

# IBM Education Assistance for z/OS V2R1

Item: DSPSIZMX for SMF Logstreams

Element/Component: BCP SMF



## Agenda

- Trademarks
- Presentation Objectives
- Overview
- Usage & Invocation
- Migration & Coexistence Considerations
- Installation
- Presentation Summary
- Appendix



## Trademarks

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



## Presentation Objectives

- Things you will learn from this session:
  - The purpose of DSPSIZMAX For SMF Logstreams
  - The functional benefit and content
  - How to invoke the new function
  - Migration / coexistence issues or concerns
  - List of Publications and References



## Overview

- Problem Statement / Need Addressed
  - When SMF logstream recording is forced to buffer data (say for some external logger failure), it is possible that two gigabytes of storage will be consumed by SMF for each logstream that is disconnected
- Solution
  - Set a cap on the maximum size of the buffer area that would be consumed by SMF
  - Provide new SMFPRMxx keyword DSPSIZMAX (logstreams) similar to BUFSIZMAX (data sets)
  - Maximum set between 128M and 2048M
- Benefit / Value
  - Reduction on data loss due to SMF buffer space shortages
  - Allow customization of maximum buffer size



## Usage & Invocation

- Support is enabled/customized by:
  - New SMFPRMxx keyword DSPSIZMAX
    - Can be specified globally or on a per LSNAME/DEFAULTLSNAME basis
    - Value range of 128M to 2048M (2G)
    - Default: 2048M (2G)
    - Set via SMFPRMxx, SETSMF or SET SMF
  - New segment in SMF Type 23 record
    - SMF23LGS contains values pertaining to log stream buffers



## Usage & Invocation

- Examples:

- SMFPRMxx

```
DSPSIZMAX (1G)  
DEFAULTLSNAME (IFASMF.DEFAULT,DSPSIZMAX(1024M) )  
LSNAME (IFASMF.STREAM1,TYPE(30),DSPSIZMAX(256M) )
```

- SETSMF command

```
SETSMF DSPSIZMAX(2G)  
SETSMF LSNAME (IFASMF.STREAM1,DSPSIZMAX(128M) )  
SETSMF DEFAULTLSNAME (IFASMF.DEFAULT,DSPSIZMAX(512M) )
```



## Migration & Coexistence Considerations

- If sharing SMFPRMxx across multiple releases
  - OA35175 for V1R12 and V1R13
    - Static DSPSIZMAX support





## Installation

- OA35175 for V1R13 and V1R12
  - DSPSIZMAX static support
  - Set once at IPL via SMFPRMxx
  - Cannot be updated via SETSMF or SET SMF
    - Will get IFA760I/IFA761I



## Presentation Summary

- New keyword DSPSIZMAX in SMFPRMxx
- Can be updated via SETSMF or SET SMF command
- New section in SMF Type 23 record SMF23LGS



## Appendix

### ▪ Publications

- z/OS MVS Initialization and Tuning Reference [SA22-7592]
- z/OS MVS System Commands [SA22-7627]
- z/OS MVS System Management Facilities (SMF) [SA22-7630]
- z/OS MVS System Messages [SA22-7638]

