

z/OS 2.4 IBM Education Assistance (IEA)

Solution Name: COMPAT(MIN,XX)

Element(s)/Component(s): Binder



Agenda

- Trademarks
- Session Objectives
- Overview
- Usage & Invocation
- Interactions & Dependencies
- Session Summary
- Appendix

Trademarks

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

Session Objectives

- Explain the new function being delivered for z/OS V2.4 Program Management Binder

Overview – COMPAT(MIN,XX)

- Who (Audience)
 - System administrators and application programmers
- What (Solution)
 - A new sub-option for the Binder option COMPAT is added
- Wow (Benefit / Value, Need Addressed)
 - **Issue:** Users may encounter various problems related to the compatibility level of the binder when they are building program objects.
 - **Benefit:** Users can specify the Program Object (PO) level with this new enhancement.

An example of the current issues (1 of 3)

User requirement:

Build a program object that reserves compilation timestamps of all object modules.

Current support:

```
COMPAT={MIN    | LKED | {CURRENT | CURR} | PM1 | PM2
        | {PM3 | OSV2R8 | OSV2R9 | OSV2R10 | ZOSV1R1 | ZOSV1R2}
        | {PM4 | ZOSV1R3 | ZOSV1R4} | {ZOSV1R5 | ZOSV1R6} | {ZOSV1R7}
        | {PM5 | ZOSV1R8 | ZOSV1R9} | {ZOSV1R10 | ZOSV1R11 | ZOSV1R12}
        | {ZOSV1R13 | ZOSV2R1 | ZOSV2R2 | ZOSV2R3}
```

The Program Management Binder documentation, ***MVS Program Management User's Guide and Reference*** says: "COMPAT=ZOSV1R10 is the minimum level that supports saving the timestamp from compiler IDRL records in program objects."

An example of the current issues (2 of 3)

Scenario 1: If there are conditional sequential RLDs in one or more object modules, what will happen if COMPAT(ZOSV1R10) is specified?

Binder Action: The binder will issue error message IEW2606S as ZOSV1R13 is the minimum level that supports conditional sequential RLDs

Scenario 2: If the binder control statement ALIGNNT is used to align a specified class, what will happen if COMPAT(ZOSV1R13) is specified?

Binder Action: The binder will issue error message IEW2606S as ZOSV2R1 is the minimum level that supports preserving all boundary alignments specifications coming from ESD records.

An example of the current issues (3 of 3)

Scenario 3: What would happen if a PO (that was built on z/OS V2R4) is to be reprocessed by the binder on z/OS V1R13 and COMPAT(CURRENT) is specified?

Binder Action: The binder on z/OS V1R13 will issue error message IEW2509S as it can not process a PO with a higher PO level, such as

```
IEW2509S 3602 MODULE HELLO IDENTIFIED BY DDNAME OBJ IS AN UNSUPPORTED VERSION  
AND CANNOT BE PROCESSED.
```

Scenario 4: What would happen if COMPAT(MIN) is specified?

Binder Action: The binder will build a PO without error. However, timestamps will be lost in the resulting PO level, which is determined by the binder, because MIN < ZOSV1R10.

Solution: A new option value

Syntax change:

```
COMPAT={MIN | LKED | {CURRENT | CURR} | PM1 | PM2  
        | {PM3 | OSV2R8 | OSV2R9 | OSV2R10 | ZOSV1R1 | ZOSV1R2}  
        | {PM4 | ZOSV1R3 | ZOSV1R4} | {ZOSV1R5 | ZOSV1R6} | {ZOSV1R7}  
        | {PM5 | ZOSV1R8 | ZOSV1R9} | {ZOSV1R10 | ZOSV1R11 | ZOSV1R12}  
        | {ZOSV1R13 | ZOSV2R1 | ZOSV2R2 | ZOSV2R3 | ZOSV2R4}
```

Or

COMPAT=(MIN,XX) , where XX is any value above except MIN,LKED,CURRENT,CURR.

Explanation for COMPAT=(MIN,XX)

The binder will select the minimum PM level that supports the features actually in use for the current bind, and the level must be equal or larger than XX.

This new function is especially useful for software vendors or anybody building and distributing programs to other customers/sites/locations where valuable information needs to be preserved in the PO (problem determination attributes, compression, etc...)

An answer to the previous example

User requirement:

Build a program object that reserves compilation timestamps of all object modules.

Answer: **COMPAT=(MIN, ZOSV1R10)**

- The resulting PO level is \geq ZOSV1R10, so timestamp will be preserved.
- No IEW2606S error is issued any more if there are conditional sequential RLDs. The resulting PO level will be \geq ZOSV1R13.
- No IEW2606S error is issued any more if the binder control statement ALIGN* is used to align a specified class. The resulting PO level will be \geq ZOSV2R1.
- The negative side effects of both COMPAT=CURRENT and COMPAT=MIN are also alleviated.

Interactions & Dependencies

- To exploit this item, all systems in the Plex must be at the new z/OS level: No
- Software Dependencies
 - None
- Hardware Dependencies
 - None
- Exploiters
 - N/A

Session Summary

- The following z/OS V2R4 Binder have been explained:
 - COMPAT(MIN,XX)

Appendix

- Book Updates
 - MVS Program Management User's Guide and Reference