

# Operating System Maturity Coming of Age

Linux is only a decade old and has several roadblocks to overcome. But vendors are trying hard to remove these, ensuring that Linux is here to stay.

Choosing the right operating system, whether it is for server level implementation or desktop level implementation, is critical for any organisation.

Since Linux is developed by thousands of experts spread across the world, despite being only 10 years young, it has emerged as a very mature and robust system. However, there still exist many issues that pose a challenge to the enterprise adopting Linux. Fortunately work is in progress on many such fronts.

## VERSION FRAGMENTATION

There are various vendors promoting Linux as a product. Some have expertise in servers and some in desktops. Every vendor has different versions of Linux for the desktop, server and enterprise. While all of them use the same Linux kernel, the tools and binaries surrounding each Linux distribution vary greatly.

The staggering number of distributions confuses a client. To overcome this problem, UnitedLinux has been formed by four partner companies to streamline Linux distributions. This makes it easier to engage ISVs (Independent Software Vendors) and hardware vendors, which, in turn, speeds the migration of Linux in an enterprise.

## APPLICATION PORTABILITY

Applications running on one distribution of Linux may not run on another. This is a major roadblock in Linux acceptance. Applications should

run at the click of a button and should not be vendor-dependent. Application portability is hampered by version fragmentation, which deters both ISVs and users. The ISVs have to test their application(s) on many different versions and work to ensure compliance. But a lot is being done to make applications work across all the major distributions—to make them real free software, though a clearer picture still has to emerge.

## HARDWARE PORTABILITY

The portability of Linux on various hardware platforms also needs to be taken care of. Linux vendors must make sure that their versions run on most of the platforms available so that the devices that are a part of any enterprise,



like printers, scanners, other USB devices, are easily recognised and used. Unless Linux desktops reach a critical mass, vendors will not build drivers for them. Unless drivers are available, users will not adopt Linux. Luckily, both these things are now taking place rapidly. Linux adoption in the user community is also rapidly increasing, forcing vendors to build drivers for their devices.

## LACK OF FORMAL DEVELOPMENT SCHEDULES, RESEARCH AND STANDARDS

With Linux, no formal development schedule or set of standards exists. Thousands of developers are contributing to various projects but with little accountability to the retail industry. There is no formal research and development process with Linux, which creates doubts in the minds of enterprise decision makers about its long-term sustainability and support. But with giants such as IBM, HP among others supporting it, doubts are being gradually dispelled. In addition, there have been initiatives, which aim at bringing development schedules, research goals, time-based work and standards in the open source community. Such initiatives will go a long way in increasing the faith in Linux.

With the recent backing of Novell, IBM, and others (despite the SCO allegations), Linux as a whole has made its mark and seems here to stay. Despite being a very young operating system, it has been able to carve out a niche in the market because of its open source model.

Once Linux adoption crosses a critical proportion, it will automatically be perceived as a mature operating system. Inevitably, all the efforts put in by ISVs, hardware vendors and advocates of open source are set to make Linux a mature operating system in the near future. **LFY**

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