

UNISYS

A Series

ALGOL Compiler
Messages

**Support
Reference Manual**

Priced Item

July 1992
Printed in U S America
8600 0031-000

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About This Manual

Purpose

The purpose of this manual is to enable you to respond productively to messages received at compilation time when you run an ALGOL program.

Scope

This manual presents a listing of messages generated by the ALGOL compiler. This manual does not include run-time messages or any messages generated by the operating system, system libraries, or message control systems (MCSs).

For each message listed, the cause of the message is provided and, in some cases, possible responses are indicated.

Audience

This manual is intended for the applications programmer or systems analyst who is experienced in developing, maintaining, and analyzing ALGOL programs.

Prerequisites

You should be familiar with the general concepts of ALGOL programming or of another high-level structured programming language.

How to Use This Manual

You can use this manual to find explanations of messages you receive when you are compiling a program.

If you are compiling the program using the Command and Edit (CANDE) message control system (MCS) or the A Series Editor, any error messages you have will appear on your screen.

If you are compiling your program using the Work Flow Language (WFL), any error messages you have are contained in your error file, which you can list on your terminal.

About This Manual

The compiler messages are arranged in this manual in alphabetical order. If you encounter a message that begins with a symbol rather than a letter, you can find the message alphabetized by the first letter that appears in the message. For example, you can find the following message listed with the messages starting with the letter B:

```
$BCL OCCURRED BEFORE $NOBCL
```

You can consult other A Series documents for further information about terms mentioned in the message discussions. In many cases, you can find further information in the *A Series ALGOL Programming Reference Manual, Volume 1: Basic Implementation*.

For further information about messages in response to DCALGOL programs, see the *A Series DCALGOL Programming Reference Manual*.

For further information about messages in response to DMALGOL programs, see the *A Series DMALGOL Programming Reference Manual*.

If you are unsure about which manual to consult for further information on a topic, start with the *A Series Documentation Library Overview*, which introduces the library of A Series documents.

If you receive a message that you cannot find documented in this manual, the message might have been generated because your program is using another product or source, such as the Advanced Data Dictionary System (ADDS), the DMINTERFACE procedure, the transaction processing system (TPS), the Semantic Information Manager (SIM), the operating system, or system libraries such as GENERALSUPPORT or CENTRALSUPPORT.

Organization

This manual is divided into four sections. In addition, a glossary and a bibliography appear at the end of this manual.

Section 1. Compiler Messages A through D

This section lists messages beginning with letters A, B, C, and D.

Section 2. Compiler Messages E through L

This section lists messages beginning with letters E, F, G, H, I, J, K, and L.

Section 3. Compiler Messages M through R

This section lists messages beginning with letters M, N, O, P, Q, and R.

Section 4. Compiler Messages S through Z

This section lists messages beginning with letters S, T, U, V, W, X, Y, and Z.

Related Product Information

A Series ALGOL Programming Reference Manual, Volume 1: Basic Implementation (8600 0098)

This manual describes the basic features of the Extended ALGOL programming language. The manual is written for programmers who are familiar with programming concepts.

A Series DCALGOL Programming Reference Manual (8600 0841)

This manual describes the Data Communications ALGOL (DCALGOL) language. This language is designed to support the implementation of message control systems (MCSs) and other resource monitoring and controlling programs that require access to special operating system interfaces. This manual is written for systems programmers.

A Series DMALGOL Programming Reference Manual (8600 0874)

This manual describes the extensions to the ALGOL language that support the development of Data Management System II (DMSII) system software. The manual is intended for programmers who develop and maintain system software.

A Series Documentation Library Overview (8600 0361)

This overview describes the library of A Series software documentation. It also provides an explanation of titling conventions, the procedure for ordering documentation, and an introduction to online documentation and its role in A Series product documentation. This overview is written for all users of A Series systems.

A Series File Attributes Programming Reference Manual (8600 0064)

This manual contains information about each file attribute and each direct I/O buffer attribute. The manual is written for programmers and operations personnel who need to understand the functionality of a given attribute. The *A Series I/O Subsystem Programming Guide* is a companion manual.

A Series I/O Subsystem Programming Guide (8600 0056)

This guide contains information about how to program for various types of peripheral files and how to program for interprocess communication, using port files. This guide is written for programmers who need to understand how to describe the characteristics of a file in a program. The *A Series File Attributes Programming Reference Manual* is a companion manual.

A Series InfoExec™ Advanced Data Dictionary System (ADDS) Operations Guide (8600 0197)

This guide describes InfoExec ADDS operations, such as creating and managing database descriptions. This guide is written for those who collect, organize, define, and maintain data and who are familiar with the Data Management System II (DMSII), the Semantic Information Manager (SIM), and with the Structured Query Language Database (SQLDB).

A Series Security Administration Guide (8600 0973)

This guide describes system-level security features and suggests how to use them. It provides administrators with the information necessary to set and implement effective security policy. This guide is written for system administrators, security administrators, and those responsible for establishing and implementing security policy.

A Series System Commands Operations Reference Manual (8600 0395)

This manual gives a complete description of the system commands used to control system resources and work flow. This manual is written for systems operators and administrators.

A Series Task Attributes Programming Reference Manual (8600 0502)

This manual describes all the task attributes available on A Series systems. It also gives examples of statements for reading and assigning task attributes in various programming languages. The *A Series Task Management Programming Guide* is a companion manual.

A Series Work Flow Language (WFL) Programming Reference Manual (8600 1047)

This manual presents the complete syntax and semantics of WFL. WFL is used to construct jobs that compile or run programs written in other languages and that perform library maintenance such as copying files. This manual is written for individuals who have some experience with programming in a block-structured language such as ALGOL and who know how to create and edit files using CANDE or the Editor.

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Section 1

Compiler Messages A through D

This section lists and describes messages that begin with the letters A, B, C, and D.

A BY-CALLING PROCEDURE CANNOT BE REFERENCED DIRECTLY.

- A by-calling procedure cannot be referenced directly in the library program that declares it.
- Change your program structure so that it does not reference the by-calling procedure within the library program that declares the procedure.

A 'CASE' PART OF THE OUTPUTMESSAGE ARRAY WAS NOT GENERATED CORRECTLY BY THIS COMPILER.

- This compiler generated an invalid case structure for this output message array.
- Check the syntax of the case expression in the output message array.

A CCSVERSION NAME WAS EXPECTED.

- A ccsversion name was expected as a parameter in this statement.
- Check your program and provide a ccsversion name as needed.

A COMS HEADER DECLARATION MUST PRECEDE COMS STATEMENTS.

- A COMS header declaration must come before any COMS statements.
- Check your program and provide a COMS header as needed.

A HOST FILE MUST BE COMPILED AT LEVEL 2.

- A host file cannot be compiled at a lexical level other than 2.
- Compile the program at lexical level 2.

Compiler Messages A through D

A LEVEL > 2 IS INVALID WHEN TADS IS SET.

- Compiling a program at a lexical level greater than 2 is not allowed when the TADS option is set to TRUE.
- Compile the program at lexical level 2, or reset the TADS option.

A PARAMETER ORDINAL MUST BE BETWEEN 1 AND 255.

- The output message parameter must be numbered consecutively and the numeric range must be between 1 and 255.
- Either number the parameter consecutively, starting at 1, or decrease the number of parameters to be less than or equal to 255.

A PATTERN MUST BE REPRESENTED WITH A STRING LITERAL.

- For the SIM Boolean function MATCH, the pattern must be represented by a string constant.
- Represent the pattern for the MATCH function as a string constant.

A PROCEDURE IDENTIFIER IS USED OUTSIDE OF ITS SCOPE.

- This program contains a procedure call that is outside the scope in which that procedure is declared.
- Move the PROCEDURE declaration to the scope you want to use, or provide a FORWARD PROCEDURE declaration in the correct scope.

A PROCEDURE MAY NOT BE SPLIT ACROSS SEGMENTS.

- A procedure must be in one segment.
- Revise your procedure to form one segment. One way to do this is to use the BEGINSEGMENT and ENDSEGMENT compiler control options.

A PROCEDURE MUST FOLLOW GLOBAL DECLARATIONS.

- A global declaration must be followed by a PROCEDURE declaration.
- Check the order of the declarations in your program to ensure that a procedure follows a global declaration.

A <STRING EXPRESSION> IS ILLEGAL HERE.

- A string expression cannot follow the keyword THEN in an IF expression.
- Change the logic of the program so that the string expression does not follow the keyword THEN in an IF expression.

'ABORT' OR 'ORDERLY' EXPECTED.

- The CLOSE statement requires a CLOSEDISPOSITION option of either ABORT or ORDERLY.
- Provide the proper CLOSEDISPOSITION option.

ABORT POSSIBLY CAUSED BY DEFINE PROBLEM.

- The compilation might have been terminated due to a problem in expanding a DEFINE statement.
- Check the level of nesting in the DEFINE declarations.

ABORT PROBABLY DUE TO BAD 'CLOSED TEXT' IN A DEFINE INVOCATION.

- This compilation might have terminated because of a problem with the parameters supplied for a define invocation.
- Check the parameters supplied to the define invocation.

'ACCEPTOPEN', 'REJECTOPEN', OR 'ACCEPTCLOSE' EXPECTED.

- The RESPOND statement requires a RESPONDTYPE option of either ACCEPTOPEN, REJECTOPEN, or ACCEPTCLOSE.
- Provide the proper RESPONDTYPE option.

ACTUAL PARAMETER MAY NOT START WITH THIS.

- An actual parameter cannot start with this symbol.
- Supply a valid value to this actual parameter.

ALREADY UNDER CONTROL OF SEPCOMP.

- The SEPCOMP option has already been set for this compilation.
- Remove all but the first SET SEPCOMP line.

AN ACCIDENTAL ENTRY HAS BEEN GENERATED.

- This warning message indicates that a thunk has been generated by the compiler.
- Ignore this message, set the WARNSUPR option, or do not use an expression as an actual parameter.

AN EXPRESSION CANNOT BE PASSED BY REFERENCE.

- An expression must be passed by value. It cannot be passed by reference.
- Check your program and pass expressions by value, if appropriate.

AN UNDECLARED IDENTIFIER HAS BEEN ENCOUNTERED.

- An undeclared identifier has been encountered by the compiler.
- Declare all identifiers before they are used.

ARITHMETIC PRIMARY CANNOT START WITH THIS.

- An arithmetic primary cannot start with this symbol.
- Provide a legal arithmetic primary to this statement.

ARRAY CROSS-SECTIONS CANNOT BE USED IN I-O LISTS.

- The program is attempting to use an array cross-section in an I/O list.
- Remove the array cross-section from the I-O list.

ARRAY DIMENSIONS MUST MATCH ARRAY REFERENCE VARIABLE.

- The dimensions of an array must match the dimensions of its reference variable.
- Compare the dimensions of the array and its reference variable and ensure that the dimensions match.

ARRAY IDENTIFIER OR SUBARRAY DESIGNATOR REQUIRED.

- An array identifier or a subarray designator is required by the syntax of this statement.
- Provide the appropriate identifier or designator.

ARRAY LEX LEVEL CANNOT EXCEED THAT OF ARRAY REFERENCE VARIABLE.

- The lexical level of an array must not be higher than any variable referencing that array.
- Ensure that all arrays in your program are declared in the same block as the variable referencing that array or that the arrays are at a higher block.

ARRAY MUST BE FULLY SUBSCRIPTED.

- An element referenced in an array must be fully subscripted.
- Do not use an array row.

ARRAY REFERENCE VARIABLE EXPECTED.

- An array reference variable is required by the syntax of this statement.
- Provide an array reference variable as needed.

ARRAY ROW EXPECTED.

- An array row is required by the syntax of this statement.
- Provide an array row as needed.

ARRAY ROW IS TOO LONG FOR EQUIVALENCING.

- An array row equivalence cannot be performed because the array row is too long.
- Shorten the length of the array row, or do not perform the equivalence.

ARRAY ROW MUST HAVE ONE ASTERISK.

- The array row selector must have only one asterisk (*).
- Remove all but the last asterisk from the array row selector.

ARRAY ROW OR MESSAGE EXPECTED.

- An array row or message is required by the syntax of this statement.
- Provide an array row or a message as needed.

ARRAY TYPE MUST MATCH ARRAY REFERENCE VARIABLE.

- The dimensions of the array must match the dimensions of the array reference variable.
- Ensure that the dimensions match.

ASSIGNMENT OPERATOR EXPECTED.

- An assignment operator (: =) is required by the syntax of this statement.
- Provide an assignment operator (: =) as needed.

'ASSOCIATEDDATA' CLAUSE EXPECTED.

- This OPEN, CLOSE, or RESPOND statement requires an ASSOCIATEDDATA option.
- Provide an ASSOCIATEDDATA option as needed.

ATTRIBUTE NOT IMPLEMENTED IN ALGOL.

- The attribute specified in this statement is not implemented in ALGOL.
- Do not use this attribute in an ALGOL program.

ATTRIBUTE OF SYMBOLIC TYPE EXPECTED.

- A symbolic type attribute is required by the syntax of this statement.
- Provide a symbolic type attribute as needed.

AUTOBIND IS INVALID BECAUSE TADS OPTION HAS BEEN SET.

- The AUTOBIND option is invalid when the TADS option has been set to TRUE.
- Either reset the AUTOBIND option or reset the TADS option.

BAD GO TO LABEL INVISIBLE; NO PCW FROM HOST.

- The compiler cannot recognize the GO TO label because it is located in a global block.
- Move the LABEL declaration to a local block.

BAD GOTOS OUT OF EPILOG PROCEDURES ARE NOT ALLOWED.

- You cannot exit a procedure by using a GO TO statement.
- Change the logic of the EPILOG procedure to allow a normal procedure exit.

\$BCL OCCURRED BEFORE \$NOBCL.

- The default character type was explicitly set to BCL before the \$NOBCL option.
- Remove either the \$BCL option or the \$NOBCL option, depending on the default character type you want.

BCL PROGRAMS ARE NOT PORTABLE TO EBCDIC MACHINES.

- BCL (Burroughs Common Language) programs cannot be run on EBCDIC (Extended Binary Coded Decimal Interchange Code) machines.
- Do not attempt to run a BCL program on an EBCDIC machine. If you want this program to run on an EBCDIC machine, reset the BCL compiler control option.

BCL STRING VARIABLE NOT PROVIDED.

- The syntax of this statement expects a BCL (Burroughs Common Language) string variable.
- Provide a BCL string variable as needed.

BEGIN EXPECTED.

- The keyword BEGIN is required at this location.
- Provide the keyword BEGIN as needed.

BOOLEAN OR REAL OR INTEGER VARIABLE EXPECTED.

- A variable of type BOOLEAN, REAL, or INTEGER is required.
- Provide the appropriate variable as needed.

BOOLEAN OR REAL VARIABLE EXPECTED.

- A variable of type BOOLEAN or REAL is required.
- Provide the appropriate variable as needed.

BOTH IDENTIFIERS MUST REFER TO THE SAME CLASS.

- Entity reference identifiers must refer to the same class.
- Ensure that the identifiers refer to the same class.

BY EXPECTED.

- The keyword BY is required by the syntax of this statement.
- Provide the keyword BY as needed.

BY, SEMICOLON, END OR UNTIL EXPECTED.

- The keyword BY, END, or UNTIL, or a semicolon (;) is required by the syntax of this statement.
- Provide the appropriate keyword or a semicolon as needed.

CALL-BY-NAME POINTER EXPRESSIONS NOT ALLOWED.

- A call-by-name pointer expression is not allowed in this statement.
- Use a call-by-value pointer expression instead.

CANNOT ASSIGN A STATIC PICTURE INTO A VARIABLE PICTURE.

- A static picture identifier cannot be assigned into a variable picture identifier.
- Change the logic of the program to avoid assigning a static picture identifier into a variable picture.

CANNOT BE FORMAL PARAMETER.

- This identifier cannot be used as a formal parameter.
- Change this formal parameter to a valid formal parameter.

CANNOT BE PASSED AS PARAMETER.

- This identifier cannot be passed as a parameter.
- For information on items that can be passed as parameters, see the *ALGOL Programming Reference Manual, Vol. 1*.

CANNOT BE POINTER ATTRIBUTE.

- The identifier used in this syntax cannot take the value of a pointer attribute.
- Change the type of the identifier to allow it to be assigned the value of a pointer attribute.

CANNOT ENTER PROCEDURE FROM THIS ENVIRONMENT.

- This procedure cannot be entered from this environment.
- Use a FORWARD PROCEDURE declaration to allow this procedure to be called from this environment.

CANNOT HAVE MORE THAN 250 EVENTS IN EVENT LIST.

- There cannot be more than 250 events in an event list in an ALGOL program.
- Remove events as needed.

CANNOT MIX ARITHMETIC WITH BOOLEAN.

- Arithmetic identifiers cannot be combined with Boolean identifiers in this manner.
- Use an arithmetic expression or an arithmetic identifier in this situation.

CANNOT MODIFY A PROCEDURE ARRAY IMPORTED FROM A LIBRARY.

- A procedure reference array that has been imported from a library cannot be modified by an ALGOL program.
- Change the structure of your program to avoid modifying an imported procedure reference array.

CANNOT MONITOR THIS ITEM.

- This item cannot be monitored by an ALGOL program.
- Do not attempt to monitor this item. Use TADS to observe its values during run time.

CANNOT REFERENCE FILE ATTRIBUTE FROM WITHIN ITS OWN DECLARATION.

- A file attribute cannot be referenced from within its own declaration.
- Reference a file attribute outside its declaration.

CANNOT STORE INTO READ-ONLY ARRAY.

- A value cannot be stored in a read-only array.
- Change this ARRAY declaration so that it declares an array that is not a read-only array, or do not store a value in this array.

CANNOT USE ATTRIBUTE NAME AS PARAMETERS.

- An attribute name cannot be used as a parameter in an ALGOL program.
- Use a variable that has been assigned the value of the attribute for the parameter.

CHARACTER SIZE MUST BE A LITERAL 0, 4, 6, 7, OR 8.

- The character size of a pointer must be 4 bits, 6 bits, or 8 bits. If a character size of 7 is used, the character size of the pointer is 8 bits. If a character size of 0 is used, the pointer is word oriented.
- Revise the character size as needed.

CHARACTER TYPE ARRAYS (HEX, EBCDIC, BCL, ASCII) CANNOT BE USED AS THE ARGUMENT TO THE POINTER FUNCTION. THE ARRAY USED AS THE ARGUMENT TO THE POINTER FUNCTION MUST BE WORD TYPE (INTEGER, REAL, BOOLEAN, DOUBLE, COMPLEX).

- A character type array has been used with a POINTER function.
- Use a word type array as an argument to a POINTER function.

CHARACTER TYPE MISMATCH.

- This character type is not valid for the syntax of this statement.
- Revise the character type as needed.

CLASS OR CLASS ENVIRONMENT IS NOT VALID.

- An invalid class has been specified for this entity.
- Provide a valid class or class environment for this entity.

CLASS OR ENTITY-VALUED ATTRIBUTE EXPRESSION EXPECTED.

- A class or entity-valued attribute expression is required by the syntax of this statement.
- Provide a class or entity-valued attribute expression as needed.

COBOL 88-LEVEL ITEMS (CONDITIONS) ARE NOT SUPPORTED; THIS ENTITY WILL BE IGNORED.

- COBOL 88-level items (conditions) are not supported by the ALGOL compiler.
- Alter the structure of your program to avoid modifying an imported procedure array.

CODE SEGMENT NUMBER TOO HIGH.

- The code segment number cannot be greater than $2^{**}12$.
- Revise the code segment number as needed; or create a library, place some of the program procedures in it, and have the program call the library.

COLON EXPECTED.

- A colon (:) is required by the syntax of this statement.
- Provide a colon as needed.

COMMA EXPECTED.

- A comma (,) is required by the syntax of this statement.
- Provide a comma as needed.

COMMA OR COLON EXPECTED.

- A comma (,) or a colon (:) is required by the syntax of this statement.
- Provide a comma or a colon as needed.

COMMA OR RIGHT BRACKET EXPECTED.

- A comma (,) or a right bracket (]) is required by the syntax of this statement.
- Provide a comma or a right bracket as needed.

COMMA OR RIGHT PARENTHESIS EXPECTED.

- A comma (,) or a right parenthesis is required by the syntax of this statement.
- Provide a comma or a right parenthesis as needed.

COMMA OR SEMICOLON EXPECTED.

- A comma (,) or a semicolon (;) is required by the syntax of this statement.
- Provide a comma or a semicolon as needed.

COMMA, SEMICOLON, OR RIGHT BRACKET EXPECTED.

- A comma (,), a semicolon (;), or a right bracket (]) is required by the syntax of this statement.
- Provide a comma, a semicolon, or a right bracket as needed.

COMPILE-TIME DEFINE NOT ALLOWED WITHIN A DEFINE.

- A compile-time DEFINE statement ('DEFINE) must be processed using the 'INVOKE statement, and cannot be declared within a DEFINE declaration.
- Alter the structure of your program to remove the compile-time DEFINE statement from the DEFINE declaration.

COMPILE-TIME VARIABLE EXPECTED.

- A compile-time variable is required by the syntax of this statement.
- Provide a compile-time variable as needed.

COMPILER ERROR.

- The self-checking mechanisms incorporated into the compiler have detected a compiler error.
- If the compiler has not given a syntax error prior to this message, submit a User Communication Form (UCF).

COMPILER INCOMPATIBLE WITH SUPPORT LIBRARIES.

- This ALGOL compiler is incompatible with the support libraries currently loaded on the system.
- Update either the ALGOL compiler or the support libraries to make them compatible.

**COMPILER LIMIT EXCEEDED, CANNOT EXCEED 255
FORMRECORDLIBRARIES.**

- The maximum number of form record libraries for an ALGOL program is 255. This limit has been exceeded by this program.
- Check your program and delete form record libraries as needed.

COMPILER - DMINTERFACE ERROR.

- The self-checking mechanisms incorporated into the compiler have detected an error in the compiler dialogue with the DMINTERFACE procedure.
- Submit a User Communication Form (UCF).

COMPILER - TRINTERFACE ERROR.

- The self-checking mechanisms incorporated into the compiler have detected an error in the compiler dialogue with the TRINTERFACE coroutine.
- Submit a User Communication Form (UCF).

COMPILER - TRINTERFACE INCOMPATIBLE DIALOG LEVELS.

- The version of the TRINTERFACE coroutine invoked is incompatible with this version of the compiler.
- Check the version of the compiler against the version of the TRINTERFACE coroutine, and load versions that are compatible.

COMS INPUTHEADER EXPECTED.

- A COMS input header is required by the syntax of this block.
- Provide a COMS input header as needed.

COMS OUTPUTHEADER EXPECTED.

- A COMS output header is required by the syntax of this block.
- Provide a COMS output header as needed.

COMSLANGSUPPORT FOUND COMPILER ERROR—PLEASE FILE UCF.

- The self-checking mechanisms incorporated into the compiler have detected an error in the COMS dialogue with the compiler.
- Submit a User Communication Form (UCF).

COMSLANGSUPPORT SYSTEM LIBRARY RETURNED UNRECOGNIZED ERROR.

- An internal error has occurred and an error value has been displayed.
- Submit a User Communication Form (UCF).

CONSTANT ARGUMENT REQUIRED.

- A constant parameter is required by the syntax of this statement.
- Provide a constant parameter as needed.

CONSTANT OR CONSTANT EXPRESSION EXPECTED.

- A constant or a constant expression is required by the syntax of this statement.
- Provide a constant or a constant expression as needed.

CONSTANT-VALUED ATTRIBUTES CANNOT BE CHANGED.

- The program is attempting to alter a constant-valued attribute.
- Change the logic of your program to avoid changing the value of a constant-valued attribute.

CONSTRUCT REQUIRES A FILE FOR THE FILE PART.

- A file must be provided for the file part of an input or output statement.
- Provide a file for the file part as needed.

CONTROLLED VARIABLE IS INVALID TYPE IN FOR LIST.

- The *for list element* of a FOR statement cannot contain the loop control variable.
- Remove the loop control variable from the *for list element* of the FOR statement.

DASH EXPECTED.

- A dash (–) is required by the syntax of this statement.
- Provide a dash as needed.

DATA MANAGEMENT IDENTIFIER EXPECTED.

- A data management identifier is required by the syntax of this statement.
- Provide a data management identifier as needed.

DATA NAMES DECLARED BEYOND HERE CANNOT BE REFERENCED.

- The database items invoked beyond this point cannot be referenced in the ALGOL program because of an internal compiler limit.
- Move the database declaration to an earlier point in the compilation of the program or reduce the number of identifiers by such methods as partitioning.

DATA SET IDENTIFIER EXPECTED.

- A data set identifier is required by the syntax of this statement.
- Provide a data set identifier as needed.

DATA TYPE IS UNSUPPORTED.

- The data type of this item imported from SIM is not supported by the ALGOL compiler.
- Change the data type of this item, or do not import data with this data type from SIM.

DATADICTINFO WAS RESET IN HOST SO RESET HERE ALSO.

- The DATADICTINFO compiler control option has been reset to match the value of this option found in the HOST file.
- No action needed.

DATADICTINFO WAS RESET IN LOADINFO SO RESET HERE.

- The DATADICTINFO compiler control option has been reset to match the value of this option found in the LOADINFO file.
- No action needed.

DATADictionary ERROR: DICTIONARY SHUTTING DOWN.

- The dictionary has been closed.
- Contact your system administrator to find out when the dictionary will be opened.

DATADictionary ERROR: DICTIONARY TIMEOUT ERROR.

- An entity lock timeout error has been detected.
- Try again later.

DATADictionary ERROR: DIRECTORY ERROR.

- The directory name specified is either illegal or not found.
- Provide a legal name of an existing directory.

DATADictionary ERROR: ENTITY NOT FOUND.

- The specified entity could not be found in the dictionary.
- Ensure that the program is looking in the correct dictionary.

DATADictionary ERROR: ENTITY TYPE ERROR.

- Either an internal error has occurred or the entity specified for program tracking is not a program entity.
- Provide a valid program entity type for program tracking.

DATADictionary ERROR: FORMLIBRARY NOT GENERATED.

- The form library has not been generated.
- Generate the form library in SDF.

DATADictionary ERROR: IDENTIFIER HISTORY ERROR.

- The entity has a status of HISTORICAL and cannot be used.
- Alter the logic of the program to avoid using entities that have the HISTORICAL status.

DATADictionary ERROR: IDENTIFIER SECURITY ERROR.

- Your program cannot access the requested entity.
- Change the security level of the usercode under which the program is running, or do not attempt to access this entity.

DATADictionary ERROR: INTERNAL I/O ERROR.

- An error occurred during the compiler interface with the dictionary.
- Submit a User Communication Form (UCF).

DATADictionary ERROR: INTERNAL SECURITY ERROR.

- An unidentified dictionary internal error has been detected.
- Submit a User Communication Form (UCF).

DATADictionary ERROR: INTERNAL TEMPLATE ERROR.

- The dictionary software used is incompatible with this compiler.
- Ensure that the version levels of the software and the compiler match.

DATADictionary ERROR: INVALID FORMAT ERROR.

- The ID template passed is invalid. The reason can be found in the next error message emitted by the compiler.
- Check the next error message.

DATADictionary ERROR: INVALID STATUS ERROR.

- The status of the entity is invalid. This message might also indicate an internal error.
- Check the status of the entity that you are trying to access.

DATADictionary ERROR: NAME ERROR.

- The entity name specified is illegal.
- Provide legal names only for entities.

DATADictionary ERROR: STATUS ERROR.

- An illegal status value has been specified.
- Reenter a new status value.

DATADictionary ERROR: TYPE MISMATCH.

- The entity type requested does not match the type found in the dictionary.
- Change the entity type if necessary.

DATADictionary ERROR: UNKNOWN ERROR CATEGORY.

- An internal dictionary error of an unknown type has occurred. The error category is displayed.
- Submit a User Communication Form (UCF).

DATADictionary ERROR: UNKNOWN ERROR SUBCATEGORY.

- An internal dictionary error of an unknown type has occurred. The error subcategory is displayed.
- Submit a User Communication Form (UCF).

DATADictionary ERROR: VERSION ERROR.

- The entity version specified is illegal.
- Provide a legal value for the version.

DEBUG ERROR [HEX].

- An operational problem has occurred.
- Submit a User Communication Form (UCF).

DEBUG ERROR [HEX]CAT/SUB.

- An internal error has occurred.
- Submit a User Communication Form (UCF).

DECIMALPOINTISCOMMA EXPECTED.

- The keyword DECIMALPOINTISCOMMA is expected in the output message parameter of this OUTPUTMESSAGE ARRAY declaration.
- Provide the keyword DECIMALPOINTISCOMMA as needed.

DECLARATIONS SHOULD PRECEDE STATEMENTS.

- The declarations of a block must precede the statements of that block.
- Move all the declarations of a block so that they appear before the statements of the block.

DECLARED LEVELS OF THIS SWAP PAIR MUST AGREE.

- The array reference or pointer variables specified in this SWAP statement must be declared at the same lexical level.
- Declare the swap pair at the same level.

DEFAULT OR DATAERROR ONLY ALLOWED WITH WRITEFORM STATEMENT.

- Either an invalid format exists for the READFORM statement (DEFAULT and DATAERROR are allowed only with the WRITEFORM statement) or an invalid option is specified in the WRITEFORM statement (DEFAULT or DATAERROR are required).
- Check the syntax of the READFORM statement or the WRITEFORM statement and correct as necessary.

DEFINE ENDS BLOCK ILLEGALLY.

- It is illegal to end a block with a DEFINE declaration.
- Do not end a block with a DEFINE declaration.

DEFINES TOO DEEPLY NESTED.

- DEFINE declarations can be nested only to a level of 47 deep.
- Change the structure of the DEFINE declarations so that the nesting level limit is not exceeded.

DESIGNATIONAL EXPRESSION CANNOT START WITH THIS.

- A designational expression cannot start with this symbol.
- Change the designational expression to start with a valid symbol.

DICTIONARY HAS RETURNED INCONSISTENT ENTITIES.

- An inconsistency has been detected in the entities returned from the dictionary compared to the previous invocation during this compilation. Either the entity has been changed in the dictionary during the compilation or an internal dictionary error has occurred.
- Compare the entity data with the values expected.

DICTIONARY STORAGE FORMAT (IGR TEMPLATE) OF THIS ENTITY IS TOO OLD - NOT SUPPORTED.

- The item/group template for this entity is out of date.
- Check the version levels of the compiler and dictionary software being used.

DIMENSIONS OF ACTUAL AND FORMAL ARRAYS UNEQUAL.

- The dimensions of the arrays used as the actual and formal parameters are not compatible.
- Change the dimensions of the arrays used as either the actual or formal parameters to make them compatible.

DIRECT ARRAY CANNOT BE MONITORED.

- A direct array cannot be monitored by a MONITOR statement in ALGOL.
- If the contents of a direct array need to be observed during run time, use TADS.

DIRECT COPY ILLEGAL FOR NON-DIRECT ARRAY.

- The array row equivalence declaration of a direct array can be equated only to another direct array.
- Do not attempt array row equivalence of a direct array with an array that is not direct.

DIRECT FILE NOT ALLOWED IN FILE PART.

- A file declared as DIRECT cannot be used as the file part of this statement.
- Use a file that is not declared as DIRECT for the file part of this statement.

DIRECT I/O ATTRIBUTE IS EXPECTED.

- A DIRECT I/O attribute is required by the syntax of this statement.
- Provide a DIRECT I/O attribute as needed.

DIRECT I/O CANNOT BE USED AS PRIMARY.

- Direct I/O operations cannot be used as a function.
- Change the logic of your program so that direct I/O operations are not used as a function.

DIRECTORY QUALIFIER ALREADY SPECIFIED.

- The directory qualifier for this entity has already been specified by the compiler and cannot be specified twice.
- Delete the second specification of this directory qualifier.

DISKHEADER ATTRIBUTE REQUIRED.

- A diskheader attribute name is required following the period in the diskheader attribute assignment or reference.
- Provide a diskheader attribute name as needed.

DISKHEADER IDENTIFIER REQUIRED.

- A diskheader array identifier is required by the syntax of this statement.
- Provide a diskheader array identifier as needed.

DISKHEADERS MUST BE ONE DIMENSIONAL.

- A diskheader array cannot have more than one dimension.
- Declare the diskheader array with only one dimension.

DISPLACEMENT TOO BIG.

- The unsigned integer used with the SEGDESCABOVE compiler control option must be in the range of 4 to 4095, inclusive.
- Change the value of the unsigned integer to be within the range 4 to 4095.

DISTINCT OR LINCDELETED EXPECTED.

- The keyword DISTINCT or the keyword LINCDELETED is required by the syntax of this SELECT statement.
- Provide a keyword as needed.

DM ITEM NAME EXPECTED.

- A Data Management (DM) item name is required by the syntax of this statement.
- Provide a DM item name as needed.

DM STATEMENT ENCOUNTERED BUT THERE HAS NOT BEEN A DMSII DATABASE DECLARED.

- This ALGOL program contains a Data Management (DM) statement, but no DMSII database has been declared.
- Declare a DMSII database before the DM statement.

DMRECORD IDENTIFIER EXPECTED.

- The syntax of this statement requires a DMRECORD identifier.
- Provide a DMRECORD identifier as needed.

DMRECORDS ARE READ-ONLY.

- An attempt has been made to alter the contents of a DMRECORD identifier.
- Change the logic of your program to avoid changing the contents of a DMRECORD identifier.

DO EXPECTED.

- The keyword DO is required by the syntax of this statement.
- Provide the keyword DO as needed.

'DONTWAIT', 'URGENT' OR 'SUBFILE' EXPECTED.

- The subfile specification of the WRITE statement requires the DONTWAIT, URGENT, or SUBFILE specification.
- Provide an appropriate subfile specification.

DOUBLE PRECISION ARRAY NOT ALLOWED.

- A double-precision array cannot be used in this statement.
- Use a single-precision array in this statement.

DOUBLE-PRECISION BINARIES ARE NOT SUPPORTED; THIS FIELD IS NOT REFERENCABLE.

- The ALGOL compiler does not support double-precision binaries.
- Avoid referencing this field.

DUPLICATE ENTRY POINT NAME.

- This library entry point name was used previously.
- Give a unique name to each library entry point.

DUPLICATE MESSAGE NUMBER.

- This output message number was used previously.
- Supply each output message with a unique number.

DUPLICATE OR UNKNOWN AWAITOPEN OPTION.

- The AWAITOPEN option is either a duplicate or unknown to the ALGOL compiler.
- Check the options supplied to the AWAITOPEN statement.

DUPLICATE OR UNKNOWN CLOSE OPTION.

- The CLOSE option is either a duplicate or unknown to the ALGOL compiler.
- Check the options supplied to the CLOSE statement.

DUPLICATE OR UNKNOWN OPEN OPTION.

- The OPEN option is either a duplicate or unknown to the ALGOL compiler.
- Check the options supplied to the OPEN statement.

DUPLICATE OR UNKNOWN RESPOND OPTION.

- The RESPOND option is either a duplicate or unknown to the ALGOL compiler.
- Check the options supplied to the RESPOND statement.

Section 2

Compiler Messages E through L

This section lists and describes messages that begin with the letters E, F, G, H, I, J, K, and L.

EACH EXPECTED.

- The keyword EACH is required by the syntax of this statement.
- Provide the keyword EACH as needed.

EBCDIC ARRAY ROW EXPECTED.

- An EBCDIC array row is required by the syntax of this statement.
- Provide an EBCDIC array row as needed.

EBCDIC POINTER EXPECTED.

- An EBCDIC pointer is required by the syntax of this statement.
- Provide an EBCDIC pointer as needed.

ELSE EXPECTED.

- The keyword ELSE is required by the syntax of this statement.
- Provide the keyword ELSE as necessary.

END EXPECTED.

- The keyword END is required by the syntax of this statement.
- Provide the keyword END as necessary.

END LEVEL EXPECTED.

- The keyword LEVEL is required following the keyword END in the transitive expression.
- Provide the keyword LEVEL as necessary.

ENDSEGMENT REQUIRED.

- The ENDSEGMENT option is required by this program.
- Provide an ENDSEGMENT option as needed.

ENTITY REFERENCE EXPECTED.

- An entity reference is required by the syntax of this statement.
- Provide an entity reference as needed.

ENTITY'S SIGN SPECIFICATION CHANGED FROM SIGN_SEPARATED TO SIGN_SEPARATE_LEADING.

- The entity that was created as sign_separated in the dictionary has been changed to sign_separate_leading for use in this program.
- Change the sign specification of the entity in the dictionary to match the program if you do not want to see this warning.

ENTITY'S SIGN SPECIFICATION CHANGED FROM SIGNED TO SIGN_TRAILING.

- The entity that was created as signed in the dictionary has been changed to sign_trailing for use in this program.
- Change the sign specification of the entity in the dictionary to sign_trailing if you do not want to see this warning.

**ENTITY'S SIGN SPECIFICATION CHANGED FROM SIGNEDV TO
SIGN_SEPARATE_LEADING.**

- The entity that was created as signedv in the dictionary has been changed to sign_separate_leading for use in this program.
- Change the sign specification of the entity in the dictionary to sign_separate_leading if you do not want to see this warning.

**ENTITY-VALUED ATTRIBUTE, INVERSE FUNCTION,
MULTIVALUED DATA-VALUED ATTRIBUTE OR TRANSITIVE
EXPRESSION EXPECTED.**

- In a SELECT statement in SIM, the compiler is expecting an entity-valued attribute, an inverse function, a multivalued data-valued attribute, or a transitive expression.
- Provide the needed attribute, function, or expression.

**ENTRY POINTS CANNOT BE DECLARED IN IMPLICIT
LIBRARIES.**

- Your program is attempting to declare an entry point in a library that is implicitly declared by the compiler.
- Do not declare entry points in implicit libraries.

ENVIRONMENT LEVEL CANNOT BE GREATER THAN 3.

- The ENVIRONMENT declaration must be at a lexical level of 3 or less.
- Move the ENVIRONMENT declaration to a lexical level of 3 or less.

EPILOG/EXCEPTION PROCEDURES MAY NOT BE NESTED.

- An EPILOG procedure or an EXCEPTION procedure cannot contain an EPILOG or EXCEPTION procedure.
- Move the EPILOG procedure or EXCEPTION procedure outside of the other EPILOG or EXCEPTION procedure.

EQUAL SIGN EXPECTED.

- An equal sign (=) is required by the syntax of this statement.
- Provide an equal sign as needed.

EQUATION CANNOT BE DONE IN GLOBAL DECLARATIONS.

- An address equation is not allowed in the global part of an ALGOL program.
- Remove the address equation from the global part of the ALGOL program.

ERROR IN BEGIN SESSION LINKAGE TO DICTIONARY.

- An error has occurred while the program is trying to link to the data dictionary.
- Check the data dictionary currently on the system.

ERROR MESSAGE EXPECTED.

- The DCALGOL message associated with the current DCALGOL statement is in error.
- Check the syntax of the DCALGOL message and correct it as necessary.

EVENT ARRAY DESIGNATOR OR ARRAY DESIGNATOR EXPECTED.

- An event array designator or an array designator is required by the syntax of this statement.
- Provide a designator as needed.

EVENT LEVEL GREATER THAN DIRECT ARRAY LEVEL.

- A direct read or write operation is being performed with an event that is declared in a higher lexical level than the corresponding direct array.
- Declare the event and the direct array that it is using at the same lexical level.

EVENT LEVEL GREATER THAN INTERRUPT LEVEL.

- The event is declared at a higher lexical level than the interrupt identifier in this ATTACH statement.
- Declare the event at the same lexical level as the interrupt identifier in this ATTACH statement.

EXECUTION OF THIS EXPRESSION WILL CAUSE AN INTERRUPT.

- One of the following faults has occurred: INTEGEROVERFLOW, ZERODIVIDE, EXPONENTOVERFLOW, or EXPONENTUNDERFLOW.
- Correct the logic of this expression.

EXTERNAL PROCEDURE ILLEGAL IN A USER SEGMENT.

- It is illegal to attempt to call an external procedure in a user segment.
- Change the logic of the program to avoid calling an external procedure in a user segment.

EXTRANEOUS CROSSHATCH.

- There are too many crosshatches (#) in this define.
- Remove crosshatches as needed.

FAMILY ATTRIBUTE REQUIRES *+ OR *-.

- To modify the FAMILY or STATIONLIST attribute, the REPLACE statement must have the symbols *+ or *- following the keyword BY.
- Add the symbols *+ or *- following the keyword BY.

FIELD IDENTIFIER EXPECTED.

- A field identifier is required by the syntax of this statement. FORMRECNUM and TRANSNUM are considered to be functions, not fields.
- Supply a field identifier as necessary.

FIELD NOT BIT-ALIGNABLE--MOVED TO NEXT DIGIT BOUNDARY.

- The compiler does not add filler when the offset of one data item does not end on a boundary for the next data item. Therefore the compiler warns you when the field cannot be aligned.
- No action necessary. This is a warning message.

FIELD WIDTH IS GREATER THAN 48 OR LESS THAN 1.

- A field width greater than 48 or less than 1 is not allowed in an ALGOL program.
- Change the size of the field width as necessary.

FINAL END NOT FOLLOWED BY PERIOD.

- The final keyword END of an ALGOL program must be followed by a period.
- Provide a period as needed.

FIRST PROCEDURE IN USER SEGMENT MUST HAVE DECLARATION.

- The \$BEGINSEGMENT compiler control option is used in this procedure without any declarations in the procedure.
- Add declarations in the procedure to form a block, or move the \$BEGINSEGMENT compiler control option to the start of a block.

FOR EXPECTED.

- The keyword FOR is required by the syntax of this statement.
- Provide the keyword FOR as needed.

FORM IDENTIFIER EXPECTED.

- A form identifier is required by the syntax of this statement.
- Provide a form identifier as needed.

FORMAL ARRAY BOUND SPECIFICATION MISMATCH.

- There is a mismatch in the array bounds between the formal array parameter and the actual array parameter.
- Correct the array bounds of the formal and actual array parameters.

FORMAL ARRAY ID EXPECTED.

- The name of a formal array parameter is required by the syntax of this statement.
- Provide a formal array parameter name as needed.

FORMAL PARAMETER NOT SPECIFIED.

- The formal parameters for the procedure are not specified in this statement.
- Provide formal parameters as needed.

FORMLIBRARY IDENTIFIER EXPECTED.

- A form library identifier is required by the syntax of this statement.
- Provide an identifier as needed.

FORMRECNUMS + TRANSNUMS AS CASE LABELS NEED PARENTHESES.

- Parentheses must be used around FORMRECNUMS and TRANSNUMS labels when they are used as labels in a CASE statement.
- Add parentheses as needed.

FORMRECORDLIBRARIES MUST BE GLOBAL.

- Form record libraries must be declared globally in an ALGOL program.
- Provide global declarations as needed.

FORMSSUPPORT SYSTEM LIBRARY RETURNED AN ERROR.

- The SDF Plus system library FORMSSUPPORT has returned an error. There might be a mismatch between SDF Plus and ADDS, or the migration of a form record library might have had errors.
- Check that the release levels of SDF Plus and ADDS that are currently loaded on the system are the same, or check the form record library used by this program.

FROM EXPECTED.

- The keyword FROM is required by the syntax of this statement.
- Provide the keyword FROM as needed.

GLOBAL DECLARATION MUST SPECIFY EXTERNAL.

- A global PROCEDURE REFERENCE ARRAY declaration must include the keyword EXTERNAL.
- Add the keyword EXTERNAL to the PROCEDURE REFERENCE ARRAY declaration.

GLOBAL INTERRUPT MUST BE DECLARED EXTERNAL.

- A global INTERRUPT declaration must include the keyword EXTERNAL.
- Provide the keyword EXTERNAL as needed.

GLOBAL POINTER TO LOCAL NOT ALLOWED.

- A pointer cannot point to an object that is declared at a higher lexical level.
- Declare a pointer at the same or a higher level than the object to which it points.

GLOBAL PROCEDURE SHOULDN'T HAVE A BODY.

- A procedure in the global part cannot have a procedure body other than EXTERNAL, FORWARD, or a library entry point specification.
- Delete the procedure body, or move the procedure body to the local part of the program.

HELP TEXT IS NOT ALLOWED HERE.

- The syntax of this statement does not allow help text.
- Remove the help text specification from this statement.

HOST MUST HAVE DECLARATIONS.

- A procedure with a HOST compiler control option must have a local declaration.
- Provide a local declaration as needed.

IDENTIFIER DECLARED BEFORE.

- This identifier has been declared previously in the same scope.
- Change the name of one of the identifiers.

IDENTIFIER DECLARED FORWARD BUT NOT FOUND.

- This identifier was declared as FORWARD, but the actual declaration was not found.
- Provide an actual declaration for this identifier.

IDENTIFIER NOT FORMAL, OR ALREADY SPECIFIED.

- The identifier is not in the formal parameter part, but it appears in the specification part; or the identifier appears twice in the specification part.
- Add this identifier to the formal parameter part, or remove one of its references in the specification part.

ILLEGAL ATTRIBUTE.

- The attribute you specified is not legal in this situation.
- Use a valid attribute.

ILLEGAL ATTRIBUTE REFERENCE CHAIN.

- The compiler could not find the match for this entity-valued attribute class.
- Check your input and enter an entity-valued attribute class that can be matched.

ILLEGAL BEGINSEGMENT OR ENDSEGMENT.

- This BEGINSEGMENT option or ENDSEGMENT option is not allowed in this location.
- Move the BEGINSEGMENT or ENDSEGMENT option to a valid location. A BEGINSEGMENT option must appear before the declaration of the first procedure to be included in the user segment. The ENDSEGMENT option must appear after the last source record of the last procedure to be included in the user segment.

ILLEGAL BOUND SPECIFIER.

- The lower bound for this array must be either an asterisk (*) or a constant expression.
- Provide an asterisk or a constant expression as needed.

ILLEGAL CHECKPOINT PARAMETERS.

- The parameters provided for this CHECKPOINT statement are not legal.
- The parameters for a CHECKPOINT statement must identify a device and a disposition. Legal devices are DISK, DISKPACK, and PACK. Legal dispositions are LOCK and PURGE.

ILLEGAL COMBINATION OF DECLARATIONS.

- This combination of declarations is not valid.
- Check the syntax of these declarations.

ILLEGAL COMBINATION OF DECLARATIONS OR ILLEGAL USE OF A RESERVED WORD.

- This combination of declarations is not valid, or a reserved word is being used as an identifier.
- Check the syntax of these declarations, or change the name of the identifier to something other than a reserved word.

ILLEGAL COMPARE PROCEDURE.

- The compare procedure provided for this SORT statement is not legal.
- Provide a compare procedure of type Boolean. The compare procedure cannot be declared EXTERNAL and it must have exactly two parameters. Each parameter must be a one-dimensional array with a lower bound of 0 (zero).

ILLEGAL CONSTRUCT.

- The syntax of this statement is not recognizable.
- Check the syntax of this statement.

ILLEGAL CONSTRUCT OF DIRECT-READ/WRITE STATEMENT.

- The DIRECT I/O statement is not in the correct format.
- Correct the format of the DIRECT I/O statement.

ILLEGAL DATABASE ATTRIBUTE.

- One or more of the attributes specified for this database are illegal.
- Delete the illegal database attributes.

ILLEGAL DATABASE IDENTIFIER.

- This identifier is not a legal database identifier.
- Provide a legal database identifier.

ILLEGAL D1 DECLARATION WAS MADE (STRING,SWITCH FILE..).

- The D1 stack declaration for DMALGOL is invalid.
- Correct the D1 stack declaration.

ILLEGAL EVENT DESIGNATOR.

- The specified event designator is not legal.
- Check the EVENT declaration.

ILLEGAL FILE DESIGNATOR.

- The specified file designator is not legal. A file designator can be a file identifier, a direct file identifier, a switch file identifier with a subscript, or a direct switch file identifier with a subscript.
- Provide the appropriate identifier.

ILLEGAL FILEKIND FOR INCLUDE FILE.

- The FILEKIND attribute of the INCLUDE file is not compatible with an ALGOL source program.
- Do not include a file with this FILEKIND attribute, or change the FILEKIND attribute of the INCLUDE file.

ILLEGAL FORMAT DESIGNATOR.

- The format designator or editing specifications for this statement are not legal.
- Correct the editing specifications or format designator.

ILLEGAL FUNCTIONNAME VALUE.

- The given FUNCTIONNAME library value is not legal for this library attribute.
- Provide a legal value for the system function name that is used to find the target object code file for the library.

ILLEGAL GLOBAL DECLARATION.

- This global declaration is not legal.
- Correct the global declaration.

ILLEGAL INTNAME.

- The given INTNAME library attribute value is not legal for this library.
- Provide a legal value for the internal identifier for the library.

ILLEGAL LIBACCESS MNEMONIC VALUE.

- The given value for the LIBACCESS library attribute is not legal for this library.
- Specify a LIBACCESS attribute with a mnemonic value of BYTITLE, BYFUNCTION, or BYINITIATOR.

ILLEGAL LIBRARY ATTRIBUTE.

- The given library attribute is not legal for this situation.
- Provide a legal library attribute for this situation.

ILLEGAL LIBRARY ATTRIBUTE FOR ASSIGNMENT OR EXPRESSION.

- The given library attribute is not legal for an assignment or for an expression.
- Do not use this library attribute for an assignment or an expression.

ILLEGAL LIBRARY OBJECT.

- The given library object for this declaration is illegal.
- Provide a legal library object.

ILLEGAL LIST DESIGNATOR.

- This list designator is not valid.
- Provide a legal list designator.

ILLEGAL PARAMETER FOR DSWAIT.

- This parameter is not valid for the DSWAIT function.
- Provide a legal parameter for the DSWAIT function.

ILLEGAL PARAMETER FOR REAL FUNCTION.

- One of the parameters for this REAL function is not legal.
- The legal parameters for the REAL function are an arithmetic expression, a Boolean expression, a complex expression, or a pointer expression with an arithmetic expression.

ILLEGAL PARAMETER FOR THIS STATEMENT OR FUNCTION.

- One of the parameters for this statement or function is not legal.
- Compare the types of parameters provided with the types of the parameters expected.

ILLEGAL PARTIAL WORD CONSTRUCT.

- The <partial word part> construct is not valid.
- Check the bit manipulation expression to see that it is valid.

ILLEGAL PATH EXPRESSION.

- The <qual term> and <path expression> constructs must evaluate to an entity value. The final element must point to a class.
- Correct the <qual term> or <path expression> construct as necessary.

ILLEGAL PICTURE CHARACTER.

- The picture character is illegal.
- Review your PICTURE declaration.

ILLEGAL PROCEDURE REFERENCE ASSIGNMENT.

- Only the value NULL, a procedure identifier, or a procedure reference array element can be assigned to a procedure reference array element.
- Check your program and correct the ASSIGNMENT statement to the procedure reference array element.

ILLEGAL REPEAT PART VALUE.

- The repeat part value is illegal.
- Change the repeat part value to an unsigned integer.

ILLEGAL SPECIFIER OR COMBINATION OF SPECIFIERS.

- The type of the data item or items is incorrect.
- Change the type of the data item or items as needed.

ILLEGAL SUBSCRIPTED VARIABLE.

- This variable cannot be subscripted.
- Remove the subscript from this variable.

ILLEGAL SYNTAX FOR PROGRAMDUMP PARAMETERS.

- The parameters for the PROGRAMDUMP statement are not in the correct format.
- The program dump parameters must be separated by commas.

ILLEGAL TABLE POINTER.

- The ALGOL program requires a pointer to a TRANSTABLE or TRUTHTABLE identifier.
- Provide a pointer as needed.

ILLEGAL TASK ATTRIBUTE.

- The given task attribute is not legal for this situation.
- Provide a legal task attribute for this situation.

ILLEGAL TASK DESIGNATOR.

- The specified task designator has not been declared previously.
- Declare the task designator before you attempt to use it.

ILLEGAL TITLE.

- The given value for the TITLE library attribute is not valid for this library.
- Provide a legal value for the object code file title of this library.

ILLEGAL TO MIX BOUND PAIRS AND LOWER BOUNDS.

- The < bound pair list > construct of the ARRAY declaration is incorrect.
- Check the < bound pair list > construct of the ARRAY declaration.

ILLEGAL USE OF EPILOG PROCEDURES.

- EPILOG procedures cannot be used in this situation. An EPILOG procedure cannot be specified as a formal parameter, cannot be declared as EXTERNAL, and cannot be declared in the global part.
- Reenter the corrected input.

ILLEGAL USE OF EXCEPTION PROCEDURES.

- An exception procedure cannot be used in this situation. An exception procedure cannot be specified as a formal parameter, cannot be declared as EXTERNAL, and cannot be declared in the global part.
- Reenter the corrected input.

ILLEGAL USE OF RESERVED WORD.

- A reserved word cannot be used in this context.
- Remove the reserved word.

ILLEGAL VALUE FOR THIS ATTRIBUTE.

- An attempt has been made to assign an invalid value to this attribute.
- Assign only legal values to this attribute.

INCLUDE ENDING SEQUENCE NUMBER EXPECTED.

- The ending sequence number for the INCLUDE statement is required.
- Provide an ending sequence number as needed.

INCORRECT SUBSCRIPTING.

- This DCALGOL message, message array, queue, or queue array is being subscripted incorrectly.
- Review the program syntax.

INCREMENT MAY NOT BE ZERO.

- The value of the increment of a FOR loop cannot be 0 (zero).
- Change the value of the increment for the FOR loop to a nonzero integer.

INDEX ILLEGAL WITH THIS DISKHEADER ATTRIBUTE.

- This diskheader attribute does not require a parameter.
- Remove the parameter from this diskheader attribute.

INDEX REQUIRED WITH THIS DISKHEADER ATTRIBUTE.

- This diskheader attribute requires an index (the row number or the copy number) as a parameter.
- Provide an index as a parameter to this diskheader attribute.

INFO FILE CREATED BY AN INCOMPATIBLE DUMPINFO; USE SAME COMPILER FOR DUMPINFO AND LOADINFO.

- The INFO file has been created by the DUMPINFO compiler control option in an incompatible compiler. The same version of the compiler must be used for DUMPINFO and LOADINFO.
- Use the same version of the compiler to create the INFO file that is used with the associated LOADINFO compilation.

INFO FILE CREATED BY DIFFERENT RELEASE LEVEL.

- The INFO file was created by a compiler with a different release level.
- Use a compiler of the same release level to create the INFO file that is used in the associated LOADINFO compilation.

INFO FILE CREATED BY DUMPINFO IN DIFFERENT LANGUAGE.

- The INFO file was created by a compiler of a different language.
- Use a compiler of the same language to create the INFO file that is used in the associated LOADINFO compilation.

**INITIAL VALUE IGNORED; NOT IMPLEMENTED OR NEW
FORMAT.**

- This initial value format cannot be recognized for this type, or this initial value format is not implemented.
- Remove this initial value format from the program.

INITIAL VALUE MUST BE CONSTANT.

- A constant value is required by the syntax of this statement.
- Provide a constant value as needed.

INPUT IS NEEDED TO CONTINUE THIS SEPCOMP.

- This SEPCOMP run cannot continue until the next input and image are entered.
- Enter the next secondary input card image to continue the SEPCOMP run.

INSUFFICIENT QUALIFICATION.

- This data item has been found previously.
- Qualification should be added for this data item and possibly for previous data items with the same name to ensure the proper item is selected.

INTEGER CONSTANT EXPECTED.

- An integer constant is required by the syntax of this statement.
- Provide an integer constant as needed.

INTEGER OR REAL VARIABLE EXPECTED.

- A variable of type INTEGER or REAL is required by the syntax of this statement.
- Provide an appropriate variable as needed.

INTERNAL ERROR IN COMPILERSUPPORT – PLEASE FILE A UCF.

- An internal error occurred in calling the COMPILERSUPPORT library.
- Submit a User Communication Form (UCF).

INTERNAL ERROR IN COMSLANGSUPPORT – PLEASE FILE A UCF.

- An internal error occurred in calling the COMSLANGSUPPORT library.
- Submit a User Communication Form (UCF).

INTERNAL MESSAGE: BINDINFO MAY BE INCOMPLETE.

- An internal error occurred because of incomplete binding information.
- Check to see if the NOBINDINFO compiler control option is set to TRUE. If it is, set NOBINDINFO to FALSE.

INTERRUPT IDENTIFIER REQUIRED.

- An interrupt identifier is required by the syntax of this statement.
- Provide an identifier as needed.

INTNAME SHOULD END IN A PERIOD.

- When a value is assigned to the INTNAME attribute, the EBCDIC string literal must have a period (.) as its last character.
- Add a period to the end of the EBCDIC string literal being assigned to the INTNAME attribute.

INTO EXPECTED.

- The keyword INTO is required by the syntax of this statement.
- Provide a keyword as needed.

INTRINSIC ALLOWED ONLY AS PROCEDURE CALL.

- An intrinsic procedure must be declared in the program using a library entry point specification.
- Provide the declaration of the intrinsic procedure by using a library entry point.

INVALID BIT NUMBER.

- The valid range of bit numbers is 0 through 47.
- Change the bit number to be in the range 0 through 47.

INVALID CHARACTER.

- An invalid character was encountered while scanning the current input.
- Check the current input for any unrecognizable characters and correct them.

INVALID CHARACTER SET.

- The character set provided (ASCII, BCL, EBCDIC, or HEX) is not valid in this statement.
- Provide a character set that is valid for this statement.

INVALID DECLARATION FOR ENVIRONMENT.

- This declaration is not valid for its environment.
- Check the elements of the program that surround this declaration to determine valid declarations for this environment.

INVALID FAULT NAME.

- The fault name provided by this ON statement is invalid.
- Provide a valid fault name for this statement to use.

INVALID GO ON A DOLLAR CARD.

- The GO TO compiler control option cannot appear within a DEFINE declaration or in included source input. The GO TO option also cannot be used when the batch facility is used.
- Remove the GO TO compiler control option from the included source input or DEFINE declaration and recompile. Or, do not use the batch facility.

INVALID HOST FILE.

- The code file specified as the host program during a SEPCOMP was either compiled with a different language or was not compiled with the \$MAKEHOST option equal to TRUE.
- Compile the host program with the same compiler that is to be used for the SEPCOMP, and ensure that the \$MAKEHOST option is equal to TRUE.

INVALID IDENTIFIER.

- This statement is attempting to use an invalid identifier.
- Declare all identifiers before they are used.

INVALID IDENTIFIER FOR TPS FORMAT, SUBFORMAT, OR ITEM.

- The type of identifier is not appropriate for use with the transaction processing system (TPS).
- Provide a legal identifier for use with TPS.

INVALID IDENTIFIER OR ILLEGAL USE OF RESERVED WORD.

- This statement uses an invalid identifier or uses a reserved word illegally.
- Use a valid identifier, or do not use a reserved word in this context.

INVALID INCLUDE OPTION IGNORED.

- The start specification or the stop specification on an INCLUDE compiler control option is incorrect. The INCLUDE option is ignored.
- Correct the start specification or the stop specification associated with this INCLUDE statement.

INVALID INDEX INTO DM TEXT ARRAY FOR 'INCLUDE'.

- The compiler has detected an index into an internal table that exceeds the maximum allowed value. This message most likely indicates a problem with the DASDL file in a data management program.
- Check the associated data management program.

INVALID INFOFILE SPECIFICATION IGNORED.

- In either the DUMPINFO or LOADINFO compiler control option, the <title> construct of the file specification is incorrect. The entire file specification is ignored and the default name of INFO is used.
- Check the <title> construct of the file specification part of the DUMPINFO or LOADINFO option. The <title> construct should be a quoted string containing a file title.

INVALID LIST INDEX.

- In this DMALGOL program, an index into the DASDL array was found to be less than 0 (zero) as specified through the LIST part of the NODE declaration.
- Provide a legal index through the LIST part of the NODE declaration.

INVALID NODE INDEX.

- In this DMALGOL program, an index into the DASDL array was found to be less than 0 (zero) as specified through the NODE declaration.
- Use the NODE declaration to specify an index into the DASDL array with a positive value, greater than 0 (zero).

INVALID OPEN SPECIFICATION.

- This statement specified an invalid OPEN option.
- Provide a valid OPEN option for this statement.

INVALID OPERATOR FOR COMPLEX OPERANDS.

- Complex operands must have corresponding complex operators.
- Check the expression and provide complex operators.

INVALID PARAMETER FOR RESIZE.

- The parameter for the RESIZE function is not valid.
- Check the requirements for a RESIZE statement.

INVALID PROCEDURE ARRAY RESIZE OPTION.

- A procedure reference array row specified in a RESIZE statement cannot use the PAGED option. A procedure reference array cannot be segmented.
- Delete the PAGED option from the statement and recompile the program.

INVALID PROPERTY INDEX.

- In this DMALGOL program, the arithmetic expression in the PROPERTY declaration specified an index into the DASDL array that was less than 0 (zero).
- Provide an index that is greater than or equal to 0 in the PROPERTY declaration.

INVALID RECEIVE OPTION SPECIFICATION.

- The right bracket of the DONTWAIT option in the RECEIVE statement for the COMS interface is missing, or the RECEIVE statement is not properly coded.
- Add the right bracket for the DONTWAIT option, or code the RECEIVE statement properly.

INVALID SEMANTIC CLASS SPECIFICATION.

- A class ID construct, a SIM database class, is required.
- Provide an appropriate database class as needed.

INVALID SEND OPTION SPECIFICATION.

- The < send options > construct of the SEND statement was specified incorrectly.
- Check the syntax and semantics of the SEND statement.

INVALID SIZE FOR COMPILE-TIME VECTOR.

- The compile-time variable has been declared with a vector length that is not in the range of 1 to 4095.
- Change the vector length to be in the range of 1 to 4095.

INVALID SOURCE-PART FOR REPLACE STATEMENT.

- The source part of this REPLACE statement is not valid.
- Correct the syntax of the source part of this REPLACE statement.

INVALID STRING CHARACTER.

- This string contains a character that is not a valid string character.
- Check the characters that make up this string and replace the invalid characters.

INVALID STRING CODE OR ILLEGAL STRING SYNTAX.

- The < hexadecimal string constant > parameter specified in a string expression is either incorrect or invalid.
- Provide a valid hexadecimal string expression.

INVALID SWAP PAIR.

- These two identifiers cannot be swapped.
- Provide identifiers of the same type to be used as parameters in the SWAP statement.

INVALID TADS OPTION.

- The TADS option is invalid.
- The TADS option must appear before the first syntactic item in a program and this option is valid if the AUTOBIND, \$MAKEHOST, or SEPCOMP option is TRUE.

INVALID TASK VARIABLE.

- A task designator is required by the syntax of this statement.
- Provide a task designator as needed.

INVALID TRANSLATETABLE DECLARATION.

- This TRANSLATETABLE declaration is invalid.
- Check the declaration syntax.

INVALID TRUTHSET DECLARATION.

- This TRUTHSET declaration is invalid.
- Check the declaration syntax.

IT SHOULD NOT BE DECLARED BY VALUE.

- This parameter should not be declared by value.
- Declare this parameter by name or by reference.

LABEL DECLARED AND USED BUT NOT FOUND.

- A label has been declared and used, but it has not been defined.
- Provide a label definition in your program.

LABELS MAY NOT BE PASSED TO PARALLEL PROCESS.

- A label identifier cannot be a parameter to either a RUN or a CALL statement.
- Remove the label as a parameter to the RUN or CALL statement.

LANG MUST BE < 17 LETTERS AND DIGITS (LEADING LETTER).

- A language name must be less than 17 characters, and the leading character must be a letter.
- Change the name of the language to be less than 17 characters.

LANGUAGE NAME EXPECTED.

- A language name is required by the syntax of this statement.
- Provide a language name as needed.

LEFT ANGLE BRACKET (<) EXPECTED.

- A left angle bracket (<) is required by the syntax of this statement.
- Provide a bracket as needed.

LEFT BRACKET EXPECTED.

- A left bracket (()) is required by the syntax of this statement.
- Provide a bracket as needed.

LEFT PARENTHESIS EXPECTED.

- A left parenthesis is required by the syntax of this statement.
- Provide a parenthesis as needed.

LENGTH MAY NOT BE EXPRESSED IN UNITS SPECIFIED.

- The length of the string expression specified in the LENGTH function might not be accurate because the size of the string and its unit size do not correspond.
- Change the value of the string size or the unit size.

LEVEL 1 COMPILE REQUIRES MCP OPTION SET.

- The compiler control option MCP must be set if the program is to be compiled at lexical level 1.
- Either set the MCP option or compile your program at a level greater than 1.

LEXICAL LEVEL EXCEEDS 15.

- The lexical level of an ALGOL program cannot exceed 15.
- Reduce the depth of the procedure definitions in the program.

LIBRARY ENTRY POINT IDENTIFIER EXPECTED.

- A library entry point identifier is required by the syntax of this statement.
- Provide an identifier as needed.

LIBRARY IDENTIFIER EXPECTED.

- A library identifier is required by the syntax of this statement.
- Provide an identifier as needed.

LINKLIBRARY RESULT.

- An error resulted when the compiler tried to link to a specific library through the LINKLIBRARY function. The result of the LINKLIBRARY function is returned.
- Check that the library identifier given to the LINKLIBRARY function identifies a library that exists on the system.

LITERAL 0, 4, OR 8 EXPECTED.

- The literal value 0, 4, or 8 is required by the syntax of this statement.
- Provide a literal value as needed.

LOADINFO ALREADY DONE FOR THIS PROCEDURE.

- The LOADINFO option has already been performed for this procedure. It does not need to be performed again.
- Remove the second LOADINFO option.

LOADINFO ATTEMPTED FROM FILE NOT CREATED BY DUMPINFO.

- The file specified by the LOADINFO option was not created by the DUMPINFO option.
- Use the LOADINFO option only on files created with the DUMPINFO option.

LOCAL SELECTION EXPRESSION EXPECTED.

- In parsing a database attribute ASSIGNMENT statement, the compiler required a local selection expression.
- Ensure that the program has a correct interface to the Semantic Information Manager (SIM).

LONG STRING MAY NOT BE BINARY OR QUATERNARY.

- A binary or quaternary long string cannot appear in an I/O list.
- Remove the binary or quaternary long string from the I/O list.

LOWER BOUND EXCEEDS UPPER BOUND.

- The lower bound specified must be less than the upper bound that has been specified.
- Change either the lower bound or the upper bound to ensure that the lower bound is less than the upper bound.

Section 3

Compiler Messages M through R

This section lists and describes messages that begin with the letters M, N, O, P, Q, and R.

MAKEHOST AND NOBINDINFO CANNOT BOTH BE SET.

- The compiler control options \$MAKEHOST and NOBINDINFO cannot both be set.
- Reset one of the options.

MAKEHOST IS INVALID BECAUSE TADS OPTION HAS BEEN SET.

- The \$MAKEHOST compiler control option is not valid because the TADS compiler control option has already been set.
- Reset either the TADS option or the \$MAKEHOST option.

MAKEHOST LIMITED TO 180 CHARACTERS OF NESTED PROCEDURE NAMES. PLEASE SHORTEN NAMES.

- An internal compiler limit has been exceeded. The maximum number of characters allowed for MAKEHOST procedure names is 180.
- Either reset the \$MAKEHOST option or shorten the names of the procedures.

MAY NOT DO \$GO TO ON A TAPE FILE.

- A \$GO TO option does not work on a TAPE file. The option can be used only on a DISK file. Also, a \$GO TO option cannot appear within a DEFINE declaration or in included source input.
- Remove the \$GO TO option and change the logic of your program to work without this option.

MAY NOT HAVE SAME INTERNAL NAME AS A COMPILER FILE.

- The file specified for inclusion has an internal name that is reserved for the compiler file names. Such names are CARD, TAPE, and PATCH.
- Change the internal name of the INCLUDE file and recompile the program.

MEMBER OF SWITCH DISAGREES WITH THE SWITCH.

- In a SWITCH FILE declaration, the switch file list of a switch file that is not designated as DIRECT can contain only file designators that are not DIRECT. The switch file list of a switch file that is designated as DIRECT can contain only file designators that are DIRECT.
- Ensure that the switch file designators match the switch file list.

MERGE CANNOT BE REFERENCED UNDER SEPCOMP CONTROL.

- The MERGE compiler control option cannot be used during a SEPCOMP.
- Remove the MERGE compiler control option.

MESSAGE ARRAY MAY NOT BE INDEXED BY THIS.

- This identifier cannot be used to index a message array because the identifier used has a double-precision value.
- Use a single-precision value to index a message array.

MESSAGE IDENTIFIER EXPECTED.

- A DCALGOL message identifier is required.
- Provide a valid message identifier where appropriate.

MESSAGE REFERENCE OUTSIDE OF BLOCK WHERE DECLARED.

- DCALGOL globally declared messages can be referenced from within nested blocks using normal scope rules, but these messages cannot be referenced from within nested procedures.
- Remove from nested procedures the references to globally declared messages.

MISMATCHED TRANSACTION BASES.

- When passing transaction records, the actual and formal parameters must refer to the same transaction base. The compiler checks the timestamp to ensure the parameters match.
- Refer to the same transaction base in the actual and formal parameters.

MISSING CAT OPERATOR.

- The compiler is expecting a string concatenation operator (CAT or | |).
- Provide an operator as needed.

MISSING DECIMAL-PLACES IN FIELD-WIDTH-PART.

- The syntax of this editing phrase requires decimal places after the field width.
- Check the declaration and provide decimal places as needed.

MISSING FIELD-WIDTH-PART.

- The syntax of this editing phrase requires a field width.
- Check the declaration and provide a field width as needed.

MISSING FIELD-WIDTH-PART OR IT WAS =0 IN T PHRASE.

- The syntax of this editing phrase requires a field width. The field width must be greater than 0 (zero) if the T editing phrase was used.
- Check the declaration and provide a field width as needed.

MISSING LIST ELEMENT.

- The syntax of this statement requires a list part.
- Check the READ or WRITE statement.

MNEMONIC FOR ATTRIBUTE VALUE EXPECTED.

- A mnemonic value for this attribute is required.
- Provide a mnemonic value that is valid for this attribute.

MONITOR PROCEDURE CANNOT BE FORMAL.

- A procedure identifier specified in a MONITOR declaration cannot be used as a formal parameter.
- Remove the procedure identifier specified in the MONITOR declaration from the formal parameter list.

MONITOR PROCEDURE HAS WRONG NUMBER OF PARAMETERS.

- The MONITOR declaration does not have the correct number of parameters.
- Check the number of parameters in the MONITOR procedure, and add the missing parameters or delete the extra parameters.

MONITOR PROCEDURE HAS WRONG PARAMETERS.

- The MONITOR declaration does not have the correct parameters.
- Check the parameters in the MONITOR procedure and correct them as necessary.

MONITOR PROCEDURE HAS WRONG TYPE.

- The variable in the MONITOR statement cannot be monitored because it is the wrong type.
- Use TADS to display the run-time values of the variable, or change the type of the variable.

MONITORED ARRAYS CANNOT APPEAR IN I/O LISTS.

- A monitor element declared as an array identifier cannot appear in an I/O list.
- Remove this array from the I/O list and do not monitor this array.

MORE THAN 63 CHARACTERS LONG.

- ALGOL identifiers can be a maximum of 63 characters.
- Shorten the length of this identifier so that it is less than or equal to 63 characters.

MULTIDIMENSIONAL ARRAYS MUST SPECIFY SUBSCRIPTS.

- Array rows with more than one dimension that are passed as parameters must specify each subscript.
- Add the necessary subscripts to the parameter.

MUST BE A DIRECT ARRAY.

- A direct array must be used in this statement.
- Check your statement and add a direct array as needed.

MUST BE A DIRECT ARRAY REFERENCE.

- This statement must use a direct array reference identifier.
- Check your statement and add a direct array reference identifier as needed.

MUST BE A LABEL IDENTIFIER.

- This statement must have a label identifier.
- Add a label identifier, as needed, to your program.

MUST BE A 6 OR 8 BIT STRING.

- The specified syntax for a MEMORYDUMP statement, an internal DMALGOL debugging statement, is incorrect.
- Check and correct the syntax of this MEMORYDUMP statement.

MUST BE ARITHMETIC EXPRESSION.

- This statement must contain an arithmetic expression.
- Provide an arithmetic expression as needed.

MUST BE ARRAY IDENTIFIER.

- This statement must contain an array identifier.
- Provide an array identifier as needed.

MUST BE BLOCK OR PROCEDURE.

- The compiler requires a block or a procedure in this location.
- Provide a block or a procedure as needed. A block can be created by using the keywords BEGIN and END and providing at least one declaration.

MUST BE BOOLEAN EXPRESSION.

- This statement requires a Boolean expression.
- Provide a Boolean expression as needed.

MUST BE DESIGNATIONAL EXPRESSION.

- The compiler requires a designational expression at this location.
- Provide a designational expression as needed.

MUST BE EBCDIC ARRAY.

- The compiler requires an EBCDIC array in this location.
- Provide an EBCDIC array as needed.

MUST BE EBCDIC STRING.

- The compiler requires an EBCDIC string in this location.
- Provide an EBCDIC string as needed.

MUST BE HEX STRING.

- The compiler requires a HEX string in this location.
- Provide a HEX string as needed.

MUST BE ONE-DIMENSIONAL ARRAY.

- The compiler requires a one-dimensional array in this location.
- Provide a one-dimensional array as needed.

MUST BE POINTER ATTRIBUTE.

- The compiler requires a pointer attribute in this location.
- Provide a pointer attribute as needed.

MUST BE POINTER EXPRESSION.

- The compiler requires a pointer expression in this location.
- Provide a pointer expression as needed.

MUST BE POINTER OR ARITHMETIC EXPRESSION.

- The compiler requires a pointer or an arithmetic expression in this location.
- Provide a pointer or an arithmetic expression as needed.

MUST BE PROCEDURE IDENTIFIER.

- The compiler requires a procedure identifier in this location.
- Provide a procedure identifier as needed.

MUST HAVE AT LEAST ONE MERGE SOURCE.

- There must be at least one source when a program specifies a merge operation.
- Check your MERGE statement and add at least one merge source.

MUST HAVE LESS THAN NINE MERGE SOURCES.

- There must be less than nine merge sources in a MERGE statement.
- Check your MERGE statement and lower the number of merge sources to less than nine.

MUST HAVE SAME CLASS AS PREVIOUS ITEM.

- The monitor elements in this type of MONITOR declaration all must be of the same class.
- Check your MONITOR declaration and ensure that the monitor elements are all of the same class.

MUST HAVE SAME DIMENSION AS PREVIOUS ARRAY.

- The array identifiers specified in the list of monitor elements in this type of MONITOR declaration all must have the same number of dimensions.
- Change the array declarations to give all the array identifiers in this MONITOR declaration the same dimensions, or remove some of the array identifiers from this MONITOR declaration and put them in another MONITOR declaration.

MUST HAVE SOME DBS ENVIRONMENTS.

- At least one database stack (DBS) environment is required at this level.
- Make sure that at least one database stack environment is available on the system at this level.

MUST STORE DIRECT ARRAY INTO DIRECT ARRAY REFERENCE VARIABLE.

- Direct arrays can be assigned only to direct array reference variables.
- Either declare both the array and array reference variable as **DIRECT** or declare neither as **DIRECT**.

NAME QUALIFIER ALREADY SPECIFIED.

- The **ADDS** entity **NAME** can be specified only once, and it has already been specified.
- Remove the second specification for the entity **NAME**.

NAME QUALIFIER IN < ENTITY QUALIFIER PART > REQUIRED.

- A **NAME** qualifier phrase (**NAME** = < entity name >) is required in the entity qualifier because the length of the **ADDS_ID** is greater than 30 characters.
- Either shorten the **ADDS_ID** to 30 characters or less, or supply a **NAME** qualifier phrase.

NAME, DIRECTORY, VERSION, OR STATUS EXPECTED.

- An entity qualifier is expected here. The possible qualifiers are **NAME**, **DIRECTORY**, **VERSION**, and **STATUS**. **NAME** is the name of the type description within **ADDS**. **VERSION** is an integer assigned to the entity by the data dictionary. **DIRECTORY** is a literal that represents a valid directory name. The asterisk (*) is a valid **DIRECTORY** name that specifies no directory name. **STATUS** allows a particular status to be retrieved. The only valid values for **STATUS** are **TEST** and **PRODUCTION**.
- Add the desired entity qualifier.

NEW CYCLE GREATER THAN OLD CYCLE + 1.

- This warning message indicates that the value for the new cycle, specified by the \$VERSION option, is one greater than the old cycle.
- If you do not want warning messages displayed, set the WARNSUPR option to TRUE.

NEW VERSION AND CYCLE LESS THAN OLD VERSION AND CYCLE.

- This warning message indicates that the new version and cycle values, specified by the \$VERSION option, are less than the old version and cycle values.
- If you do not want warning messages displayed, set the WARNSUPR option to TRUE.

NEWDOPEVECTOR HAS BEEN DEIMPLEMENTED-USE RESIZE.

- The NEWDOPEVECTOR function in DMALGOL has been deimplemented.
- Use the RESIZE function to increase the size of the first dimension of a two-dimensional array.

NEXT EXPECTED.

- The keyword NEXT is required by the syntax of this statement.
- Provide the keyword NEXT as needed.

NO BLANK SEQUENCE NUMBERS ALLOWED.

- Sequence numbers cannot be blank.
- Supply a value for the sequence numbers.

NO CODE FILE PRODUCED - AUTOBIND IGNORED.

- This compilation has not produced a code file. Therefore the AUTOBIND option is ignored.
- The AUTOBIND option is ignored if a code file is not produced or if the TADS option is set to TRUE. Check your program and correct as needed.

NO ENVIRONMENT COULD BE FOUND FOR THIS PATCH.

- The environment being patched could not be found in the HOST file.
- Check the \$MAKEHOST option of the HOST file that is being used for this SEPCOMP.

NO MORE THAN 16 DIMENSIONS ALLOWED.

- Arrays cannot have more than 16 dimensions.
- Check the ARRAY declaration and alter it to have no more than 16 dimensions.

NO PARAMETERS ALLOWED.

- This procedure identifier (the CONTROL procedure from a FREEZE statement, an EPILOG procedure in a DCALGOL program, a SAVEOUTPUT procedure, or a SAVEINPUT procedure) cannot have parameters.
- Remove the parameters that have been provided for this procedure.

NO PRIMARY CAN START WITH THIS.

- A valid primary in an ALGOL program cannot start with this symbol.
- Change the primary to start with a valid symbol.

NO STATEMENT CAN START WITH THIS.

- A valid statement in an ALGOL program cannot start with this symbol.
- Change the statement so that it starts with a valid symbol.

NO VALUE RETURNED FOR THIS I/O CONSTRUCT.

- The compiler does not return a value from this I/O statement.
- Change the logic of your program so that it does not require a value returned from this I/O statement, or use a different I/O statement.

NODE HAS NO LIST.

- An attempt has been made to use the LIST part of a NODE identifier in this DMALGOL program; however, a list has not been defined for this node.
- Check the program and provide an appropriate LIST definition.

NODE HAS NO PROPERTIES.

- An attempt has been made to use the PROPERTIES part of a NODE identifier in this DMALGOL program; however, no properties have been defined for this node.
- Provide an appropriate PROPERTIES definition.

NODE IDENTIFIER EXPECTED.

- An identifier of type NODE is required by the syntax of this DMALGOL statement.
- Provide an identifier with a type of NODE.

NON-CHARACTER ARRAY ROW EXPECTED.

- A word-based array row is required by the syntax of this statement.
- Provide a word-based array row as needed.

NON-LOCAL MESSAGE REFERENCE IS 'UNSAFE'.

- In DMALGOL, references to globally declared messages are considered unsafe operations.
- Declare a message locally if you want to reference it in a DMALGOL program.

NOT ALLOWED AS LIST ELEMENT IN READ STATEMENT.

- The compiler has found a symbol that is not allowed as a list element in a READ statement.
- Check the syntax for the list elements in a READ statement and remove invalid symbols.

NOT AN INTEGRAL NUMBER OF SIX-BIT CHARACTERS.

- The ALGOL compiler has encountered a long octal string with an odd number of characters.
- Change the long octal string so that it has an even number of characters.

NOT DEFINED IN GIVEN DATA SET.

- In this DMALGOL program, the input mapping of a GET statement or the output mapping of a PUT statement is attempting to transfer the value of a DASDL-declared data item that is not defined.
- Define the data item before using it.

NOT ENOUGH SUBSCRIPTS.

- Not enough subscripts have been provided to access the elements of this array.
- Provide subscripts as necessary.

NOT FOUND OR INVALID FOR MAKEHOST ENVIRONMENT.

- The local environment for the \$MAKEHOST option cannot be found or it is not a valid environment name.
- Check the name of the environment to see that it valid for this \$MAKEHOST option.

NULL EXPECTED.

- A NULL value is required by the syntax of this statement.
- Check the statement syntax and provide a NULL value as needed.

NULL VALUE NOT DEFINED FOR BOOLEAN ITEM.

- The value of NULL is not defined for Boolean items. Boolean items can have only the value TRUE or FALSE.
- Provide a TRUE or FALSE value to replace the NULL value.

NUMBER ALREADY USED IN CASE.

- This number has already been used as a label in this CASE statement.
- Make all the numbers used as labels unique in a CASE statement. Change one of the numbers to a new value.

NUMBER EXPECTED.

- A number is required by the syntax of this statement.
- Provide a number as needed.

NUMBER IS TOO BIG.

- This number is too big for the compiler to use.
- Reduce the number to an appropriate size.

NUMBER MUST BE LESS THAN 4030 IN FORMAT SPECIFICATION.

- The number used for the repeat part, field width, or decimal places in a format specification should be less than 4030.
- Reduce the number to be less than 4030.

NUMBER OF PARAMETERS DIFFERS FROM FORWARD DECLARATION.

- The number of parameters in the FORWARD declaration of the procedure is not the same as the number of parameters in the actual PROCEDURE declaration.
- Compare the FORWARD declaration with the actual PROCEDURE declaration, and correct the number of parameters.

NUMBER OF PARAMETERS DISAGREES WITH DECLARATION.

- The number of parameters in the procedure call differs from the number of parameters in the PROCEDURE declaration.
- Check the parameters provided with the procedure call against the parameters in the declaration, and correct as necessary.

NUMBER OUT OF RANGE.

- This number is out of range for the current application.
- Alter your program to use only a number within the range of this application.

OBJECT CODE WILL BE PRODUCED FOR TARGET 'ALL'.

- The object code file produced from this compilation can run on all currently supported machines.
- To have this code file optimized for the machine or machines on which it will run, use the TARGET option with the primary identifier indicating the machine or machines that will run the code file.

OF EXPECTED.

- The keyword OF is required by the syntax of this statement.
- Provide the keyword OF as needed.

OFFSET MAY NOT BE EXPRESSED IN UNITS SPECIFIED.

- The OFFSET function cannot return an offset value in the units that have been specified.
- Change the units of the pointer provided to the OFFSET function.

OLD DICTIONARY – NO DECODE_ERR ENTRYPPOINT; COMPILER WILL INTERPRET ERROR.

- This program has linked to an earlier release of ADDS, which does not have the DECODE_ERR entry point.
- Link to a current release of ADDS.

ONLY ARRAY-ROW I/O MAY BE USED FOR PORTFILES.

- Reading and writing to port files can be done only with array-row I/O.
- Do not attempt an I/O operation to port files with any item other than a array-row I/O.

ONLY BOOLEAN EXPRESSIONS MAY BE NEGATED.

- The only expressions that can be negated are Boolean expressions.
- Do not try to negate this expression, or use parentheses to make sure that you are negating a Boolean expression.

ONLY FIRST DIGIT IN STRING IS USED IN FORMAT.

- Only the first digit of the string code is used when a simple string literal appears in the editing specifications. A warning is issued because a second or third digit has appeared.
- Use only 1-digit string literals for editing specifications.

ONLY LEVEL 3 PROCEDURES ALLOWED.

- SEPCOMP is allowed only on level 3 procedures.
- Change the lexical level of the SEPCOMP to 3.

ONLY ONE ELSE CLAUSE PER CASE STATEMENT IS ALLOWED.

- There can be only one ELSE clause for each CASE statement.
- Remove the extra ELSE clause from this CASE statement.

OPTION MAY NOT BE CHANGED WHILE MAKING A HOST.

- The NEW compiler control option cannot be assigned a value if the \$MAKEHOST option is TRUE and the first syntactic item of the source program has been compiled.
- Move the NEW option so that it occurs before the first syntactic item of this program, or delete either the NEW option or the \$MAKEHOST option.

OPTION MUST APPEAR BEFORE FIRST SYNTACTICAL ITEM.

- This compiler control option cannot be assigned a value if the first syntactic item of the source program has been compiled.
- Move this compiler control option so that it occurs before the first syntactic item of the source program.

OUTPUT MESSAGE NUMBER MUST BE BETWEEN 1 AND 99999999.

- The output message number in an OUTPUTMESSAGE ARRAY declaration must be between 1 and 99999999.
- Change the OUTPUTMESSAGE ARRAY declaration to use only numbers between 1 and 99999999.

OUTPUT MESSAGE SEGMENT EXPECTED.

- The syntax of the output message requires an output message segment after the equal sign (=).
- Add the text for this output message segment after the equal sign.

OUTPUTMESSAGE ARRAY NAMES MUST BE UNIQUE IN A PROGRAM.

- This output message array name has been used before.
- Change the name of this output message array to be a unique identifier.

PARAMETER EXPECTED.

- This attribute requires a parameter.
- Provide a parameter as needed.

PERIOD EXPECTED.

- A period is required by the syntax of this statement.
- Provide a period as needed.

PICTURE IDENTIFIER EXPECTED.

- A PICTURE identifier is required by the syntax of this statement.
- Check your PICTURE declaration and provide an identifier as needed.

POINTER FOR NOT ALLOWED FOR FORMAL PARAMETERS.

- The expression (POINTER)X FOR Y DIGITS cannot be used as a formal parameter in an ALGOL program.
- Pass the pointer and the length as formal parameters.

POINTER FOR NOT ALLOWED IN GLOBAL DECLARATIONS.

- The expression (POINTER)X FOR Y DIGITS cannot appear in the global declarations of an ALGOL program.
- Remove the pointer expression from the global declarations.

POINTER IDENTIFIER REQUIRED.

- A pointer identifier is required by the syntax of this statement.
- Provide a pointer identifier as needed.

POINTER INTO MESSAGE MAY NOT BE ASSIGNED.

- In a DCALGOL program, a pointer into a message identifier, or a pointer into a message array, cannot be assigned a value.
- Do not assign a value to this pointer.

POINTER OR STRING EXPRESSION EXPECTED.

- A pointer or string expression is required by the syntax of this statement.
- Provide a pointer or a string expression as needed.

POINTER PRIMARY CANNOT START WITH THIS.

- A pointer primary cannot start with this character.
- Start the pointer primary with a legal character.

POSITIVE INTEGER EXPECTED.

- A positive integer is required by the syntax of this statement.
- Provide a positive integer as needed.

PREPROCESSOR STATEMENT EXPECTED.

- A preprocessor statement is required by the syntax of this statement.
- Provide a preprocessor statement as needed.

PREPROCESSOR STATEMENT MAY NOT START WITH THIS.

- A preprocessor statement cannot begin with this character.
- Start the preprocessor statement with a legal character.

PRIOR EXPECTED.

- The keyword PRIOR is required by the syntax of this statement.
- Provide the keyword PRIOR as needed.

PROCEDURE IDENTIFIER EXPECTED.

- A procedure identifier is required by the syntax of this statement.
- Provide a procedure identifier as needed.

PROCEDURE MUST BE AT LEVEL HIGHER THAN GLOBALS.

- The lexical level of all procedures must be greater than the global portions of an ALGOL program.
- Use the INTRINSICS option to compile a procedure at lexical level 2 and have a global part.

PROCEDURE MUST BE USER DECLARED.

- The procedure identifier used in a CALL, PROCESS, or RUN statement must be declared in the user program.
- Declare in your user program the procedure that you want to call, process, or run.

PROCEDURE TYPE DIFFERS FROM FORWARD DECLARATION.

- The type of the procedure is different from the type of the FORWARD declaration of the procedure.
- Match the type of the PROCEDURE declaration with the type of the FORWARD declaration.

PROCEDURE TYPE MUST MATCH PROCEDURE REFERENCE VARIABLE.

- The procedure reference array element on the left side of the assignment operator (:=) and the procedure or procedure reference array element on the right side must be of the same type and have the same parameter descriptions.
- Match the types and parameter descriptions of the procedure reference array elements of both sides of the assignment operator.

PROGRAM SEGMENT TOO LARGE.

- A program segment is too large for the ALGOL compiler.
- Reduce the size of the appropriate program segments. You can use the BEGINSEGMENT and ENDSEGMENT compiler control options to control the segmentation of your program.

PROGRAM TOO LARGE.

- This program is too large to be compiled by the ALGOL compiler.
- Remove segments as needed. Some segments might need to be placed in a library.

PROPERTY IDENTIFIER EXPECTED.

- A property identifier is required by the syntax of this DMALGOL statement.
- Provide a property identifier as needed.

PUT LOADINFO INSIDE THE BRACKETS, NOT BEFORE.

- The LOADINFO compiler control option must be placed inside brackets ([]), not before the brackets.
- Move the location of the LOADINFO compiler control option so that it is inside the brackets.

QUERY IDENTIFIER EXPECTED.

- A query identifier is required by the syntax of this statement that is using the SIM interface.
- Provide a query identifier as needed.

QUERY VARIABLE MUST BE ASSOCIATED WITH A DMRECORD.

- For a SIM retrieval query, the query variable must be associated with a previously defined DMRECORD type. This construct is the user-defined name associated with the format.
- Associate the query variable with a previously defined DMRECORD type.

QUEUE ATTRIBUTE EXPECTED.

- A queue attribute is required by the syntax of this DCALGOL statement.
- Provide a queue attribute as needed.

QUEUE CANNOT BE OWN.

- A QUEUE, QUEUE ARRAY, or QUEUE ARRAY REFERENCE declaration cannot be declared as OWN.
- Remove the keyword OWN from the QUEUE declaration. If you want the contents of the queue saved when the program exits the block in which the queue is currently declared, then move the QUEUE declaration to the outer block.

QUEUE CANNOT BE PASSED BY VALUE.

- In a DCALGOL program, queues and queue arrays can be declared as parameters to procedures and can be passed by name only. They cannot be passed by value.
- Pass the arrays by name.

QUEUE IDENTIFIER EXPECTED.

- A queue identifier is required by the syntax of this DCALGOL statement.
- Provide a queue identifier in your program.

QUOTE SIGN EXPECTED.

- A quotation mark (") is required by the syntax of this statement.
- Provide a quotation mark as needed.

READ ONLY QUEUE ATTRIBUTE ILLEGAL.

- An attempt has been made to alter a read-only queue attribute.
- Do not attempt to alter a read-only queue attribute.

REAL OR REAL SUBSCRIBED VARIABLE REQUIRED.

- A real or real subscribed variable is required by the syntax of this statement.
- Provide an appropriate variable as needed.

**RECORD FIELDS MUST BE INDIVIDUALLY SPECIFIED,
IGNORED.**

- The record retrievals are ignored because the record fields were not individually specified.
- Specify the record fields individually.

RECORD IDENTIFIER EXPECTED.

- A record identifier is required by the syntax of this statement.
- Provide a record identifier as needed.

RECORD IDENTIFIER OR FIELD OF TYPE RECORD EXPECTED.

- A record identifier or a field of type RECORD is required by the syntax of this statement.
- Provide an appropriate record identifier or field as needed.

RECORD, REAL ARRAY, OR EBCDIC ARRAY ID EXPECTED.

- A record, a real array, or a EBCDIC array identifier is required by the syntax of this statement.
- Provide the appropriate record, array, or identifier.

RECORD TYPE NOT RECOGNIZED BY COMSLANGSUPPORT.

- The record type specified by the program is not recognized by the COMSLANGSUPPORT library that is currently loaded.
- Change the type of the record to one that is recognized by the COMSLANGSUPPORT library that is currently loaded.

RELATIONAL OPERATOR EXPECTED.

- A relational operator is required by the syntax of this statement.
- Provide an operator as needed.

REMOTE FILE IN TADS OPTION NOT DECLARED GLOBALLY.

- The remote file in the TADS compiler control option needs to be declared globally.
- Declare the remote file globally.

REPEAT FIELD ILLEGAL IN FREE FIELD INPUT.

- A REPEAT part of a format specification is illegal in free-field input.
- Check your READ statement and remove the REPEAT part as needed.

REPEAT PART MAY NOT BE NEGATIVE.

- The repeat part value of a PICTURE declaration must be an unsigned integer.
- Check the declaration and provide an unsigned integer as needed.

RESETTING NOBINDINFO IS ILLEGAL IF STATISTICS IS SET.

- Resetting the NOBINDINFO compiler control option is not legal if the STATISTICS compiler control option is set.
- Either reset the STATISTICS option or do not reset the NOBINDINFO option.

'RESPONDTYPE' CLAUSE EXPECTED.

- The RESPOND statement requires a RESPONDTYPE clause.
- Provide an appropriate clause as needed.

RESULT VARIABLE SHOULD BE ARITHMETIC.

- The result variable for this action should be type arithmetic.
- Provide the appropriate result variable as needed.

RESULT VARIABLE SHOULD BE BOOLEAN.

- The result variable for this action should be type BOOLEAN.
- Provide the appropriate result variable as needed.

RESULT VARIABLE SHOULD BE POINTER.

- The result variable for this action should be type POINTER.
- Provide the appropriate result variable as needed.

RETAIN EXPECTED.

- The keyword RETAIN is required by the syntax of this statement.
- Provide the keyword RETAIN as needed.

RIGHT ANGLE BRACKET (>) EXPECTED.

- A right angle bracket (>) is required by the syntax of this statement.
- Provide a right angle bracket as needed.

RIGHT BRACKET EXPECTED.

- A right bracket (]) is required by the syntax of this statement.
- Provide a right bracket as needed.

RIGHT PARENTHESIS EXPECTED.

- A right parenthesis is required by the syntax of this statement.
- Provide a right parenthesis as needed.

RUN STATEMENT MAY NOT HAVE NAME PARAMETERS.

- A RUN statement cannot have name parameters in its actual parameter part.
- The parameters for a procedure invoked with a RUN statement must be call-by-value.

RUN STATEMENT MAY NOT HAVE POINTER PARAMETERS.

- A RUN statement cannot have pointer parameters in its actual parameter part.
- Do not use pointers, arrays, files, or strings as parameters to a RUN statement.

RUN STATEMENT MAY NOT HAVE STRING PARAMETERS.

- A RUN statement cannot have string parameters in its actual parameter part.
- Do not use pointers, arrays, files, or strings as parameters to a RUN statement.

Section 4

Compiler Messages S through Z

This section lists and describes messages that begin with the letters S, T, U, V, W, X, Y, and Z.

SDFPLUS FORM RECORD IDENTIFIER EXPECTED.

- An SDF Plus form record identifier is required by the syntax of this statement.
- Provide a form record identifier as needed.

SDFPLUS TRANSACTION IDENTIFIER EXPECTED.

- An SDF Plus transaction identifier is required by the syntax of this statement.
- Provide a transaction identifier as needed.

SECOND PARAMETER OF THIS FUNCTION MUST BE GEQ ZERO.

- The second parameter of this function must be a positive value.
- Provide a positive value as needed.

SEE THE ADDS REFERENCE MANUAL FOR FURTHER INFORMATION.

- See the *InfoExec ADDS Operations Guide* for more information on the error encountered while compiling this program.

SEEK ILLEGAL WITH DISKHEADERS.

- In a DCALGOL program, a SEEK statement cannot have a diskheader I/O file part as its file designator.
- Remove the diskheader I/O file as the file designator in the SEEK statement.

SEEK MAY NOT HAVE FORMAT.

- A SEEK statement cannot contain a format identifier.
- Remove format identifiers as needed.

SEEK OR SPACE MUST HAVE NON-DIRECT FILE FOR FILEPART.

- The SEEK statement and the SPACE statement must have nondirect files specified for their file part.
- Use only nondirect files for SEEK and SPACE statements.

SEEK STATEMENT MUST HAVE ADDRESS PART.

- A SEEK statement must have a record number to indicate the location to position the pointer.
- Include a record number in the SEEK statement.

SELECT, WITH, OR FIELD NAME EXPECTED.

- The keyword SELECT, the keyword WITH, or a field name is required by the syntax of this statement.
- Provide a keyword or field name as needed.

SEMANTIC ATTRIBUTE EXPECTED.

- A semantic attribute is required by the syntax of this statement.
- Provide a semantic attribute as needed.

SEMANTIC PRIMARY NOT ALLOWED HERE.

- A SIM primary is not allowed at this location in an ALGOL, a DCALGOL, or a DMALGOL program.
- Remove the SIM primary from this location.

SEMICOLON EXPECTED.

- A semicolon (;) is required by the syntax of this statement.
- Provide a semicolon as needed.

SEMICOLON OR RIGHT BRACKET EXPECTED.

- A semicolon (;) or a right bracket (]) is required by the syntax of this statement.
- Provide a semicolon or a right bracket as needed.

SEPARATELY COMPILED PROCEDURE CANNOT BE EXTERNAL.

- A procedure compiled using the SEPCOMP compiler control option cannot be an external procedure.
- Do not use the SEPCOMP compiler control option with external procedures.

SEPARATELY COMPILED PROCEDURE CANNOT BE FORWARD.

- A procedure compiled using the SEPCOMP compiler control option cannot be declared as FORWARD.
- Do not use the SEPCOMP compiler control option with a procedure that is declared as FORWARD.

SEPCOMP HOST FILE CREATED BY DIFFERENT LANGUAGE.

- The HOST file specified by this SEPCOMP compiler control option was created using a different language.
- Use the same language for the files used in a SEPCOMP.

SEPCOMP HOST FILE CREATED BY DIFFERENT RELEASE LEVEL.

- The HOST file specified by this SEPCOMP compiler control option was created under a different release level.
- Use compilers with the same release level to compile the HOST file and the SEPCOMP files.

SEQUENCE ERROR NOT ALLOWED UNDER SEPCOMP.

- Programs compiled using the SEPCOMP compiler control option terminate if any sequence errors occur.
- Check the programs that you are trying to compile with the SEPCOMP option and resequence as necessary.

SEQUENCE NUMBERS ARE TOO CLOSE TOGETHER.

- The sequence numbers in this SEPCOMP patch are too close together to properly perform a SEPCOMP.
- Resequence the line numbers in the patch and attempt the SEPCOMP again.

SET, SETS, ALL OR NONE EXPECTED.

- The keyword SET, SETS, ALL, or NONE is required by the syntax of this statement.
- Provide a keyword as needed.

SIGN SPECIFICATIONS OF THIS ENTITY NOT SUPPORTED.

- This type of sign specification for a COBOL type is not supported by the ALGOL compiler.
- Change the sign specification of this entity to a sign specification supported by ALGOL.

SIM LANGUAGE EXTENSION STATEMENT ENCOUNTERED BUT THERE HAS NOT BEEN A SIM DATABASE DECLARATION.

- The ALGOL compiler has found a SIM language extension accessing a SIM database, but a SIM database has not been declared.
- Declare a SIM database, or remove the language extension.

SIMPLE ARITHMETIC VARIABLE REQUIRED.

- A simple arithmetic variable is required by the syntax of this statement.
- Provide a variable as needed.

SINGLE-PRECISION EXPRESSION REQUIRED.

- A single-precision expression is required by the syntax of this statement.
- Provide a single-precision expression as needed.

SINGLE-PRECISION VARIABLE REQUIRED.

- A single-precision variable is required by the syntax of this statement.
- Provide a single-precision variable as needed.

SLASH REQUIRED.

- A slash (/) is required by the syntax of this statement.
- Provide a slash as needed.

SOMETHING IS WRONG WITH YOUR SYSTEM/PATCH \$# CARD.

- An error has occurred with the patch that is being compiled including the SEPCOMP option.
- Check your SYSTEM/PATCH patch delimiter card (\$#) and try the SEPCOMP again.

SPACE MAY NOT HAVE BRACKET PART.

- The file designator of a SPACE statement cannot contain brackets ([]).
- Remove brackets as needed.

SPECIFICATION DIFFERS FROM FORWARD DECLARATION.

- The parameter specification for this procedure differs from the FORWARD declaration of the procedure.
- Check both parameter lists and change the list that is incorrect.

STACKSWAP MAY BE DECLARED ONLY ONCE.

- In a DCALGOL program, a STACKSWAP declaration can occur only once. There cannot be a duplicate declaration.
- Remove all but one of the STACKSWAP declarations so that the program can compile.

STACKSWAP MAY NOT BE DECLARED AT OUTER LEVEL.

- In a DCALGOL program, a STACKSWAP declaration cannot be located in the outer level of a program.
- Move the STACKSWAP declaration to an inner level.

STATUS DESIGNATOR (TEST, PRODUCTION, OR ANY) EXPECTED.

- An entity qualifier STATUS is expected by the program since ADDS extensions are being used.
- Add the line *STATUS = <status value>* to the program, where the <status value> is TEST, PRODUCTION, or ANY.

STATUS QUALIFIER ALREADY SPECIFIED.

- The entity qualifier STATUS has already been specified by this program.
- Remove all but one of the *STATUS = <status value>* source lines.

STEP EXPECTED.

- The keyword STEP is required by the syntax of this statement.
- Provide the keyword STEP as needed.

STRING AND ITEM LENGTHS MUST MATCH.

- The length of the string and the length of the item are not the same.
- Match lengths as needed.

STRING CONSTANT OR ELSE EXPECTED.

- A string constant or the keyword ELSE is required by the syntax of this statement.
- Provide a constant or the keyword ELSE as needed.

STRING EXPRESSION MAY NOT BE PASSED TO CALL/PROCESS.

- A string expression cannot be used as a parameter in a CALL statement or a PROCESS statement.
- Remove an expression as needed.

STRING MUST BE 4-, 6-, OR 8-BIT CHARACTERS.

- The character size for a string must be 4, 6, or 8 bits.
- Provide an appropriate character size.

STRING NOT ALLOWED AS PARAMETER TO UNSPECIFIED PROCEDURE.

- A string is not allowed as a parameter to an unspecified procedure.
- Do not use a string as a parameter to this procedure.

STRING PARAMETER BY VALUE ILLEGAL FOR CALL OR PROCESS.

- A string parameter passed by value is illegal for a CALL statement or a PROCESS statement.
- Do not pass a string parameter as call-by-value for a CALL or a PROCESS statement.

Compiler Messages S through Z

STRING PRIMARY EXPECTED.

- A string primary is required by the syntax of this statement.
- Provide a string primary as needed.

STRING TOO LONG.

- The maximum string length allowed in an ALGOL program is 256.
- Provide a string of an appropriate length.

SUBFILE, DONTWAIT, AND URGENT ONLY ALLOWED ONCE EACH.

- The keywords SUBFILE, DONTWAIT, and URGENT are only allowed once in each statement.
- Remove duplicate keywords.

'SUBFILE' EXPECTED.

- A SUBFILE clause is required in the AWAITOPEN, RESPOND, CLOSE, or OPEN statement because the specified file is a port file.
- Provide a SUBFILE clause as needed.

SUBSCRIPT OUTSIDE DECLARED BOUNDS.

- The subscript for this array element is outside the declared bounds of the array.
- Change the subscript so that it is within the declared bounds of the array.

SUBSCRIPTS MUST PRECEDE ASTERISKS.

- It is illegal for an asterisk (*) to precede a subscript in a multidimensional array. For example, $A[1, *]$ is correct syntax, but $A[* , 1]$ is not correct for a two-dimensional array.
- Move the asterisk so that it is the last dimension of the array.

SYNCHRONIZE EXPECTED.

- The keyword SYNCHRONIZE is required by the syntax of this statement.
- Provide the keyword SYNCHRONIZE as needed.

TADS CANNOT BE SET WITH A LEVEL > 2.

- The compiler control option TADS cannot be set if the lexical level of the program being compiled is greater than 2.
- Either reset the TADS option or compile the program at lexical level 2.

TADS DOES NOT YET SUPPORT THIS DATA TYPE.

- This data type is not supported by TADS.
- Change the data type to one that is supported by TADS, or use another means to display this data type.

TADS IS INVALID BECAUSE THIS PROGRAM IS USING BINDING.

- Setting the TADS compiler control option to TRUE is invalid for this program because this program uses binding.
- Reset the TADS option or turn off the binding for this program.

TADS OPTION MUST BE SET FOR THIS OPTION TO BE VALID.

- The compiler control option TADS must be set in order for this option to be valid.
- Set the TADS option as needed.

TERMINAL EXPECTED.

- The keyword TERMINAL is required in the DISABLE statement.
- Provide the keyword TERMINAL as needed.

THE '\$' OPTION WILL BE DEIMPLEMENTED ON 4.1, USE LISTDOLLAR.

- The program is using a compiler control option that will soon be deimplemented. The LISTDOLLAR compiler control option is the preferred option.
- Use the LISTDOLLAR compiler control option instead of the \$ compiler control option.

THE CCSVERSION IS INVALID AND MAY RESULT IN A RUN TIME FAILURE UNLESS IT IS AVAILABLE ON THE MACHINE THIS PROGRAM IS INTENDED TO BE RUN UPON.

- The ccsversion supplied to the CENTRALSUPPORT library is not available on the system that is doing the compilation. Running the program on this system might result in a run-time failure.
- Change the ccsversion to one that is on this system, or make sure that the ccsversion you are specifying is on the system on which this program will run.

THE CCSVERSION NAME MUST BE LESS THAN 17 LETTERS AND DIGITS (LEADING LETTER).

- The name of a ccsversion must be less than 17 characters and must begin with a letter.
- Change the name of the ccsversion so that it is less than 17 characters and begins with a letter.

THE LABEL HAS ALREADY OCCURRED.

- This label has occurred previously in this block of the ALGOL program.
- Change the name of this label so that it is unique.

THE LABEL WAS NOT DECLARED IN THIS BLOCK.

- The label specified was not declared in the current block the program is using.
- Declare the label before it is specified.

THE OUTPUTMESSAGE ARRAY PRODUCED BY THIS COMPILER IS INCOMPATIBLE WITH GENERALSUPPORT.

- The version of the output message array produced by this compiler is not compatible with the GENERALSUPPORT library.
- Try adding a ccversion to the output message array, or delete the ccversion if it is present.

THE PRECEDING HELP TEXT IS OUT OF PLACE OR COMMA EXPECTED.

- The preceding help text is out of place, or a comma is required by the syntax of the program.
- Add a comma or move the help text to the correct location.

THE QUERY'S DMRECORD OR TYPE MUST MATCH THE DMRECORD.

- The type of the query must be the same as the type of the DMRECORD variable.
- Ensure that the types of the query and the DMRECORD variable match.

THE TARGET OPTION WAS NOT SPECIFIED AND THE ODT COMPILERTARGET IS NOT KNOWN TO THIS MCP.

- The target option was not specified and the COMPILERTARGET system command is not known to this operating system.
- Check the target specification.

THE TARGET VERSION OF THE MCP AND THE COMPILER DIFFER.

- The target version of the operating system is not the same as the version of the compiler.
- Check the target specification.

THE TWO PARAMETERS MUST HAVE SAME NUMBER OF DIMENSIONS.

- Both the formal and actual parameters must have the same number of dimensions.
- Compare the formal and actual parameters and make sure that they have the same number of dimensions.

THE UNITS FUNCTION REQUIRES A RECORD, FIELD, DISPLAY, OR DIGITS IDENTIFIER AS INPUT.

- The UNITS function requires a record, a field display, or a < digit > parameter.
- Check your program and provide an appropriate record, field display, or parameter.

THEN EXPECTED.

- The keyword THEN is required by the syntax of this statement.
- Provide the keyword THEN as needed.

THERE MUST HAVE BEEN EXACTLY ONE DATABASE DECLARATION.

- In a program that uses a DMINQ function, one database only must be declared.
- Add the database declaration if it is missing, or delete all but one of the database declarations.

THESE RECORD TYPES INCOMPATIBLE. SEE TYPE DECLARATION.

- These records cannot be assigned to each other because their types are incompatible.
- Change the types of the records to make them compatible, or do not assign them to each other.

THIS BLOCK ALREADY HAS AN EPILOG/EXCEPTION PROCEDURE.

- More than one EPILOG or EXCEPTION procedure cannot be declared in a block.
- Delete all but one of the EPILOG or EXCEPTION procedures in this block.

THIS BLOCK CONTAINS NO EXPORT LIST DECLARATIONS.

- At least one EXPORT declaration must be in the same block as the FREEZE statement.
- Add at least one EXPORT declaration to the block containing the FREEZE statement.

THIS CLAUSE HAS ALREADY APPEARED.

- This clause has already appeared in this LIBRARY declaration.
- Delete all but one occurrence of this clause in the LIBRARY declaration.

THIS CODE GENERATION HAS NOT YET BEEN IMPLEMENTED.

- This code generation has not yet been implemented.
- Do not use the source code that has caused this error.

THIS COMPILER CONTROL OPTION MUST APPEAR BEFORE THE FIRST SYNTACTIC ITEM IN A PROGRAM.

- This compiler control option must appear before the first line of source code in an ALGOL program.
- Move this compiler control option before the first line of source code in the program.

**THIS COMPILER PRODUCED AN INVALID OUTPUTMESSAGE
ARRAY INTERNAL FORM. PLEASE FILE A UCF.**

- The internal format of this output message array was produced incorrectly by this compiler.
- Submit a User Communication Form (UCF).

**THIS DEBUG OUTPUT ONLY VISIBLE FOR \$INTERNAL
COMPILER.**

- An internal error for debugging purposes has occurred and is visible only when the \$INTERNAL compiler control option is set.
- Submit a User Communication Form (UCF).

THIS DIMENSION IS DECLARED WITH TOO MANY ELEMENTS.

- The maximum size of a dimension is $2^{**}20 - 1$ elements.
- Decrease the size of the dimension so that it is less than the maximum size limit specified.

THIS DMALGOL CONSTRUCT IS 'UNSAFE'.

- The use of this construct might lead to a violation of system integrity or security policy.
- Do not use this construct.

THIS ENTITY TYPE IS NOT SUPPORTED IN ALGOL.

- The value specified for the dictionary entity type is not supported in ALGOL.
- Change the value specified for the dictionary entity type to one that is supported in ALGOL.

**THIS ENTITY TYPE IS NOT SUPPORTED – MIGRATION
REQUIRED.**

- The data type of this entity is not supported in ALGOL; a migration might be required.
- Either change the data type of this entity or perform a migration.

THIS EXPRESSION MAY NOT BE ASSIGNED TO A MESSAGE.

- This expression cannot be assigned to a message in a REMOVE or DCWRITE function.
- Change the logic of your program to assign only valid expressions to messages in REMOVE or DCWRITE functions.

THIS FUNCTION CANNOT BE A COMPILETIME FUNCTION.

- This transaction function cannot be a compile-time function.
- Supply your program with a transaction function that is not a compile-time function, such as a run-time function.

THIS FUNCTION CANNOT BE A RUNTIME FUNCTION.

- This transaction function cannot be a run-time function.
- Supply your program with a transaction function that is not a run-time function, such as a compile-time function.

THIS IDENTIFIER IS TOO LONG – MORE THAN 17 CHARACTERS.

- This identifier is too long for the ALGOL compiler.
- Reduce the size of the identifier to less than 18 characters.

THIS IDENTIFIER IS TOO LONG – MORE THAN 30 CHARACTERS.

- This identifier is too long for the ALGOL compiler.
- Reduce the size of the identifier to less than 31 characters.

THIS INTERRUPT WAS ALREADY DECLARED FORWARD.

- This interrupt has already been declared as FORWARD.
- Check and adjust your program.

THIS IS A READ ONLY DIRECT I/O ATTRIBUTE.

- An attempt has been made to alter a read-only direct I/O attribute.
- Do not attempt to alter a read-only direct I/O attribute.

THIS IS NOT A VALID IDENTIFIER.

- The identifier given is not in the correct form.
- Correct the form of this identifier.

THIS ITEM IS READ-ONLY.

- An attempt has been made to alter a read-only item.
- Do not alter a read-only item.

THIS LIST MAY NOT BE USED WITH FREEFIELD FORMAT.

- The list specified cannot be used with a free-field data format.
- Either change the list or do not use this list with a free-field data format.

THIS OPTION CANNOT BE RESET OR POPPED.

- The specified compiler control option cannot be used in a RESET or a POP compiler control record within an ALGOL program.
- For information on operations that can be performed with this compiler control option, see the *ALGOL Programming Reference Manual, Vol. 1*.

THIS OPTION IGNORED—IT HAS BEEN SEEN BEFORE.

- This compiler control option is ignored. It has already been seen by this ALGOL program.
- Delete all occurrences of this option except for one.

THIS PROCEDURE CANNOT BE A REFERENCE PROCEDURE.

- Your program has attempted to make a procedure a reference procedure.
- Do not make this procedure a reference procedure.

THIS PROCEDURE CANNOT BE DECLARED FORWARD.

- This BY-CALLING procedure cannot be declared as FORWARD.
- Check the dynamic procedure specifications.

THIS PROCEDURE CANNOT BE SEPARATELY COMPILED.

- This BY-CALLING procedure cannot be compiled separately.
- Check the PROCEDURE declaration.

THIS PROCEDURE IS INAPPROPRIATE FOR BY-CALLING.

- This procedure cannot be used as a BY-CALLING procedure.
- Check the PROCEDURE declaration.

THIS PROCEDURE WAS ALREADY DECLARED FORWARD.

- This procedure has already been declared as FORWARD. It does not need to be declared as FORWARD again.
- Remove all but the first FORWARD declaration for this procedure.

THIS PROGRAM HAS TOO MANY WORDS OF DEFINE TEXT.

- This ALGOL program has too much define text for the ALGOL compiler.
- Change some of the DEFINE declarations to procedures.

THIS RELATION MAY USE ONLY EQL, NEQ, IS, OR ISNT.

- This relation can use only the relational operators EQL, NEQ, IS, or ISNT.
- Change the current relational operators to EQL, NEQ, IS, or ISNT.

THIS RELATIONAL OPERATOR NOT PROVIDED FOR STRINGS.

- This relational operator cannot be used for strings by the ALGOL compiler.
- Use a relational operator that is valid for strings in this location.

THIS SELECTION EXPRESSION CAUSES A LINEAR SEARCH.

- The selection expression used in this program causes a linear search.
- Change the selection expression if you do not want a linear search.

'TITLE' EXPECTED.

- The keyword TITLE is required by the syntax of this statement.
- Provide the keyword TITLE as needed.

TITLE SHOULD END IN A PERIOD.

- A title should end in a period (.) in an ALGOL program.
- Provide a period as needed.

TO EXPECTED.

- The keyword TO is required by the syntax of this statement.
- Provide the keyword TO as needed.

TOO MANY DICTIONARY ENTITIES RETRIEVED.

- The program is attempting to retrieve more entity names than can be stored by the compiler.
- Decrease the number of entity names this program is attempting to retrieve.

TOO MANY INCLUDE FILES NESTED.

- The level of nesting of INCLUDE files is too large for the ALGOL compiler.
- INCLUDE files can be nested only up to a level of five deep. Reduce the nesting of the INCLUDE file to five or less.

TOO MANY PARAMETERS.

- Too many parameters have been provided for this statement.
- Check the syntax of this statement and remove parameters as needed.

TOO MANY PARAMETERS TO THIS DEFINE.

- There are too many parameters provided for this DEFINE invocation. No more than nine parameters are allowed in a DEFINE invocation.
- Check your program and delete parameters as needed.

TOO MANY STACK CELLS AT THIS LEVEL.

- The program exceeds the maximum amount of stack cells at this level. The maximum amount of stack cells is $2^{**} 12$.
- Check your program and delete stack cells as needed.

TOO MANY STATEMENTS OR CASE NUMBER OUT OF RANGE.

- The number of statements in a CASE statement must be between 0 and 1023, inclusive. The maximum number of case nesting is 47.
- Check the CASE statement and delete statements or revise the case number list.

TOO MANY STRING CHARACTERS OR MISSING QUOTE.

- The string is too long or a quotation mark (") is required. The maximum string length allowed in DMALGOL is $8 * 256 * 256$.
- Delete characters from the string or provide a quotation mark.

TOO MANY SUBSCRIPTS.

- Too many subscripts have been provided to access the array.
- Delete subscripts as needed.

TOO MANY WORDS OF INITIAL VALUES.

- There are too many words of initial values in the value array, editing specification format, FILL statement, or DUMP declaration.
- Delete words as needed.

TOO MUCH SAVED QUERY TEXT FOR ONE PROGRAM UNIT.

- The program exceeds the maximum size of saved query text for one program unit.
- Delete the saved query text as needed.

TRANSACTION BASE IDENTIFIER EXPECTED.

- A transaction base identifier is required.
- Provide an identifier as needed.

TRANSACTION RECORD VARIABLE OR ARRAY ELEMENT EXPECTED.

- A transaction record variable or an array element is required.
- Provide a variable or array element as needed.

'TRUE' OR 'FALSE' EXPECTED.

- The keyword TRUE or FALSE is required by the syntax of this statement.
- Provide a keyword as needed.

TYPE DECLARED DOESN'T MATCH TYPE RETURNED BY DICTIONARY.

- The declared entity type is not the same as the type returned by the dictionary.
- Compare the two types and ensure that they match.

TYPES OF ACTUAL AND FORMAL PARAMETERS DISAGREE.

- The types of the actual and formal parameters of this procedure are not compatible.
- Check the PROCEDURE declaration to ensure that the parameters are compatible.

UNABLE TO LINK TO COMSLANGSUPPORT SYSTEM LIBRARY.

- This ALGOL program is unable to link to the COMSLANGSUPPORT system library.
- Check the COMSLANGSUPPORT library that is currently loaded for such items as the version number or entry point.

UNABLE TO LINK TO FORMSSUPPORT SYSTEM LIBRARY.

- This ALGOL program is unable to link to the FORMSSUPPORT system library.
- Check the FORMSSUPPORT library that is currently loaded for such items as the version number or entry point.

UNABLE TO LINK TO SPECIFIED DICTIONARY.

- The compiler cannot link to the specified dictionary.
- Check to see if the dictionary is present on the system.

UNABLE TO PARSE THIS STATEMENT WITHOUT THE DICTIONARY.

- The compiler is unable to parse this statement without the dictionary.
- Make sure the dictionary is present when the program is compiled.

UNACCEPTABLE COMPARE PROCEDURE.

- The COMPARE procedure provided with this SORT or MERGE statement is not acceptable.
- Change the COMPARE procedure to conform to that which is required by the compiler. The COMPARE procedure must be a Boolean procedure with two parameters. Each parameter must be a one-dimensional array with a lower bound of 0 (zero).

UNACCEPTABLE INPUT PROCEDURE.

- The INPUT procedure provided with this SORT or MERGE statement is not acceptable.
- Change the INPUT procedure to that which is required by the compiler. The INPUT procedure must be a Boolean procedure with two parameters. Each parameter must be a one-dimensional array with a lower bound of 0 (zero).

UNACCEPTABLE OUTPUT PROCEDURE.

- The OUTPUT procedure provided with this SORT or MERGE statement is not acceptable.
- Change the OUTPUT procedure to that which is required by the compiler. The OUTPUT procedure must be a Boolean procedure with two parameters. Each parameter must be a one-dimensional array with a lower bound of 0 (zero).

UNASSIGNED EDITING - PHRASE LETTER.

- The editing-phrase letter is missing in the READ or WRITE statement or FORMAT declaration.
- Provide an editing-phrase letter for the READ or WRITE statement or FORMAT declaration.

UNDECLARED IDENTIFIER OR ILLEGAL CONSTRUCT.

- The identifier is not declared or it is an illegal construct.
- Declare this identifier or change the construct to a legal form.

UNDEFINED LOCATOR.

- The locator returned by the USERDATALOCATOR function is not defined.
- For more information about the USERDATALOCATOR function and the MAKEUSER command, see the *Security Administration Guide*.

UNEXPECTED LEFT BRACKET.

- A left bracket (()) was not required by the ALGOL compiler in this location.
- Add a left bracket to this statement at the proper location.

UNKNOWN DOLLAR CARD OPTION.

- This compiler control option is unknown to the ALGOL compiler.
- Check the *ALGOL Programming Reference Manual, Vol. 1* to find out which compiler control options are known to the ALGOL compiler.

UNMATCHED LEFT PARENTHESIS IN PRECEDING FORMAT.

- The ALGOL compiler has encountered an unmatched left parenthesis in the preceding statement.
- Add or delete parentheses as needed.

UNRECOGNIZED PARAMETER.

- This parameter for a LOCK or FREEZE statement is not recognized by the ALGOL compiler.
- Provide parameters that are recognized by the ALGOL compiler for the LOCK or FREEZE statement.

UNSUCCESSFUL ATTEMPT TO INITIATE TRINTERFACE.

- A TRINTERFACE coroutine is initiated when the first TRANSACTION BASE declaration is encountered. Your program was not able to initiate the TRINTERFACE coroutine.
- Check the SYSTEM/TRINTERFACE library on your system to see that it is loaded.

UNTIL EXPECTED.

- The keyword UNTIL is required by the syntax of this statement.
- Provide the keyword UNTIL as needed.

UNTYPED PROCEDURE REQUIRED.

- A procedure without a type is required by the ALGOL compiler at this location.
- Provide an untyped procedure as needed.

UPDATE ASSIGNMENT (*) INVALID WITH PARTIAL WORD PART.

- An update assignment (*) cannot be used with a partial word variable.
- Use the entire partial word variable name instead of the update assignment.

'UPLEVEL' ASSIGNMENT IS 'UNSAFE'.

- A pointer cannot point to an array that is declared at a higher lexical level.
- Declare a pointer at the same or higher level than the array to which it points.

UPELVEL PROCEDURE REFERENCE NOT ALLOWED.

- An up-level procedure cannot be referred to in this program.
- Remove the reference to the up-level procedure.

'URGENT' IS ONLY ALLOWED ON WRITE STATEMENTS.

- The keyword URGENT is allowed only in WRITE statements.
- Check the syntax of your statement.

USE THE SEGDESCABOVE OPTION TO AVOID THIS PROBLEM.

- This program is having difficulty referencing its segment dictionary.
- Since this is a large program, set the SEGDESCABOVE compiler control option.

USER OPTION SET/RESET, BUT NOT USED.

- A USER compiler control option has been specified as SET or RESET but it is not used by this ALGOL program.
- Either use the USER option or do not set it.

USER OPTION SHOULD BE REFERENCED PREVIOUSLY.

- A USER compiler control option needs to be referenced previously.
- Reference the USER option at an earlier location.

VALUE FUNCTION EXPECTED.

- A VALUE function is required by the syntax of this statement.
- Provide the VALUE function as needed.

VALUE MAY NOT BE NEGATIVE.

- This value cannot be negative.
- Recheck the logic of this statement and change the value to a positive value.

VARIABLE EXPECTED.

- A variable is required by the syntax of this statement.
- Provide a variable as needed.

VERSION QUALIFIER ALREADY SPECIFIED.

- A version qualifier has already been specified for this program.
- Remove all but the first version qualifier.

WHEN CTPROC IS USED, THE LOADINFO AND DUMPINFO COMPILERS MUST BOTH SET IT.

- When you are loading information, the compile-time facility capabilities of the compiler used must match those of the compiler used to create the DUMPINFO file. DMALGOL and DCALGOL compilers support the use of the CTPROC option. The CTPROC option cannot be used with ALGOL.
- The compilers used for the LOADINFO and DUMPINFO options must both set the CTPROC option, if it is to be used.

WHERE EXPECTED.

- The keyword WHERE is required by the syntax of this statement.
- Provide the keyword WHERE as needed.

WHILE OR UNTIL EXPECTED.

- The keyword WHILE or UNTIL is required by the syntax of this statement.
- Provide a keyword as needed.

WIDTH FIELD ILLEGAL IN FREE FIELD INPUT.

- A width field is illegal in the free-field input of this READ statement.
- Remove the width field in the free-field input of this READ statement.

WITH EXPECTED.

- The keyword WITH is required by the syntax of this statement.
- Provide the keyword WITH as needed.

WRITE-ONLY ATTRIBUTE.

- You cannot get attribute information from a write-only attribute.
- Change the logic of the program so that it does not read an attribute that is write only.

XREF SKIPPED. TRIED TO XREF, \$XREFS NOT SET. COMPILER ERROR—PLEASE FILE UCF.

- The self-checking mechanisms incorporated into the compiler have detected an error.
- Submit a User Communication Form (UCF).

Glossary

A

address

(1) The identification of a location in storage (memory). (2) A sequence of bits, a character, or a group of characters that identifies a network station or a group of stations, a user, or an application. (3) The location of a device in the system configuration. (4) The identification of the location of a disk sector.

ADDS

See Advanced Data Dictionary System.

Advanced Data Dictionary System (ADDS)

A software product that allows for the centralized definition, storage, and retrieval of data descriptions.

ALGOL

Algorithmic language. A structured, high-level programming language that provides the basis for the stack architecture of the Unisys A Series systems. ALGOL was the first block-structured language developed in the 1960s and served as a basis for such languages as Pascal and Ada. It is still used extensively on A Series systems, primarily for systems programming.

ASCII

American Standard Code for Information Interchange. A standard 7-bit or 8-bit information code used to represent alphanumeric characters, control characters, and graphic characters on a computer system.

B

BCL

See Burroughs Common Language.

block

(1) A group of physically adjacent records that can be transferred to or from a physical device as a group. (2) A program, or a part of a program, that is treated by the processor as a discrete unit. Examples are a procedure in ALGOL, a procedure or function in Pascal, a subroutine or function in FORTRAN, or a complete COBOL program.

Burroughs Common Language (BCL)

An obsolete code using 6-bit character representation.

Glossary

C

CANDE

See Command and Edit.

CCR

See compiler control record.

code segment dictionary

A memory structure that is associated with a process and that indexes the memory addresses of the various segments of program code used by that process. The same code segment dictionary can be shared by more than one process, provided that each process is an instance of the same procedure. A code segment dictionary is also referred to as a D1 stack.

Command and Edit (CANDE)

A time-sharing message control system (MCS) that enables a user to create and edit files, and to develop, test, and execute programs, interactively.

compile

To convert a program written in a source language, such as COBOL or ALGOL, to machine code that can be executed by a computer.

compile time

The time during which a compiler analyzes program text and generates an object code file.

compiler control option

An individual compiler directive that appears in a compiler control record (CCR). Compiler control options were previously referred to as compiler dollar options or dollar options.

compiler control record (CCR)

A record in a source program that begins with a dollar sign (\$) and contains one or more options that control various compiler functions. These specifications can appear anywhere in the source program unless otherwise specified. The term *compiler control image (CCI)* is a nonpreferred synonym.

D

DASDL

See Data and Structure Definition Language.

Data and Structure Definition Language (DASDL)

In Data Management System II (DMSII), the language used to describe a database logically and physically, and to specify criteria to ensure the integrity of data stored in the database. DASDL is the source language that is input to the DASDL compiler, which creates or updates the database description file from the input.

Data Communications ALGOL (DCALGOL)

A Unisys language based on ALGOL that contains extensions for writing message control system (MCS) programs and other specialized system programs.

Data Management ALGOL (DMALGOL)

A Unisys language based on ALGOL that contains extensions for writing Data Management System II (DMSII) software and other specialized system programs.

Data Management System II (DMSII)

A specialized system software package used to describe a database and maintain the relationships among the data elements in the database.

database stack (DBS)

A stack that contains all the information necessary for the Data Management System II (DMSII) Accessroutines to manage a database.

data-valued attribute (DVA)

In the Semantic Information Manager (SIM), an attribute that contains data values for the entities of a class. *See also* entity-valued attribute.

DBS

See database stack.

DCALGOL

See Data Communications ALGOL.

disk

A random-access data storage device consisting of one or more circular platters that contain information recorded in concentric circular paths called tracks. Data on a disk are accessed by movable read/write heads. Some disks are removable.

DMALGOL

See Data Management ALGOL.

DMINTERFACE

The DMINTERFACE procedure is a coroutine that communicates with the user language compilers to invoke and compile references to user language interfaces.

DMSII

See Data Management System II.

DVA

See data-valued attribute.

E

EBCDIC

Extended Binary Coded Decimal Interchange Code. An 8-bit code representing 256 graphic and control characters that are the native character set of most mainframe systems.

Glossary

Editor

A Unisys utility program designed to create and modify program source and data files.

entity-valued attribute (EVA)

In the Semantic Information Manager (SIM), an attribute that links an entity to one or more other entities of the same or another class. Entity-valued attributes establish relationships between entities. *See also* data-valued attribute.

EVA

See entity-valued attribute.

F

file attribute

An element that describes a characteristic of a file and provides information the system needs to handle the file. Examples of file attributes are the file title, record size, number of areas, and date of creation. For disk files, permanent file attribute values are stored in the disk file header.

G

global identifier

Within a given block of an ALGOL, NEWP, or Pascal program, an identifier that is declared in an outer block. A global identifier retains its values and characteristics as the blocks to which it is global are entered and exited.

I

I/O

Input/output. An operation in which the system reads data from or writes data to a file on a peripheral device such as a disk drive.

I/O subsystem

The hardware and software that manage all transfers of information between the operating system and peripheral devices.

L

lex level

See lexical level.

lexical level (lex level)

- (1) A number that indicates the relative level of an addressing space within the stack of an executing program. Lexical levels range from 0 through either 15 or 31, depending on the computer family. A lower lexical level indicates a more global addressing space.
- (2) A measure of the number of other blocks a block is nested within. The outer block of a program has a lex level of 2 or 3, depending on whether the program has a procedure heading. Each block has a lex level one higher than the block it is nested within.

M

master control program (MCP)

The central program of the A Series operating system. The term applies to any master control program that Unisys may release for A Series systems.

MCP

See master control program.

MCS

See message control system.

message control system (MCS)

A program that controls the flow of messages between terminals, application programs, and the operating system. MCS functions can include message routing, access control, audit and recovery, system management, and message formatting.

P

procedure

A block that can be invoked by statements elsewhere in the same program or, in some cases, by statements in another program. In most instances, a procedure has a procedure heading and a procedure body. Examples are a procedure in ALGOL, a procedure or function in Pascal, a subroutine or function in FORTRAN, or a complete COBOL program.

S

Screen Design Facility (SDF)

The InterPro™ product used for creating forms for online, transaction-based application systems.

Screen Design Facility Plus (SDF Plus)

A Unisys product used for creating user interface systems (UIs) for online, transaction-based application systems.

SDF

See Screen Design Facility.

SDF Plus

See Screen Design Facility Plus.

Semantic Information Manager (SIM)

(1) The basis of the InfoExec environment. SIM is a database management system used to describe and maintain associations among data by means of subclass-superclass relationships and linking attributes. (2) In the Data Transfer System (DTS), a Unisys software product (SIM kernel) that DTS uses to extract data from host files.

InterPro is a trademark of Unisys Corporation.

Glossary

separately compiled procedure (SEPCOMP)

In ALGOL, a procedure that is compiled on its own, rather than as part of a program, so that the procedure can be bound into a host program.

SEPCOMP

See separately compiled procedure.

SIM

See Semantic Information Manager.

T

TADS

See Test and Debug System.

Test and Debug System (TADS)

A Unisys interactive tool for testing and debugging programs and libraries. TADS enables the programmer to monitor and control the execution of the software under testing and examine the data at any given point during program execution.

thunk

A compiler-generated procedure that calculates and returns the value of a constant or expression passed to a call-by-name formal parameter. The thunk is executed each time the formal parameter is used. A thunk is also referred to as an accidental entry.

TPS

See transaction processing system.

transaction processing system (TPS)

A Unisys system that provides methods for processing a high volume of transactions, keeps track of all input transactions that access the database, enables the user to batch data for later processing, and enables transactions to be processed on a database that resides on a remote system.

TRINTERFACE

An external coroutine that communicates with the user language compilers to invoke and compile references to the user language interfaces for the transaction processing system (TPS). These references include user-defined transaction record formats, transaction journals, subbases, and other information related to transaction processing.

U

UCF

See User Communication Form.

User Communication Form (UCF)

A form used by Unisys customers to report problems and express comments about Unisys products to support organizations.

W

WFL

See Work Flow Language.

Work Flow Language (WFL)

A Unisys language used for constructing jobs that compile or run programs on A Series systems. WFL includes variables, expressions, and flow-of-control statements that offer the programmer a wide range of capabilities with regard to task control.

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