Agenda

- Intro and review of the problem. (bv)
- Some potential solutions. (bv)
    - Jump ship. What real alternatives are there.
    - Similar ship, different name. Fedora Core and Legacy projects. News on Fermi Linux.
    - Can't beat 'em, join 'em. Buying in to RHEL. (also see following reports from the last HEPiX and SLCCC meetings).
- Report on discussions at HEPiX. (Tom Throwe)
- Report on discussions at SLCCC. (Tom Schlagel)
- Discussion (all)
    - Existing plans: NUHEP, RCF, Others.
    - Applicability of presented plans to groups net yet decided.

Some abbreviations and definitions

RHL - Redhat Linux. The "consumer" or "free" versions. (7.x, 8.x, 9)

RHEL - Redhat Enterprise Linux. Versions based on RHL (past) or FC (now), per system, per year charge. Comes in WS, ES and AS flavors.

RHPW - Redhat Professional Workstation Sort of RHEL WS-lite + desktop. ˜$80, 1 yr RHN, only available in a box. After 1 yr???

RHN - Redhat Network. Allows a single system use "up2date" to download patched packages

RHEN - Redhat Enterprise Network. RHN + a web front end allowing groups and multisystem package management (what we have).

FC - Fedora Core. A non-commercial project sponsored but not 100% controlled by Redhat.

FL - Fedora Legacy. A project working to provide support for RHL 7.3, 9 and obsolete FC.

What is the problem

Redhat is moving away from income based on selling boxed sets and supporting consumer level customers in order to focus on "enterprise" level customers.

- No security patches for RH $\leq$ 8.0 after 2003/12/31
- No security patches for RH $\leq$ 9 after 2004/04/30
- RH 9 is the last "consumer" RHL.
- Only RHEL available from Redhat, only RHEL in RHEN.
- RHEL not cheap, WS = $179/system/year for 1-2 CPU. (50% discount for 2 years available to current RHEN users, also see reports on SLCCC's and other's negotiations).
- WS includes only a few servers, (HTTP, SMB, NFS, not MySQL?).
- RHL $\rightarrow$ RHEL needs re-install (some reports of upgrades working)
- Buying into RHEL allows Redhat to audit your "organization".

Where does Physics RHEN stand?

Currently we have:

- 275 (+10 gifted) entitlements,
- set to expire on 2004/5/29 (RHL 9 EoL = 4/30),
- which will **not** renew automatically.
- This "over subscription" of 1 month entitles us to free evaluation ISOs + RHN channel between 4/30 and 5/29.

And where is it going:

- No plans to renew any physics RHEN entitlements.
- Purchasing RHEL entitlements includes RHN but not RHEN.
- Good time for ITD to take over the "meta" management of any RHEN entitlements as recommended in the Linux Working Group report.

See open questions below.

Jumping Ship - Alternatives to Redhat

Some reasons for jumping:

- If no RHEN, patched package management sees a level playing field. Ie. up2date $\equiv$ APT $\equiv$ YUM, to first order.
- Even with RHL $\rightarrow$ RHEL one will likely need a full re-install. If one has to walk around with a bunch of CDs, why not make them non-RH ones.
- Seek distributions better matched to our security support and and long running stability needs and price point.

Which ones? Difficult question guaranteed to spark flame wars.

debian

suse

Mandrake Linux

Fedora Core

Fermi Linux

Debian - pros:

- Non-commercial - no profit motive, supported by a cast of thousands of developers, decisions based on a constitutionally bound democracy and enacted policies. Stability, not surprises!
- Decade long track record of proven commitment to quality and security.
- A primary player in defining the Free Software movement.
- Choice a of long supported (3+ years) stable release with just security updates or cutting-edge "testing/unstable" releases with the very latest software.
- Can upgrade (no reinstall needed) between stable releases, from stable to testing/unstable or can just ride testing/unstable forever.
- The highest quality packaging and best package management system containing the most packages.
- Much existing BNL experience, both inside and out of ITD.
- Voted best distribution in this year's Linux Journal survey.

Debian - cons:

- No official support for some important proprietary software (Oracle, Objectivity).
- Some consider Debian difficult to install.
- Some dislike Debian's lack of GUI based admin tools.
- There is a need to be more familiar with Debian system internals than RHL.

Novell/SUSE or Mandrake Linux?

This is all hearsay and guesses. I have no SUSE nor Mandrake experience.

SUSE:

- Individual SUSE users praise it.
- It enjoys support from 3rd party proprietary software (more than Debian, similar to RH).
- It now has a large corporation (Novel) backing/buying it. (good?).
- Reports of large companies considering RH->SuSE switch.

Mandrake:

- Individual Mandrake users praise it (vehemently).
- Reportedly more desktop than server oriented.

Maybe others can share experience here?

Fedora Core - the Debian of Redhat, sort of.

- Unknown quantity.
- Redhat retains "editorial control" with external developers participating in decisions.
- No formal support from RH, informal support from volunteer mailing lists, bug submission, etc.
- Free and "Redhat-like" (no big re-education needed).
- Short release cycle, ˜6 months, updates 2-3 months after next release (Fedora Legacy may take this further).
- Security fixes not back ported, must upgrade to get a security fix.
- Updates via APT/RPM or YUM or via up2date which now "speaks" APT and YUM. Apparently no use of RHEN and FC (see open questions).
- Becomes partial source for RHEL packages.

Fermi Linux

Take from:
http://www-oss.fnal.gov\
/projects/fermilinux/common/Fermi_Linux_Support_Structure.html

FERMI LINUX 7.1.x (based on RedHat 7.1)

- Support will end on Dec 31, 2003

FERMI LINUX 7.3.x (based on RedHat 7.3)

- Support will continue at least until Dec 31, 2004
- Security updates only from community and Fedora Legacy
- Distributed via autoyum and/or direct ftp download.

FERMI LINUX 9.0.x (based on RedHat 9.0)

- Support will continue at least until April 30, 2004

FERMI LINUX LTS (LongTermSupport) 3.0 (based on RHEL 3.0)

- Expect to have a beta release by December 1st.
- Recommended migration path for all earlier versions.

RHEL - Buying In

Common to all flavors:

- All include RHN entitlements. RHEN is extra.
- Entitlements are per system per year.
- 5 year security updates, 3 year bug updates, 12-18 month release cycle.
- Users of RHEL open up their "organization" to auditing by Redhat.

Three flavors: WS, ES, AS, fine splitting based on support.

- WS: $179-299 ($792 for 64 bit). #cpu $\leq$ 2, few servers (HTTP, SMB, NFS but no NIS, DHCP. DBs?).
- ES: $349-799.
- AS: $1499-2499 (+$500 for 64 bit).

Discounts, possibly large, for bulk purchases.

RHEL - Open questions

How does Redhat Enterprise Network still fit in?

With a RHEN Satellite Server (SS) we can inject our own packages. What about RHEN SS plus:

- Built-from-source RHEL, maybe with Fermi Linux packages?
- Feeding Fedora packages?

And the big question: what will we be charged? If we buy SS but feed it only free packages (Fermi Linux / Fedora) to free clients do we still pay client connection entitlements?

What kind of deal can be negotiated for bulk purchases?

What are the other labs doing?

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