

# IBM Education Assistance for z/OS V2R1

Item: Nested CEEPIPI Environments

Element/Component: Language Environment



## Agenda

- Trademarks
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- Usage & Invocation
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- Appendix



## Trademarks

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



## Presentation Objectives

- Describe new support that allows applications in an active Preinitialization MAIN\_DP environment to call CEEPIPI to run applications in a nested MAIN\_DP environment



## Overview

- Problem Statement / Need Addressed
  - Preinitialization applications running in a MAIN\_DP environment need the ability to call CEEPIPI to run applications in nested MAIN\_DP environments. In prior releases, the CEEPIPI call would fail if this is attempted.
- Solution
  - Allow certain CEEPIPI calls from an active MAIN\_DP environment
- Benefit / Value
  - An application running in a MAIN\_DP environment can call another application in a nested MAIN\_DP environment, without having to return to the assembler PreInit driver to call the second application.



## Usage & Invocation

- To run Preinitialization applications in nested MAIN\_DP environments, the following general steps are needed:
  - Create more than one MAIN\_DP environment, using the existing CEEPIPI init\_main\_dp function (integer value = 19), and keep track of the output tokens.
  - Use the existing CEEPIPI call\_main function (integer value = 2) with one of the tokens to run application program A.
  - From application program A, use the CEEPIPI call\_main function with another token to invoke application program B in a nested MAIN\_DP environment.
  - Application B program can invoke yet another application in a third nested MAIN\_DP environment.



## Usage & Invocation

### ▪ Example 1:

- Assembler driver: call CEEPIPI(init\_main\_dp,,,token1)
- Assembler driver: call CEEPIPI(init\_main\_dp,,,token2)
- Assembler driver: call CEEPIPI(call\_main,,,token1,,) to invoke Program\_A (pass token2 as a parameter to Program\_A)
- Program\_A: call CEEPIPI(call\_main,,,token2) to invoke Program\_B (may need to call assembler code to make the CEEPIPI call).
- Program\_B: returns to Program\_A, which returns to the Assembler driver.
- Assembler driver: call CEEPIPI(term,token1) and CEEPIPI(term,token2) to end the two MAIN\_DP environments.



## Usage & Invocation

### ▪ Example 2:

- Assembler driver: call CEEPIPI(init\_main\_dp,,,token1)
- Assembler driver: call CEEPIPI(call\_main,,,token1,,) to invoke Program\_A
- Program\_A: call CEEPIPI(init\_main\_dp,,,token2) to create a second MAIN\_DP environment
- Program\_A: call CEEPIPI(call\_main,,,token2) to invoke Program\_B
- Program\_B: returns to Program\_A
- Program\_A: call CEEPIPI(term,token2) to end the second MAIN\_DP environment and return to the Assembler driver
- Assembler driver: call CEEPIPI(term,token1) to end the first MAIN\_DP environment.





## Presentation Summary

- New Preinitialization support allows applications running in a MAIN\_DP environment to make CEEPIPI calls to run applications in nested MAIN\_DP environments.



## Appendix

- Publication Numbers:
  - SA22-7561: z/OS Language Environment Programming Guide
  - SA22-7562: z/OS Language Environment Programming Reference

