



Selecting a Linux Distribution

Mark Post
Novell, Inc.

Wednesday, February 14, 2007
Session 9232

Agenda

- Narrowing down the field
 - Quick overview of what's available
- What are you looking for?
- Pricing
- Try before you buy
- Turf battles and politics
- Questions (I'll also take questions as we go along unless time gets short)

Narrowing down the field

- 400+ Linux distributions available
- Only a few have much market share
 - Red Hat
 - SUSE
 - Mandriva
 - Slackware
 - Non-commercial (so, no sales figures)
 - Debian, OpenSUSE, Fedora Core, CentOS

Mainframe market share

- SUSE
- Red Hat
- Non-commercial
 - Debian/390
 - Slack/390
 - CentOS
 - “Work alike” of Red Hat RHEL
 - Fedora Core

Realistically speaking...

- For production use, with commercial support, and ISV certifications needed
 - SUSE Linux Enterprise Server/Desktop
 - Red Hat Enterprise Linux
- For Proof of Concept work, the choices are far more open

What are you looking for?

- Is commercial support important to you?
- Bleeding edge, or system stability?
- Application availability
- ISV certifications
- Hardware support
- Management tools
- Support contract terms

Bleeding Edge vs. Stability

- Bleeding Edge (to a certain extent)
 - OpenSUSE, Fedora Core
 - Debian (testing and unstable)
- Stable
 - SUSE Linux Enterprise Server/Desktop
 - Red Hat Enterprise Linux, CentOS
 - Slackware, Slack/390
 - Debian, Debian/390 (stable and testing)

Application Availability

- Check for the applications you need
- Just because the ISV has a Linux version don't assume that includes mainframe Linux

Application Certification

- Most ISVs certify only a few platforms
 - Some only certify on *one* Linux distribution
 - In some cases, this might be a very *old* version
- Most will certify on SUSE and Red Hat

Hardware Support

- Red Hat and SUSE
 - System x
 - System i
 - System p
 - System z
 - 31 and 64-bit, soon to be 64-bit only (SLES10 and RHEL5)
- Slackware
 - System x (32-bit only)

Hardware Support

- Debian
 - System x, System p, System z (31-bit, 64-bit in development)
- Slack/390
 - System z (31-bit, 64-bit nearing release)
- CentOS
 - System x, System z

Hardware Support

- OpenSUSE
 - System x, System p
- Fedora Core
 - System x, System p, (sometimes) System z

Management Tools

- Check with your suppliers
 - Make sure they have Linux versions
 - Make sure they have mainframe Linux versions
- Smaller companies might be able to use Open Source tools
 - Closer to “health checkers” than full-blown monitoring tools
 - Likely to meet your needs at no cost.

Support Contract Terms

- For Linux, maintenance is *not* equal to support
 - Maintenance is similar to PUT or RSU
 - Support is similar to calling the IBM Support Center with some consulting
- In general, the more support you want, the higher the cost (no real surprise)
- Commercial support available for Debian, Slack/390

Support Contract Terms

- Red Hat sells three versions
 - WS, ES, and AS
 - The code on the CDs is identical
- Support is bundled with every license purchased
- Your support comes from the (re) seller
 - Red Hat
 - HP, IBM, Dell, Sun

Support Contract Terms

- SUSE sells two versions
 - Enterprise Server
 - Enterprise Desktop
- Built from a common source code base, what gets shipped is different
- You can buy support from anyone, including Novell, or not.

Pricing

- Keep in mind SUSE doesn't bundle support
 - If you don't, SUSE will *always* look less expensive
- If you need a lot of support, Red Hat may be less expensive
- If you don't need a lot of support SUSE may be less expensive

Pricing

- Red Hat prices by WS vs. ES vs AS
 - ES is limited in hardware configurations supported, as well as software packages.
 - # of CPUs is counted by physical sockets
 - This appears to be changing with RHEL version 5
- Basic and standard support for WS and ES
- Standard and premium support for AS
 - Mainframe licenses are for *each* processor

<http://www.redhat.com/rhel/compare/server/>

Pricing

- SUSE prices by Server versus Desktop and architecture
 - Annual Subscription for SUSE Linux Enterprise Desktop (SLED)
 - Fixed prices for SUSE Linux Enterprise Server (SLES), up to 32 CPU sockets for System x, i, and p.
 - System z licenses are for *each* processor, whether standard CP or IFL
 - SLES10 is 64-bit only
- Final cost will depend on the level of support you purchase, and who you get it from.

Distribution “Personalities”

- Mismatches between them and your organization’s style can cause problems
 - Conservative or maverick?
 - Need more than EXT3 for file systems?
 - Need new system z features sooner or not?
 - GUI configuration tools, or CLI & text-based?
 - Lots of changes to software packages?

Try before you buy

- Try several Linux distributions and see which one(s) best meet(s) your needs
 - See the list of URLs at the end
- Nothing anyone says is as valuable as testing in your own environment

Talk to others

- Ask other people what they like and dislike about the various distributions.
 - The Linux-390 mailing list is a good place
- Check out how maintenance/support is delivered, and what people think about both
 - Timeliness, effectiveness, and cost are all important factors

Turf Battles and Politics

- Do you already have Linux in your shop?
- There is a tendency to stick with what is already known or well advertised
- There is a tendency to go with what is popular
- Having some (small amount of) variety is not necessarily a bad idea

Questions?



Additional Information

- DistroWatch <http://distrowatch.com/>
- SUSE Linux <http://www.novell.com/linux/>
- Red Hat Linux <http://www.redhat.com/>
- Mandriva Linux <http://www.mandriva.com/>
- Debian GNU/Linux <http://www.debian.org/>
- Slackware Linux <http://www.slackware.com/>
- Slack/390 Linux <http://www.slack390.org/>
- CentOS Linux <http://www.centos.org/>
- Sine Nomine Linux Support
<http://sinenomine.net/support/linux/debian>
<http://sinenomine.net/node/484>
- HP Debian Support
<http://h20219.www2.hp.com/services/cache/76815-0-0-225-121.html>

Mailing lists and forums

- CentOS <http://www.centos.org/modules/tinycontent/index.php?id=16>
- Debian <http://www.debian.org/MailingLists/>
- Fedora Core <https://www.redhat.com/mailman/listinfo/fedora-list>
- Linux-390 <http://www2.marist.edu/htbin/wlvindex?linux-390>
- Mandriva http://www.mandriva.com/en/mailling_lists
- Red Hat 3 <https://www.redhat.com/mailman/listinfo/taroon-list>
- Red Hat 4 <https://www.redhat.com/mailman/listinfo/nahant-list>
- SUSE Linux http://en.opensuse.org/Communicate#Mailing_Lists
- SUSE SLES <http://support.novell.com/forums/2su4.html>

Evaluation Software

- SUSE Linux Enterprise Server
<http://download.novell.com/index.jsp>
- SUSE Linux/openSUSE <http://en.opensuse.org/Download>
- Red Hat Enterprise Linux <https://www.redhat.com/rhel/details/eval/>
- Fedora Core <http://fedora.redhat.com/download/>
- CentOS <http://www.centos.org/modules/tinycontent/index.php?id=15>
- Slackware <http://www.slackware.com/getslack/>
- Slack/390 <http://www.slack390.org/getslack390.html>
- Debian <http://www.debian.org/CD/>
- Mandriva <http://www.mandriva.com/en/downloads/mirrors/2006>