

# z/OS 3.1 IBM Education Assistant

Solution Name: Correlator Entitlement for RMF and ADG

Solution Element(s): BCP – SMF

July 2023



# Agenda

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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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- IBM z/OS Workload Interaction Correlator (priced feature) enables z/OS components and middleware to generate 5-second synchronized, micro-summary, exceptionalism enriched data Correlator with no measurable increase in CPU overhead.
  - Generating z/OS IOS, CICS, and IMS Correlator records requires a Correlator license
  - Generating z/OS Supervisor and Db2 Correlator records does not require a Correlator license
- For critical situations, IBM service requests Correlator records available without a Correlator license (e.g. Supervisor, Db2) and performs Navigator analysis to reduce the time required to the diagnose root cause.
- IBM service wants Correlator records that require a Correlator license collected for critical situations
- IBM service wants all clients to be collecting all available Correlator records as first failure data capture for critical situations

# Overview

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- Who (Audience)
  - All clients running z/OS 2.4 and above
- What (Solution)
  - [Correlator entitlement](#) extends a Correlator license at no additional cost to clients running:
    - z/OS 2.4 and above with a Resource Monitor Facility (RMF) license
    - z/OS 2.5 and above with an Advanced Data Gatherer (ADG) license
  - [IBM Flash](#) recommends all clients collect all available Correlator records
    - All clients can collect at least 1 correlator record without a Correlator license
- Wow (Benefit / Value, Need Addressed)
  - Many clients can collect Correlator records that require a Correlator license
  - Many clients have all available Correlator data when a critical situation is reported

# Usage & Invocation

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- [Enabling Workload Interaction Correlator](#) describes how to collect Correlator records.
- All clients running Db2 v12 and above, collect Db2 Correlator records by activating:
  - Db2 ZPARMs [STATIME\\_MAIN=5](#) and [SMFSTAT=YES](#) (default) or [SMFSTAT=\(1,...\)](#) to include trace class 1
  - [SYS1.PARMLIB\(SMFPRMxx\) TYPE\(100\)](#)
- All clients eligible for [Correlator Entitlement](#), collect the available Correlator records (e.g. Supervisor, IOS, CICS, IMS) by activating:
  - [SYS1.PARMLIB\(SMFPRMxx\) WIC and TYPE\(98\)](#)
- All clients ineligible for [Correlator Entitlement](#), collect the available Correlator records (e.g. Supervisor) by activating:
  - [SYS1.PARMLIB\(SMFPRMxx\) HFTSINTVL\(5\) and TYPE\(98\)](#)
- All clients collecting any Correlator records should also [Collect Hardware Instrumentation Services \(HIS\) counters as IBM recommends](#) so Supervisor Correlator records includes Cycles Per Instruction metrics

# Interactions & Dependencies

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- Software Dependencies
  - Db2 V12 and above for Db2 Correlator records
  - CICS 5.4 and above and a purchased or entitled Correlator license for CICS Correlator records
  - IMS 15 and above with a purchased or entitled Correlator license for IMS Correlator records
  - z/OS 2.5 and above with a purchased or entitled Correlator license for IOS Correlator records
- Hardware Dependencies
  - z14 and later hardware for CICS, IMS, and IOS Correlator records
- Exploiters
  - Db2, CICS, IMS, IOS, Supervisor

# Upgrade & Coexistence Considerations

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- To exploit this solution, all systems in the Plex 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: **N/A**



# Installation & Configuration

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- List anything that a client needs to be aware of during installation and include **examples** where appropriate - clients appreciate these:
  - Are any APARs or PTFs needed for enablement? **Yes**
    - Correlator – z/OS 3.1 base, z/OS 2.5 or 2.4 [APAR OA62268](#) . z/OS 2.3 [APAR OA57165](#).
    - IOS – z/OS 2.5 or 3.1 with [APAR OA62963](#)
    - CICS 5.4 and above with [APAR PH16392](#)
    - IMS V15 and above with [APAR PH15062](#)
    - Db2 V12 and above with [APAR PH18658](#)
  - What jobs need to be run? **N/A**
  - What hardware configuration is required? **N/A**
  - What PARMLIB statements or members are needed? **See Usage & Invocation chart**
  - Are any other system programmer procedures required? **No**
  - Are there any planning considerations? **No**
  - Are any special web deliverables needed? **No**
  - Does installation change any system defaults? **No**

# Summary

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- [IBM Flash](#) all clients collect all available Correlator records as first failure data capture for critical situations

# Appendix

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[Book: z/OS Planning for Installation](#)

[Chapter: Summary of Changes](#)

[Section: Changes in z/OS V2R5](#)

[Subsection: New Information](#)

[Book: z/OS Planning for Installation](#)

[Chapter: Learning About z/OS](#)

[Section: Introduction to z/OS elements and features](#)

[Subsection: Table 1. Base elements and optional features in V2R5](#)

[Book: z/OS Introduction and Release Guide](#)

[Chapter: z/OS optional features descriptions](#)

[Section: z/OS Advanced Data Gatherer](#)

[Book: z/OS MVS System Management Facilities \(SMF\)](#)

[Chapter: IBM z/OS Workload Interaction Correlator](#)

[Section: Enabling the z/OS Correlator Feature](#)