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**A Company Positioning
White Paper**

Linux Standard Base

The purpose of this document is to help identify the issues at hand that could cause the forking, or fragmentation, of Linux into several proprietary operating systems—each of which would require separate ports of software. We will explore the implications of this scenario, and suggest a solution.

An Argument in Favor of the Linux Standard Base

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Executive Summary

The main objective of Linux Standard Base (LSB) is to solve the problem facing every commercial independent software vendor (ISV); namely, the resource expenditure associated with porting their software products to multiple versions of the many Linux products and distributions currently in the market place.

This whitepaper explores three scenarios, identifying their advantages and disadvantages; then proposes a solution that will help the Linux community to expand the quality and quantity of commercial-grade software available to it.

Linux Standard Base

The main objective of Linux Standard Base (LSB) is to solve the problem facing every commercial independent software vendor (ISV); namely, the resource expenditure associated with porting their software products to multiple versions of the many Linux products and distributions currently in the market place.

If we cannot find a solution to this problem, the life span of Linux will be cut tragically short. Nearly every ISV to whom I have spoken wants to remain distribution agnostic. That is, they do not want to care which Linux offering their software runs on. They do not want to have to choose between Linux providers. They do not want to support four or more versions of Linux to accommodate the current Linux community.

Three Solutions in the Marketplace

As I see the market, there are currently three solutions being offered:

- Expect the ISV to publish the source code for their applications, and to allow the community to support the different versions
- Encourage the ISV to select a single kernel version and library, and then require the Linux providers to provide patches to the kernel and libraries, or
- Require the ISV to select a single Linux provider to support All solutions have issues. Let me address the issues with the solutions above, ending with my recommendation.

Expect the ISV to Publish the Source Code for Their Applications To expect the software vendor to publish the source code might work in some cases. However, some of these industry players have millions, if not billions of dollars tied up in commercial software and hardware products. They will not be allowed by their executive management or by their owners to publish the source code for their applications. The source code, to their way of thinking, is their most prized possession. It is what separates their product from their competition. Publishing the source opens up tremendous liabilities. Netscape, for example, published the browser source code, only to outsource it to another company. Publishing source has to be done after significant thought and consideration.

We have found that the ISVs who cannot at the present time provide source code will continue to support Linux and the open source effort, but their boards of directors, attorneys, and their shareholders recognize the liabilities of opening their source at the present time.

Publishing source code has to be done after significant thought and consideration. 1 Encourage the ISV to Select a Single Kernel Version and Library The second option encourages the ISV to select a single version of the kernel and library. What would be the result if, say, Oracle selected one kernel and library, and Informix picks another? Or better yet, would be the result if Corel and Oracle pick the same version of the kernel and its libraries and the customer cannot run either of them without locating some patches to make then run on his version of the kernel. Total chaos would reign. Such a solution would be, in fact, no solution at all.

Require the ISV to Select a Single Linux Provider to Support The third option is to port to just one Linux distribution. This seems counter intuitive to the Linux and Open Source community which believes in choice. However, there are those who would support this option, thinking that it has the best chance of solving the problem.

My major concern with porting to only one Linux distribution, is that by so doing, ISVs and their customers are denied the innovations in both product and market penetration that the other Linux providers are making. In addition to that, the Linux community is denied access to the ISVs software solutions.

The bottom line here is that ISVs, the Linux providers, the Linux community at large, and the business customer will all lose.

The Only Answer is Collaboration

The only answer is Collaboration The only real answer is for the Linux community and the current providers of Linux to collaborate at the basic levels of compatibility. This involves the kernel and an agreed upon set of operating system services found in the libraries.

History has shown that no operating system, regardless of how elegant or ubiquitous, has a chance of survival without applications. Linux and the entire Open Source community have a tremendous opportunity to become a significant force in the commercial environment, but only if they remain open-minded. If Linux and the Open Source community can make it easy for commercial software providers to interact with that Open Source without incurring legal liabilities or major costs, Linux will be a significant player, and the customer, the ISVs, and the Linux providers will all win.

Linux at the Crossroads

Linux is at a crossroads, and the path seems clear. All Linux providers must give up some immediate and transitory gains today so that the Linux Standard Base can be allowed to establish unifying software porting stan-

dards. A long-term vision of the Linux opportunity should encourage all providers to move toward LSB. 2 We want the software community as well as the buying public to see that Linux is different, not just because it is Open Source, but because its providers have the vision to encourage a common kernel and library.

If Linux providers choose the irresponsible route, and choose not to cooperate, but to continue with their own agendas as they have in the past, Linux will fragment. It will fall significantly short of its potential as a real, commercial alternative in the industry.

The Linux operating environment must not be allowed to disintegrate because of short-sightedness and small-minded decisions today.

The only real answer is to support LSB. LSB, in my opinion, should be applauded as the only viable solution for ISVs to port once and have their applications run on all the major Linux operating systems.

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