

UNIX and LINUX

Differences and Similarities



What are the major differences between Unix and Linux?

- That's a very broad question and could be answered any number of ways.
- Probably the simplest answer is that from a technical point of view there are no major differences.
- Most people aren't satisfied with believing that Linux and UNIX are very similar, though.
- Here's a list of the most obvious remaining differences.

0. Difference Between UNIX and LINUX

- Unix is a commercial product where as Linux is a freeware.
- Those who sale Linux do not actually charge for Linux but for the support they provide.
- There are few minor differences between Unix & Linux.

1. Origin

- UNIX originated in the laboratories of universities and large corporations, as an initiative within the context of those organizations.
- Linux was begun by a university student (Linus Torvalds) without any initial support from any large organization.
- Linux also began as in mimicry of other well-known UNIX-like implementations, whereas the initial UNIX implementations were original research.
- Most commercial UNIX versions are also derived from that early research.

2. Service Model

- Most UNIX versions operate on the basis that you can buy help (support and service contracts).
- Although such things are increasingly available to Linux technologists, traditional arrangements consist of providing your own help, with the assistance of a community of like-minded people.
- Linux is big, and access to communities is more important than, say, it is for IBM mainframes.

3. Equipment

- Although Linux runs on many kinds of equipment, it is best known for its support of commodity IBM-Intel PC-based hardware.
- Most of the more popular UNIX flavors focus on high-performance hardware, usually of a proprietary nature, or using high-end standard computing architectures, like SPARC.
- With ever-increasing gains in PC hardware, like Serial-ATA, this distinction is not as large as it used to be, especially for low performance uses, like desktops.

4. Licensing

- Linux follows the Free Software Foundation's radical licensing model, which provides a great deal of liberty to those that interact with Linux technology.
- UNIX versions provided by other vendors have profit strategies embedded in them.
- People who offer Linux services might have a profit strategy, but Linux itself doesn't.
- This means that vendor lock-in is less of an issue with Linux than it is with other UNIX offerings.
- It also means that organizations big enough to have a center of computing competency always have the choice of "doing it themselves."

5. Honesty

- Linux and related software is extremely visible.
- You can find out about flaws before you commit to the technology rather than afterwards.
- Because of this, a version number in Linux is a more reliable indicator of the quality of the software than in UNIX.
- For example, most Linux software spends a long time being version 0 (zero) before it ever qualifies for the label "version 1."

Other Issues

- In terms of quality, performance and feature set, there's little to separate Linux from the other UNIXes.
- Linux has yet to provide genuine real-time scheduling, which some other UNIX versions do well.

Summary

- UNIX یک سیستم عامل بسیار با قدمت است و Linux برگرفته ای از این سیستم عامل است
- UNIX ذاتا برای سرور طراحی شده است و رابط گرافیکی برای آن وجود نداشته یا به آن فکر نشده است
- Linux برای استفاده همزمان توسط سرورها و کامپیوترهای دسکتاپ طراحی شده است و رابط گرافیکی دارد
- UNIX ذاتا برای Mainframe ها و سرورهای بزرگ طراحی شده است
- Linux ضمن اینکه می تواند در سرورها و Mainframe ها استفاده شود در PC ها نیز قابلیت استفاده دارد
- UNIX دارای مالک است اما Linux تحت لیسانس GNU ارائه شده است

Thank U :)