

# Superior Linux Distribution



It is important to begin by saying that all Linux distributions, including commercial – Red Hat Enterprise Linux, SUSE, Xandros, etc – as well as non-commercial – Debian, Slackware, Gentoo, etc – are all good and are technically able to fulfill most real world needs. To choose amongst them is more related to personal taste of the people who already knows it than to functionality. But a company must think about other aspects – not only taste – to guarantee making the right strategic choice for long term benefits.

## Support and Certification

All Linux distributors package, in one way or another, mostly the same set of Open Source softwares (the Kernel, Apache, Samba, libraries, Gnome, KDE, etc). But only the so called enterprise distributions include *support services* together with their product.

For a user, support really means:

- 1. A partner available now and in the long term to transfer operational risks.**  
This is the most important point. Companies don't want to take risks — specially the Open Source risks — for themselves.
- 2. Fast access to quality updates.**  
Companies in general have limited resources to compile, test and apply OSS updates.
- 3. Access to a large set of certified hardware (IHV) and software (ISV) vendors, and availability of pre-tested complex solutions.**  
A critical part of any IT project is the support and certification connections between its components (hardware, storage, middleware, etc). The most important and valued function provided by a distributor, even more so than the embedded technology in the OS, is its ability to build ecosystems of certified Independent Hardware and Software Vendors.

## Price for a License Versus Subscription Business Models

Companies that sell commercial software (as Microsoft, IBM, Oracle, etc) allow somebody to use their products only after buying the rights to. This “buyable rights” are referred to as a commercial license.

The software provided in any Linux distribution is free of charge. The developers of these softwares

have licensed their work under the [GPL](#), [BSD](#), [Mozilla Public](#), [IBM Public](#) or some [other Open Source licenses](#), which grants anyone the rights to use and redistribute the software without having to pay any money.

It is a misnomer to say that you are “buying” some Linux distribution (or a license for it to be used). You can't buy it. It is already yours, in practical terms. It is like saying a user is buying the content of some web site. There is nothing material to acquire. On the other hand this user can subscribe to a service that provides hot line support, access to updates and access to an ecosystem of interoperable certified products and solutions – the support points outlined above.

So enterprise Linux distributors (such as Red Hat, Novell, Xandros) sell these services, and not the software, because the last is free of charge.

## Choosing the Best Distribution

There are two responsible and effective ways to use a Linux distribution as part of a company's IT operations:

- 1. Acquire a global commercial Linux subscription such as Red Hat Enterprise Linux or Novell SUSE Linux Enterprise Server.**  
A subscription ties together the Open Source software and its global scale support, providing a stable environment for a certified ISV and IHV flourishing ecosystem.
- 2. Use free distributors such as as Debian or Slackware and buy support services from an independent local company.**  
Free distributions may introduce more risk due to non-global support operations, in addition to a loose integration between software and support, which leads to a weak ISVs and IHVs ecosystem.

In terms of technical flexibility and vendor choice – points that influence cost –, both options are equal. All the benefits of the second option are present in the first, while second lacks the ecosystem aspects.

Thus the conclusion is that it is more reasonable to directly acquire a product that directly ties the support to the software, than manually integrate them at the regional level.

Companies should look at the following points, in

this order, when choosing a Linux distribution to run their business applications:

1. Which distribution vendor do I have closer commercial relationship?
2. Who has best pricing model for the value provided?
3. Which distribution does my technical staff have more experience with?
4. Which distribution is supported and certified by my providers of hardware and software?
5. If you are unsure, be responsible and use an enterprise distributor.

There are two enterprise Linux distributors that have a strong ecosystem and penetration in the market: [Red Hat Enterprise Linux](#) and [Novell SUSE Linux Enterprise](#). They have differences that every year continue to converging and diverge. See the table for a comparison.

## Other Enterprise Distributions

There are several Linux distributions with business models similar to the one adopted by Red Hat and Novell. Most well known are [Ubuntu](#) (technically based on Debian), [Mandriva](#) (Conectiva and Mandrake fusion), [Xandros](#) (also based on Debian.) They are focused on building a product that can scale globally in such a way that support services can be delivered automatically or as a self-service.

There is an intrinsic market law that seeks equilibrium by providing two options in which to choose. One option may be good (there is actually no option when only one path is available), two mature options is better, and three or more options are too much for the market to handle. It appears that the market has already defined its two mature options: Novell and Red Hat.

Even if these other enterprise distributors have better products, they'll have to spend a

considerable amount of energy developing an ecosystem of ISVs and IHVs. More than that, ISVs and IHVs will have to take a break in their operations to listen to what these new distributors have to offer.

	SUSE Linux Enterprise	Red Hat Enterprise Linux
usability	Includes Java, Flash and other popular no-cost closed-source software	Strict policy to include only Open Source and patent-free software
	Unified, componentized, more complete and consistent administration tool – YaST – for GUI and TUI	Small, separate and monolithic configuration tools for the generic situations, mostly for GUI
	Complex patches focused on usability and better integration of different software	Minimal patches focused on simplified maintainership in the long term
technological approach	Uncommon interpretation of standards such as the FHS, LSB, JPackage	Common sense strict conformance to Linux standards, including JPackage
	Stick with what already works	Includes last stable innovations from the Open Source world
	Not all source packages available to the public	All source packages available to the public
	Some different source packages (kernel, libc, etc) for different platforms	Same source packages across all platforms, with intelligent compile/build systems
	Naming conventions (packages, folders, filenames, etc) have some "SUSE" signature	Naming conventions are generic and Red Hat-independent
ecosystem	Always ready to partner	Strong ecosystem established
	Other infrastructure-related products that use to be closed source, such as monitoring, collaboration and administration	OSS and Linux are the hearth and soul of the company; PostgreSQL, middleware, Java and infrastructure related products, such as GFS, clustering, Directory Server, always Open Source

favorable    challenging    neutral

Ecosystem is everything. A product with a good ecosystem can easily become much better than an excellent product without an ecosystem. This is probably the most important aspect a company should consider when choosing a Linux distribution.

One cannot say that a certain distribution is better than all others. When searching for a distribution one should be pragmatic in striking a balance between the distribution's functions and how well it meets the goals of the company or specific project.

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