TECHNICAL SPECIFICATION

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First edition
2021-10

Linux Standard Base (LSB) —

Part 1-6: Graphics and Gtk3 specification

Noyau de base normalisé Linux (LSB) —

Partie 1-6: Spécification graphique et Gtk3

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by the Linux Foundation as Linux Standard Base (LSB): Graphics and gtk3 specification and drafted in accordance with its editorial rules. It was assigned to Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 22, *Programming languages, their environments and system software interfaces*, and adopted by National Bodies.

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This first edition of ISO/IEC TS 23360-1-6 cancels and replaces ISO/IEC 23360-1:2006, which has been technically revised.

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Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Introduction

The Trial Use Specification describes components which may or may not be present on an otherwise conforming system. The purpose is to indicate that these components are on a Standards Track, that is, they are intended to become part of the LSB Specification in a future edition.

This document should be used in conjunction with the documents it references. Information referenced in this way is as much a part of this document as is the information explicitly included here.

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I Introductory Elements

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1 Scope

The Trial Use Specification defines components which are not required parts of the LSB Specification.

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2 Normative References

The specifications listed below are referenced in whole or in part by the Trial Use Specification. Such references may be normative or informative; a reference to specification shall only be considered normative if it is explicitly cited as such. The Trial Use Specification may make normative references to a portion of these specifications (that is, to define a specific function or group of functions); in such cases, only the explicitly referenced portion of the specification is to be considered normative.

Table 2-1 Informative References

Name	Title	URL
Gdk 3.6.4 Reference Manual	Gdk 3.6.4 Reference Manual	http://developer.gnome.org/gdk3/3.6
Gtk 3.6.4 Reference Manual	Gtk 3.6.4 Reference Manual	http://developer.gnome.org/gtk3/3.6
ISO C (1999)	ISO/IEC 9899:1999 - Programming Languages -- C	

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3 Requirements

3.1 TUM Libraries

The libraries listed in Table 3-1 shall be available on a Linux Standard Base system which implements the Trial Use TUM module, with the specified runtime names. This list may be supplemented or amended by the architecture-specific specification.

Table 3-1 Standard Library Names

Library	Runtime Name
libpng15	libpng15.so.15

These libraries will be in an implementation-defined directory which the dynamic linker shall search by default.

3.2 Gtk3 Libraries

The libraries listed in Table 3-2 shall be available on a Linux Standard Base system which implements the Trial Use Toolkit_Gtk3 module, with the specified runtime names. This list may be supplemented or amended by the architecture-specific specification.

Table 3-2 Standard Library Names

Library	Runtime Name
libgdk-3	libgdk-3.so.0
libgtk-3	libgtk-3.so.0

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These libraries will be in an implementation-defined directory which the dynamic linker shall search by default.

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4 Terms and Definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 2382, ISO 80000–2, and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4.1

archLSB

Some LSB specification documents have both a generic, architecture-neutral part and an architecture-specific part. The latter describes elements whose definitions may be unique to a particular processor architecture. The term archLSB may be used in the generic part to refer to the corresponding section of the architecture-specific part.

4.2

Binary Standard, ABI

The total set of interfaces that are available to be used in the compiled binary code of a conforming application, including the run-time details such as calling conventions, binary format, C++ name mangling, etc.

4.3

Implementation-defined

Describes a value or behavior that is not defined by this document but is selected by an implementor. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence of the value or behavior. An application that relies on such a value or behavior cannot be assured to be portable across conforming implementations. The implementor shall document such a value or behavior so that it can be used correctly by an application.

4.4

Shell Script

A file that is read by an interpreter (e.g., awk). The first line of the shell script includes a reference to its interpreter binary.

4.5

Source Standard, API

The total set of interfaces that are available to be used in the source code of a conforming application. Due to translations, the Binary Standard and the Source Standard may contain some different interfaces.

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4.6

Undefined

Describes the nature of a value or behavior not defined by this document which results from use of an invalid program construct or invalid data input. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence or validity of the value or behavior. An application that relies on any particular value or behavior cannot be assured to be portable across conforming implementations.

4.7

Unspecified

Describes the nature of a value or behavior not specified by this document which results from use of a valid program construct or valid data input. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence or validity of the value or behavior. An application that relies on any particular value or behavior cannot be assured to be portable across conforming implementations.

In addition, for the portions of this specification which build on IEEE Std 1003.1-2001, the definitions given in *IEEE Std 1003.1-2001, Base Definitions, Chapter 3* apply.

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5 Documentation Conventions

Throughout this document, the following typographic conventions are used:

`function()`

the name of a function

command

the name of a command or utility

`CONSTANT`

a constant value

`parameter`

a parameter

`variable`

a variable

Throughout this specification, several tables of interfaces are presented. Each entry in these tables has the following format:

name

the name of the interface

(symver)

An optional symbol version identifier, if required.

[*`refno`*]

A reference number indexing the table of referenced specifications that follows this table.

For example,

forkpty(GLIBC_2.0) [SUSv4]

refers to the interface named `forkpty()` with symbol version `GLIBC_2.0` that is defined in the reference indicated by the tag `SUSv4`.

Note: For symbols with versions which differ between architectures, the symbol versions are defined in the architecture specific parts of of this module specification only. In the generic part, they will appear without symbol versions.

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II PNG15 library

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