing to SDDBD temporary file, SDREDO. SDDBD writes to SDREDO when the user issues the REDO command.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2816 MESSAGE: Error while deleting temporary file SDREDO. Program aborted (SDERR 2816)

CAUSE: A disc error occurred while deleting SDDBD temporary file, SDREDO.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2817 MESSAGE: Error while opening temporary file SDALIAS. Program aborted (SDERR 2817)

CAUSE: A disc error occurred while opening SDDBD temporary file, SDALIAS.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2818 MESSAGE: Error while writing to temporary file SDALIAS. Program aborted (SDERR 2818)

CAUSE: A disc error occurred while writing to SDDBD temporary file, SDALIAS.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2819 MESSAGE: Error while deleting temporary file SDALIAS. Program aborted (SDERR 2819)

CAUSE: A disc error occurred while deleting SDDBD temporary file, SDALIAS.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

2820 MESSAGE: Exceeded max number of tries for a valid SD password. Prog aborted (SDERR 2820)

CAUSE: A correct password was not entered at the SD password prompt in three tries. Because the program was running in batch mode, the program will be aborted.

ACTION: Edit your input file and re-stream the job.

2821 MESSAGE: Exceeded max number of tries for a valid DB password. Prog aborted (SDERR 2821)

CAUSE: A correct password was not entered at the DB password prompt in three tries. Because the program was running in batch mode, the program will be aborted.

ACTION: Edit your input file and re-stream the job.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) open error

CAUSE: SDCAT.PUB.SYS message catalog does not exist.

ACTION: Notify the Dictionary Administrator of the problem.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) access error

CAUSE: SDDBD could not access SDCAT.PUB.SYS.

ACTION: Check and see if SDCAT.PUB.SYS is being exclusively accessed by some other users. If a serious problem is suspected, notify the System Manager and Dictionary Administrator.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) illegally formatted

CAUSE: SDCAT.PUB.SYS is not in accordance with the NL message catalog format.

ACTION: Notify the Dictionary Administrator and the System Manager.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) internal error

CAUSE: SDCAT.PUB.SYS contains an internal error.

ACTION: Notify the Dictionary Administrator and the System Manager.

None MESSAGE: Message catalog access error: set = !, msg = !, err = !

CAUSE: An error occurred while attempting to access an SDDBD message. The message set number is sss, message line number is mmm, and the NL error code is eee.

ACTION: Check the message catalog (SDCAT.PUB.SYS) and see if the message is missing. If a serious problem is suspected, notify the System Manager.

None MESSAGE: Error while writing to \$STDLIST. Program is aborted

CAUSE: An error is detected while writing to \$STDLIST.

ACTION: If the STDLIST = clause is used at the RUN command, see if the file equated to \$STDLIST is filled up. If a serious problem is suspected, notify the System Manager.

B SDDBD Command Abbreviations

SDDBD accepts abbreviations of the command key words. The table underneath lists each SDDBD key word and the corresponding abbreviation.

Keyword	Abbreviation
DEFINE	DEF
DICTIONARY	DICT
SCOPE	S
PASSWORD	P
DOMAIN	D
VERSION	V
OPEN-MODE	OM
SHARED-UPDATE	SU
EXCLUSIVE-UPDATE	EU
NAME-MODE	NM
EXTERNAL	EXT
INTERNAL	INT
IMAGE	IM
DATABASE	DB
PASSWORD	P
OPEN-MODE	OM
BACK-REFERENCE	BR
ON	ON
OFF	OFF
SENSITIVITY	SEN
READ	R
MODIFY	M
PRIVATE	PV

Keyword	Abbreviation
COMPATIBILITY-LEVEL	CL
IMAGE-COMPATIBILITY	IC
COMPLETE	C
OPTION	OP
PROMPT	PR
SKIP	SK
REPLACE	RE
TERMINATE	T
NEW	N
QUIET	Q
VERBOSE	V
LOAD	L
HELP	Н
SHOW	SH
REST	R
REDO	REDO
COMMENT	COM
EXIT	Е

128 Appendix B

C SDDBC Error Messages

The following is a complete listing of SDDBC errors listed in order by error number. The list includes at least one possible cause of the error and a recommended action for each cause.

The list is divided into the following groups:

Message Number	Error Type
4001–4074	File System Messages
4075-4099	Initialization Messages
4100-4124	Driver/Validator Messages
4125-4199	Scanner/Parser Messages
4200-4209	Define Messages
4210-4224	Help Messages
4225-4249	Redo Messages
4250-4299	Image Messages
4300-4399	Create Messages
4400-4449	Miscellaneous Messages

Some System Dictionary error messages list a cause as "An unexpected subsystem error has occurred." If this is one of the causes for the message you have received, System Dictionary has probably encountered an error in TurboIMAGE/V, or SORT/V, or possibly detected a system error (MPE XL). In this case, you should report the problem to the Dictionary Administrator or System Manager, who should try to determine its cause and fix it if possible. If they need assistance in solving the problem, they should contact a Hewlett-Packard Response Center.

Some System Dictionary error messages list an action of "Refer to the associated error." In this case, an additional message related to a System Dictionary intrinsic, the MPE V system, the Pascal Run-Time Library, the Native Language Subsystem, or TurboIMAGE will be displayed. Refer to the documentation on these subsystems for additional information on the problem.

Some System Dictionary error messages list an action of "Notify the Dictionary Administrator." In this case, System Dictionary has encountered an error that requires the attention of the Dictionary Administrator or System Manager. If the DA or System Manager needs assistance in solving the problem, they should contact a Hewlett-Packard Response Center.

Some of these messages, as shown in this manual, include an exclamation point (!). This character serves as a substitution character, and stands for a parameter (such as a file name) which will be displayed as part of the actual message instead of the !.

File System Messages (4001-4074)

4001 **OMESSAGE: Dictionary cannot be opened (SDERR 4001)**

CAUSE: The dictionary could not be opened with the specified DEFINE command.

ACTION: Refer to the associated error and correct the indicated problem.

4002 OMESSAGE: Dictionary cannot be closed (SDERR 4002)

CAUSE: The dictionary could not be closed.

ACTION: Refer to the associated error and correct the indicated problem.

4003 OMESSAGE: Unable to open the \$STDLIST file (SDERR 4003)

CAUSE: The \$STDLIST file could not be opened.

ACTION: Refer to the associated error and correct the indicated problem.

4004 OMESSAGE: Unable to write the banner message (SDERR 4004)

CAUSE: The banner message could not be written to the \$STDLIST file.

ACTION: Refer to the associated error and correct the indicated problem.

4005 **OMESSAGE**: Unable to write the command prompt (SDERR 4005)

CAUSE: The command prompt could not be written to the \$STDLIST file.

ACTION: Refer to the associated error and correct the indicated problem.

4006 **OMESSAGE**: Unable to write the continue prompt (SDERR 4006)

CAUSE: The continue prompt could not be written to the \$STDLIST file.

ACTION: Refer to the associated error and correct the indicated problem.

4007 OMESSAGE: Unable to write a prompt message (SDERR 4007)

CAUSE: A prompt message could not be written to the \$STDLIST file.

ACTION: Refer to the associated error and correct the indicated problem.

4008 OMESSAGE: Unable to write to the \$STDLIST file (SDERR 4008)

CAUSE: An output line could not be written to the \$STDLIST file.

ACTION: Refer to the associated error and correct the indicated problem.

4009 **OMESSAGE: Unable to open the input file (SDERR 4009)**

CAUSE: The input file could not be opened.

ACTION: Refer to the associated error and correct the indicated problem.

4010 **OMESSAGE: Unable to close the input file (SDERR 4010)**

CAUSE: The input file could not be closed.

ACTION: Refer to the associated error and correct the indicated problem.

4011 OMESSAGE: Input file recsize too long. All lines trunc to 80 chars (SDWARN 4011)

CAUSE: The input file has a record size greater than 80 characters. All input lines are a maximum of 80 characters so all lines will be truncated to 80 characters.

ACTION: If the commands in the input file do not take up more than 80 characters per line, no action is needed. If the commands do take up more than 80 characters per line, all characters after 80 will be ignored so the expected action(s) will not occur. In this case, the commands must be placed on multiple lines so that no one line contains more than 80 characters (including blanks).

4012 **OMESSAGE**: Unable to read from the input file (SDERR 4012)

CAUSE: Could not read from the input file.

ACTION: Refer to the associated error and correct the indicated problem.

4013 OMESSAGE: The log file is full (SDWARN 4013)

CAUSE: Could not write to the log file because it is full. If the log file is a permanent file, the program will try to open the temporary file with the same name as the permanent log file to be the alternate log file. If the log file is a temporary file, logging will be disabled. In either case, processing will continue.

ACTION: No action is needed.

4014 **OMESSAGE: Unable to close the log file (SDERR 4014)**

CAUSE: The log file could not be closed while exiting the program.

ACTION: Refer to the associated error and correct the indicated problem for the next run.

4015 **OMESSAGE: Unable to open command file SDCMD (SDERR 4015)**

CAUSE: The temporary file SDCMD which is used as the command buffer could not be opened.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4017 OMESSAGE: Unable to write to command file SDCMD (SDERR 4017)

CAUSE: Could not write to the temporary file SDCMD which is used as the command buffer.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4018 **OMESSAGE: Command file SDCMD is full (SDERR 4018)**

CAUSE: Could not write to the temporary file SDCMD which is used as the command buffer because it is full. The command being entered has too many lines (> 32000).

ACTION: Correct the error causing > 32000 lines to be in the command and reissue the command.

4019 **OMESSAGE: Unable to open temporary file (SDERR 4019)**

CAUSE: A nameless temporary file used by the program could not be opened.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4020 **OMESSAGE**: Unable to rewind temporary file ! (SDERR 4020)

CAUSE: Could not reset the file pointer of the specified temporary file to the beginning of the file.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4021 OMESSAGE: Unable to reposition name file to record number! (SDERR 4021)

CAUSE: Could not reset the file pointer of the name file to the specified record number.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4022 **OMESSAGE**: Unable to read from temporary file! (SDERR 4022)

CAUSE: Could not read from the specified temporary file.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4023 **OMESSAGE: Temporary file! is full (SDERR 4023)**

CAUSE: Could not write to the specified temporary file because it is full.

ACTION: Contact the DA. Internal Error.

4024 OMESSAGE: Unable to write to temporary file! (SDERR 4024)

CAUSE: Could not write to the specified temporary file.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4025 **OMESSAGE**: Unexpected EOF while reading from temp file! (SDERR 4025)

CAUSE: Encountered an unexpected EOF while reading from the specified temporary file.

ACTION: Contact the DA. Internal Error.

4026 **OMESSAGE: The schema file is full (SDERR 4026)**

CAUSE: Could not write to the schema file because it is full.

ACTION: Contact the DA. Internal Error.

4027 OMESSAGE: Unable to write to schema file (SDERR 4027)

CAUSE: Could not write to the schema file.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4028 OMESSAGE: Unable to purge schema file (SDERR 4028)

CAUSE: The schema file could not be purged.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4029 **OMESSAGE: Unable to close schema file (SDERR 4029)**

CAUSE: The schema file could not be closed.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4030 **OMESSAGE**: Unable to retrieve an MPE file error message (SDERR 4030)

CAUSE: A file system error occurred, but the associated message could not be retrieved through the MPE CAUSE file system intrinsic, FErrMsg.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4031 **OMESSAGE: Unable to open the \$STDINX file (SDERR 4031)**

CAUSE: Unable to open the \$STDINX file to read the prompted scope password.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4032 OMESSAGE: Unable to close the \$STDINX file (SDERR 4032)

CAUSE: The \$STDINX file could not be closed

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4033 OMESSAGE: Unable to retrieve information about the \$STDINX file (SDERR 4033)

CAUSE: Unable to retrieve information about the \$STDINX file through the FGetInfo Intrinsic.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4034 OMESSAGE: Unable to read from the \$STDINX file (SDERR 4034)

CAUSE: Unable to read from \$STDINX when being prompted for the scope password.

ACTION: Contact the DS (remember to get the associated file error). Internal Error.

4035 OMESSAGE: Unable to retrieve information about the \$STDLIST file (SDERR 4035)

CAUSE: Unable to retrieve information about the \$STDLIST file through the FGetInfo Intrinsic.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4036 **OMESSAGE**: Unable to retrieve information about the input file (SDERR 4036)

CAUSE: Unable to retrieve information about the input file through the FGetInfo Intrinsic.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4037 **OMESSAGE**: Unable to set the End-Of-File marker in the temporary file (SDERR 4037)

CAUSE: Unable to set the End-Of-File marker in the temporary file through the FControl Intrinsic

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

Initialization Messages (4075–4099)

4075 OMESSAGE: Unable to find the Banner message in the catalog (SDERR 4075)

CAUSE: The banner message could not be retrieved from the message catalog.

ACTION: Contact the DA to get a new copy of the catalog with the banner message in it.

4076 **OMESSAGE**: The number is not a 16 bit integer (SDERR 4076)

CAUSE: The indicated number is greater than 32767.

ACTION: Change the number so it is less than or equal to 32767.

CAUSE: The indicated number is less than -32768.

ACTION: Change the number so it is greater than or equal to -32768.

4077 **OMESSAGE: Invalid character encountered (SDERR 4077)**

CAUSE: A character not allowed in a number was found.

ACTION: Remove the invalid character from the number.

4078 **OMESSAGE**: Invalid language number specified in the catalog (SDERR 4078)

CAUSE: The language number specified in the message catalog is invalid.

ACTION: Contact the DA to get a new copy of the catalog with a valid language number.

4079 **OMESSAGE**: Abbreviation for command word! is missing (SDERR 4079)

CAUSE: The abbreviation for the command word at the specified location in the message catalog is missing.

ACTION: Contact the DA to get a new copy of the catalog with the missing abbreviation present.

4080 OMESSAGE: Command word with abbreviation! is missing (SDERR 4080)

CAUSE: The command word at the specified location in the message catalog is missing.

ACTION: Contact the DA to get a new copy of the catalog with the missing command word present.

4081 **OMESSAGE: Wild card character is missing (SDERR 4081)**

CAUSE: A wild card character is missing from the message catalog.

ACTION: Contact the DA to get a new copy of the catalog with the missing wild card character present.

4082 OMESSAGE: Language number not configured onto the system (SDERR 4082)

CAUSE: The language number specified in the message catalog is not configured onto the system.

ACTION: Contact the DA to configure the desired language number onto the system or change the language number in the message catalog to one which is already configured on the system.

4083 **OMESSAGE: SDDBC and Dictionary Intrinsics versions not compatible (SDERR 4083)**

 ${\tt CAUSE:} \ \ \textbf{The version of the SDDBC program and the System Dictionary intrinsics are not compatible.}$

ACTION: Contact the DA to get a new copy of the SDDBC program that is compatible with the version of the intrinsics that is on the system.

Driver/Validator Messages (4100-4124)

4100 OMESSAGE: Exceeded maximum number of allowed errors (SDWARN 4100)

CAUSE: The program encountered the number of errors specified as the maximum in the PARM option.

ACTION: Correct the error(s) found and either rerun or finish running the job.

4101 **OMESSAGE: Logging has been disabled (SDWARN 4101)**

CAUSE: Logging has been disabled because the user does not want the program to overwrite an existing log file.

ACTION: Do nothing and no logging will take place or exit the program and specify a new file or a file that can be overwritten as the log file.

CAUSE: Logging has been disabled because the current log file has filled up and an alternate log file was not available.

ACTION: Do nothing and no logging will take place or exit the program and specify a new file or a file that can be overwritten as the log file.

CAUSE: Logging has been disabled because unable to write to the log file.

ACTION: Do nothing and no logging will take place or exit the program, refer to the associated file error and correct the indicated problem.

4102 **OMESSAGE**: Logging proceeding onto a temporary log file (SDWARN 4102)

CAUSE: The permanent log file is full. Logging has been redirected to a temporary log file with the same name as the permanent log file.

ACTION: No action is needed.

4103 OMESSAGE: SDLOG is a temporary file. Save if needed (SDWARN 4103)

CAUSE: The log file was saved as a temporary file.

ACTION: If the log file is not needed, do nothing and it will remain a temporary file. If the log file is needed, save it.

4104 OMESSAGE: Expected End-Of-File NOT found in input file (SDERR 4104)

CAUSE: Unexpected input lines found in the input file after an EXIT command.

ACTION: Edit the input lines to remove the extra lines.

4105 **OMESSAGE**: Hit End-Of-File of input file before executed an EXIT (SDERR 4105)

CAUSE: Hit the end of the input file without finding an EXIT command.

ACTION: Edit the input file to place an EXIT command at the end.

4106 **OMESSAGE: Invalid command (SDERR 4106)**

CAUSE: The command entered is not recognized by the program.

ACTION: Issue a command that is recognized by the program. Use HELP for a list of valid commands.

4107 OMESSAGE: Command not valid when the dictionary is not open (SDERR 4107)

CAUSE: The command entered is not allowed before the dictionary is opened.

 ${\tt ACTION:} \ \textbf{Issue a command that is valid before the dictionary is opened or open the dictionary and then issue the command.}$

Scanner/Parser Messages (4125-4199)

4125 OMESSAGE: Missing close quote on a character string (SDERR 4125)

CAUSE: There is no closing quote on the character string specified.

ACTION: Insert a closing quote in the specified location.

4126 OMESSAGE: Invalid character found (SDERR 4126)

CAUSE: A character not allowed in the local language was found.

ACTION: Remove the indicated character from the command string.

4127 OMESSAGE: Name is too long (SDERR 4127)

CAUSE: The indicated name is greater than 32 characters.

ACTION: Change the name so it is less than or equal to 32 characters.

4128 OMESSAGE: Invalid character for an MPE file name (SDERR 4128)

CAUSE: The indicated character is not allowed in an MPE filename.

ACTION: Remove the invalid character from the filename.

4129 OMESSAGE: Text skipped from last error to here (SDWARN 4129)

CAUSE: Some of the input string was not processed in order to recover from the preceding error.

ACTION: No action is needed.

4130 OMESSAGE: Unexpected token for a Value (SDERR 4130)

CAUSE: A keyword or option value was expected in the indicated position.

ACTION: Insert missing value or change existing unexpected token to a valid value.

4131 **OMESSAGE**: Unexpected token: possible missing semicolon or period (SDERR 4131)

CAUSE: The token indicated is not allowed in this position.

ACTION: Review the command syntax and correct the entered command accordingly.

CAUSE: A semicolon is expected before the indicated token to separate two keyword clauses.

ACTION: Insert a semicolon before the indicated token.

CAUSE: A comma is expected before the indicated token to separate the option value clause from the next option value clause.

ACTION: Insert a comma before the indicated token.

CAUSE: The indicated character string contains characters not allowed in a System Dictionary name and so must be placed within a pair of quotes.

ACTION: Place a pair of quotes around the indicated character string.

CAUSE: There is a token missing at the indicated position.

ACTION: Review the command syntax and insert the token at the indicated position.

4132 **OMESSAGE: Characters found after the end of the command (SDERR 4132)**

CAUSE: Characters were found after the period ending the command.

ACTION: Remove the extra characters that follow the period from the command.

4133 OMESSAGE: A period was expected here (SDERR 4133)

CAUSE: No period was found to end the command.

ACTION: Insert a period in the indicated location.

4134 OMESSAGE: Equal expected (SDERR 4134)

CAUSE: An equal sign is expected at the indicated location.

ACTION: Insert an equal sign in the indicated location.

4135 OMESSAGE: Missing close parenthesis (SDERR 4135)

CAUSE: The closing parenthesis for the CONTROL list is missing.

ACTION: Insert a closing parenthesis in the indicated location.

4136 OMESSAGE: Bad character(s) after close parenthesis (SDERR 4136)

CAUSE: The character after the closing parenthesis must be either a period or a semicolon.

ACTION: Check the command syntax and either remove the unexpected characters or insert the missing expected character.

4137 **OMESSAGE: Expected a filename (SDERR 4137)**

CAUSE: An MPE filename was expected here.

ACTION: Insert a valid filename in the specified location.

4138 **OMESSAGE: Invalid name (SDERR 4138)**

CAUSE: The specified name value is invalid.

ACTION: Correct the name value so it is valid.

4139 **OMESSAGE: Invalid name mode (SDERR 4139)**

CAUSE: The specified name-mode value is invalid.

ACTION: Correct the name-mode value so it is valid.

4140 **OMESSAGE**: Invalid open mode (SDERR 4140)

CAUSE: The specified open-mode value is invalid.

ACTION: Correct the open-mode value so it is valid.

4141 **OMESSAGE: Invalid conflict (SDERR 4141)**

CAUSE: The specified conflict value is invalid

ACTION: Correct the conflict value so it is valid.

4142 **OMESSAGE: Invalid output destination (SDERR 4142)**

CAUSE: The specified output destination value is invalid.

ACTION: Correct the output destination value so it is valid.

4143 OMESSAGE: Invalid version status (SDERR 4143)

CAUSE: The specified version status value is invalid.

ACTION: Correct the version status value so it is valid.

4144 **OMESSAGE: Unexpected guoted value (SDERR 4144)**

CAUSE: A quoted value is not allowed at the indicated position.

ACTION: Specify a value for the indicated position that is not a quoted string.

4145 **OMESSAGE: Invalid keyword (SDERR 4145)**

CAUSE: The indicated keyword is not one of the recognized keywords in the program.

ACTION: Change the keyword to one recognized by the program. Use the HELP command to list valid keywords for the command.

4146 OMESSAGE: Invalid keyword for this command (SDERR 4146)

CAUSE: The indicated keyword is not allowed in the current command.

ACTION: Change the keyword to one which is valid for the command. Use the HELP command to list valid keywords for the command.

4147 **OMESSAGE**: This keyword has already been specified in the command (SDERR 4147)

CAUSE: The indicated keyword has already been specified in the command.

ACTION: Either combine the two clauses into one clause for the command or remove the indicated keyword.

4148 OMESSAGE: A value is expected (SDERR 4148)

CAUSE: A value is expected in the indicated position.

ACTION: Enter an appropriate value at the indicated position.

4149 **OMESSAGE: Expected a left parenthesis (SDERR 4149)**

CAUSE: Expected an opening left parenthesis for the complex value to be entered.

ACTION: Insert parentheses around the value for this keyword clause.

4150 OMESSAGE: There are characters after the REDO command (SDWARN 4150)

CAUSE: There are unexpected characters on the line after the REDO command.

ACTION: No action is needed since the characters will be ignored. The next time a REDO is issued, do not enter extra characters.

4151 **OMESSAGE: Expected option or option=value (SDERR 4151)**

CAUSE: Expected either an option or an option to be assigned a value (value can be blank).

ACTION: If there are no options or option-value pairs, remove the CONTROL keyword. Otherwise, remove the extra comma at the end of the clause.

4152 **OMESSAGE: Invalid control (SDERR 4152)**

 ${\tt CAUSE:} \ \ \textbf{The specified control value is invalid}.$

ACTION: Correct the control value so it is valid.

4153 **OMESSAGE: Invalid comment (SDERR 4153)**

CAUSE: The specified comment value is invalid.

ACTION: Correct the comment value so it is valid.

Define Messages (4200-4209)

4200 **0MESSAGE: Both VERSION and STATUS were specified. STATUS is ignored (SDWARN 4200)**

CAUSE: Both the VERSION and STATUS keywords cannot be specified in the same command. Either VERSION for a specific version, or STATUS for the last version of the given status, should be used.

ACTION: Do nothing and the version will be used and the status ignored. The next time the dictionary is opened, specify either the specific version (VERSION) or a specific status (STATUS), but not both.

4201 **OMESSAGE**: Quoted passwords cannot extend to multiple lines (SDERR 4201)

CAUSE: If the password is entered with quotes, it must be entered on a single line.

ACTION: Specify the password so the opening and closing quotes are on the same line.

4202 OMESSAGE: Invalid scope password. Remember case counts (SDWARN 4202)

CAUSE: An invalid password has been entered in response to the scope password. Remember that System Dictionary distinguishes between uppercase and lowercase characters in a scope password.

ACTION: Specify the correct password for the scope.

4203 **OMESSAGE**: Exceeded maximum tries for a valid scope password (SDERR 4203)

CAUSE: Unable to open the dictionary because the valid scope password was not specified within 3 tries.

ACTION: Reenter the Define command and specify the correct password for the scope.

4204 OMESSAGE: Unexpected End-Of-File on \$STDINX (SDERR 4204)

CAUSE: Hit the end of the file on \$STDINX when trying to read the scope password.

ACTION: Contact the DA. Internal Error.

4205 **OMESSAGE:** Unable to turn the echo facility off (SDERR 4205)

CAUSE: Unable to turn the echo facility off through the FControl Intrinsic when prompting for the scope password

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4206 **OMESSAGE**: Unable to turn the echo facility on (SDERR 4206)

CAUSE: Unable to turn the echo facility on through the FControl Intrinsic after prompting for the scope password.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

Help Messages (4210-4224)

4210 OMESSAGE: Expected a command or a period (SDERR 4210)

CAUSE: The characters after the HELP command must be either a command or a period.

 ${\tt ACTION:} \ Remove \ the \ unexpected \ characters \ and \ replace \ them \ with \ a \ command, \ a \ period \ or \ blanks.$

4211 **OMESSAGE: Expected a period (SDERR 4211)**

CAUSE: A period was expected in the indicated position.

ACTION: Remove the unexpected characters and replace them with a period or blanks.

Redo Messages (4225-4249)

4225 OMESSAGE: Cannot REDO a REDO command (SDERR 4225)

CAUSE: The REDO command cannot be used to change a command into a REDO command.

ACTION: Do not change the command being edited into REDO.

4226 **OMESSAGE**: REDO only allowed when input is interactive (SDERR 4226)

CAUSE: The REDO command is only allowed when the program is run interactively. Input can be coming from \$STDIN or from a redirected \$STDIN.

ACTION: Enter the entire command in the command file or batch job instead of trying to use REDO.

4227 OMESSAGE: No command has been entered to REDO (SDERR 4227)

CAUSE: No command has been entered yet.

ACTION: Enter a command other than REDO. REDO can then be used to reissue or correct the command entered.

4228 **OMESSAGE**: Must break the line before insert to prevent line overflow (SDERR 4228)

CAUSE: The existing line and the string to be inserted will not fit on a single input line.

ACTION: Break the existing line so the new line and the string to be inserted will fit on a single input line.

4229 OMESSAGE: Bad command after delete (ignored) (SDERR 4229)

CAUSE: Unexpected characters were found on the line after the DELETE command.

ACTION: No action is needed since the characters will be ignored. The next time the DELETE command is issued, do not put unexpected characters on the line. DELETE can consist of a continuous string of one or more D's or a single D, blanks, and a single D. The only other command allowed on the same line as a DELETE is an INSERT. Insert is allowed after one of the two DELETE strings.

4230 OMESSAGE: The entire command has been deleted (SDWARN 4230)

CAUSE: The entire command in the redo buffer has been deleted.

ACTION: No action is needed. Since the entire command was deleted, the REDO system returns to the command mode. The original command can be reedited or a new command can be issued.

4231 OMESSAGE: Unexpected characters after REDO command (SDERR 4231)

CAUSE: There are unexpected characters on the line after a REDO command. Except for the DELETE/INSERT combination, only a single REDO command can be entered.

ACTION: Reissue the command with only a single command on the line.

4232 **OMESSAGE:** + and -NOT allowed in a number (SDERR 4232)

CAUSE: The numbers used to move within the redo buffer cannot involve a + or -.

ACTION: Remove the + or -from the number specifying how far to move and simply use the appropriate command to specify direction (+ to move forward and -to move backward).

Image Messages (4250–4299)

4250 OMESSAGE: Image database name truncated to 6 characters (SDWARN 4250)

CAUSE: The indicated name is too long to be an IMAGE database name. It was truncated to 6 characters.

ACTION: No action is needed.

4251 **OMESSAGE: Exceeded the maximum size for a control list (SDERR 4251)**

CAUSE: The inputted control list is longer than 80 characters. 80 characters is the maximum size for a control list in this program.

ACTION: Enter a control list which is less than or equal to 80 characters.

4252 **OMESSAGE**: Unable to close database when checking if valid database (SDERR 4252)

CAUSE: The database specified could not be closed while checking to see if the database is defined in the dictionary, but does not exist in the logon group.

ACTION: Contact the DA (remember to get the associated Image error). Internal Error.

4253 OMESSAGE: Database is not defined in the dictionary (SDERR 4253)

CAUSE: The database specified has not yet been defined in the dictionary.

ACTION: Use the User Interface or the Database Loader utility to define the database in the dictionary.

4254 OMESSAGE: Database check failed (SDERR 4254)

CAUSE: The check to see if the specified valid database has failed.

ACTION: Refer to the associated file or IMAGE error and correct the indicated problem.

4255 **OMESSAGE: Unable to close the old schema file (SDERR 4255)**

CAUSE: The old schema file could not be closed.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4256 OMESSAGE: Unable to close the new schema file (SDERR 4256)

CAUSE: The new schema file could not be closed.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4257 **OMESSAGE**: Unable to create the new schema file (SDERR 4257)

CAUSE: The new schema file could not be created.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4258 **OMESSAGE**: Unable to reopen the old schema file (SDERR 4258)

CAUSE: The new schema file cannot be accessed and the old schema file cannot be reopened.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4259 **OMESSAGE: Unable to close the schema list file (SDERR 4259)**

CAUSE: The schema list file could not be closed.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4260 OMESSAGE: Unable to create the schema list file (SDERR 4260)

CAUSE: The schema list file could not be created.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4261 **OMESSAGE: Unable to purge the schema file (SDERR 4261)**

CAUSE: The schema file could not be purged.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4262 **OMESSAGE**: Unable to purge the schema list file (SDERR 4262)

CAUSE: The schema list file could not be purged.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4263 OMESSAGE: Database already exists (SDERR 4263)

CAUSE: The specified database already exists in the logon group.

ACTION: If only the schema file is desired, specify the NOROOT option in the CONTROL list. If a new database is desired, purge the existing database and rerun the program.

4264 OMESSAGE: Image database alias name truncated to 6 characters (SDWARN 4264)

CAUSE: The indicated alias name is too long to be an IMAGE database name. It was truncated to 6 characters.

ACTION: No action is needed.

4265 OMESSAGE: Unable to purge the old schema file (SDERR 4265)

CAUSE: The old schema file could not be purged.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4266 0MESSAGE: Invalid Image database type defined. (SDWARN 4266)

CAUSE: The database type for the specified database was not one of the valid values: IMAGE, or TURBO.

ACTION: Before the next run, use the User Interface to modify the database type so that the specified database is one of the valid values.

4267 **OMESSAGE**: Unable to retrieve information about schema file (SDERR 4267)

CAUSE: Unable to retrieve information about the schema file through the FGetInfo intrinsic.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4268 OMESSAGE: Unable to retrieve information about schema list file (SDERR 4268)

CAUSE: Unable to retrieve information about the schema list file through the FGetInfo intrinsic.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4269 **OMESSAGE**: Unable to open schema file to retrieve the actual file name (SDERR 4269)

CAUSE: The schema file could not be opened to retrieve the actual file name.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4270 OMESSAGE: Unable to open list file to retrieve the actual file name (SDERR 4270)

CAUSE: The schema list file could not be opened to retrieve the actual file name.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4271 **OMESSAGE**: Unable to close schema after retrieving actual file name (SDERR 4271)

CAUSE: The schema file could not be closed after retrieving the actual file name.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4272 **OMESSAGE**: Unable to close list file after retrieving actual file name (SDERR 4272)

CAUSE: The schema list file could not be closed after retrieving the actual file name.

ACTION: Contact the DA (remember to get the associated file error). Internal Error.

4273 OMESSAGE: Schema and schema list files cannot be the same (SDERR 4273)

CAUSE: The textfile (schema file) and the listfile (schema list file) for DBSCHEMA cannot be the same.

ACTION: Specify a schema and a schema list file that are two different files.

Create Messages (4300-4399)

4300 OMESSAGE: Database to be created is not defined (SDERR 4300)

CAUSE: The database to be created has not yet been defined by the IMAGE command.

ACTION: Use the IMAGE command to define the database to be created.

4301 OMESSAGE: Cannot do file equate for DBSTEXT (SDERR 4301)

CAUSE: Unable to issue the file equate for the textfile for DBSCHEMA through the Command intrinsic.

ACTION: Contact the DA (remember to get the associated error). Internal Error.

4302 OMESSAGE: Cannot do file equate for DBSLIST (SDERR 4302)

CAUSE: Unable to issue the file equate for the listfile for DBSCHEMA through the Command intrinsic.

ACTION: Contact the DA (remember to get the associated error). Internal Error.

4303 **OMESSAGE**: Cannot find image-database contains image-class relationship (SDERR 4303)

CAUSE: Unable to retrieve the user class numbers for the database.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4304 **OMESSAGE: Cannot get image-class entity (SDERR 4304)**

CAUSE: Unable to retrieve information about the user class number.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4305 **OMESSAGE**: Cannot find image-database contains image-dataset relationship (SDERR 4305)

CAUSE: Unable to retrieve information about specified image-database and image-dataset relationships

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4306 **OMESSAGE**: Cannot get image-database contains image-dataset relationship (SDERR 4306)

CAUSE: Unable to retrieve information about specified image-database and image-dataset relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4307 **OMESSAGE**: Cannot get image-database contains image-class relationship (SDERR 4307)

CAUSE: Unable to retrieve information about the specified image-database and image-class relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4308 OMESSAGE: Cannot get image-dataset entity (SDERR 4308)

CAUSE: Unable to retrieve information about image-dataset entity

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4309 OMESSAGE: Data set type of dataset! is not IMAGE data set type (SDERR 4309)

CAUSE: Attribute image-dataset-type value of the data set is not one of AUTOMATIC, MANUAL or DETAIL.

ACTION: Correct the attribute value of the data set.and change its attribute edit values to conform with HP definitions.

4310 OMESSAGE: Cannot get image-dataset primary name (SDERR 4310)

CAUSE: Unable to retrieve the primary name of the data set.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4311 **OMESSAGE:** Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

CAUSE: Cannot retrieve information about image-dataset, element, element, image-dataset, image-database chain relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4312 **OMESSAGE: Cannot get image chain relationship (SDERR 4312)**

CAUSE: Cannot retrieve information about image-dataset, element, element, image-dataset, image-database chain relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4313 **OMESSAGE: Number of search items exceeded 16 for detail data set! (SDERR 4313)**

CAUSE: Too many search items exist for detail data set through IMAGE chain relationships.

ACTION: Use the User Interface to correct the IMAGE chain relationships.

4314 **OMESSAGE**: Cannot find image-dataset contains record relationship (SDERR 4314)

CAUSE: Unable to retrieve information about image-dataset contains record relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4315 OMESSAGE: Cannot get image-dataset contains record relationship (SDERR 4315)

CAUSE: Unable to retrieve information about image-dataset contains record relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4316 **OMESSAGE**: First record related to data set ! used. Primary not exist (SDWARN 4316)

CAUSE: The data set is not related to a record with primary-flag attribute value is true. First record retrieved was used.

ACTION: No action is needed.

4317 OMESSAGE: Cannot get variable length attribute for entity (SDERR 4317)

CAUSE: Cannot retrieve description attribute value of entity.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4318 OMESSAGE: Cannot get variable length attribute for relationship (SDERR 4318)

CAUSE: Cannot retrieve description attribute value of relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4319 OMESSAGE: Cannot find record contains element relationship (SDERR 4319)

CAUSE: Unable to retrieve information about a record contains element relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4320 OMESSAGE: Cannot get record contains element relationship (SDERR 4320)

CAUSE: Unable to retrieve information about a record contains element relationship.

 ${\tt ACTION:} \ \ \textbf{Contact the DA (remember to get the associated SD intrinsic error)}. \ \ \textbf{Internal Error.}$

4321 **OMESSAGE**: Data set ! has exceeded max. number of items allowed by IMAGE (SDERR 4321)

CAUSE: A data set can only have 99 (255 for TurboIMAGE) items maximum.

ACTION: Check your database definition.

4322 **OMESSAGE: Cannot get element entity (SDERR 4322)**

CAUSE: Unable to retrieve information about an element entity.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4323 OMESSAGE: Cannot get element primary name (SDERR 4323)

CAUSE: Unable to retrieve the primary name of the element.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4324 OMESSAGE: Cannot get element type attribute of element! (SDERR 4324)

CAUSE: Unable to retrieve element-type attribute value of element entity.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4325 OMESSAGE: Cannot find entity contains image class relationship (SDERR 4325)

CAUSE: Unable to retrieve information about IMAGE dataset or element contains image-class relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4326 OMESSAGE: Cannot get entity contains image class relationship (SDERR 4326)

CAUSE: Unable to retrieve information about IMAGE dataset or element contains image-class relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4327 OMESSAGE: Cannot find data set key element relationship (SDERR 4327)

CAUSE: Unable to retrieve information about image-dataset key element relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4328 OMESSAGE: Key data item missing for manual master set! (SDERR 4328)

CAUSE: A manual data set must have a relationship of type image-dataset key element to indicate its key data item.

ACTION: Use the User Interface or other means to establish the dataset keyed to an element.

4329 OMESSAGE: Total number of items defined in database exceeded ! (SDERR 4329)

CAUSE: The elements related to records which are related to data sets, which in turn are related to the specified database, exceeded IMAGE allowable limit. The limit is 255 for IMAGE/V and 1023 for TurboIMAGE.

ACTION: Check your database definition integrity.

4330 **OMESSAGE**: Image alias does not exist for element !. Primary name used (SDWARN 4330)

CAUSE: The specified element does not have an alias. Therefore, the primary name was used.

ACTION: No action is needed.

4331 **OMESSAGE: Image alias does not exist for data set !. Primary name used (SDWARN 4331)**

CAUSE: The specified data set does not have an alias. Therefore, the primary name was used.

ACTION: No action is needed.

4332 **OMESSAGE**: Element type of element! inconsistent at relationships level (SDWARN 4332)

CAUSE: Element type attribute values defined for various records related to the same element are not the same and back-reference-flag value is false in at least one relationship.

ACTION: No action is needed. SDDBC will use the element-type value from the element entity.

4333 OMESSAGE: Element name! truncated to 16 bytes (SDWARN 4333)

CAUSE: The specified element name was truncated to 16 characters.

ACTION: No action is needed.

4334 OMESSAGE: First primary record related to data set ! used (SDWARN 4334)

CAUSE: There was more than one record related to the data set with a primary-flag attribute value of true. The first record retrieved with such value is used.

ACTION: No action is needed.

4335 **OMESSAGE: Schema file is not opened (SDERR 4335)**

CAUSE: A schema file has not been specified yet.

ACTION: Use the IMAGE command to specify a schema file before trying to create the database.

4336 **OMESSAGE**: Total number of passwords defined for database exceeded **63** (SDERR 4336)

CAUSE: The number of relationships of the specified image-database contains image-class exceeded IMAGE allowable limit.

ACTION: Use the User Interface or other means to remove some password definition for the database.

4337 **OMESSAGE**: Element type of element ! not conform with IMAGE item type (SDERR 4337)

CAUSE: Element-type attribute value is not one of D,I,J,K,R,U,X,Z or P. This attribute value is from the record contains element relationship if the back-reference-flag attribute value is false or it is from the element entity if the back-reference-flag attribute value is true.

ACTION: Use the User Interface or other means to correct the element-type attribute value. Also change the edit value for this attribute to conform with HP standard.

4338 OMESSAGE: Sort error. Number is ! (SDERR 4338)

CAUSE: Unable to sort the element names.

ACTION: Contact the DA (remember to get the associated error). Internal Error.

4339 OMESSAGE: Sort end error. (SDERR 4339)

CAUSE: Unable to end the element name sort.

ACTION: Contact the DA. Internal Error.

4340 **OMESSAGE**: Total number of data sets defined for database exceeded! (SDERR 4340)

CAUSE: The number of relationships between the specified IMAGE database and IMAGE data sets exceeded IMAGE allowable limit. The limit is 99 for IMAGE/V and 199 for TurboIMAGE.

ACTION: Check the integrity of your database definition in the dictionary.

4341 **OMESSAGE: Substituted with! (SDWARN 4341)**

CAUSE: Data set or data item name conflicts with another data set name due to truncation. SDDBC substitutes it with a unique name.

ACTION: No action is needed.

4342 **OMESSAGE**: Alias name of element ! conflicts. Primary name used (SDWARN 4342)

CAUSE: The alias name of the specified element conflicts with another element name. Therefore, the primary name of the element is used.

ACTION: No action is needed.

4343 **OMESSAGE**: Alias name of data set! conflicts. Primary name used (SDWARN 4343)

CAUSE: The alias name of the specified data set conflicts with another data set name. Therefore, the primary name of the data set is used.

ACTION: No action is needed.

4344 OMESSAGE: Data set name! truncated to 16 characters (SDWARN 4344)

CAUSE: The specified data set name was truncated because it exceeded 16 characters.

ACTION: No action is needed.

4345 **OMESSAGE: Name cannot be blank (SDERR 4345)**

CAUSE: A blank name is not acceptable when prompted for a new name as a result of conflict.

ACTION: Enter a non blank name in response to the prompt.

4346 **OMESSAGE: Name truncated to 16 characters (SDWARN 4346)**

CAUSE: A name was truncated because it exceeded 16 characters.

ACTION: No action is needed.

4347 **OMESSAGE:** Cannot find image data set uses device class relationship (SDERR 4347)

CAUSE: Unable to retrieve information about IMAGE data set uses device class relationship.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error

4348 OMESSAGE: First device class related to data set! used (SDWARN 4348)

CAUSE: There was more than one device class related to the specified data set so the first one retrieved was used.

ACTION: No action is needed.

4349 OMESSAGE: Element name conflicts due to truncation (SDWARN 4349)

CAUSE: After truncation, an element conflicts with another element.

ACTION: No action is needed.

4350 OMESSAGE: Data set name conflicts due to truncation (SDWARN 4350)

CAUSE: After truncation, the data set conflicts with another data set.

ACTION: No action is needed.

4351 **OMESSAGE**: Element name! conflicts due to truncation"

CAUSE: After truncation, the specified element conflicts with another element.

ACTION: No action is needed.

4352 OMESSAGE: Data set name! conflicts due to truncation"

CAUSE: After truncation, the specified data set conflicts with another data set.

ACTION: No action is needed.

4353 **OMESSAGE: Sub item count of element! too big. Truncated to 3 digits (SDERR 4353)**

CAUSE: The count attribute value was greater than 3 digits. Only the last three digits were used.

ACTION: Use the User Interface or other means to correct the count attribute value for the element.

4354 **OMESSAGE: Sub item length of element! too big. Truncated to 3 digits (SDERR 4354)**

CAUSE: The sub item length of the element was greater than 3 digits. Only the last three digits were used.

ACTION: Use the User Interface or other means to correct the byte length attribute value for the element. See manual on how sub item length is computed based on the element type.

4355 **OMESSAGE: Element name! already used (SDERR 4355)**

CAUSE: Another element in the database already uses the specified name.

ACTION: Enter a name that is unique among all the elements in the database.

4356 OMESSAGE: Data set name! already used (SDERR 4356)

CAUSE: Another data set in the database already uses the specified name.

ACTION: Enter a name that is unique among all the data sets in the database.

4357 OMESSAGE: Cannot get alias name of device class! (SDERR 4357)

CAUSE: Attempt to get alias name of device class failed.

ACTION: Contact the DA (remember to get the associated SD intrinsic error). Internal Error.

4358 OMESSAGE: No RECORD is related to data set! (SDERR 4358)

CAUSE: At least one record must be related to an image-dataset in order to establish its record layout.

ACTION: Use the User Interface or other means to create relationship of the above data set and a record, and check the integrity of your data base definition.

4359 OMESSAGE: No data set is related to the database (SDERR 4359)

CAUSE: If no data set is related to the database, no schema can be generated.

ACTION: Use SDDBD or other means to load a complete database definition into System Dictionary.

4360 **OMESSAGE**: Element ! contains an image class with undefined access value (SDWARN 4360)

CAUSE: Attribute access value can only be R for read access and W for write access.

ACTION: Use the User Interface to correct the access attribute value of the above element contains image-class relationship.

4361 **OMESSAGE**: Data set! contains an image class with undefined access value (SDWARN 4361)

CAUSE: Attribute access value can only be R for read access and W for write access.

ACTION: Use the User Interface to correct the access attribute value of the above relationship-type image-dataset contains image-class relationship.

4362 OMESSAGE: Element ! has exceeded number of read class list (SDERR 4362)

CAUSE: The specified element has more than 63 read classes.

ACTION: Use the User Interface to delete some of the read classes from the specified element.

4363 OMESSAGE: Element! has exceeded number of write class list (SDERR 4363)

CAUSE: The specified element has more than 63 write classes.

ACTION: Use the User Interface to delete some of the write classes from the specified element.

4364 OMESSAGE: Data set! has exceeded number of read class list (SDERR 4364)

CAUSE: The specified data set has more than 63 read classes.

ACTION: Use the User Interface to delete some of the read classes from the specified data set.

4365 OMESSAGE: Data set! has exceeded number of write class list (SDERR 4365)

CAUSE: The specified data set has more than 63 write classes.

ACTION: Use the User Interface to delete some of the write classes from the specified data set.

4366 OMESSAGE: Image alias not exists for device class !. Primary name used (SDWARN 4366)

CAUSE: The specified device class does not have an IMAGE alias. Therefore its primary name was used.

ACTION: No action is needed.

4367 OMESSAGE: First key element related to detail set ! used (SDWARN 4367)

CAUSE: There was more than one key element related to the specified detail data set. Therefore, the first one retrieved was used.

ACTION: No action is needed.

4368 **OMESSAGE**: Unable to find the run DBUTIL reminder message in the catalog (SDERR 4368)

CAUSE: The reminder message to run DBUTIL.PUB.SYS cannot be retrieved from the catalog.

ACTION: Contact the DA and have him/her get a new copy of the catalog with the reminder message in it.

4369 OMESSAGE: No rel alias for data set !. Entity alias used (SDWARN 4369)

CAUSE: The specified data set does not have a relationship alias so the data set's entity alias was used.

ACTION: No action is needed.

4370 OMESSAGE: No rel alias for element !. Entity alias used (SDWARN 4370)

CAUSE: The specified element does not have a relationship alias so the element's entity alias was used.

ACTION: No action is needed.

4371 OMESSAGE: Rel alias for element! conflict. Primary name used (SDWARN 4371)

CAUSE: The specified element has two relationship aliases which conflict. The element does not have an entity alias so its primary name was used.

ACTION: No action is needed.

4372 OMESSAGE: Rel alias for element! conflict. Primary alias used (SDWARN 4372)

CAUSE: The specified element has two relationship aliases which conflict. The element's entity alias was used.

ACTION: No action is needed.

4373 **OMESSAGE:** No password defined for the database in the dictionary (SDWARN 4373)

CAUSE: Relationship type IMAGE-DATABASE contains IMAGE-CLASS is not defined in the dictionary.

ACTION: If you want passwords generated in the schema, use SDMAIN to define the password information for the specified database in the dictionary. Otherwise, no action is needed.

Miscellaneous Messages (4400-4449)

4400 OMESSAGE: Catalog error! encountered during catalog read (SDERR 4400)

CAUSE: An error was encountered while retrieving information from the message catalog.

ACTION: Contact the DA (remember to supply the catalog error number). Internal Error.

4401 OMESSAGE: Could not find message set! in the catalog (SDERR 4401)

CAUSE: The indicated message set could not be found in the message catalog.

ACTION: Contact the DA to get a new message catalog with the indicated set present.

4402 OMESSAGE: Could not find message (set:number) ! in the catalog (SDERR 4402)

CAUSE: Unable to retrieve the indicated message in the indicated message set from the message catalog.

ACTION: Contact the DA to get a new message catalog with the indicated message present.

4403 OMESSAGE: Cannot activate DBSCHEMA process (SDERR 4403)

CAUSE: Unable to activate the process to run DBSCHEMA through the Activate intrinsic.

ACTION: Contact the DA (remember to get the associated error). Internal Error.

4404 OMESSAGE: Cannot create DBSCHEMA process (SDERR 4404)

CAUSE: Unable to create the process to run DBSCHEMA through the Create intrinsic.

ACTION: Contact the DA (remember to get the associated error). Internal Error.

4405 **OMESSAGE**: Error message ! not found in the catalog. Catalog error ! (SDERR 4405)

CAUSE: The indicated error message could not be found in the message catalog.

ACTION: Contact the DA to get a new copy of the message catalog with the indicated error message present.

4406 **OMESSAGE: Native language error (SDERR 4406)**

CAUSE: An error was detected during a call to a Native Language intrinsic.

ACTION: Contact the DA. Internal Error.

4407 **OMESSAGE**: Heap overflow. Command is too complex (SDERR 4407)

CAUSE: All of the available heap space in the program has been allocated. The command is too long and/or complex.

ACTION: Simplify the command by breaking it into two or more pieces and reissue the pieces.

4408 **OMESSAGE**: Library error ! encountered (SDERR 4408)

CAUSE: A Pascal error was encountered.

ACTION: Contact the DA (remember to supply the Library error number). Internal Error.

4409 **OMESSAGE: MPE command is too long (SDERR 4409)**

CAUSE: The entered MPE command is too long.

ACTION: Limit the MPE command to 256 characters and reenter it.

4410 **OMESSAGE: Invalid MPE command (SDERR 4410)**

CAUSE: The specified MPE command is not a legal MPE command.

ACTION: Enter a legal MPE command.

CAUSE: The specified MPE command is not allowed to be issued from within this program.

ACTION: Enter an MPE command that can be issued through the Command intrinsic.

4411 **OMESSAGE: MPE Executor error number! (SDERR 4411)**

CAUSE: An error was encountered while executing the MPE command.

ACTION: Use the error number to look up the error for the specified command in the MPE Intrinsics Manual.

SDDBC Error Messages

Miscellaneous Messages (4400–4449)

D SDDBC Command Abbreviations

Abbreviations provide a short-hand for specifying commands in SDDBC. All command words in the system have an abbreviated form (some have the entire word as the abbreviation). Following are some major points about abbreviations:

- · They consist of from one to five characters
- · They are unique within each set
- They can be localized in the message catalog just like the command words
- They can be used anywhere the equivalent command word can be used

Booleans

BOOLEAN ABBREVIATION

TRUE T FALSE F

Commands

COMMAND ABBREVIATION

COMMENT COM

CREATE C

DEFINE DEF

EXIT E

HELP H

IMAGE IM

REDO REDO

RESET R

SHOW SH

Name Conflicts

NAME CONFLICT ABBREVIATION

PROMPT P
TERMINATE T
SUBSTITUTE S

Keywords

KEYWORD ABBREVIATION

COMMENT COM
CONFLICT CON
CONTROL C

DATABASE DB
DICTIONARY DICT

DOMAIN D

NAME N

NAME-MODE NM

OPEN-MODE OM

ORDER ORD

OUTPUT OUT PASSWORD P

SCHEMA SC

SCOPE S

STATUS STAT

VERSION V

Names

NAME ABBREVIATION

PRIMARY P

ALIAS A

Name Modes

NAME MODE ABBREVIATION

INTERNAL INT EXTERNAL EXT

Open Modes

OPEN MODE ABBREVIATION

READ-ALLOW-READ RAR

READ-ONLY RO

SHARED-UPDATE SU

EXCLUSIVE-UPDATE EU

Output Destination

DESTINATION ABBREVIATION

TERMINAL TERM
PRINTER PRINT
NULL NULL

Responses

RESPONSE ABBREVIATION

YES Y

NO N

Version Status

STATUS ABBREVIATION

TEST T PRODUCTION P

ARCHIVAL A

E SDVPD Error Messages

The following is a complete listing of SDVPD errors listed in order by error number. The list includes at least one possible cause of the error and a recommended action for each cause.

The list is divided into the following groups:

Message Number	Error Type
3001-3101	SDVPD Warning Messages
3100-3458	SDVPD Error Messages

Some System Dictionary error messages list a cause as "An unexpected subsystem error has occurred." If this is one of the causes for the message you have received, System Dictionary has probably encountered an error in TurboIMAGE/V, or SORT/V, or possibly detected a system error (MPE XL). In this case, you should report the problem to the Dictionary Administrator or System Manager, who should try to determine its cause and fix it if possible. If they need assistance in solving the problem, they should contact a Hewlett-Packard Response Center.

Some System Dictionary error messages list an action of "Refer to the associated error." In this case, an additional message related to a System Dictionary intrinsic, the MPE V system, the Pascal Run-Time Library, the Native Language Subsystem, or TurboIMAGE will be displayed. Refer to the documentation on these subsystems for additional information on the problem.

Some System Dictionary error messages list an action of "Notify the Dictionary Administrator." In this case, System Dictionary has encountered an error that requires the attention of the Dictionary Administrator or System Manager. If the DA or System Manager needs assistance in solving the problem, they should contact a Hewlett-Packard Response Center.

Some of these messages, as shown in this manual, include an exclamation point (!). This character serves as a substitution character, and stands for a parameter (such as a file name) which will be displayed as part of the actual message instead of the !.

SDVPD Warning Messages (3001-P3101)

3001 OMESSAGE: Forms file! already defined in dictionary (SDWARN 3001)

CAUSE: A FORMSFILE with the same name already exists in the dictionary.

ACTION: None necessary. SDVPD will take action as specified by the OPTION parameter of the VPLUS command.

3002 MESSAGE: Form! already exists (SDWARN 3002)

CAUSE: A FORM with the same name already exists in the dictionary.

ACTION: None necessary. SDVPD will take action as specified by the OPTION parameter of the VPLUS command.

3003 MESSAGE: Compatible definition for element! used (SDWARN 3003)

CAUSE: An entity with the same attribute values already exist in the dictionary.

ACTION: None necessary. The compatible definition will be used to establish relationships.

3004 MESSAGE: Incompatible definition exists for element!

CAUSE: An entity with different attribute values exists in the dictionary.

ACTION: None necessary. SDVPD will take action according to the value of the OPTION parameter.

3010 MESSAGE: Conflicting entity SKIPped (SDWARN 3010)

CAUSE: SDVPD is informing the user that a conflicting entity is being skipped.

ACTION: None necessary. SDVPD will continue processing.

3011 MESSAGE: Conflicting entity being REPLACEd with the new (SDWARN 3011)

CAUSE: SDVPD is informing the user that the old conflicting entity and all the associated relationships are purged and the new entity definition is added.

ACTION: None necessary. SDVPD will continue processing.

3012 MESSAGE: Loading process TERMINATEs due to a conflict (SDWARN 3012)

CAUSE: SDVPD is informing the user that the loading process is terminated, because it found a conflicting entity definition in the dictionary.

ACTION: None necessary. See if there is any unexpected conflict.

3013 MESSAGE: Above relationship already exists (SDWARN 3013)

CAUSE: SDVPD is informing the user that the specified relationship already exists in the dictionary.

ACTION: None necessary. SDVPD will continue processing.

3020 MESSAGE: Logging disabled (SDWARN 3020)

CAUSE: SDVPD will not log the user's command, because it could not open SDLOG.

ACTION: None necessary. If command logging is essential for you, exit the program immediately, correct any problem, and reinvoke the program.

3021 MESSAGE: New log file! is temporary. Save it for future use (SDWARN 3021)

CAUSE: SDVPD is informing the user that the log file is temporary.

ACTION: Save the log file if you want to keep it.

3101 MESSAGE: Text from the error to the end of command ignored (SDWARN 3101)

CAUSE: SDVPD ignores the rest of the command from the first syntax error.

ACTION: Use REDO to fix the command, or reenter the command with the error fixed.

SDVPD ERROR MESSAGES (3100–3458)

3100 MESSAGE: Unknown SDVPD command (SDERR 3100)

CAUSE: The command issued is not a valid SDVPD command.

ACTION: Check your command and see if it is one of the SDVPD commands.

3102 MESSAGE: Expecting 'Y' or 'N' answer (SDERR 3102)

CAUSE: You entered something other than 'Y' or 'N' at a yes/no question.

ACTION: Answer with 'Y' or 'N' at the question.

3103 MESSAGE: Illegal response to option prompt (SDERR 3103)

CAUSE: You entered something other than 'S', 'R', 'N', 'T' at the SDVPD option prompt.

ACTION: Answer with 'S', 'R', 'N', or 'T' at the prompt.

3104 MESSAGE: Command ending period is missing (SDERR 3104)

CAUSE: You issued a command without a command ending period.

ACTION: Issue the REDO command and attach a command ending period.

3105 MESSAGE: Expecting equal sign (SDERR 3105)

CAUSE: An equal sign is missing. The place where SDVPD expects an equal sign is pointed with $'^{\prime}$.

ACTION: Issue the REDO command to insert the equal sign.

3106 MESSAGE: Parameter separating semi-colon missing (SDERR 3106)

CAUSE: A command is issued with parameters not properly separated by a semi-colon.

ACTION: Issue the REDO command to insert the semi-colon.

3107 7MESSAGE: Superfluous parameters found after command ending period (SDERR 3107)

CAUSE: An extraneous token is found after the command ending period.

ACTION: Issue the REDO command to delete the token after the command ending period.

3108 MESSAGE: Found more arguments than command requires (SDERR 3108)

CAUSE: An extraneous token is found after a one word command.

ACTION: Issue the REDO command to delete the extraneous tokens.

3109 MESSAGE: Mismatched quotes (SDERR 3109)

CAUSE: Closing quote not found where expected in quoted password.

ACTION: Use REDO command or retype command with correct password.

3110 MESSAGE: Unknown DEFINE parameter (SDERR 3110)

CAUSE: A define command is issued with an unrecognizable parameter.

ACTION: Check the command you just issued and see if the parameter has been

misspelled.

3111 MESSAGE: Expecting dictionary name (SDERR 3111)

CAUSE: The DICTIONARY parameter is specified with no actual dictionary name.

ACTION: Issue the REDO command to insert the dictionary name.

3112 MESSAGE: Expecting scope name (SDERR 3112)

CAUSE: The SCOPE parameter is specified with no actual scope name.

ACTION: Issue the REDO command to insert the scope name.

3114 MESSAGE: Illegal open mode (SDERR 3114)

CAUSE: Value of the OPEN-MODE parameter is not valid.

ACTION: Issue the REDO command to replace the value of OPEN-MODE to either SHARED-UPDATE or EXCLUSIVE-UPDATE.

3115 MESSAGE: Illegal name mode (SDERR 3115)

CAUSE: Value of the NAME-MODE parameter is not valid.

ACTION: Issue the REDO command to replace the value of NAME-MODE to either INTERNAL or EXTERNAL.

3120 MESSAGE: Unknown VPLUS parameter (SDERR 3120)

CAUSE: A vplus command is issued with an unrecognizable parameter.

ACTION: Check the command you just issued and see if the parameter has been misspelled.

3121 MESSAGE: Expecting Vplus forms file name (SDERR 3121)

CAUSE: The FORMSFILE parameter is specified with no actual forms file name.

ACTION: Issue the REDO command to insert the forms file name.

3122 MESSAGE: Illegal sensitivity value (SDERR 3122)

CAUSE: The SENSITIVITY VPLUS parameter is assigned an invalid value.

ACTION: Issue the REDO command to replace the incorrect value with either READ, MODIFY, or PRIVATE.

3123 MESSAGE: Expecting ON/OFF switch (SDERR 3123)

CAUSE: A VPLUS parameter that requires ON/OFF switch is assigned a value other than ON or OFF.

ACTION: Issue the REDO command to replace the parameter value to ON or OFF.

3124 MESSAGE: Illegal option specification (SDERR 3124)

CAUSE: The OPTION parameter is assigned an illegal value.

ACTION: Issue the REDO command to replace the OPTION parameter value to either PROMPT, SKIP, REPLACE, NEW, or TERMINATE.

3125 MESSAGE: Expecting form name or period (SDERR 3125)

CAUSE: The LOAD command is issued with unacceptable separators embedded.

 ${\tt ACTION:} \ \textbf{Issue the REDO command to format the LOAD command as follows:}$

LOAD [<form1> ... <formn>]

3126 MESSAGE: Illegal compatibility-level value (SDERR 3126)

CAUSE: The COMPATIBILITY-LEVEL parameter of the VPLUS command is assigned an illegal value.

ACTION: Issue the REDO command to replace the COMPATIBILITY-LEVEL parameter value to either VPLUS-COMPATIBILITY or COMPLETE.

3127 MESSAGE: Illegal character convert option (SDERR 3137)

CAUSE: The CHAR parameter of the VPLUS command is assigned an illegal value.

ACTION: Issue the REDO command to replace the CHAR parameter value to OFF, X, or 9.

3200 MESSAGE: Could not close the dictionary (SDERR 3200)

CAUSE: SDClose intrinsic invocation failed.

ACTION: Notify the Dictionary Administrator of this problem.

3201 MESSAGE: Could not open the dictionary (SDERR 3201)

CAUSE: SDOpen intrinsic invocation failed. Underneath is a list of possible causes:

Some other user is accessing the dictionary in an incompatible dictionary open mode. For example, if another user is accessing the dictionary in the exclusive-update mode, you will be denied any access to the dictionary.

ACTION: Request other users to reopen the dictionary in open modes that are compatible with yours.

CAUSE: The specified dictionary does not exist.

ACTION: Make sure that, if a file equate exists for your dictionary name, it is correct. Then, see if the specified dictionary exists.

CAUSE: The native language of the dictionary data is not same as that of the utility.

ACTION: If the dictionary's native language ID is different from yours, you cannot open the dictionary. For any future initialization of dictionaries make sure that the SDINIT utility uses the same message catalog as your utility's.

CAUSE: Some other error.

ACTION: Act according to the additional error messages issued. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

3202 MESSAGE: No dictionary open (SDERR 3202)

CAUSE: An attempt was made to load definitions with no dictionary opened.

ACTION: Issue the DEFINE command to open the dictionary, and then load the definitions.

3203 MESSAGE: Could not open the Dictionary because of invalid scope password (SDERR 3203)

CAUSE: The password entered was not valid for the scope specified.

ACTION: Enter the correct password.

3210 MESSAGE: Could not close the forms file (SDERR 3210)

CAUSE: Vcloseformf intrinsic invocation failed.

ACTION: Notify the Dictionary Administrator or the System Manager of this problem.

3211 MESSAGE: Could not open the forms file (SDERR 3211)

CAUSE: Vopenformf intrinsic invocation failed.

Some other user is accessing the file exclusively.

ACTION: Check the file equate, if any, and see if the forms file actually exists.

CAUSE: The specified forms file does not exist.

ACTION: Request other users to reopened the forms file with shared access mode or wait till they are finished.

CAUSE: Some other more grave system error.

ACTION: Act according to the additional error messages issued. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

3212 MESSAGE: No forms file open (SDERR 3212)

CAUSE: An attempt was made to access the forms file with none opened.

ACTION: Issue the VPLUS command to open the forms file and reissue the command that caused this error.

3220 MESSAGE: Error while opening old SDLOG. Logging disabled (SDERR 3220)

CAUSE: 1. The old SDLOG is being accessed by some other user exclusively.

2. Some other error.

ACTION: Since logging is disabled, and SDLOG is not opened at all, you are not required to take any action. However, if the command logging is essential for you, exit the program immediately, take care of the problem, and reenter SDVPD. If a system error is suspected, notify the System Manager.

3221 MESSAGE: Error while creating new SDLOG. Logging disabled (SDERR 3221)

CAUSE: Insufficient disc space.

ACTION: Build a small file and equate SDLOG to it. Notify the System Manager of the insufficient disc space.

CAUSE: Some other error.

ACTION: Since logging is disabled, and SDLOG is not opened at all, you are not required to take any action. However, if the command logging is essential, exit the program, take care of the problem, and reenter SDVPD. Further, following actions are suggested:

Use a file equate to equate SDLOG to some other file and try. If a system error is suspected, notify the Dictionary Administrator or the System Manager.

3222 MESSAGE: Error while opening old SDOUT. Report defaulting to \$STDLIST (SDERR 3222)

CAUSE: Old SDOUT could not be opened. The SDOUT report information will be output to \$STDLIST upon termination of the program.

ACTION: Since SDOUT report information is collected and reported to \$STDLIST, you do not have to take any action. However, if the report information needs to be saved away in a disc file, exit the program immediately, locate and remedy the problem, and then reinvoke the program.

3223 MESSAGE: Error while creating new SDOUT. Report defaulting to \$STDLIST (SDERR 3223)

 ${\tt CAUSE: \textbf{Insufficient disc space}}.$

ACTION: Build a smaller SDOUT.

CAUSE: Some other error.

ACTION: Report the error to the Dictionary Administrator or the System Manager.

3224 MESSAGE: Error while creating temporary SDOUT. SDOUT not opened (SDERR 3224

CAUSE: Disc related error. It is likely that you ran out of disc space.

ACTION: Report the error to System Manager. When this error occurs, SDOUT is not opened at all, and the program resumes its processing. Hence, you do not have to take any action, except, if you need the SDOUT report saved away in a disc file, exit the program, take care of the problem, and reenter SDVPD.

3225 MESSAGE: Error while setting EOF on message buffer file (SDREDO: SDERR 3225)

CAUSE: An MPE file system error is encountered while setting the "end of file" to the message buffer file. The message buffer file is used to fetch multi-lined messages from the message catalog. SDVPD uses the temporary file SDREDO as the message buffer file.

ACTION: SDVPD will not be able to access this multi-line message. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

3226 MESSAGE: Error while reading from message buffer file (SDREDO: SDERR 3226)

CAUSE: An MPE file system error is encountered while reading from the message buffer file.

ACTION: SDVPD will immediately processing this multi-line message. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

3230 MESSAGE: Error while loading above relationship between FORMS FILE and FORM (SDERR 3230)

CAUSE: SDCreateRel intrinisic invocation failed. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3231 MESSAGE: Error while loading above relationship between FORM and ELEMENT (SDERR 3231)

CAUSE: SDCreateRel intrinsic invocation failed. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3240 MESSAGE: Error occurred while replacing entity! (SDERR 3240)

CAUSE: An error has been detected while deleting an old entity definition and creating a new one. Make sure that you have the modify access to the definition. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3241 MESSAGE: Scope owner does not have MODIFY access to ! (SDERR 3241)

CAUSE: An attempt was made to modify a definition to which you do not have modify access. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3242 MESSAGE: Entity name! invalid (SDERR 3242)

CAUSE: The entity name given is not acceptable.

ACTION: Make sure that the name does not contain any of the non-acceptable characters.

3243 MESSAGE: Error while loading FORMS FILE definition for ! (SDERR 3243)

CAUSE: SDCreateEnt intrinsic invocation failed. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3244 MESSAGE: Error while loading FORM definition for ! (SDERR 3244)

CAUSE: SDCreateEnt intrinsic invocation failed. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3245 MESSAGE: Error while loading ELEMENT definition for ! (SDERR 3245)

CAUSE: SDCreateEnt intrinsic invocation failed. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3246 MESSAGE: Error while retrieving old definition for ! element (SDERR 3246)

CAUSE: SDGetEnt intrinsic invocation failed. Check the System Dictionary intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3247 MESSAGE: Duplicate internal ELEMENT name! found in external name mode (SDERR 3247

CAUSE: When attempting to create the ELEMENT definition, a duplicate internal name is found. However, because the current name mode is external, the old definition cannot be retrieved.

ACTION: The call to SDGetEnt will be skipped. SDDBD will act according to the value of the OPTION parameter.

3248 MESSAGE: Duplicate external ELEMENT name! found in internal name mode (SDERR 3248)

CAUSE: When attempting to create the ELEMENT definition, a duplicate external name is found. However, because the current name mode is internal, the old definition cannot be retrieved.

ACTION: The call to SDGetEnt will be skipped. SDDBD will act according to the value of the OPTION parameter.

3249 MESSAGE: Entity! inaccessible or owned by other scope in other version (SDERR 3249)

CAUSE: The entity exists and you do not have read access to it.

ACTION: None necessary. SDVPD will use the OPTION parameter of the VPLUS command to determine what to do.

CAUSE: The entity exists in another version of the current domain and is owned by a different scope.

ACTION: None necessary. SDVPD will use the OPTION parameter of the VPLUS command to determine what to do.

3250 MESSAGE: Error while retrieving form names (SDERR 3250)

CAUSE: Vgetforminfo VPLUS intrinsic invocation failed. Check the VPLUS intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3251 MESSAGE: Error while retrieving forms file information (VGETFILEINFO) (SDERR 3251)

CAUSE: Vgetfileinfo VPLUS intrinsic invocation failed. Check the VPLUS intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3252 MESSAGE: Error while retrieving form information (VGETFORMINFO) (SDERR 3252)

CAUSE: Vgetforminfo VPLUS intrinsic invocation failed. Check the VPLUS intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3253 MESSAGE: Error while retrieving field information (VGETFIELDINFO) (SDERR 3253)

CAUSE: Vgetfieldinfo VPLUS intrinsic invocation failed. Check the VPLUS intrinsic error message(s).

ACTION: Take action according to the intrinsic error message(s).

3260 MESSAGE: No command to REDO (SDERR 3260)

CAUSE: REDO is issued as the first command to the program.

ACTION: Do not issue REDO as the first command to SDVPD.

3261 MESSAGE: REDO is not allowed in non-interactive mode (SDERR 3261)

CAUSE: REDO is issued in a non-interactive program environment. Remember that REDO is not allowed in a non-interactive environment.

ACTION: Do not issue REDO in a non-interactive environment.

3262 MESSAGE: Illegal use of REDO (SDERR 3262)

CAUSE: The REDO command is issued to edit the command into another REDO.

ACTION: Do not edit your command into "REDO" through REDO.

3263 MESSAGE: Command line out of range. Ignored (SDERR 3263)

CAUSE: The +/- REDO subcommand issued results in a line outside of the bounds of the currently edited command.

ACTION: Make sure that the number specified with the +/- subcommand is within the bounds of the edited command.

3264 MESSAGE: Illegal command after delete. Ignored (SDERR 3264)

CAUSE: Only the "I" subcommand is allowed after the "D" subcommand. You issued a series of D's followed by a character other than "I".

ACTION: Issue the subcommand in a correct format.

3265 MESSAGE: String to insert too long to fit (SDERR 3265)

CAUSE: The "I" subcommand is issued with a string which is too long to fit into the line being edited.

ACTION: Break the line with the "B" subcommand, and then add the string.

3266 MESSAGE: String to append too long to fit (SDERR 3266)

CAUSE: The "A" subcommand is issued with a string which is too long to fit into the line being edited.

ACTION: Break the line with the "B" subcommand, and then add the string.

3267 MESSAGE: REDO subcommand is followed by unallowed characters (SDERR 3267)

CAUSE: The REDO subcommands that does not take any argument is followed by other characters.

ACTION: Make sure that you did not mean to replace corresponding part of the command line with the string.

3268 MESSAGE: Move forward/backward command can only have a number following it (SDERR 3268)

CAUSE: The +/- REDO subcommand is issued with a non-numeric argument.

ACTION: If you really meant to issue the +/- subcommand, reissue the subcommand with a correct number following it.

3270 MESSAGE: No help on subject! Displaying general help instead (SDERR 3270)

CAUSE: One of the subject names specified with the HELP command is not an SDVPD

command key word.

ACTION: Check the subject name pointed by "^", and see if it is misspelled.

3271 MESSAGE: Illegal parameter for the MPE command (SDERR 3271). Error code:!

CAUSE: An MPE command is issued with an illegal argument.

ACTION: Check the command argument, and see if it is incorrect.

3272 MESSAGE: No such MPE command (SDERR 3272). Error code: !

CAUSE: An unknown MPE command is issued.

ACTION: Make sure that the command issued can be execute through the command intrinsic.

3276 MESSAGE: Error occurred while forming the upshift table (SDERR 3276)

CAUSE: NLInfo NL intrinsic invocation failed.

ACTION: Notify the Dictionary Administrator or the System Manager of the problem.

3400 MESSAGE: SDVPD version incompatible with that of SD intrinsics (SDERR 3400)

CAUSE: The program's version number is different from the intrinsic's version.

ACTION: Notify the Dictionary Administrator of the problem.

3405 MESSAGE: Program aborts due to too many errors (SDERR 3405)

CAUSE: The program detected the number of errors specified through the run-option.

ACTION: Check your input and see where the errors have occurred.

3410 MESSAGE: \$STDINX open error. Program aborted (SDERR 3410)

CAUSE: An error occurred while opening \$STDINX.

ACTION: If the "STDIN = " clause was issued on the RUN command, see if the file equated to STDIN actually exists and if the file is not being exclusively accessed by some other user. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

3411 MESSAGE: Error while reading from input file. Program aborted (SDERR 3411)

CAUSE: A disc error occurred while reading from the program input file.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager of the problem if a serious problem is suspected.

3412 MESSAGE: Premature EOF reached on input file. Program aborted (SDERR 3412)

CAUSE: The EOF is found while reading on the input file.

ACTION: Edit SDIN file to correct the problem. Be sure to include the EXIT command before the EOF.

3420 MESSAGE: Error while writing to SDLOG. Program aborted (SDERR 3420)

CAUSE: A disc error occurred while writing to SDLOG.

ACTION: Check the file system error message given. See if the disc is full. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

3421 MESSAGE: Error while closing SDLOG. Program aborted (SDERR 3421)

CAUSE: A disc error occurred while closing SDLOG.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious disc error is suspected.

3430 MESSAGE: Error while reading from SDOUT. Program aborted (SDERR 3430)E

CAUSE: A disc error occurred while reading from temporary SDOUT to output the report onto the SSTDLIST.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious disc error is suspected.

3431 MESSAGE: Error while writing to SDOUT. Program aborted (SDERR 3431)

CAUSE: A disc error occurred while writing to SDOUT.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3432 MESSAGE: Error while closing SDOUT. Program aborted (SDERR 3432)

CAUSE: A disc error occurred while closing SDOUT.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3450 MESSAGE: Error while opening temporary file SDTMP. Program aborted (SDERR 3450)

CAUSE: A disc error occurred while opening SDVPD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3451 MESSAGE: Error while reading from temporary file SDTMP. Program aborted (SDERR 3451)

CAUSE: A disc error occurred while reading from SDVPD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3452 MESSAGE: Error while writing to temporary file SDTMP. Program aborted (SDERR 3452)

CAUSE: A disc error occurred while writing to SDVPD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3453 MESSAGE: Error while deleting temporary file SDTMP. Program aborted (SDERR 3453)

CAUSE: A disc error occurred while deleting SDVPD temporary file, SDTMP.

ACTION: Check the file system error message. Notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3454 MESSAGE: Error while opening temporary file SDREDO. Program aborted (SDERR 3454)

CAUSE: A disc error occurred while opening SDVPD temporary file, SDREDO.

ACTION: Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3455 MESSAGE: Error while reading from temporary file SDREDO. Program aborted (SDERR 3455)

CAUSE: A disc error occurred while reading from temporary file SDREDO. SDVPD reads from SDREDO when the user enters 'E' or 'Y while in REDO.

ACTION: Check the file system error message, and Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3456 MESSAGE: Error while writing to temporary file SDREDO. Program aborted (SDERR 3456)

CAUSE: A disc error occurred while writing to SDVPD temporary file SDREDO. SDVPD writes to SDREDO when the user issues the REDO command.

ACTION: Check the file system error message, and Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3457 MESSAGE: Error while deleting temporary file SDREDO. Program aborted (SDERR 3457)

CAUSE: A disc error occurred while deleting SDVPD temporary file, SDREDO.

ACTION: Check the file system error message, and Check the file system error message, and notify the Dictionary Administrator or the System Manager if a serious error is suspected.

3458 MESSAGE: Exceeded maximum number of tries for a valid password. Program aborted (SDERR 3458)

CAUSE: You did not enter a valid password within the maximum number of tries allowed while in the batch mode.

ACTION: Correct the password.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) open error

CAUSE: SDCAT.PUB.SYS message catalog does not exist.

ACTION: Notify the Dictionary Administrator.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) access error

CAUSE: SDVPD could not access SDCAT.PUB.SYS.

ACTION: Check and see if SDCAT.PUB.SYS is being exclusively accessed by some other users. If a serious problem is suspected, notify the System Manager and Dictionary Administrator.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) illegally formatted

CAUSE: SDCAT.PUB.SYS is not in accordance with the NL message catalog format.

ACTION: Notify the Dictionary Administrator of this problem.

None MESSAGE: Message catalog (SDCAT.PUB.SYS) internal error

CAUSE: SDCAT.PUB.SYS contains an internal error.

ACTION: Notify the Dictionary Administrator and System Manager of this problem.

None MESSAGE: Message catalog access error: set = !, msg = !, err = !

CAUSE: An error occurred while attempting to access an SDVPD message. The message set number is !, message line number is !, and the NL error code is !.

ACTION: Check the message catalog (SDCAT.PUB.SYS) and see if the message is missing. If a serious problem is suspected, notify the System Manager.

None MESSAGE: Error while writing to \$STDLIST. Program is aborted

CAUSE: An error is detected while writing to \$STDLIST.

ACTION: If the 'STDLIST = ' clause is used at the RUN command, see if the file equated to \$STDLIST is filled up. If a serious problem is suspected, notify the Dictionary Administrator or the System Manager.

SDVPD Error Messages SDVPD ERROR MESSAGES (3100–3458)

F SDVPD Command Abbreviations

SDVPD accepts abbreviations of the command key words. The table underneath lists each SDVPD key word and the corresponding abbreviation.

Keyword	Abbreviation
DEFINE	DEF
DICTIONARY	DICT
SCOPE	S
PASSWORD	P
DOMAIN	D
VERSION	V
OPEN-MODE	OM
SHARED-UPDATE	SU
EXCLUSIVE-UPDATE	EU
NAME-MODE	NM
EXTERNAL	EXT
INTERNAL	INT
VPLUS	VP
FORMSFILE	FF
SENSITIVITY	SEN
READ	R
MODIFY	M
PRIVATE	PV
COMPATIBILITY-LEVEL	CL
VPLUS-COMPATIBILITY	VPC
COMPLETE	С
CHAR	СН
OFF	OFF

Keyword	Abbreviation
X	X
9	9
CHAR	СН
HYPEN	НҮ
CHECK-ELEM-TYPE	CET
ON	ON
OFF	OFF
OPTION	OP
PROMPT	PR
SKIP	SK
REPLACE	RE
TERMINATE	Т
NEW	N
QUIET	Q
VERBOSE	V
LISTFORMS	LF
LOAD	L
HELP	Н
SHOW	SH
RESET	R
REDO	REDO
COMMENT	COM
EXIT	Е

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