

CRTE (BS2000/OSD) V2.6

Common Run-Time Environment for COBOL2000, COBOL85 and C/C++

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Pages 3

The Common Run-Time Environment is a prerequisite software product for running source programs compiled with the COBOL2000, COBOL85 and C/C++ compilers. CRTE acts as the central interface between the objects generated by the compilers and the BS2000/OSD operating system.

Product Characteristics

CRTE (Common Run-Time Environment) V2.6 is the common runtime system for all variants of the following compilers: COBOL2000 V1.0 or higher, COBOL85 V2.1 or higher, C and C++ V2.1 or higher, and C/C++ V3.0 or higher in BS2000/OSD V6.0B or higher and in OSD/XC V2.0 or higher.

CRTE includes language-specific and language-neutral libraries, routines for program linkage, mathematics, standardized event and exception handling, as well as storage and I/O management. The header files of the C and C++ library functions are also part of CRTE.

CRTE is a software requirement for COBOL85, COBOL2000, C and C++ applications produced using the aforementioned compiler versions, and for running the COBOL2000 (BS2000/OSD)® compiler. CRTE is also a prerequisite for applications comprising a mix of different languages. Under BS2000/OSD V6.0B or higher, CRTE V2.6 supports the COBOL85, COBOL2000, C and C++ compilers as well as the associated applications also in POSIX.

Most modules of the CRTE runtime system are shareable and can be preloaded as a subsystem.

CRTE is also included in the OSD/XC extended operating system package for computers of the SX series. However, only the modules of the C/C++ runtime system and ILCS are available in RISC SPARC code in this variant, but not the COBOL-RTS.

With the release of correction package 2/2001, CRTE V2.2 was replaced by CRTE V2.3 in all versions of OSD-SVP from V2.0 on.

With the release of correction package 1/2003, CRTE V2.3 in OSD-SVP V4.0 or higher and OSD/XC V1.0 or higher will be replaced by CRTE V2.4.

With the release of correction package 2/2004, CRTE V2.4 in OSD/XC V1.0 or higher will be replaced by CRTE V2.5.

With the release of correction package 2/2006, CRTE V2.5 in OSD/XC V2.0 or higher will be replaced by CRTE V2.6.

Functional Description

CRTE includes built-in functions and routines for linking programs via the communication interface of the Inter-Language Communication Services (ILCS).

The standard C++ library conforming to the ANSI C++ Draft and the Tools.h++ © Rogue Wave library are also shipped with CRTE V2.1 or higher.

The standard C++ library includes a string class, container classes, iterators, generic algorithms, numeric classes and operations, as well as I/O classes.

The Tools.h++ © library contains universally usable "foundation classes". These include string classes with pattern-matching mechanisms, classes for handling date and time, virtual streams, container classes and internationalization classes.

Enhancements in CRTE V2.6 compared to CRTE V2.5:
Runtime system support for COBOL2000 (BS2000/OSD)® V1.4

Enhancements in CRTE V2.5 compared to CRTE V2.4:

- Runtime system support for COBOL2000 (BS2000/OSD)® V1.3
- No Supply of RISC-MIPS module

Enhancements in CRTE V2.4 compared to CRTE V2.3:
Runtime system support for COBOL2000 (BS2000/OSD)® V1.2

Extended runtime system support for C/C++:

Additional 64-bit functions

Large file compilation environment (external control)

Support for IEEE arithmetic

Support for ASCII-coded character strings

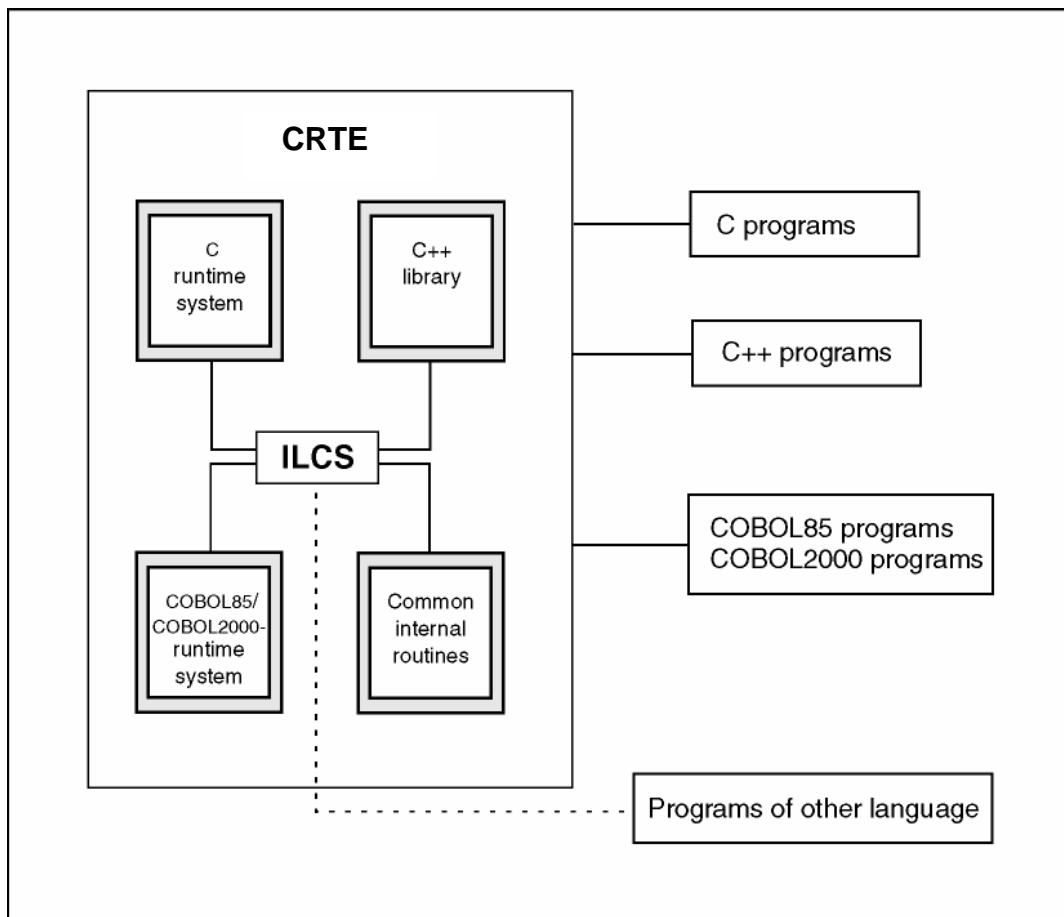
Program Description

CRTE consists of the modules of the runtime systems for COBOL2000, COBOL85 and C/C++ and the language-neutral libraries. The header files of the C/C++ library functions are also part of CRTE.

Most modules of the CRTE runtime system are shareable and can be preloaded as a subsystem.

The generated /390 format guarantees object compatibility for running BS2000/OSD customer applications, even in the event of future architecture changes.

Product overview:



Technical data	
TECHNICAL REQUIREMENTS HARDWARE	Business server with /390 architecture (S series) Business server with SPARC architecture (SX series)
TECHNICAL REQUIREMENTS SOFTWARE	BS2000/OSD-BC V6.0B or higher for S series servers OSD/XC V2.0 or higher for SX series servers BS2000/OSD-BC V6.0B or higher with POSIX-BC is required in order to use the POSIX functionality. The POSIX subsystem must be installed and loaded. The POSIX-BC version released for the relevant OSD version is required for running POSIX applications produced with CRTE V2.6. With the release of correction package 2/2001, CRTE V2.2 was replaced by CRTE V2.3 in all versions of OSD-SVP from V2.0 on. OSD-SVP V4.0 and OSD/XC V1.0 or higher were shipped with CRTE V2.3. With the release of correction package 1/2003, CRTE V2.3 will be replaced by CRTE V2.4 in all versions of OSD-SVP from V4.0 on and in all versions of OSD/XC from V1.0 on With the release of correction package 2/2004, CRTE V2.4 will be replaced by CRTE V2.5 in all versions of OSD/XC from V1.0 on With the release of correction package 2/2006, CRTE V2.5 will be replaced by CRTE V2.6 in all versions of OSD/XC from V2.0 on.
OPERATING MODE	Batch and interactive dialog
IMPLEMENTATION LANGUAGE	C/C++, SPL4 and Assembler
USER INTERFACE	Messages in English or German (optional)
INSTALLATION	Please refer to the relevant release notices.
DOCUMENTATION	User guide for CRTE Reference manual for C library functions in BS2000 Reference manual for C library functions for POSIX applications Reference manual for C++ library functions for Cfront mode Documentation available in English only: User's Guide and Reference for Standard C++ Library Functions (ANSI-C++ mode) User's Guide for Tools.h++ © Class Reference for Tools.h++ © Tools.h++ Copyright © Rogue Wave Software, Inc.
USER REQUIREMENTS	Knowledge of the C++, C, COBOL programming languages and BS2000/OSD
TRAINING	See course offer at: http://www.fujitsu-Siemens.com/training
CONDITIONS	This software product is supplied to the customer against a single payment or installments in accordance with our conditions for the use of software products.
WARRANTY	Class: A Delivery format: Machine language
ORDERING AND DELIVERY	This software product may be obtained from your local Fujitsu Siemens Computers GmbH regional office.