

# z/OS V2.5 IBM Education Assistant

Solution Name: System Recovery Boost

Solution Element(s): RMF

July 2021



# Agenda

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

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

# Objectives

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- Explain purpose/usage of RMF updates
  - RMF Postprocessor
    - Introduce the new Boost Class for the CPU Activity Report
    - Introduce the new Boost Class for the WLM Activity Report

# Overview

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- Who (Audience)
  - z/OS Performance Analysts and System Programmers
- What (Solution)
  - Introduce new Postprocessor System Recovery Boost reporting.
- Wow (Benefit / Value, Need Addressed)
  - RMF Postprocessor reporting:
    - Provide the capability to identify when System Recovery Boost was enabled to provide additional CPU capacity.

# Usage & Invocation

- RMF Postprocessor CPU Activity Report (CPU)

|                                       |                         |                    |           |                                |                  |                           |                      |                     |     |                    |           |   |
|---------------------------------------|-------------------------|--------------------|-----------|--------------------------------|------------------|---------------------------|----------------------|---------------------|-----|--------------------|-----------|---|
| 1                                     | C P U   A C T I V I T Y |                    |           |                                |                  |                           |                      |                     |     |                    | PAGE      | 1 |
| z/OS V2R5                             |                         |                    |           | SYSTEM ID SYS1                 |                  | START 03/02/2021-21.44.33 |                      | INTERVAL 000.15.00  |     |                    |           |   |
|                                       |                         |                    |           | RPT VERSION V2R5 RMF           |                  | END 03/02/2021-21.59.33   |                      | CYCLE 1.000 SECONDS |     |                    |           |   |
| -CPU                                  | 8561                    | CPC CAPACITY       | 3084      | SEQUENCE CODE 000000000003E968 |                  |                           |                      |                     |     |                    |           |   |
| MODEL                                 | 717                     |                    |           | HIPERDISPATCH=YES              |                  |                           |                      |                     |     |                    |           |   |
| H/W MODEL                             | T01                     | CHANGE REASON=NONE |           |                                | BOOST TYPE=Speed |                           | BOOST CLASS=Recovery |                     |     |                    |           |   |
| 0---CPU---                            |                         |                    |           |                                |                  |                           |                      |                     |     |                    |           |   |
|                                       |                         | ----- TIME % ----- |           |                                |                  | --- MT % ---              |                      | LOG PROC            |     | --I/O INTERRUPTS-- |           |   |
| NUM                                   | TYPE                    | ONLINE             | LPAR BUSY | MVS BUSY                       | PARKED           | PROD                      | UTIL                 | SHARE %             |     | RATE               | % VIA TPI |   |
| 0                                     | CP                      | 100.00             | 31.10     | 31.61                          | 0.00             | 100.00                    | 31.10                | 50.1                | MED | 3505               | 4.76      |   |
| 1                                     | CP                      | 100.00             | 15.31     | 15.74                          | 0.00             | 100.00                    | 15.31                | 50.1                | MED | 0.00               | 0.00      |   |
| 2                                     | CP                      | 100.00             | 0.00      | 3.51                           | 99.77            | 100.00                    | 0.00                 | 0.0                 | LOW | 0.00               | 0.00      |   |
| 3                                     | CP                      | 100.00             | 0.00      | -----                          | 100.00           | 100.00                    | 0.00                 | 0.0                 | LOW | 0.00               | 0.00      |   |
| 4                                     | CP                      | 100.00             | 0.00      | -----                          | 100.00           | 100.00                    | 0.00                 | 0.0                 | LOW | 0.00               | 0.00      |   |
| TOTAL/AVERAGE                         |                         |                    | 9.28      | 23.66                          |                  | 100.00                    | 9.28                 | 100.2               |     | 3505               | 4.76      |   |
| 0 5                                   | IIP                     | 100.00             | 63.29     | 47.19                          | 0.00             | 89.75                     | 56.80                | 57.2                | MED |                    |           |   |
|                                       |                         |                    |           | 30.43                          | 0.00             |                           |                      |                     |     |                    |           |   |
| 6                                     | IIP                     | 100.00             | 42.76     | 32.47                          | 0.00             | 93.95                     | 40.17                | 57.2                | MED |                    |           |   |
|                                       |                         |                    |           | 15.78                          | 0.00             |                           |                      |                     |     |                    |           |   |
| 7                                     | IIP                     | 100.00             | 0.00      | -----                          | 100.00           | 90.92                     | 0.00                 | 0.0                 | LOW |                    |           |   |
|                                       |                         |                    |           | -----                          | 100.00           |                           |                      |                     |     |                    |           |   |
| 8                                     | IIP                     | 100.00             | 0.00      | -----                          | 100.00           | 90.92                     | 0.00                 | 0.0                 | LOW |                    |           |   |
|                                       |                         |                    |           | -----                          | 100.00           |                           |                      |                     |     |                    |           |   |
| 9                                     | IIP                     | 100.00             | 0.00      | -----                          | 100.00           | 90.92                     | 0.00                 | 0.0                 | LOW |                    |           |   |
|                                       |                         |                    |           | -----                          | 100.00           |                           |                      |                     |     |                    |           |   |
| A                                     | IIP                     | 100.00             | 0.00      | -----                          | 100.00           | 90.92                     | 0.00                 | 0.0                 | LOW |                    |           |   |
|                                       |                         |                    |           | -----                          | 100.00           |                           |                      |                     |     |                    |           |   |
| TOTAL/AVERAGE                         |                         |                    | 17.68     | 31.47                          |                  | 91.23                     | 16.16                | 114.4               |     |                    |           |   |
| 0----- MULTI-THREADING ANALYSIS ----- |                         |                    |           |                                |                  |                           |                      |                     |     |                    |           |   |
| CPU TYPE                              |                         | MODE               | MAX CF    | CF                             | AVG TD           |                           |                      |                     |     |                    |           |   |
| CP                                    |                         | 1                  | 1.000     | 1.000                          | 1.000            |                           |                      |                     |     |                    |           |   |
| IIP                                   |                         | 2                  | 1.123     | 1.022                          | 1.182            |                           |                      |                     |     |                    |           |   |

# Usage & Invocation

- RMF Postprocessor WLM Activity Report

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WORKLOAD ACTIVITY

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z/OS V2R5

SYSPLEX SYSPLEX1

START 03/02/2021-21.59.33

INTERVAL 001.00.00

MODE = GOAL

CONVERTED TO z/OS V2R5 RMF

END 03/02/2021-22.59.33

POLICY ACTIVATION DATE/TIME 02/23/2021 09.24.27

- SERVICE POLICY PAGE -

SERVICE DEFINITION: Policy01 Policy WLM Policy

INSTALL DATE: 02/23/2021 09.24.20

INSTALLED BY: TS5367

POLICY: POLICY01 Policy Software Policy 01

DISCRETIONARY GOAL MANAGEMENT: NO

DYNAMIC ALIAS MANAGEMENT: YES

I/O PRIORITY MANAGEMENT: YES

-SERVICE DEFINITION COEFFICIENTS-

-NORM FACTORS-

IOC CPU SRB MSO AAP IIP

0.0 1.0 1.0 0.0000 1.0000 1.0000

SYSTEMS

---ID--- OPT SU/SEC CAP% --TIME-- INTERVAL --BOOST--

SYS1 RS 91954.0 100 21.59.33 00.59.59 Recovery

SYS2 RS 91954.0 100 22.44.33 00.14.59 Recovery

SYS3 RS 91954.0 100 21.59.33 00.59.59 Recovery

---ID--- OPT SU/SEC CAP% --TIME-- INTERVAL --BOOST--

SYS5 RS 91954.0 100 21.59.33 00.59.59 Recovery

SYS6 RS 95808.4 100 21.59.33 00.59.59 Recovery

SYS7 RS 91954.0 100 21.59.33 01.00.00 Recovery

# Interactions & Dependencies

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- Software Dependencies
  - None
- Hardware Dependencies
  - None
- Exploiters
  - None



# Upgrade & Coexistence Considerations

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- None

# Installation & Configuration

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- This support is included in the GA shipment of the z/OS V2.5 RMF (HRM77D0) deliverable.

# Summary

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- Introduce new System Boost class: RECOVERY.

# Appendix

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- RMF - <https://github.com/IBM/IBM-Z-zOS/tree/master/zOS-RMF>
  - Contains Product information, presentations, etc.
- Documentation and news
  - RMF Report Analysis, SC34-2665
  - RMF User's Guide, SC34-2664
  - RMF Programmer's Guide, SC34-2667
  - Latest version of PDF files can be downloaded from:  
<http://www.ibm.com/systems/z/os/zos/bkserv/>