

Fujitsu Software BS2000 CRTE-BAS

Version 11.1A  
July 2020

Release Notice

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# 1 General

This Release Notice is a summary of the major extensions, requirements and operating information with regard to the following technical delivery unit:

BS2GA.CRTE-BAS as of V11.1A for OSD/BC as of V11.0.

The technical delivery units contain the components CRTE-BASYS V11.1A, CRTE-MSG V11.1A and POSIX-HEADER V11.1A.

\*1 The release level is that of July 2020.

\*1 Changes to release level December 2019 are marked with “\*1”.

\*1 This and other current Release Notices are shipped on the SoftBooks DVD and are available online at <https://bs2manuals.ts.fujitsu.com/>.

\*1

If one or more previous versions are skipped when this product version is used, the information from the Release Notices of the previous versions must be noted.

## 1.1 Ordering

\*1 CRTE-BAS V11.1A is included in OSD/BC V11.0 and therefore also in  
\*1 OSD/XC V11.0.

## 1.2 Delivery

The CRTE-BAS V11.1A files are supplied via SOLIS.

The following delivery components are required, regardless of the hardware type (HSI):

SINLIB.POSIX-HEADER.111	Library for installation in POSIX
SYSLIB.POSIX-HEADER.111	Header for C applications in POSIX
SINPRC.POSIX-HEADER.111	Library with installation procedures
SYSLNK.CRTE-BASYS.111 SYSLNK.CRTE-BASYS.111.ASSRTS SYSLNK.CRTE-BASYS.111.CLIB	Libraries with C and assembler runtime system for BS2000 internal programs
SYSLNK.CRTE-BASYS.111.ILCS	ILCS module library
SYSLNK.CRTE-BASYS.111.PTH SYSLNK.CRTE-BASYS.111.PTH-LOAD	Libraries for PThreads
SYSMES.CRTE-MSG.111	Message file for C, COBOL and assembler runtime system
SYSSII.CRTE-BASYS.111 SYSSII.CRTE-MSG.111 SYSSII.POSIX-HEADER.111	IMON information files for CRTE-BASYS, CRTE-MSG and POSIX-HEADER
SYSSSC.CRTE-BASYS.111 SYSSSC.CRTE-BASYS.111.LOW	Subsystem declarations (CRTEBASY)
SYSSSC.CRTE-BASYS.111.PTH SYSSSC.CRTE-BASYS.111.PTH.LOW	Subsystem declarations (CRTEPTH)

The following delivery components are only required on SQ servers and on each x86 server unit in SE Servers:

SKULNK.CRTE-BASYS.111 SKULNK.CRTE-BASYS.111.ASSRTS	Libraries with C and assembler runtime system for BS2000 internal programs (X86)
SKULNK.CRTE-BASYS.111.PTH SKULNK.CRTE-BASYS.111.PTH-LOAD	Libraries for PThreads (X86)
SKUSSC.CRTE-BASYS.111	Subsystem declarations (CRTEBASK)
SKUSSC.CRTE-BASYS.111.PTH	Subsystem declarations (CRTEPTK)

The current file and volume characteristics are listed in the SOLIS2 delivery cover letter.

### 1.3 Documentation

The manuals of CRTE and C Library Functions are recommended for use the header files supplied with CRTE-BAS V11.1A

CRTE V11.1A Common Runtime Environment  
Benutzerhandbuch

CRTE V11.1A Common Runtime Environment  
User Guide

C-Bibliotheksfunktionen für POSIX-Anwendungen  
Referenzhandbuch

C Library Functions for POSIX Applications  
Reference Manual

The BS2000 documentation is available in German and English on DVD with the title "BS2000 SoftBooks".

The documentation is also available on the internet at <https://bs2manuals.ts.fujitsu.com/>.

## **2 Software extensions**

CRTE-BAS V11.1A is a software requirement for CRTE V11.1A.

### **2.1 Support of C standard ISO/IEC 9899:2011**

- \*1 CRTE-BAS V11.1A contains the components to run the functions of the C standard ISO/IEC 9899:2011.

## 3 Technical information

### 3.1 Resource requirements

The files supplied with the technical delivery unit CRTE-BAS occupy approx. 9,700 PAM pages.

and additional approx. 12,700 PAM pages are required for SQ servers and for each x86 server unit in SE Servers.

Installation of POSIX-HEADER V11.1A and CRTE V11.1A in POSIX takes up around 5 MB in the root file system.

The following space is required in class 4 memory for loading the subsystems:

CRTEBASK	5438 KB (only for X86 systems)
CRTEBASY	2346 KB
CRTEPTH	2386 KB
CRTEPTK	5522 KB (only for X86 systems)

All subsystems are loaded by default into the class 4 memory above 16 MB.

### 3.2 Software configuration

- \*1 CRTE-BAS V11.1A is included in OSD/BC V11.0 and therefore also in
- \*1 OSD/XC V11.0.

### 3.3 Product installation

Installation of the technical delivery unit CRTE-BAS with the installation monitor IMON is mandatory. The information concerning installation in the delivery cover letter must be followed as well as the information in this Release Notice.

The necessary inputs and the sequence of the installation are described in the IMON documentation.

The standard installation of POSIX-HEADER in the POSIX file system is made either directly with IMON or with the POSIX installation tool after installation with IMON.

The following additional installation forms are also described in the CRTE V11.1A manual:

- Installation to a non-standard ID
- Private installation
- Installing the header files and link switches in any desired POSIX directory

The CRTEBASY subsystem and possibly CRTEBASK as well as CRTEPTH and possibly CRTEPTK from the CRTE-BASYS V11.0B delivery unit, are provided as the runtime environment for BS2000 internal programs. The subsystems should only be preloaded if this is recommended in the Release Notice of another installed product.

The subsystems are loaded into upper class 4 memory by default. As an alternative, the subsystems can also be loaded into class 4 memory below 16 MB using the supplied subsystem declaration files (with the extension LOW), if enough space is available there.

In addition, IMON copies the IC@RTSXS, IC@STLNK and IC@ULINK modules from the SYSLNK.CRTE-BASYS.111.CLIB library into the CLIB. If the \$.CLIB file does not exist in the original system, it is created by IMON. This \$.CLIB can be used for programs that were compiled with C V2.0 or earlier.

The compatibility library SYSLNK.ILCS is also installed with CRTE-BASYS.

### 3.3.1 Important information regarding upgrades

CRTE-BAS V11.1 is the subsequent version of CRTE-BAS V11.0.

Upgrading from previous POSIX-HEADER versions:

If the version of a product already installed in POSIX (POSIX-HEADER) changes (e.g. from 110 to 111), the old product version should be deinstalled ('Delete packages from POSIX' function of the POSIX installation program) before the new product version is installed in POSIX. This deinstallation can only be made using procedures from the old product files (e.g. SINLIB.<product>.<oldvers>). The old product files can then be deleted and the new product version installed in POSIX. See also the CRTE V11.0B User Guide for more information on this.

Upgrading from previous CRTE-BASYS versions:

Any preloaded CRTEBASY or CRTEBASK subsystems from a previous version as well as CRTEPTH or CRTEPTK of a previous version or the product CRTE of a previous version may not be accessed while or after installing CRTE-BAS V11.1A. They should be stopped before CRTE-BAS V11.1A is installed, and either replaced by the new version of the subsystem concerned (in the case of a standard installation, IMON automatically generates the appropriate entries in the subsystem catalog) or removed from the subsystem catalog.

## 3.4 Product use

The CRTE V11.1A User Guide contains information on using the product POSIX-HEADER V11.1A.

## 3.5 Discontinued functions (and those to be discontinued)

The following functions are no longer supported as of this version:

none

The following functions are supported for the last time in this version:

none

## 3.6 Incompatibilities

none

## 3.7 Restrictions

none



### 3.8 Procedure in the event of errors

If an error occurs, the following error documents are needed for diagnostics:

- a detailed description of the error condition
- indication as to whether and how the error can be reproduced
- options, source and error listing including expansion of the COPY and INCLUDE elements (LISTING option)
- execution log
- source including the COPY and INCLUDE elements and COSSD if required
- linker listing
- input/output files
- expected result
- brief description of execution
- product version number
- Rep files used
- CONSLOG (in special cases)
- DUMP, if available
- subsystems used

## **4 Hardware requirements**

CRTE-BAS V11.1A will run on all business servers supported by

- OSD/BC as of V11.0 and
- OSD/XC as of V11.0

## **5 Firmware versions**

not applicable