OSS Watch

What are all
these
distributions
and how
should I
choose one?

Stuart Yeates

# What are all these distributions and how should I choose one?

## Stuart Yeates

OSS Watch

This is an *introductory* presentation.

If you:

- are already familiar with many Linux distribution
- used slackware before it was called slackware
- have come to make sure I mention your favourite distribution

Leave now while you can still slip into another talk

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- Your Priorities
- History
- Diversity
- Choice

Why is it that you're considering Linux?

What are your personal priorities?

- Stability
- Security
- Learning about computers
- Learning about Linux
- Applications
- Bleeding edge versions
- Development plans
- Work motivations
- Face-to-face support
- Internet support
- Philosophical motivations

Linux was originally distributed as a *tarball* (.tar.gz)

Each user downloaded, unpacked, configured, compiled and installed it themselves

Each application then had to be similarly processed

Installation in particular was a hurdle

# History II

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A number of attempts were made to repackage Linux to make it easier and more convenient to install

- Slackware (1993)
- Debian (1993)
- Redhat (1995)
- ...

Because these groups and the software they were writing distributed linux, they became known as *distributions*, shortened to *distro*.

Each successful distro learnt from the mistakes of the previous distros, and from their own previous iterations.

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# What does a distro do for the user ?

Usually a distro:

- provides a convenient way to install Linux
- provides pre-packaged, pre-tested, pre-compiled software that *just works* out of the box
- provides support for users
- provides a single place to submit bug reports
- provides a sense of community

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Usually a distro:

- provides infrastructure (hosting, version control, bug tracking, etc)
- provides a pool of users as potential user-developers
- provides a pool of existing developers
- provides a sense of community

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A distro may refer to a specific set of software, a family of sets of software, the infrastructure used to build the software, the community building the software, the community using the software or the process by which the software is built.

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- Stability
- Security
- Pedagogical concerns
- Applications
- Bleeding edge versions
- Philosophical motivations

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New distros arise when someone (or some group) comes up with an innovation that is sufficiently cool / useful / productive to tempt people from the existing distros or tempt new users from other platforms.

Innovations can relate to software packaging, social organisation, priorities, ...

Switching distros can involve very large amounts of work, so even when a new distro has very clear advantages, many users are very slow to switch.

Existing distros adopt features found useful in new distros.

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Cohesive forces:

- Common tools (make, configure, etc)
- Open standards
- Explicit projects (LSB, freedesktop.org, etc)
- Common sense

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*Think*

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Try LiveCDs (possibilities...)

Talk to local Linux people (beer)

Talk to your friends and colleagues

Talk to your local IT support

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Choosing scientific Linux because:

- No licence fees

- Deeply compatible with Red Hat range

- Red Hat range used by peers

Choosing Ubuntu because:

- Very easy install
- Others in the building moving towards it
- Regular updates

Choosing debian because:

- Already familiar with debian community
- Wants to become a debian developer

Choosing Gentoo because:

- Department was committed to it
- IT staff gave informal support because it was what they used

Installing Debian on an *old box* because:

- The box was disposable
- Failure could be quietly hidden
- Success would lead to more informed decisions next time
- Debian was "to hand"

The ones that matter most are the ones about *people*

Without a community to fall back on, you're stuck one way or the other.

Don't install a live distro to disk (unless you know why you want to)

Install the latest stable version (unless you know why you don't want to)

Start with an end-of-life machine you can trash

Have something else to do while you repartition, reformat, reinstall and reconfigure.

Backup

Ask your peers

Use IRC and google from a stable machine to debug, fix problems.

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For more information on open source software development and deployment, visit http://www.oss-watch.ac.uk/ or write to info@oss-watch.ac.uk