

# z/OS V1R13

## DFSMS catalog: Parmlib member

### Overview

- Problem Statement / Need Addressed
  - Today, the only way the customers can customize their Catalog environment is via SYS1.NUCLEUS(SYSCATxx) and SYS1.PARMLIB(LOADxx)
  - Only 1 line (80 characters) is available and it has been long filled, preventing any new parameters from being added.
  - It prevents customers from changing these parameters once the system has been IPL'ed.
- Solution
  - For catalog to provide its own PARMLIB member and any number of parameters can be added and changed with and without a system IPL.
- Benefit / Value
  - The system programmer can now create his own catalog PARMLIB member(s) to customize the catalog environment. The parameters can be changed by doing an IPL or a simple restart of the catalog address space (CAS).
- The following parameters are supported in this line item:
  - VVDSSPACE(primary,secondary)
    - Primary and Secondary space quantities for VVDS implicit defines in tracks. Default is 10 tracks for both.
  - TASKMAX(n) – Catalog service task upper limit. Default is 180. Minimum is 24 and maximum is 360.
  - NOTIFYEXTENT(n) – Percentage threshold to warn when a catalog is getting full. Default is 80%.
- The following Enable/Disable parameters supported via the MODIFY CATALOG command are also supported in this line item –
  - DELFORCEWNG(YES/NO) - Enables/Disables the ability to issue a warning message when attempting to use the DELETE VVDS RECOVERY and DELETE USERCATALOG FORCE commands. Default is YES.
  - DSNCHECK(YES/NO) - Enables/Disables syntax checking on names being added to a catalog. Default is YES.
  - SYMREC(YES/NO) - Enables/Disables the ability to create a SYMREC . Default is YES.
  - UPDTFAIL(YES/NO) – Enables/Disables the message IEC390I from been issued when a VSAM update request against a catalog abnormally terminates. Default is YES.
  - IEC390I updatetype FOR KEY entryname IN CATALOG catalogname WAS ABNORMALLY TERMINATED
  - VVRCHECK(YES/NO) - Enables/disables enhanced VVR checking on VVDS I/O. Default is NO.
  - DELRECOVWNG(YES/NO) – New keyword in V1R13. Enables/Disables the ability to issue a warning message when the DELETE UCAT RECOVERY command is issued. Default is NO. Introduced via LI2357.
  - EXTENDEDALIAS(YES/NO) – New keyword in V1R13. Enables/Disables the ability to create extension records for user-catalog aliases. Default is NO. Introduced via LI2368.

### Usage and invocation

- In order to use the new catalog PARMLIB member support, the system programmer must create one or more PARMLIB members (IGGCATxx) and populate it with the desired settings. The suffix (xx) is any 2 alphanumeric or national (\$,#,@) characters; the default is "00" (zeros).

Sample IGGCATxx:

```
VVDSSPACE(40,50)
```

```
TASKMAX(75)
```

--> Blank line allowed

```
NOTIFYEXTEN(19) --> NOTIFYEXTENT misspelled. Will be ignored and an error is issued.
```

```
VVRCHECK( YES)
```

- A few important syntax rules for the IGGCATxx member
  - Comments begin with /\* and end with \*/. Must fit on a single line.
  - Multiple declarations of any parameters are allowed. The last valid value will be used for the parameter. For example , the following are allowed:
    - VVDSSPACE(10,10)
    - VVDSSPACE(14,14)
    - VVDSSPACE(14,14) will be used as the final value for VVDSSPACE in this case
  - No blanks will be allowed between digits. For example: VVDSSPACE(1 0, 14) is not valid for a VVDSSPACE(10,14) declaration
  - Input ends with the end of file (EOF).
  - All parameters should start and finish on the same line.
  - The parameters DO NOT have to start in column one. They must fit entirely within columns 1 and 71. Any text beyond column 71 will be ignored.
  - If an invalid parameter is detected on any line, processing for that line stops at the last valid parameter on that line. Processing continues at the next line.
- The IGGCATxx parameters are processed both at IPL and when CAS is restarted.
- The IGGCATxx member(s) are optional but, if specified, the parameters specified within take precedence over the parameters specified in the LOADxx and SYSCATxx members.

- The suffixes should be specified in the new IEASYSxx parameter, CATALOG=(*list of suffixes separated by commas*). When multiple members are specified, the members are processed in the order specified.
  - Examples:
    - CATALOG=AA (specifies one member. No parens needed if only one member)
    - CATALOG=(AA,BB,05) (specifies multiple members. Values in IGGCAT05 will override those in IGGCATBB and IGGCATAA.)
- If CATALOG= is specified, and a particular IGGCATxx member on it is not found, it is skipped. If none of the members are found, the default PARMLIB member (IGGCAT00) is searched.
- If CATALOG= is not specified, the default member (IGGCAT00) is searched.
- If IGGCAT00 does not exist, then default values are used for the parameters.

## Messages

### ▪ IEC385W IGGCATxx BYPASSED DUE TO xxxxxxxx ERROR. RETURN CODE IS rc

**Explanation:** An internal error was detected during a service which was called by catalog during parsing of the catalog PARMLIB member.

In the message text:

xxxxxxx is "A LOAD" or "A STORAGE" or "AN IEEMB878"

rc is the return code returned by the internal service

### ▪ IEC386W INVALID KEYWORD DETECTED IN aaaaaaaa AT LINE: text

**Explanation:** A syntax error was detected on a particular line during the parsing of IGGCATxx.

In the message text:

aaaaaaa is the 8 character catalog PARMLIB member name starting with IGGCAT followed by the 2 character suffix

text is the whole line of text with the invalid keyword up to position 71

### ▪ IEC387W ERROR RELEASING IGGCATxx STORAGE. ERROR CODE IS rc

**Explanation:** An internal error was detected while releasing storage obtained during IGGCATxx processing.

In the message text:

rc is the return code returned by the STORAGE service during storage release processing

For all messages refer to *z/OS MVS System Messages Vol. 7 (IEB-IEE)* for a more detailed explanation.

## Interactions and dependencies

- Software Dependencies
  - None
- Hardware Dependencies
  - None
- Exploiters
  - System Programmer

## Migration and coexistence considerations

- None. Down-level systems will not try to read the new IGGCATxx PARMLIB member(s)

## Installation

- Need to create the new IGGCATxx PARMLIB member(s) and populate them with the desired settings.
- The list of suffixes must be specified on the new IEASYSxx system parameter, CATALOG=. If the CATALOG= parameter is not found, the default member IGGCAT00 is processed. If IGGCAT00 is not found, default values will be applied.
- IMPORTANT....the IGGCATxx members are processed during an IPL and a restart of the catalog address space (F CATALOG,RESTART)

## Session summary

- The Catalog PARMLIB member support can be used to customize the catalog environment.
- The PARMLIB member(s) must be created in the PARMLIB concatenation. The list of suffixes for the PARMLIB member(s) to be used must be specified via the new system parameter CATALOG= in IEASYSxx. If CATALOG= is not found then IGGCAT00 will be processed. If IGGCAT00 is not found, default values are applied.
- The PARMLIB members are processed during IPL and a restart of the catalog address space.
- If invalid values are detected in any of the PARMLIB member(s), the parameter is ignored and a message displaying the invalid parameter is issued in the syslog and also to the console if it is a CAS restart.

## Appendix - References

- Publications:
  - *z/OS DFSMS Managing Catalogs (SC26-7409-10)* – explains the new PARMLIB member and its contents
  - *z/OS MVS System Messages Vol. 7 (IEB-IEE) (SA22-7637-21)* – explains the new messages introduced in this support
  - *z/OS MVS Initialization and Tuning Reference (SA22-7592-22)* – explains the new PARMLIB member and its contents