Selecting a Linux Distribution

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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
- 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
- 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  

• Slackware  
  http://www.slackware.com/getsslack/

• Slack/390  
  http://www.slack390.org/getsslack390.html

• Debian  
  http://www.debian.org/CD/

• Mandriva  