z/OS V2.5 IBM Education Assistant

Solution Name: RSM support for greater than 4TB real memory for a z/OS image

Solution Element(s): BCP RSM

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Agenda

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Trademarks

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

None

Objectives

 Make it possible to use more than four terabytes of physical storage to enable new workflows.

Overview

- Who (Audience)
 - System programmer pushing limits of the system memory size.
- What (Solution)
 - Allow 2G LFAREA to exceed the current 4TB memory limit.
- Wow (Benefit / Value, Need Addressed)
 - New workloads are now possible that require more storage than is currently available.

Usage & Invocation

- Specify more than 4TB of storage in your LPAR activation profile
- Specify a larger (2G) LFAREA in your IEASYSxx
 - LFAREA=(2G=*nn*)
 - nn can now be specified to use more than 4TB of memory.
- Adjust applications that make use of 2G frames to use more frames if applicable.

Such as Java, zCX, Db2, etc.

Interactions & Dependencies

- Software Dependencies
 - None
- Hardware Dependencies
 - Machine that supports more than 4TB of memory.
- Exploiters
 - Available to exploiters that use 2G pages like Db2, Java, zCX

Upgrade & Coexistence Considerations

- To exploit this solution, all systems in the sysplex must be at the new z/OS level:
 - No.
- List any toleration/coexistence APARs/PTFs.
 - None.
- List anything that doesn't work the same anymore.
 - CVTRLSTG should be changed to Rce_OnlineFrameCountAtIPL to support values >4TB-1
 - SMF added a new field in record-type 0 to support 64-Bit Counts.

Installation & Configuration

• None.

Summary

• It's just more memory available for 2G pages.

Appendix

• None