The Ultimate Development Environment

Based on the original OpenStep specification created by NeXT, the GNUstep core libraries provide a superb development environment to address the many challenges of writing quickly robust and flexible applications.

Free

GNUstep is an official GNU project using GNU LGPL as the license of its core libraries.

State of the art object-oriented design

GNUstep is built on a NeXTstep–inspired, truly visionary, object-oriented design.

Flexible

GNUstep uses Objective-C, the fastest object-oriented language with full dynamic dispatch, full and direct access to runtime structures (including full introspection capabilities, ability to create classes at runtime, ability to add or modify methods of existing classes), forwarding, distributed objects support built into the language, and much more.

Simple

GNUstep has a simple and consistent API which is the result of decades of development. Objective-C is a simple but incredibly powerful superset of C which a C programmer can learn in a day.

Fast

The GNUnstep core libraries include an optimized foundation library which, for example, not only supports natively unicode strings but uses a transparent class cluster design which makes sure that every string is internally stored and managed in the most efficient way. I.e., if you’re only using ASCII strings, the library will store and manage them as ASCII, and only start using slower (and more memory hungry) character sets when it’s really needed.

Easy to integrate

Objective-C is compatible with C and uses the same linking conventions, so you can use your preferite C libraries in Objective-C or expose functionality of your Objective-C projects as C functions which can be used from C. Because of the dynamic nature of Objective-C it is particularly easy to interface it with other languages as well, as demonstrated by the existing guile, java and ruby interfaces. C++ integration is simple because of Objective-C++, which allows you to mix Objective-C and C++ in the same file! Objective-C++ is being contributed by Apple to the main GCC trunk.

Source Code Compatibility with Apple Mac OS X Cocoa

GNUstep uses the same language (Objective-C) and API (based on the OpenStep API) that Apple Mac OS X Cocoa is using. For this reason, software written for GNUstep can be compiled on Apple Mac OS X Cocoa and vice versa.

Fast build system

GNUstep includes gnustep–make, a build system which allows you to build your projects by using extremely simple and intuitive makefiles; it provides you with full portability (to any GNUstep platform, and to Apple Cocoa) without the need to interact with tools like autoconf. gnustep–make has been heavily optimized and can crunch through your most complex and deep projects at an incredible speed, shortening dramatically your build and test iterations. If you prefer an IDE, ProjectCenter allows you to create and run projects without the need to write makefiles.

Graphical user interface builder

Gorm allows developers to quickly create graphical applications and to design every little aspect of the application's user interface. It is inspired by the legendary NeXTstep Interface Builder application, and takes advantage of the dynamic features of the Objective-C language to make it easy and intuitive to connect graphical objects in your window with the actual code in your application. Using drag and drop all types of objects like menus, buttons, tables, lists and browsers are easily added to the interface. With just the mouse you can resize, move or convert the objects or connect them to functions as well as edit nearly every aspect of them using Gorm’s powerful inspectors.

For Further information, please visit www.gnustep.org