

PACKAGE ID - 001001SPARC00 FORMBUILDER

KWIC TITLE - FORMBUILDER/FBGRAPHICS

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 10/01/1994 **PUBLICATION DATE** - 09/01/1994

DESCRIPTION - FormBuilder is a software library developed at the INEL that provides the programmer with a high-level interface to a subset of the X Window system and the OSF/Motif widget set. The primary goal of the FormBuilder library is to assist the programmer in rapidly developing a OSF/Motif based Graphical User Interface (GUI). Through the use of the FormBuilder application programmers interface (API), the GUI programmer is afforded several distinct advantages over Motif programming. Among these advantages are a substantially reduced learning curve, more readable/maintainable/modifiable code, smaller, more efficient binaries, and reduced compile/link/debug time during development. Working in concert with the FormBuilder library is the FBGraphics library, a 2-dimensional graphics library that allows the programmer to perform graphical operations within certain FormBuilder windows. The FBGraphics library is based on the Xlib drawing routines and much like FormBuilder, its purpose is to provide the programmer with a simpler, more productive mechanism for producing the desired graphical output on the screen.

PACKAGE CONTENTS - Media Directory; Software Abstract; EGG-EE-11477;
Media Includes Source Code, Compilation Instructions, Linking
Instructions Programmer Documentation;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 3.5 Diskette

METHOD OF SOLUTION - FormBuilder is a C interface library to a subset of the OSF/Motif widget set and the X Window System. The purpose of the library is to ease the use of the most common elements of these toolsets while not limiting their power and flexibility. FBGraphics is similar in purpose and is based on the Xlib graphics capabilities.

COMPUTER - SUN SPARC

OPERATING SYSTEMS - FormBuilder and FBGraphics libraries have been built and tested on a number of Unix platforms including SunOS, Solaris, HP-UX, AIX, IRIX, and Ultrix.

PROGRAMMING LANGUAGES - C programming language

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SOFTWARE LIMITATIONS - None known

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - FormBuilder's focus is to assist the programmer in developing a OSF/Motif based GUI. While this is by no means unique, FormBuilder is one of the few products that does this with the additional goals of producing readable, maintainable, efficient code.

RELATED SOFTWARE - The FormBuilder and FBGraphics libraries are highly dependent on the OSF/Motif and X Window System libraries. Users of FormBuilder/FBGraphics must have these libraries correctly installed on their system.

OTHER PROG/OPER SYS INFO - FormBuilder and FBGraphics are both written in the C programming language since they are an interface layer to other C libraries. Parallel Ada bindings are also provided. The Ada bindings are not necessarily between compilers since, by nature, they require use of vendor specific capabilities of the Ada compiler. They are currently written and tested under Rational Apex version 1.4.1. A port to some Ada compilers, such as the Verdix Ada compiler should be trivial while some others may be more involved.

HARDWARE REQS - The only hardware requirements are a display terminal compatible with the X Window System and a Unix workstation supported by one of the Operating Systems previously listed.

REFERENCES - J.A. Goetsch, FormBuilder/FBGraphics Programmer's Reference Manual, EGG-EE-11477, September 1994.

ABSTRACT STATUS - Released AS-IS 10/26/95

SUBJECT CLASS CODE - PN

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
F CODES
COMPUTER GRAPHICS
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INTERACTIVE DISPLAY DEVICES

EDB SUBJECT CATEGORIES -
990200

SPONSOR - DOE/IO

PACKAGE TYPE - AS - IS