IBM Education Assistance for z/OS V2R2

Item: Dynamic LOGREC
Element/Component: BCP SVA LOGREC

Agenda

- Trademarks

- Presentation Objectives

- Overview

- Usage & Invocation

- New Message IFB102E

- Presentation Summary

- Appendix

Trademarks

- See url http://www.ibm.com/legal/copytrade.shtml for a list of trademarks.

Presentation Objectives

- Learn about the Dynamic LOGREC support and how to use it to improve LOGREC availability

- Learn about miscellaneous enhancement to LOGREC
    - IFB102E is now shown for temporary system logger errors instead of IFB100E

Overview - Review

- What is LOGREC?
    - LOGREC is a collection of error records that originate from z/OS
        - a source of mainframe error records for decades

    - Records stored in fixed data set SYS1.LOGREC on sysres volume

    - 1982 – SYS1.LOGREC can reside on any volume (if cataloged)

    - 1994 – IEASYSxx LOGREC= support to specify data set name

    - 1995 – LOGREC can be written to log stream SYSPLEX.LOGREC.ALLRECS (fixed)

    - No changes in 20 years

Overview - Problem

- Problem Statement / Need Addressed

    - An overwhelming number of requirements have been collected to allow the ability to dynamically change the location of the LOGREC data set

      Clients want to do the following without performing an IPL:

        - Perform maintenance on the DASD backing the LOGREC data set
        - Switch from LOGSTREAM to DATASET after a logger outage
            - Without having the LOGREC data set pre-allocated
        - Resize the LOGREC data set
        - Save an old LOGREC data set and switch to a new data set

Overview - Solution

- Solution
  - Alter the SETLOGRC command
    - When switching to DATASET, allocate the data set
      - Even if IPLed with LOGSTREAM or IGNORE
    - When switching from DATASET, deallocate the data set
    - Allowing specification of DATASET or LOGSTREAM resource

  - Alter the IPL IEASYSxx LOGREC=
    - Allow for specification of log stream name

- Benefit / Value
  - Requirements satisfied
  - IPL reduction / elimination
  - Greater availability and flexibility for LOGREC

Usage & Invocation – SETLOGRC Updates

- SETLOGRC command updates

- SETLOGRC
    - LOGSTREAM **| LS**
        - **LOGSTREAM=log.stream.name**

    - DATASET **| DS**
        - **DATASET=data.set.name**

    - IGNORE

- See Appendix F for details

Usage & Invocation – SETLOGRC Examples

▪ SETLOGRC command updates

▪ Examples:
  - `SETLOGRC LOGSTREAM`
  - **`SETLOGRC LS`**
  - **`SETLOGRC LOGSTREAM=NEW.LOGSTREAM.NAME`**
  - **`SETLOGRC LS=NEW.LOGSTREAM.TWO`**
  - `SETLOGRC DATASET`
  - **`SETLGORC DS`**
  - **`SETLOGRC DATASET=TEST.LOGREC`**
  - **`SETLOGRC DS=SYS2.LOGREC`**
  - `SETLOGRC IGNORE`

Usage & Invocation – IEASYSxx Updates

- IEASYSxx LOGSTREAM= parameter updates

- LOGREC=
    - data.set.name
    - LOGSTREAM **| LS**
    - IGNORE
    - **LOGSTREAM=*lsname* | LS=*lsname***
        - Name a log stream resource for LOGREC to yes
        - Allows a log stream other than SYSPLEX.LOGREC.ALLRECS

- See Appendix G for details

Usage & Invocation – IEASYSxx Examples

- IEASYSxx LOGSTREAM= parameter updates

- Examples
    - `LOGREC=DATA.SET.NAME`
    - `LOGREC=LOGSTREAM`
    - **`LOGREC=LS`**
    - **`LOGREC=LOGSTREAM=LOGREC.TEST1`**
    - **`LOGREC=LS=SYS1.LOGREC.TEST2`**
    - `LOGREC=IGNORE`

Usage & Invocation – New Messages

- Messages

- `IFB110I UNABLE TO function LOGREC DATASET`
  `NAME: data set name`
  `RETCODE: retcode RSNCODE rsncode`
  - *function* is `ALLOCATE, OPEN, or CLOSE`
  - See Appendix B for details

- `IFB112I  dynamic allocation messages`
  - See Appendix C for details

Usage & Invocation – Notes and Reminders

- To change the LOGREC recording medium
    - IPL is no longer required
    - Switch between LOGSTREAM and DATASET

- Reminders
    - Initialize LOGREC data sets before use (IFCDIP00 or EREP)
    - LOGREC data set is still created as 'unmovable' (see appendix H)

- SETLOGRC can resume LOGREC recording in the event of errors
    - Logger/ CF/ outages
    - DASD outages

New Message IFB102E

```
IFB102E TEMPORARY LOGREC ERROR ON SYSTEM  system-name - RC=xxxx-yyyy
explanation - explanation_reason
LOG STREAM NAME: log-stream-name
STRUCTURE NAME: structure-name
```

- Message now returned instead of IFB100E for temporary logger conditions
    - System Logger return codes x'0860' to x'088F' and x'08B0'
    - CF structure full
    - Staging data set full, or formatting
    - CF structure rebuild in progress; user request or loss of connectivity

- LOGREC will continue to retry these conditions
    - New message differentiates the severity of the condition
    - IFB100E means loss of LOGREC data is likely, not so for IFB102E
    - Actions may be needed to ensure system logger is properly tuned

- For details see appendix D for IFB100E and appendix E for IFB102E

Presentation Summary

- You have now learned
    - about Dynamic LOGREC and how you can use it to improve your LOGREC availability

    - about miscellaneous enhancement to LOGREC
        - IFB102E is now shown for temporary system logger errors instead of IFB100E

Appendix

- A – Publications Affected

- B – IFB110I details

- C – IFB112I details

- D – IFB100E details

- E – IFB102E details

- F – SETLOGRC command details

- G – LOGREC IEASYSxx details

- H – Initializing and reinitializing the logrec data set

Appendix A – Publications Affected

- z/OS MVS Initialization and Tuning Reference (SA23-1380)
  - See Appendix G

- z/OS MVS System Commands (SA38-0666)
  - See Appendix F

- z/OS MVS System Messages, Vol 8 (IEF-IGD) (SA38-0675)
  - See Appendices B, C, D, E

- z/OS MVS Tools and Service Aids (GA32-0905)
  - See Appendix H

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Appendix B - IFB110I details

```
IFB110I UNABLE TO function LOGREC DATASET
NAME: data set name
RETCODE: retcode RSNCODE rsncode
```

Explanation: The user issued the SETLOGRC command to change the LOGREC recording medium to DATASET, however the system encountered a problem.

In the message text

function is one of

      ALLOCATE - LOGREC failed allocating the new data set

      OPEN - LOGREC failed opening the new data set

      CLOSE -LOGREC failed closing the old data set

data set name is the name of the LOGREC data set we encountered the problem working on.

retcode is the return code from the function.

rsncode is the reason code from the function.

      When *function* is ALLOCATE:

          - this is typically the SVC99 reason

          - is set to 'FFFFFFFF'x when a STORAGE OBTAIN failure occurs

          - the *retcode* is for a STORAGE OBTAIN failure.

      When *function* is OPEN is set to 0

      When *function* is CLOSE:

          - this is typically set to 0

          - is set to 1 when the LOGREC *dataset* is being closed after being opened for IPL processing

          - is set to 'FFFFFFFF'x when there is a LOAD failure of the CLOSE after IPL routine

            -the *retcode* is for a LOAD failure

Appendix B - IFB110I details (cont.)

System action: The system continues processing. If possible the system will fall back to the previous LOGREC recording medium.

Operator response: Check the return and reason codes against the function and data set and determine if any configuration problems exist. For ALLOCATION errors see message IFB112I for any dynamic allocation messages.

Source: System Environmental Recording (LOGREC)

Module: IFBLOGIN

Routing code: 2,10

Descriptor code: 3

Appendix C - IFB112I details

```
IFB112I   dynamic allocation messages
```

Explanation: This message contains dynamic allocation messages when the allocation of the LOGREC data set has issues after a SETLOGRC command.

System action: The system continues processing.

Operator response: look into the messages to see if a problem exist along with message IFB110I.

Source: System Environmental Recording (LOGREC)

Module: IFBLOGIN

Routing code: 2,10

Descriptor code: 3

Appendix D - IFB100E details

```
IFB100E LOGREC LOG STREAM ERROR ON SYSTEM sysname - RC=xxxx-yyyy
explanation - explanation_reason
LOG STREAM NAME: log-stream-name
STRUCTURE NAME: structure-name
```

Explanation:
System logger returned a setup or environmental error to LOGREC, and LOGREC has halted recording to the LOGREC log stream. System programmer action is likely needed to restore LOGREC recording.

In the message text:
sysname - The name of the system on which the LOGREC log stream failure occurred.

xxxx-yyyy - The return and reason codes from the system logger service, see *explanation* and *explanation_reason* for more info.

explanation - is one of:
UNABLE TO CONNECT TO LOG STREAM – Indicates the error occurred after the IXGCONN macro was issued in an attempt to connect to the LOGREC log stream. See z/OS MVS Programming: Authorized Assembler Services Reference IAR-XCT for a description of the IXGCONN return and reason codes.
UNABLE TO WRITE TO LOG STREAM – Indicates the error occurred after the IXGWRITE macro was issued in an attempt to write to the LOGREC log stream. See z/OS MVS Programming: Authorized Assembler Services Reference IAR-XCT for a description of the IXGWRITE return and reason codes.
DISCONNECT ERROR – Indicates the error occurred after the IXGCONN macro was issued in an attempt to disconnect from the LOGREC log stream. See z/OS MVS Programming: Authorized Assembler Services Reference IAR-XCT for a description of the IXGCONN return and reason codes.

Appendix D - IFB100E details (cont.)

log-stream-name - Identifies the name of the LOGREC log stream that had the error.

structure-name - Identifies the structure name associated with the LOGREC log stream that had the error.

System action:
LOGREC will record to buffers until buffers become full or the condition is corrected. If the buffers become full, LOGREC will stop recording records and LOGREC error and environmental records will be lost. When the condition is corrected, LOGREC will write buffered and future records to the log stream when the condition clears. The system continues processing.

Operator response:
Notify the system programmer.

System programmer response:
Depending on the explanation-reason, do one of the following:

```
LOG STREAM NOT DEFINED
```
Define a LOGREC log stream to the system logger inventory using the IXCMIAPU utility program. SYS1.SAMPLIB member IFBLSJCL can be used as an example of how to define a LOGREC log stream. Enter the SETLOGRC LOGSTREAM COMMAND to activate LOGREC log stream recording.

Alternately switch to an existing LOGREC log stream via the SETLOGRC LOGSTREAM=lsname command where lsname is the name of your target log stream.

Alternately switch to an existing LOGREC dataset via the SETLOGRC DATASET command.

Appendix D - IFB100E details (cont.)

LOG STREAM DEFINED AS MODEL

Switch to an existing LOGREC log stream via the SETLOGRC LOGSTREAM=lsname command where lsname is the name of your target log stream and is not a type MODEL.

If needed, define a LOGREC log stream to system logger inventory using the IXCMIAPU utility program. SYS1.SAMPLIB member IFBLSJCL can be used as an example of how to define a LOGREC log stream. Enter the SETLOGRC COMMAND to activate LOGREC log stream recording.

If desired use IXCMIAPU to delete the model logstream and define a new log stream using that name or use the rename operation to move the model log stream.

Alternately switch to an existing LOGREC dataset via the SETLOGRC DATASET command.

STRUCTURE NOT DEFINED

Define the structure in the XES policy using the IXCMIAPU utility. Ensure that the structure and LOGREC log stream are defined in the system logger inventory using the utility program IXCMIAPU. Enter the SETLOGRC LOGSTREAM command to reactivate LOGREC log stream Recording.

Alternately switch to an existing LOGREC dataset via the SETLOGRC DATASET command. You can also switch to a LOGREC log stream that connects to a valid log stream structure defined to the XES and LOGR policies or a DASDonly log stream via the SETLOGRC LOGSTREAM command.

SYSTEM LOGGER NOT AVAILABLE

System logger is not active at this time. See 'When the system logger address space fails' in Setting up a sysplex.

Appendix D - IFB100E details (cont.)

explanation_reason - identifies the reason for the error, is one of the following:

`LOG STREAM NOT DEFINED` -The LOGREC log stream has not been defined to the system logger inventory. This error corresponds to IXGCONN reason code 80B.

`LOG STREAM DEFINED AS MODEL` - The LOGREC log stream has been defined to the system logger inventory as a model log stream. The error corresponds to IXGCONN reason code 820.

`STRUCTURE NOT DEFINED` - The system logger was unable to access the LOGREC log stream because the structure name associated with the log stream is not defined in the current XES policy. This error corresponds to IXGCONN reason code 811.

`SYSTEM LOGGER NOT AVAILABLE` - The system logger services are currently unavailable. This error corresponds to reason code 890 or 891.

`LOG STREAM DIRECTORY IS FULL` - The system logger was unable to process the write request because the coupling facility structure space allocated for the LOGREC log stream is full. Attempts to offload the coupling facility data to DASD have failed because the log stream's data set directory is full. No further write requests can be processed until enough log data is deleted from the log stream to free up space in the data set directory. This error corresponds to IXGWRITE reason code 85C.

`LS DIRECTORY FULL/OFFLOAD FAILED` - The system logger was unable to process the write request because the coupling facility structure space that is allocated for the LOGREC log stream is full. Attempts to offload the coupling facility data to DASD have failed. No further write requests can be processed until enough log data is deleted from the log stream to free up space in the data set directory. This error corresponds to IXGWRITE reason code 85D.

`STRUCTURE NOT AVAILABLE` - The system logger attempt to connect to the structure was prevented by XES. This error corresponds to reason codes 853, and 802.

`IMPROPER SAF AUTHORIZATION` - LOGREC does not have proper SAF authorization to connect to the LOGREC log stream or the authority specified does not match the authority allowed. This error corresponds to IXGCONN reason code 80D.

`LOGGER DISABLED FOR THIS IPL` - The system logger services are unavailable for the life of this IPL. This error corresponds to IXGCONN reason code 814 or 82E.

diagfld1,diagfld2,diagfld3,diagfld4 - Contains the system logger answer area diagnostic fields when the return and reason codes are unexpected.

Appendix D - IFB100E details (cont.)

```
LOG STREAM DIRECTORY IS FULL
LS DIRECTORY FULL/OFFLOAD FAILED
```
Run an EREP job that references the LOGREC log stream to copy some of the log stream data to a history data set. Then delete the data from the log stream. Enter the SETLOGRC LOGSTREAM command to reactivate the LOGREC log stream recording.

```
STRUCTURE NOT AVAILABLE
```
An error occurred accessing a coupling facility structure by system logger. If the structure becomes available again, LOGREC will retry the failed writes. If the condition does not correct itself in a timely manner, LOGREC will write to internal buffers until they fill, if they fill LOGREC data will be lost. See 'When the coupling facility structure fails' in MVS z/OS Seting Up a Sysplex.

If the condition does not correct itself, use the SETLOGRC command to switch to a log stream in a different structure, or to data set recording.

```
IMPROPER SAF AUTHORIZATION
```
LOGREC failed connecting to the log stream because a SAF authorization check failed. See 'Define authorization to system logger resources' in Setting up a sysplex for more assistance.

```
LOGGER DISABLED FOR THIS IPL
```
LOGREC can not use log streams because logger is disabled in this environment. You should change the recording medium to data set by via the SETLOGRC DATASET command.

Otherwise, see z/OS MVS Programming: Assembler Services Reference ABE-HSP for the description of the IXGCONN or IXGWRITE return and reason codes. Contact IBM support if necessary action is not apparent.

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Appendix D - IFB100E details (cont.)

Source: System Environmental Recording (LOGREC)

Module: IFBLOGIN

Routing code: 2,10

Descriptor code: 3

Appendix E - IFB102E details

```
IFB102E TEMPORARY LOGREC ERROR ON SYSTEM system-name - RC=xxxx-yyyy
explanation - explanation_reason
LOG STREAM NAME: log-stream-name
STRUCTURE NAME: structure-name
```

Explanation:
System logger has returned a temporary condition to LOGREC, and LOGREC has halted recording to the LOGREC log stream. Depending on the condition system logger will either offload the log stream data or complete the rebuild and post LOGREC that it can continue processing. Although system programmer action is not immediately needed, log stream tuning may be needed to prevent future application delays. LOGREC will retry the operations when the temporary condition is relieved.

In the message text:
sysname - The name of the system on which the LOGREC log stream failure occurred.

xxxx-yyyy - The return and reason codes from the system logger service, see explanation and explanation_reason for more info

explanation - is one of:
```
UNABLE TO CONNECT TO LOG STREAM
```
Indicates the error occurred after the IXGCONN macro was issued in
an attempt to connect to the LOGREC log stream. See z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for a description of the IXGCONN return and reason codes.

Appendix E - IFB102E details (cont.)

UNABLE TO WRITE TO LOG STREAM
Indicates the error occurred after the IXGWRITE macro was issued in an attempt to write to the LOGREC log stream. See z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for a description of the IXGWRITE return and reason codes.

DISCONNECT ERROR
Indicates the error occurred after the IXGCONN macro was issued in an attempt to disconnect from the LOGREC log stream. See z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for a description of the IXGCONN return and reason codes.

explanation_reason - identifies the reason for the error, is one of the following:
STRUCTURE IS FULL
The system logger was unable to process the request because the structure associated with the LOGREC log stream is full. This error corresponds to reason code 860, and 866.

LOG STREAM IS NOT AVAILABLE
The system logger was unable to access the LOGREC log stream. The primary reason is because the structure associated with the LOGREC log stream is being rebuilt, but it could be because the coupling facility or the structure failed. This error corresponds to reason codes 861 through 88F.

STRUCTURE NOT AVAILABLE
The system logger attempt to connect to the structure was prevented by XES. This error corresponds to reason code 8B0.

log-stream-name - Identifies the name of the LOGREC log stream that had the error.

Appendix E - IFB102E details (cont.)

structure-name - Identifies the structure name associated with the LOGREC log stream that had the error.

System action: LOGREC will write records to buffers. When the temporary condition ends, LOGREC will be alerted from system logger that processing can continue. LOGREC will write any buffered writes as well as new writes once signaled. The system continues processing.

Operator response: Although this problem will likely clear itself up, it might be indicative of needed re-tuning of the log stream. Notify the system programmer if the condition occurs frequently.

System programmer response: Depending on the reason code from system logger (yyyy), do one of the following:

0860, 0866 - The coupling facility structure is full. Logger will offload the data in the coupling facility and alert LOGREC when complete. LOGREC will continue writing. If this condition occurs frequently, this may indicate your LOGREC log stream is in need of tuning enhancements to provide greater availability to the log stream. See system programmer actions for IXGH007E or IXGH009E for directions.

0861, 0862, 08B0 - The coupling facility structure is in the process of rebuilding due to a user or configuration request. LOGREC will resume writing when the process is complete, no action is needed.

0863, 0864 - The coupling facility structure is in the process of rebuilding due to a failure or connectivity loss. The rebuild process will likely connect the structure to another coupling facility and LOGREC will continue writing to the log stream when the process completes. If the process fails, intervention may be needed to set up the coupling facility connections, or switch LOGREC to data set recording via SETLOGRC DATASET command. Look for messages IXG101I, IXG105I, IXG107I.

Appendix E - IFB102E details (cont.)

0865 - The staging data set is full. Logger will offload the data in the staging data set and alert LOGREC when complete. LOGREC will continue writing. If this condition occurs frequently, this may indicate your LOGREC log stream is in need of tuning enhancements to provide greater availability of the log stream. See system programmer actions for IXGH008E for directions.

0867 - This temporary reason describes two situations which are unlikely to occur for the LOGREC log stream. The first is one in which system logger is unable to obtain storage for local buffer space for the log stream request. The second is one in which LOGREC requested an excess of 10,000 incomplete writes to the log stream. LOGREC will continue processing when these conditions are relieved. If this reason code is seen frequently, contact IBM support.

0868 - A write to the log stream was requested when the staging data set was being formatted. LOGREC will wait for this process to complete and continue writing to the log stream. No additional action is needed.

Source: System Environmental Recording (LOGREC)

Module: IFBLOGIN

Routing code: 2,10

Descriptor code: 3

Appendix F - SETLOGRC Command details

Use the SETLOGRC command to change the LOGREC error and environmental recording medium originally specified in the IEASYSxx parmlib member during initial program load (IPL). You can specify one of the following options for LOGREC error recording: LOGSTREAM, DATASET, or IGNORE

Optionally, you can specify a new name for DATASET or LOGSTREAM parameters.

After the system processes the command, depending on the specified option, one of the following results will occur:

- If the change of medium is successful, the system issues message IFB097I to indicate the change and the new medium to the requesting console.

- If the change is to DATASET:
    - If the change of medium is to DATASET and the system was not originally initialized with a data set specified as the recording medium, the system now dynamically allocates and opens the specified data set. If no data set name is provided, then LOGREC defaults to using SYS1.LOGREC. If the system fails to open the LOGREC data set, it issues messages IFB110I and IFB112I along with message IFB099I.
    - If the current medium is DATASET and DATASET is requested with a new data set name, LOGREC closes and deallocates the old data set, then allocates and opens the new data set for LOGREC recording.
    - If the current medium is LOGSTREAM and DATASET is requested, LOGREC disconnects from the log stream, then allocates and opens the data set for LOGREC recording. If problems arise when allocating the data set, LOGREC attempts to revert to log stream recording.

Appendix F - SETLOGRC Command details (cont.)

- If the change is to IGNORE:
    - Note: IBM recommends that you use the IGNORE setting in testing environments only.
    - If the current setting is IGNORE and IGNORE is requested, LOGREC issues message IFB096I to the invoking console to indicate that the desired medium is the current setting.
    - If the desired setting is to IGNORE, LOGREC error and environmental records are not recorded and are not provided in an ENF 36 signal.
    - If the current medium is DATASET and IGNORE is requested, LOGREC closes and deallocates the LOGREC data set.
    - If the current medium is LOGSTREAM and IGNORE is requested, LOGREC disconnects from the log stream.

- If the change is to LOGSTREAM:
    - If the desired setting is to LOGSTREAM and the connection to the log stream fails, the system issues message IFB094I to indicate the successful change of medium from LOGSTREAM to LOGSTREAM. If the change of medium is unsuccessful, the system issues message IFB099I. The system also issues message IFB100E to indicate that the system logger is unavailable. LOGREC error and environmental records are internally buffered until the system logger becomes available. The buffer can hold only a certain number of records and will wrap when that number is exceeded.
    - If the connection is successful or when system logger and the log stream are available for writing, LOGREC writes records, including any buffered records, to the log stream.
    - If the current medium is DATASET and LOGSTREAM is requested, LOGREC closes and deallocates the LOGREC data set, then connects to the log stream.

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Appendix F - SETLOGRC Command details (cont.)

- – If the current medium is LOGSTREAM and LOGSTREAM is requested, LOGREC disconnects from and then reconnects to the log stream. If a new log stream name is requested, LOGREC disconnects from the old log stream and connects to the new log stream.

Syntax
The complete syntax for the SETLOGRC command is:

SETLOGRC {LOGSTREAM|DATASET|IGNORE|LOGSTREAM=lsname|DATASET=dsname}

Note: The SETLOGRC command does not have an abbreviation. An acceptable abbreviation for LOGSTREAM is LS and for DATASET is DS.

Parameters
The parameters are:

LOGSTREAM | LS
Indicates that the desired medium for recording LOGREC error and environmental records is a log stream. To use a log stream, the LOGREC log stream must be defined. See z/OS MVS Setting Up a Sysplex for information about LOGREC log stream definitions.

Optionally, you can specify a new log stream name by setting

LOGSTREAM=lsname, where lsname is the log stream to which you want to record LOGREC entries.

Appendix F - SETLOGRC Command details (cont.)

DATASET | DS
Indicates that the desired medium for recording LOGREC error and environmental records is a data set. You can change the recording medium to and from dataset at any time. This setting instructs LOGREC to use dynamic allocation to find the LOGREC data set, as long as it is cataloged. Ensure that your data set meets the preconditions of a LOGREC data set and is initialized through EREP. For more information about preparing the LOGREC data set, see z/OS MVS Diagnosis: Tools and Service Aids .

Optionally, you can specify a new data set name by setting DATASET=dsname, where dsname is the data set to which you want to record LOGREC entries. If LOGREC is currently recording to DATASET, the system closes the old data set and opens the new data set for processing.

IGNORE
Indicates that recording LOGREC error and environmental records is to be disabled.

IGNORE closes LOGSTREAM connections, then closes and deallocates DATASET resources. You can use IGNORE to perform maintenance for the LOGREC medium; however, LOGREC records are not recorded when IGNORE is in use.

Appendix G - LOGREC= IEASYSxx details

LOGREC={*dsname* | LOGSTREAM | LOGSTREAM=*lsname* | IGNORE}

LOGREC specifies the LOGREC recording medium to be used for error and environmental recording. If this parameter is omitted, then SYS1.LOGREC is the default data set name specification.

dsname
Specifies the name of the LOGREC data set to be used for error recording. In a multisystem environment, if you specify a unique name for each of your LOGREC data sets, IBM suggests that you not place these names in the SYSTEMS exclusion resource name list in parmlib member GRSRNLxx. Before an IPL, the LOGREC data set must have been allocated, cataloged (unless on the SYSRES) in the system master catalog, and initialized using IFCDIP00. In a multisystem environment, take care in running IFCDIP00 to ensure, if using the SYS1.LOGREC data set name default, that the correct LOGREC data set is initialized.

LOGSTREAM | LS
Specifies that the LOGREC log stream (SYSPLEX.LOGREC.ALLRECS) is to be used for the error and environmental recording. The log stream provides a single repository for all of the MVS images in a sysplex. The log stream eliminates the need to allocate, catalog, and initialize a LOGREC data set on each system. When reporting programs, such as EREP, are run, the single log stream can be used as input to the program.

LOGSTREAM=lsname | LS=lsname
Specifies the name of a log stream resource to which to record LOGREC entries. With this functionality, you can use a log stream other than the default SYSPLEX.LOGREC.ALLRECS.

Appendix G - LOGREC= IEASYSxx details (cont.)

IGNORE
Specifies that error and environmental recording are to be ignored. LOGREC records are not recorded to the output medium; no records are written to a LOGREC data set or to the LOGREC log stream. Also, the system does not issue the ENF event code 36 signal for records when IGNORE is specified.

Attention: This specification is intended to be used only on test systems when a LOGREC data set is not established and the LOGREC log stream is not defined.

Value range:
One of the allowable specifications. The values for *dsname* and *lsname* can contain system symbols. When the dsname option is used, only one data set can be specified.

Default:
SYS1.LOGREC

Associated parmlib member:
When LOGSTREAM is specified, see Chapter 24,"COUPLExx (cross-system coupling facility (XCF) parameters)," on page 267.

Appendix G - LOGREC= IEASYSxx details (cont.)

Table 23 shows syntax examples of the LOGREC parameter and the results they produce.

Example	Result
LOGREC=SYSA.LOGREC	The data set 'SYSA.LOGREC is used.
LOGREC=SYSTEMA.LOGREC	The data set SYSTEMA.LOGREC is used
LOGREC=&SYSNAME;.LOGREC	Assuming the value that is specified on the SYSNAME= parameter is SYSTEMA, the data set SYSTEMA.LOGREC is used.
LOGREC=&SYSNAME;&SYSNAME;DATA.FILE	Assuming the value that is specified on the SYSNAME= parameter is S1, the data set S1S1DATA.FILE is used.
LOGREC=LOGSTREAM	The LOGREC log stream, SYSPLEX.LOGREC.ALLRECS, is used by SVC 76 (LOGREC) to record error and environmental records
LOGREC=LS	SVC 76 (LOGREC) uses the LOGREC log stream SYSPLEX.LOGREC.ALLRECS to record error and environmental records
LOGREC=LOGSTREAM=LOGREC.TEST1	SVC 76 (LOGREC) uses the log stream LOGREC.TEST1 to record error and environmental records.
LOGREC=LS=LOGREC.TEST1	SVC 76 (LOGREC) uses the log stream LOGREC.TEST1 to record error and environmental records
LOGREC=IGNORE	No error or environmental recording by SVC 76 will occur.

Appendix H - Initializing and reinitializing the LOGREC data set

You must initialize the logrec data set before starting the system that will use it. You reinitialize the logrec data set when an uncorrectable error occurs. You clear the logrec data set when it is full or near full. You must also initialize a logrec data set before using the SETLOGRC command to switch to it.

To initialize or reinitialize the logrec data set, use the service aid program IFCDIP00. To clear a full logrec data set, use EREP. IFCDIP00 creates a header record and a time stamp record for the logrec data set.

Attention: The logrec data set is an unmovable data set. If you attempt to move it after IPL using a program, such as a defragmentation program, your system will experience difficulty both reading from and writing to the data set. Logrec records physical addresses into the logrec data set rather than to relative address, and this prevents the ability to move the data set. You can use the SETLOGRC command to switch to IGNORE, LOGSTREAM, or a different data set to free the data set and allow use of maintenance programs for the volume that contains the logrec data set. However, the data set itself remains unmovable.