



***Document
Library
Facility***

***Diagnosis
Guide***

First Edition (February 1984)

This book, together with the Document Library Facility Diagnosis Reference (LY35-0072-0), replaces and makes obsolete the Document Library Facility Diagnosis, LY20-8068-1. This edition applies to Release 3 of the Document Library Facility Program number 5748-XXE, and to any subsequent releases until otherwise indicated in new editions or technical newsletters.

The changes for this edition are summarized under "Summary of Amendments" following the list of figures.

Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest IBM System/370 and 4300 Processors Bibliography, GC20-0001, for the editions that are applicable and current.

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PREFACE

This book provides information to help you diagnose failures in the Document Library Facility (DLF) and communicate those failures to an IBM support center representative for correction.

Using the proper set of keywords, you can search the Software Support Facility (SSF) data base or the Early Warning System (EWS) microfiche to discover if your problem has already been reported.

If you are an IBM customer, you can relay the keyword set(s) to your IBM support center representative, who will access the SSF data base for you.

Note: This book can be used with or without access to SSF/EWS. You can speed the diagnosis of any problem by using keyword sets when communicating with your IBM support center representative.

HOW THIS BOOK IS ORGANIZED

The sections of this book are organized to help you develop a complete set of keywords systematically:

- "Introduction" on page 1 explains the keyword concept, how to locate possible user errors, and how to use the book.
- "Component Identification Keyword" on page 4 provides the DLF component identification number to be used in the search argument.
- "Type-of-Failure Keyword" on page 5 describes seven types of program failures to be used as keywords.
- "Module Keyword" on page 10 helps identify the name of the module you suspect is failing.
- "Function Keyword" on page 11 divides the system into functional areas that identify the DLF command that was processing when the failure occurred.
- "Release Level Keyword" on page 13 lists the 3-digit keywords associated with the various DLF release levels.
- "Maintenance Level Keyword" on page 14 shows how to use the latest program temporary fix number as a keyword.
- "Search Argument Procedure" on page 15 explains how to use the keyword string to search SSF/EWS.
- "Preparing Authorized Program Analysis Reports (APARs)" on page 16 lists information needed to initiate an authorized program analysis report (APAR).

PREREQUISITE INFORMATION

To use this book to the greatest advantage, you should have a basic understanding of the Document Library Facility on the level described in:

- Document Library Facility Guide, SH20-9165.

RELATED PUBLICATIONS

References are made in this book to the following publications:

- Document Library Facility Guide, SH20-9165
- Document Library Facility Messages, SH35-0049, which is distributed only in print
- Document Composition Facility Diagnosis Guide, SY35-0069, which describes Document Composition Facility diagnosis procedures
- Programming System General Information Manual, G229-2228, which describes how to complete APAR forms.

RESTRICTED PUBLICATIONS

- Document Library Facility Diagnosis Reference, LY35-0072, which provides information about the logic and processing of the Document Library Facility
- Document Composition Facility Diagnosis Reference, LY35-0070, which you can use to do free-form diagnosis.

PUBLICATION LIBRARY GUIDE FOR THE DOCUMENT LIBRARY FACILITY

The following table is a library guide to the manuals for the Document Library Facility (DLF). The manuals are listed as they relate to user tasks.

User Tasks	Typical Audience	Recommended Books	Brief Description
Using the document library	DLF library user	DLF Guide (SH35-9165) DLF Messages (SH35-0049)	Describes DLF, its interfaces, the library commands, and library messages
Installing and maintaining DLF	Systems programmer	DLF Program Directory DLF Guide (SH35-9165) DLF Diagnosis Guide (SY35-0071) DLF Diagnosis Reference (LY35-0072) DLF Messages (SH35-0049)	Gives information on error isolation and program tailoring
Setting up and maintaining the document library	DLF administrator	DLF Guide (SH35-9165) DLF Messages (SH35-0049)	Describes DLF, its interfaces, the library commands, and library messages

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SUMMARY OF AMENDMENTS

RELEASE 3

The following changes have been made:

- The Document Library Facility Diagnosis, LY20-8068, has been separated into two books:
 - The Document Library Facility Diagnosis Guide, SY35-0071,
 - The Document Library Facility Diagnosis Reference, LY35-0072.
- An introduction has been added to the book that includes a section on how to eliminate command usage errors.
- Several procedures have been expanded and enhanced, including the type-of-failure keyword section and the search argument procedure.

RELEASE 2

The following change has been made:

- The order in which the component identifier keyword, maintenance level keyword, and the function keyword are discussed has been changed.

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INTRODUCTION

PURPOSE AND SCOPE OF THIS BOOK

This book helps diagnose program failures in the Document Library Facility through the use of keywords. A keyword is simply an agreed-upon word or abbreviation used to describe one aspect of a program failure. The short chapters in this book show how to select keywords in a systematic way.

PROBLEM DIAGNOSIS AND CORRECTION PROCESS

Diagnosis is the task of identifying the IBM program that is the source of a programming problem, describing the problem, comparing it to similar known problems, reporting a new problem, and correcting the problem.

Diagnosis begins when an IBM program is suspected of not functioning properly because of an inherent defect.

DIAGNOSTICIAN

The diagnostician can be either a customer employee or an IBM employee. After identifying the IBM program (Document Library Facility in this case) causing the failure, a diagnostician describes the failure using keywords. These keywords are then used to search the Software Support Facility (SSF) or the Early Warning System (EWS) to find out if a correction has already been developed. SSF is an online data base containing up-to-date information about the resolution of authorized program analysis reports (APARs) and EWS is a microfiche copy of the information contained in SSF.

When necessary, the diagnostician talks to an IBM support center Level 1 representative for assistance in identifying the failure and conducting the keyword search.

SUPPORT CENTER LEVEL 1

By way of a telephone call, the IBM support center representative uses the keyword string developed by a diagnostician to search SSF or EWS. Should the search reveal that the failure has already been defined, the representative will provide any available relief from the problem. If the problem is new, the diagnostician will be placed on the Level 2 call queue and contacted shortly thereafter by a support center level 2 representative.

SUPPORT CENTER LEVEL 2

When a Level 1 representative refers a newly-discovered failure to Level 2, the diagnostician and a Level 2 representative analyze the problem in depth. Together, they:

- Review the information that the diagnostician obtained in generating the keyword string
- Verify that the correct keywords were used to search the data base
- Gather additional information about the failure.

After confirming that the problem has not been reported previously, the Level 2 representative develops a bypass to

enable the customer to continue productive work. This IBM representative will assist in the preparation of an APAR to report a new problem.

IBM CHANGE TEAM

Upon receipt of the APAR and supporting documentation, the IBM change team develops a correction to the problem, makes it available to the customer reporting the problem, and adds it to the SSF data base for future reference.

USING KEYWORDS

In your role as diagnostician, use each keyword to describe one aspect of a program failure. The first keyword in the string identifies the component name of the Document Library Facility. You can search SSF/EWS with just the component keyword and detect all APARs written for the Document Library Facility. Adding other keywords to your search argument reduces the number of matches and increases the chances of locating a match for your particular problem.

Remember that the searches you make, and those that others make, will be most successful if everyone using SSF/EWS follows these simple rules:

- Use search keywords from the lists in this book.
- Spell keywords the same way every time, the way they are given here.
- Include the appropriate keywords in any APAR.

If the circumstances surrounding your problem make it difficult to follow this book's instructions for developing a particular keyword, omit that keyword and go on to the next. In general, though, you will not want to start a search until you have a full set of keywords.

A full set of DLF keywords (search argument) consists of:

- Component identification keyword
- Type-of-failure keyword
- Module keyword
- Function keyword
- Release level keyword
- Maintenance level keyword.

DEVELOPING THE KEYWORD STRING

Follow the instructions in the keyword procedures. If no specific step is specified (a branch), follow the next sequential step. Information necessary to perform the numbered step is presented as bulleted information immediately following the step.

Occasionally, a step provides a partial keyword string that describes what is known at that time about the program problem. A partial keyword string may require that a specific piece of information be inserted, such as replacing the *x* of the MSG*x* keyword with the ten-character identifier of the message you received. The information to be substituted will be known at that time. Continue to develop the keyword string until you are told to use it as a search argument. The instructions will direct you to search SSF/EWS as soon as the keyword string is

complete enough to make a search reasonably productive. If an early search is unsuccessful, the instructions will show you how to continue diagnosing the problem.

If you suspect your problem is a program error, go to the section titled "Getting Started" and follow the instructions for eliminating user errors and gathering diagnosis information.

If you are familiar with the process of selecting keywords and want to see only those that are unique to the Document Library Facility, check the table of contents.

GETTING STARTED

Before developing a keyword string as described in this book, thoroughly check for command usage errors. If your problem persists, begin gathering the diagnosis information you will need to develop the keyword string.

ELIMINATING COMMAND USAGE ERRORS

The following procedure will help you verify that the problem is not merely the result of using Document Library Facility commands incorrectly.

1. Examine the operands specified for each command to make sure they are specified correctly. See the Document Library Facility Guide for command usage information.
2. If you find a usage error, correct it and then try to reproduce the problem before continuing.
3. If all command operands appear correct, contact a systems programmer for assistance in gathering diagnostic information.

GATHERING DIAGNOSTIC INFORMATION

This procedure is designed to gather the diagnostic information needed to develop the keyword string to be used as a search argument for SSF/EWS.

1. If DLF has been changed since it last processed successfully, examine the changes. If the error is occurring as a result of the changes made in the code and cannot be corrected, note the change that caused the error.
2. Correct all problems diagnosed by messages and ensure that any messages previously generated have nothing to do with the problem you are working on.
3. Write down the sequence of events that led to the error condition. This information is helpful in developing a keyword string, useful when contacting an IBM support center, and required when preparing an APAR.
4. Go to "Component Identification Keyword" on page 4 to begin developing the keyword string.

COMPONENT IDENTIFICATION KEYWORD

The component identification number is the first in a set of keywords describing any problem. It is derived from the order number of the Document Library Facility and serves to identify the SSF data base library that contains APARs for this product. Use this keyword whenever you suspect that the Document Library Facility is the failing component. Used alone, it produces a full listing of APARS against the DLF component. As you proceed through the diagnosis procedures, you will verify that the problem is in the Document Library Facility.

PROCEDURE

1. The component identification number for the Document Library Facility is:
5748XXE00
2. Go to "Type-of-Failure Keyword" on page 5 to continue developing the keyword string.

TYPE-OF-FAILURE KEYWORD

The type-of-failure keyword describes an external symptom of the program failure and is a required part of the keyword string. The seven type-of-failure conditions and the keywords you must use to represent them in the search argument are:

<u>KEYWORD</u>	<u>TYPE-OF-FAILURE</u>
MSGX	You received a DLF message that tells of an error, indicates an error not caused by bad user input, or seems to be in error itself. Go to "MSGX" below.
ABENDxxx or PROGCKxxx	Use either of these keywords when DLF stops abnormally. Go to "ABENDxxx or PROGCKxxx" on page 6.
WAIT	Use this keyword when DLF suspends activity without issuing a message. Go to "WAIT" on page 7.
LOOP	DLF is doing something repetitively, go to "LOOP" on page 7.
INCORROUT	Output from the program is incorrect or missing. Go to "INCORROUT" on page 8
DOC	Information is incorrect or not present in one of the DLF manuals. Go to "DOC" on page 8.
PERFM	DLF fails to perform to explicitly-stated expectations. Go to "PERFM" on page 9.

If more than one keyword describes the problem, use the one that appears first in the list.

Depending on the type-of-failure keyword selected, you may be asked to supply additional information that further describes where the failure occurred. This additional information includes:

- Resource (for WAIT)
- Manual-number (for DOC)
- Message number (for MSGX)
- Abend code (for ABENDxxx)

The conditions that govern the selection of each type-of-failure keyword are explained next.

MSGX

Use this keyword when a message:

- Is not documented or is documented incorrectly in Document Library Facility: Messages
- Is generated when it should not have been generated
- Is not generated when it should have been generated
- Warns of an error condition detected by the Document Library Facility (DLF) or a DLF-related program.

Note: Document Library Facility Messages is distributed in print only.

Each Document Library Facility message is identified by a set of 10 characters, in the form DSMmmmmnnnc, as shown in Figure 1.

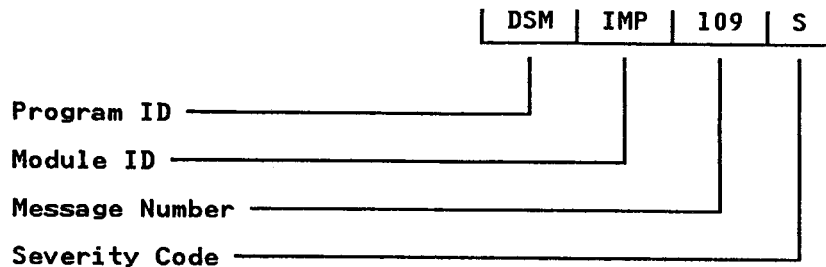


Figure 1. Message Identification

Procedure

1. Replace the x in the MSGX keyword with the 10-character message identifier. For example, if the message identifier is DSMIMP109S, the MSGX keyword is:

MSGDSMIMP109S

The format of the partial MSGX keyword string is:

5748XXE00 MSGDSMmmmmnnnc

2. Go to "Function Keyword" on page 11 and follow the instructions.

ABENDXXX OR PROGCKXXX

Use this keyword when the host system, the Document Library Facility, or any program that services the Document Library Facility stops abnormally.

Do not use this keyword if theabend was forced by the host system or operator because of too much time spent in a wait state or an endless loop. For those situations, see the WAIT and LOOP keywords.

Procedure

1. If the ABEND identification includes a code (OS/VS2 environments only), add it to the keyword at xxx. For example, use ABENDOC4, if a OC4abend occurred.

2. If you have a complete storage dump, locate the instruction address at which the abend occurred. An instruction address appears as the last six characters of the program status word (PSW) at the beginning of the dump.

The format of the partial **ABENDxxx** or **PROGCKxxx** keyword string is:

5748XXE00 ABENDxxx

3. Go to "Module Keyword" on page 10 and select a module name for your keyword string.

WAIT

Use this keyword when:

- The program status word for the host system has the wait bit on
- The host system, the Document Library Facility or a program that services the Document Library Facility suspends activity (without issuing a message) while waiting for some condition to be satisfied.

Do not use this keyword if the wait occurs after an abend, as the result of an unanswered message, or because of an endless loop in the Document Library Facility. Instead, use the **ABENDxxx** or **LOOP** keywords.

Procedure

1. If possible, select a keyword from the following list to describe the resource for which the program is waiting.

- STORAGE
- DISK
- INPUT
- OUTPUT
- BUFFER

Note: If the wait is for a resource that is not described by one of these keywords, you can choose some other descriptive word—but make it specific.

2. If you have a complete storage dump, locate the instruction address at which the wait occurred. An instruction address appears as the last six characters of the program status word at the beginning of the dump.

The format of the partial **WAIT** keyword set is:

5748XXE00 WAIT resource

3. Go to "Module Keyword" on page 10 and select a module name for your keyword string.

LOOP

Use this keyword if some part of the program code processes endlessly. This includes situations where a portion of the output (a blank page, for example) repeats endlessly.

However, do not use the **LOOP** keyword for an endlessly repeated message (use the **MSGx** keyword) or an intentional loop used to wait for some resource (use the **WAIT** keyword).

Procedure

1. If a Document Library Facility program suspends activity for no apparent reason, it may be in either a loop or a wait state. Evidence of a loop may be the repetition of blank output pages. If a loop is not evident, use the WAIT keyword.
2. If you have a complete storage dump, locate the instruction address at which the loop occurred. An instruction address appears as the last six characters of the program status word at the beginning of the dump.

The format of the partial LOOP keyword string is:

5748XXE00 LOOP

3. Go to "Module Keyword" on page 10 and select a module name for your keyword string.

INCORROUT

Use this keyword when the output is incorrect.

Do not use this keyword for text that repeats endlessly (use the LOOP keyword).

Procedure

1. Check the Document Library Facility commands and options you used. Make sure the output results are different from what you expect to see.
2. Check the "Service Aids" section of Document Library Facility Diagnosis Reference for suggestions on analyzing the effect of commands.

The format of the partial INCORROUT keyword string is:

5748XXE00 INCORROUT

Go to "Function Keyword" on page 11 and select a module name for your keyword string.

DOC

Use this keyword when a programming problem appears to be caused by incorrect or missing information in one of the Document Library Facility manuals (except for Document Library Facility Messages—in that case, use the MSGx keyword).

Procedure

1. If the documentation problem is in any Document Library Facility publication, place the publication's order number after the DOC keyword.

Note: Do not use hyphens or the suffix digit as part of the keyword string. For example, if the order number of the book is SY35-0071-0, the DOC keyword is:

DOCSH350071

2. The format of the DOC keyword string is:

5748XXE00 D0Cordernumber

3. To determine if this is a known problem, go to "Search Argument Procedure" on page 15 and follow the instructions. If the search is unsuccessful, return here to continue.

4. If this is a documentation error that you believe will cause lost time for other users, contact an IBM support center representative for help in initiating a severity 3 or 4 documentation APAR.
5. If the documentation problem is not severe, use the Reader's Comment Form attached to the back of the incorrect manual to suggest improvements to the publication.

PERFM

Use this keyword to identify situations in which some part of the Document Library Facility fails to meet explicitly-stated expectations. Because most performance problems relate to system tuning, they should be handled by system engineers and system programmers.

Procedure

1. The format of the partial PERFM keyword string is:
5748XXE00 PERFM
2. Go to "Function Keyword" on page 11 and follow the instructions.

MODULE KEYWORD

Use this keyword to identify the module you suspect contains the program failure.

PROCEDURE

1. Use the instruction address you found in the ABENDxxx, WAIT, or LOOP procedure as a starting point. The left-most column of numbers indicates addresses within the dump.
2. Scan backwards in the dump until you see an eight-character module-id followed by a module date. For example, DSMSPCPL is a DLF module-id and 79.320 is a module date in Julian format.
3. If there is a branch instruction (a 4-byte instruction with 47F0 as the first two bytes) just ahead of the module-id, you have found the beginning of a module.
4. Use the eight-character module-id as the module keyword.

Your partial set of keywords might be:

Component Identification: 5748XXE00
Type-Of-Failure: LOOP
Module: DSMSPCPL

So as a partial keyword string their format would be:

5748XXE00 LOOP DSMSPCPL

5. Move on to "Function Keyword" on page 11 to continue with the keyword selection process.

FUNCTION KEYWORD

The procedure in this section describes how you can add another keyword to your string by determining the DLF function that was processing when the failure occurred. Selecting an accurate function keyword provides a tighter focus on the area of the program code that contains the error.

Note: It may be helpful to consult the &ldref., where each function (command) appears with its own heading and explanation.

Procedure

1. From the list in Figure 2, select the name of the function that was processing when the program failed.

If a string of control statements was specified, DLF may not detect a failure in one control statement until a later one is processing.
2. If possible, determine the command option or sub-function in effect when the failure occurred and use it as an additional keyword.
3. If the SCRIPT function was processing, the Document Library Facility called the Document Composition Facility (DCF). The modules in the DCF program also begin with the identifier DSM, so the transition from one program to the other may not be immediately apparent from the last program message. If the function name for the failure is SCRIPT, also check Document Composition Facility Diagnosis Guide. You may have to report this as a DCF-related problem.

Your partial set of keywords may now look like this:

Component Identification:	5748XXE00
Type-Of-Failure:	LOOP
Module:	DSMSPCPL
Function:	COPY

So as a keyword string their format would be:

5748XXE00 LOOP DSMSPCPL COPY

4. Go to "Release Level Keyword" on page 13 and follow the instructions.

Command	Function
ACCOUNT	Generates accounting records
ALTER	Changes the characteristics of a document class, cluster, processor, user, or system
ARCHIVE	Archives selected documents from the document library to an external sequential data set
AUTH	Identifies an authorized DLF user and establishes that user as the current user number.
CLOSE	Ends the reading of one or more documents when DLF is used as a subroutine of an application program
COPY	Copies documents and/or profiles
DEFINE	Defines document class, new ESDS clusters, processors, new users, and system specifications
ENVIRONMENT	Describes the characteristics of a VSE sequential file that is used for input or output Not a valid command in OS/VS2
EXPORT	Writes a copy of a document from a document library to a sequential file
IMPORT	Reads a document from a sequential file and stores it in the document library
LIST	Lists document class, clusters, processors, users and processors
PASSWORD	Changes or deletes a user's password
PROTECT	Changes the password or share status of a document or a version of a document
PURGE	Deletes documents, clusters, processors, and user numbers
READ	Requests records from a document (one at a time) when DLF is called as a subroutine
RETRIEVE	Retrieves (copies into the document library) documents previously archived to external data sets
SCRIPT	Invokes the SCRIPT/VS formatter when DCF is also installed

Figure 2. Function Names and Descriptions

RELEASE LEVEL KEYWORD

This keyword identifies the release level of the Document Library Facility currently installed on your system. The release level keyword is a three-digit code of:

- 010 for release level 1
- 020 for release level 2
- 300 for release level 3

Although the release level keyword is optional when developing an SSF search argument, it is required for APAR preparation.

Procedure

1. Select the keyword that applies to the DLF release level currently installed on your system.
2. Go to "Maintenance Level Keyword" on page 14 and follow the instructions.

MAINTENANCE LEVEL KEYWORD

This procedure helps you identify the five-digit identification number of the last PTF applied to the &dlf. installed on your system that was not part of a new release. For example, if the last PTF applied was PTF 11357, use UP11357 as the maintenance level keyword. If no PTFs have been applied since you installed the latest release of DLF, use UP00000 as the maintenance level keyword.

As a general rule, use the most current PTF number as a keyword to search SSF/EWS only if you feel the PTF caused the problem; the match you are looking for might have been found for some other PTF.

Note: If you have difficulty determining the latest PTF applied to your system, use as the Maintenance Level Keyword the number of the latest program update tape (PUT) that was applied to your system.

Determine the number of the latest PTF applied to the Document Library Facility.

- For OS/VS environments, execute the System Modification Program (SMP) PTF list.
- For VSE environments, execute the Maintain System History Program (MSHP).

You now have all the necessary information for an effective search of known problems in SSF/EWS. Your complete set of keywords might look like this:

Component Identification: 5748XXE00
Type-of-Failure: ABEND0C4
Module: DSMSPCPL
Function: COPY
Release Level: 020
Maintenance: UP11357

Having described each aspect of the program failure with these keywords, you are ready to search the SSF/EWS data base with the following keyword string (search argument):

5748XXE00 ABEND0C4 DSMSPCPL COPY 020 UP11357

If you do not have direct access to SSF/EWS, contact your IBM support center and have them search SSF/EWS with the search argument keyword set you have developed.

If you have access to SSF/EWS, go to the section "Search Argument Procedure" on page 15 and follow the instructions.

SEARCH ARGUMENT PROCEDURE

Each SSF/EWS keyword describes one aspect of a program failure. The more precisely the keyword describes the program failure, the more selective the resulting search will be, thus yielding fewer matches or hits.

The following procedure explains how to use the set of keywords you developed as a search argument in SSF/EWS.

Procedure

1. Using the full set of keywords you developed, access SSF/EWS and search the data base or microfiche. This will produce a number of matches (reported failures with characteristics similar to those of your problem).
2. Inspect each of the matches and eliminate those APAR fixes already applied to your system.
3. Compare each remaining APAR closing description with your failure symptoms.
4. If you find a match, correct the problem by applying the fix.
5. If you find a match but a fix for the problem is not available, ask your IBM support center representative to contact you when a fix becomes available.
6. If you do not find a fix, broaden the search by using the following techniques in the order they are given:
 - Omit the release level keyword from the search argument, thereby broadening the search to include similar failures on other release levels.
 - Begin dropping keywords from the right of the search argument to broaden the search even more. Keyword sets are developed in the diagnostic procedures to allow this technique to be used.

PREPARING AUTHORIZED PROGRAM ANALYSIS REPORTS (APARS)

Initiate an APAR only after you:

1. Check your command specifications for errors.
2. Develop a valid keyword string.
3. Complete an unsuccessful search argument procedure.

INITIATING AN APAR

As they help you diagnose a DLF problem, the support center gathers the information needed to complete an APAR. If your problem is a new one, an IBM support center Level 2 representative will issue an APAR number for the problem and begin the APAR procedure. At that time, be prepared to supply the following information:

- Operating system installed at your facility
- Current service level
- The keyword string or strings used to search SSF or EWS.
- CPU number (serial - model)

APAR-SUPPORTING DOCUMENTATION

Depending on the type of problem you are having, the support center might ask you to provide information that describes the DLF functions used, data base, environment, or operating instructions in effect when the problem occurred.

While the documentation requirements vary depending on the nature and severity of the failure, IBM does need the following documentation for all DLF-related problems:

1. Console listing and/or job run listing
2. Complete text of all messages, including ID NUMBER.

For ABEND, WAIT and LOOP problems, IBM also needs:

- A core dump.

With this information in hand, IBM can try to reproduce the problem and observe the failure symptoms.

Note: Be sure to put the APAR number a support center representative gives you on the top right-hand portion of each piece of documentation you submit.

The Procedures Section of Programming System General Information Manual, G229-2228 fully describes the necessary steps for submitting APAR documentation.

SUBMITTING TAPES OR DISK PACKS AS APAR DOCUMENTATION

When you submit tapes as part of the APAR documentation, always use the smallest reel possible (that is, mini or 1200 feet). This minimizes shipping costs.

Before you ship user tapes to IBM as part of APAR supporting documentation, fill out the label (form number G229-2186) IBM provides; be sure to include:

1. Name - APAR submitter
2. Region - region number
3. Branch Office - branch office number
4. Customer Number - tape owner number
5. APAR Serial - assigned serial number (If you do not know this number, use the Problem Number.)
6. Mode and Density - 7 or 9-track
7. Label - STD (standard), non STD (non-standard), No (no label)
8. File Format - fixed blocked, unblocked, etc.
9. BLK Size - physical record size
10. REC Size - logical record size
11. Prog Used to Create - program used to create the tape; DEBE or OS DUMP/RESTORE, for example.

This label is intended to prevent the loss of user tapes, should they become separated from other items of APAR documentation. IBM will return lost tapes to the submitter indicated on the label. IBM will return disk packs to the submitter. Any other material IBM specifically requests after the problem has been resolved and tested will be returned under a separate cover.

ACRONYMS USED IN THIS BOOK

<u>ACRONYM</u>	<u>MEANING</u>
APAR	Authorized Program Analysis Report
EWS	Early Warning System
MSHP	Maintain System History Program
PSW	Program Status Word
PTF	Programming Temporary Fix
PUT	Program Update Tape
SMP	System Modification Program
SSF	Software Support Facility

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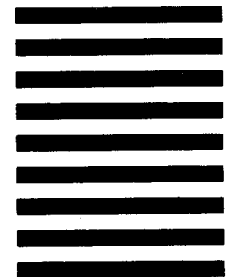
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