z/OS V2.5 IBM Education Assistant

Solution Name: z/OS USS Change the LIMMSG default to SYSTEM

Solution Element(s): z/OS UNIX System Services

Agenda

- Trademarks
- Objectives
- Overview
- Usage & Invocation
- Interactions & Dependencies
- Upgrade & Coexistence Considerations
- Installation & Configuration
- Summary
- Appendix

Trademarks

- See url http://www.ibm.com/legal/copytrade.shtml for a list of trademarks.
- Additional Trademarks:
  - None

Objectives

Explain the LIMMSG parmlib option and why the default was changed from NONE to SYSTEM

Overview

- Who (Audience)
  - System Programmers
- What (Solution)
  - Change the default for parmlib option LIMMSG from NONE to SYSTEM
- Wow (Benefit / Value, Need Addressed)
  - Monitor system resource usage to detect potential issues before they occur

Usage & Invocation

- The parmlib option LIMMSG default was changed from NONE to SYSTEM
- LIMMSG function

  Option LIMMSG indicates if messages should be issued when certain system and or process level limits are reached**.**
  It allows customers to see when certain resources are starting to reach high levels and act upon the issue prior to function failure.

- LIMMSG(NONE|SYSTEM|ALL)

  NONE – no messages are issued when limits are reached
  SYSTEM – messages will be issued once a system limit reaches 85% and higher.
  Also, messages will be issued for process limits that are explicitly set for a process instead of using the process limit set by the parmlib option.
  For example:
  PROCESS A threads are limited by USS parmlib option MAXTHREADS
  PROCESS B has a value set for MAXTHREADS in the USP
  When LIMMSG is set to SYSTEM, messages will be issued for PROCESS B but not PROCESS A
  ALL – messages will be issued when any system or process limit is set

- Changing the default to SYSTEM will detect issues before the customer sees an actual problem

  A customer will see warning messages indicating certain system resources are reaching a high level

  BPXI039I SYSTEM LIMIT resource-name HAS REACHED xxx% OF ITS CURRENT CAPACITY OF y

Interactions & Dependencies

- Software Dependencies - None
- Hardware Dependencies - None
- Exploiters – N/A

Upgrade & Coexistence Considerations

- To exploit this solution
  - allow LIMMSG to default to SYSTEM
  - Update your USS parmlib member BPXPRMxx to either remove the LIMSG setting or to specifically set it to SYSTEM
- Toleration/coexistence APARs/PTFs – N/A
- If you do not want to run with LIMMSG set to SYSTEM
  - Update your USS parmlib member BPXPRMxx and set LIMMSG to NONE or to PROCESS
- Coexistence – N/A

Installation & Configuration

USS Parmlib option LIMMSG must be allowed to default to SYSTEM

or must be set to SYSTEM

Summary

- Setting LIMMSG to SYSTEM will detect potential issues with USS resource shortages before they occur.

Appendix

- Publications
  - MVS System Commands
  - MVS Initialization and Tuning Reference
  - z/OS Infoprint Server Customization
  - z/OS Upgrade Workflow