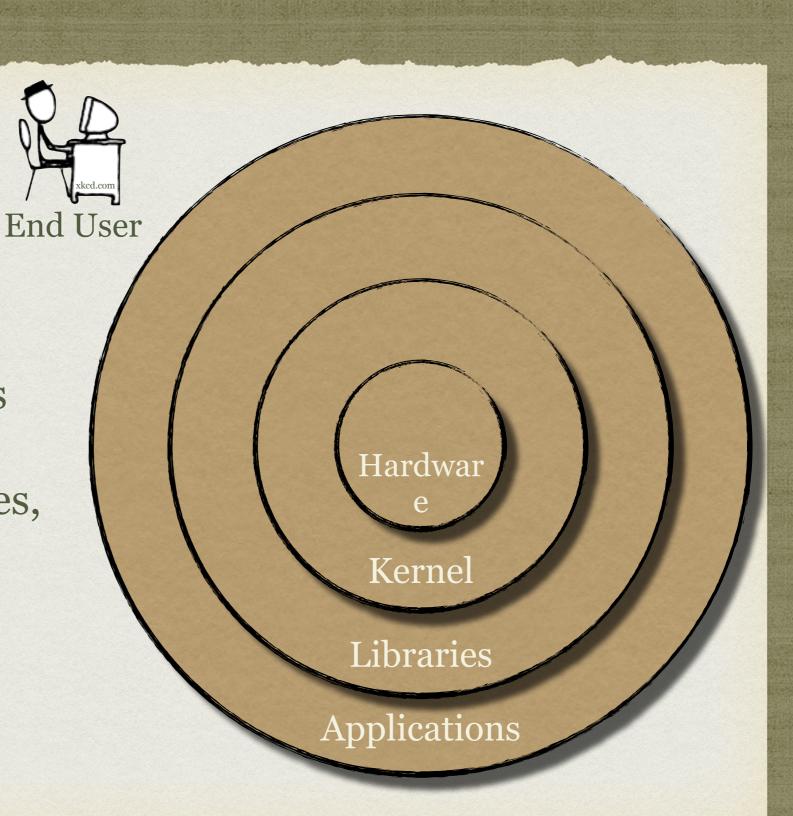


LINUX The Big Picture

OVERVIEW

- Center of machine
- Scheduler, memory manager, device drivers
- Shared software routines, system calls
- User level software



DISTRIBUTIONS

- The "Linux" part of Linux is the kernel and supporting drivers. By itself, it does not represent a complete operating system.
- Thousands of open source projects combine their powers to form the One True Operating System we know as Linux. :)
- *Distributors* pick and choose from all of this software, combine it with a Linux kernel and package it up into something called a distribution. Common ones include...

DISTRIBUTIONS

- <u>Redhat</u>: One of the oldest and most popular. Originally offered two levels: personal and enterprise. Decided to focus on enterprise offerings, so dropped Red Hat Personal and created the Fedora Project, a community driven entity to produce a personal distribution of Linux.
- <u>Fedora</u>: Aims to release quarterly "Core" distributions. Focuses on up to date software packages and kernels.
- <u>CentOS</u>: Takes Redhat Enterprise Linux, strips the branding and provides free version.

DISTRIBUTIONS

- <u>Debian</u>: Popular, flexible, apt packaging system
- <u>Ubuntu</u>: Popular for desktops, easy to use, based on Debian
- <u>Gentoo</u>: Focus on performance through targeted, on-the-fly compilation. Unique, advanced, powerful.
- <u>Slackware</u>: One of the first distributions. Meant for advanced users focus on stability and simplicity.
- 100's of distributions! See http://www.linux.org/dist/

LINUX IS...

• <u>Multiuser</u>

- One of the primary goals of UNIX was to maximize the utilization of the computer (they weren't cheap then!)
- The concept allows multiple users to perform tasks at the same time





LINUX IS...

• <u>Multitasking</u>

- Allowing multiple users necessitates the ability to do multiple things at once.
- Implemented through a complex scheduling system

