z/OS 2.4
IBM Education Assistance

Name: C Headers

Element(s)/Component(s): BCP/many (e.g., SMF)

Agenda

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Trademarks

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

- Additional Trademarks:
  - None

Session Objectives

- Start to provide C Header files for maclib/modgen macros to facilitate C code development

Overview

- Who (Audience)
  - C coders needing to access z/OS control blocks
- What (Solution)
  - Provide C Headers for some macros in maclib/modgen
- Wow (Benefit / Value, Need Addressed)
  - Avoids needing to code your own, will be kept in synch as the assembler macros change

Usage & Invocation

- In this release, limited macros, concentrating on those identified by ISVs as being of most help

- In subsequent releases, we hope to do more

- Macros tend to have the same names as their assembler analogs

- Provided in both data set (SYS1.SIEAHDR.H) and file system (/usr/include/zos – a new sub-directory)

- Headers are tool-generated based on the "original", with a common look and feel (a group of ISVs helped to decide things)

- No unique documentation is provided for these header files. They are to be considered analogous to the assembler macros

- Normal invocation for a header: #include <theheadr.h>

Usage & Invocation

- Perhaps consider this initial release to be a bit of a "probe" to make sure that we're on the right track

- Requires LANGLVL(EXTENDED) and LANGLVL(LONGLONG)

- Utilizes definitions from stdint (for C) / cstdint (for C++)

Headers provided

- For SMF record mappings, IFACSMFR which provides C mappings for the SMF records covered by the IFASMFR macro.

- Unlike IFASMFR, it will expand everything under its control, not just a single header

- For example, z/OS BCP, z/OS DFSMS, z/OS JES SMF records (not all in this initial deliverable)

Headers provided (cont)

- CVT
- FXEFR, FXECTRL
- IEFJESCT, IEFJSCVT, IEFJSSIB, IEFSSSO, IEZJSCB
- IHAASCB, IHAASSB, IHAASXB, IHAECVT, IHAFACL, IHAPSA, IHAPSAE, IHAPSAX, IHARB, IHASDWA, IHASRB, IHASTCB, IKJRB, IKJTCB

Interactions & Dependencies

- To exploit this item, do all systems in the sysplex need to be at the new z/OS level? No

- Software Dependencies
  - None

- Hardware Dependencies
  - None

- Exploiters
  - None

Migration & Coexistence Considerations

- No migration/coexistence concerns
- No toleration/coexistence APARs/PTFs.

Session Summary

- Some C header files are being provided

- We would appreciate from you a list of maclib/modgen macros that are most important to you for us to provide C analogs, to help prioritize the work effort going forward

Appendix

- No unique documentation is provided for these header files. The data areas (and SMF records mappings) information is what should be used