# IBM Education Assistance for z/OS V2R1

Item: Runtime System Symbol Access
Element/Component: Language Environment

Material is current as of June 2013

# Agenda

- Trademarks
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- Overview
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# Trademarks

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

# Presentation Objectives

- Explain the new Language Environment interfaces that allow a program to access exported JCL symbols:
  - 31bit: callable service CEEGTJS
  - 64bit: C function __le_ceegtjs()

# Overview

- Problem Statement / Need Addressed
  - In z/OS 2.1, the JES2 and Scheduler components enhanced the use of JCL symbols in JCL providing an interface to retrieve JCL symbols at execution time. An Language Environment callable service is asked for to provide similar function as the scheduler service does but with less complexity and more usability.
- Solution
  - New interfaces were added to Language Environment to allow an application to retrieve the value of an exported JCL symbol.
- Benefit / Value
  - An application can now retrieve the value of an exported JCL symbol from a high level language.

# Usage & Invocation

- For 31bit Language Environment applications:

```
CEEGTJS(function_code,
        symbol_name,
        symbol_value,
        value_length,
        fc);
```

  - function_code
    - A fullword integer containing the function code of one of the following values:

      1 : Retrieve the value and its associate length of an exported JCL symbol.
  - symbol_name
    - A halfword length-prefixed character string(VSTRING),representing the name of an exported JCL symbol to be retrieved.

# Usage & Invocation

- symbol_value
  - A 255-byte fixed-length string. On return from this service, the symbol_value contains the value of the exported JCL symbol. If the length of the exported JCL symbol is shorter than 255 characters, the returned string is padded with blanks.
- value_length
  - A fullword integer containing the length of the value of the specified JCL symbol.
- fc
  - A 12-byte feedback code optional in some languages that indicates the result of this service.

- Usage note
  - Lower case characters in the symbol_name will be converted to upper case.

# Usage & Invocation

- For 64bit C applications:

```
#include<__le_api.h>

void __le_ceegtjs(_INT4 * function_code,
     _VSTRING * symbol_name,
     _CHAR255 * symbol_value,
     _INT4 * value_length,
     _FEEDBACK * fc);
```

  - The parameters are the same as CEEGTJS instead of fc is a 16-byte feedback code.

# Presentation Summary

- The new callable service CEEGTJS can be used by 31bit Language Environment applications and __le_ceegtjs() can be used by 64bit C programs to retrieve the value of an exported JCL symbol.

# Appendix

- XL C/C++ Runtime Library Reference (SA22-7821)
- Language Environment Programming Reference (SA22-7562)
- Language Environment Programming Guide (SA22-7561)
- Language Environment Concepts Guide (SA22-7567)
- Language Environment Programming Guide for 64-bit Virtual Addressing Mode (SA22-7569)