

An abstract graphic on the left side of the slide, consisting of a network of thin, light-blue lines and small circles, resembling a circuit board or a neural network, extending vertically from the top to the bottom.

# ABOUT LINUX AND DISTRIBUTIONS

# THE BIRDS AND THE BEES



- Source: xkcd.com

# LINUX DISTRIBUTIONS

- In order to be called “Linux”, a distribution must have the Linux kernel
- Each usually has some kind of package management system in order to install software
- There are 1000's of distributions out there
- You can create your own, if you would like - <http://www.linuxfromscratch.org/>
- Distributions may include, including the kernel:
  - Open source tools and libraries
  - Window Manager
  - Desktop environment
- While most Linux distributions are open source, some are paid for due to support and proprietary software

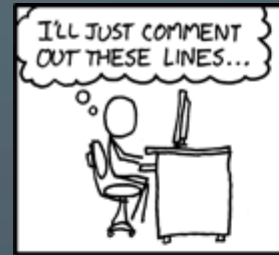
# LINUX DISTRIBUTIONS – HOW TO DECIDE

- What Linux distribution is best?
  - Really, which Linux distro is best for me?
- Does the distribution have support?
  - Is there paid support?
  - Is there a large user support community?
- Does the distribution stay up to date on packages?
  - Do they stay up to date on security patches?
- How difficult is the distribution to use?
  - Will my coworkers hate me for picking it?

# LINUX DISTRIBUTIONS – MAJOR

- Distrowatch.com has a lot of information about distribution
- Major distribution include:
  - Redhat
    - Fedora,CentOS,Scientific
  - Debian
    - Ubuntu, Knoppix, Mint
  - openSUSE
  - Arch
  - Gentoo
  - Slackware

# DISTRIBUTIONS COMIC



```
//MD_update(&m, buf, j);
```



```
//do_not_crash();
```



```
//prevent_911();
```



IN THE RUSH TO CLEAN UP THE DEBIAN-OPENSSL FIASCO, A NUMBER OF OTHER MAJOR SECURITY HOLES HAVE BEEN UNCOVERED:

AFFECTED  
SYSTEM

SECURITY PROBLEM

FEDORA CORE

VULNERABLE TO CERTAIN  
DECODER RINGS

XANDROS  
(EEE PC)

GIVES ROOT ACCESS IF  
ASKED IN STERN VOICE

GENTOO

VULNERABLE TO FLATTERY

OLPC OS

VULNERABLE TO JEFF  
GOLDBLUM'S POWERBOOK

SLACKWARE

GIVES ROOT ACCESS IF USER  
SAYS ELVISH WORD FOR "FRIEND"

UBUNTU

TURNS OUT DISTRO IS  
ACTUALLY JUST WINDOWS VISTA  
WITH A FEW CUSTOM THEMES

# LINUX DISTRIBUTIONS – CUSTOM EXAMPLES

- Phones - Android
- Routers - ddWRT
- Security - Kali
- IoT – Nest, Raspberry Pi
- Privacy - Tails

# CONCLUSION

- Linux distributions have all kinds of different capabilities
- Some are large, some are small
- Some provide great support
- It's really up to the system administrator to decide what distro is right for which purpose