



## VAC / LUAC Top 10 List (Actually a few more)...

- **Virtualization**
- **Power management**
- **Device driver support**
- **Security**
- **Scalability**
- **Kernel debugger**
- **IPv6 Readiness**
- **Testing (Kernel, User Space, and HW)**
- **ZFS Ease of Administration Parity**
- **SystemTAP Market Readiness**
- **RDMA Hooks for Linux Kernel**



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **Virtualization**

- Support the work of current community developers through sponsorship of those activity
- To form an LF workgroup to identify gaps in virtualization technology on Linux and provide that feedback to our members and the community
- At the appropriate stage consider standards for manageability
- Wish list includes:
  - Same Linux kernel for all virtualization solutions;
  - Standard for Linux VMs - to allow migration between virtualization solutions including interoperability between various versions of Xen implementations;
  - Standard management interfaces – to allow same management tool to work on all virtualization solutions.
  - Facilitate development of applications running effectively in VMs independent of choice of virtualization solution.



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **Power Management “Green Linux”**
  - The general power management case is pretty well covered
    - Todo list
      - More hardware device support
      - Support of device/peripheral low power modes (beyond processor)
  - Lobby hardware manufactures to improve documentation which will enable the community to help improve power management
  - Completed items are aimed mainly at notebooks
  - Server/embedded needs work
  - Hold a second power management summit <http://lwn.net/Articles/181888/>



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **Device driver support for Linux**
  - Continue to work with the LF to encourage open source drivers
  - Promote the NDA program in order to provide developers access to device API's
  - Aggregate customer requirements for Linux device support - make a business case to companies about the need to support Linux
  - Create a white paper and web site outlining the model of driver development on Linux and the business case of development and ongoing maintenance cost



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **Security**

- Usability of features already in the kernel such as SELinux (possibly AppArmor)
- Encrypted File Systems and Key Management associated w/ them · Trusted Platform Module and TSG software stack

- **Scalability**

- NUMA features
- Virtual memory scalability
- Filesystem scalability and performance
- I/O subsystem scalability and performance

- **Kernel debugger**

- Sponsor a developer to clean up, submit, and agree to maintain KDBG
- This would be through the normal LKML process



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **IPv6 Readiness**
  - Meet DOD purchasing requirement
  - Achieve parity with windows
  - Meet telco market requirement
  - Work group and mailing list already underway
  - Looking for guidance from kernel community



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **The more Kernel features, the more testing needed**
- **Testing Framework shared among Kernel Developers, Vendors/Distributions and LSB effort**
  - Find the bugs earlier, Fix them earlier. Find the incompatibilities earlier, Notify of them earlier.
- **Multiple testing initiative existing**
  - LTP/Autotest: Community Testing Framework and test suites
  - CrackerJack: China/Japan/Korea regression test targeting API compatibility among versions
  - LSB: Standard Certification
- **LF to facilitate a Forum to grow more testing initiatives, avoid unnecessary duplication and get synergies**



# What are some of the initiatives the VAC / LUAC would like to see pursued at the LF?

- **ZFS Ease of administration parity**
  - FS differences not key – administration is key
  - Unify / integrate available technologies in one place
  - Decrease learning curve for system administrators
- **SystemTAP Market Readiness**
  - Great progress made, but more needed
  - Focus on user applications
  - DTrace compatibility
  - Response to SUN's marketing efforts
- **RDMA Hooks**
  - Enable generic solution





# Linux Foundation Vendor Advisory Council Top 10 List

June 13, 2007



## Who is the VAC?

- **The purpose of the Vendor Advisory Council is to provide a neutral forum in which member companies can discuss shared issues, collaborate on projects of common interest and cooperatively direct funds to open source development community activities and members.**
- **Think of it similarly to a “general mailing list” for members**
- **This group is an “incubator” of new ideas for the Linux Foundation**
- **Projects out of the VAC can be started right away where members offer resources**
- **Projects that wish to use LF resources will pitch the board of directors and management for funding**
- **VAC is a watch dog for getting member participation**
- **VAC also monitors existing projects for progress**



# Conceptual Model of our Process

**Define It**

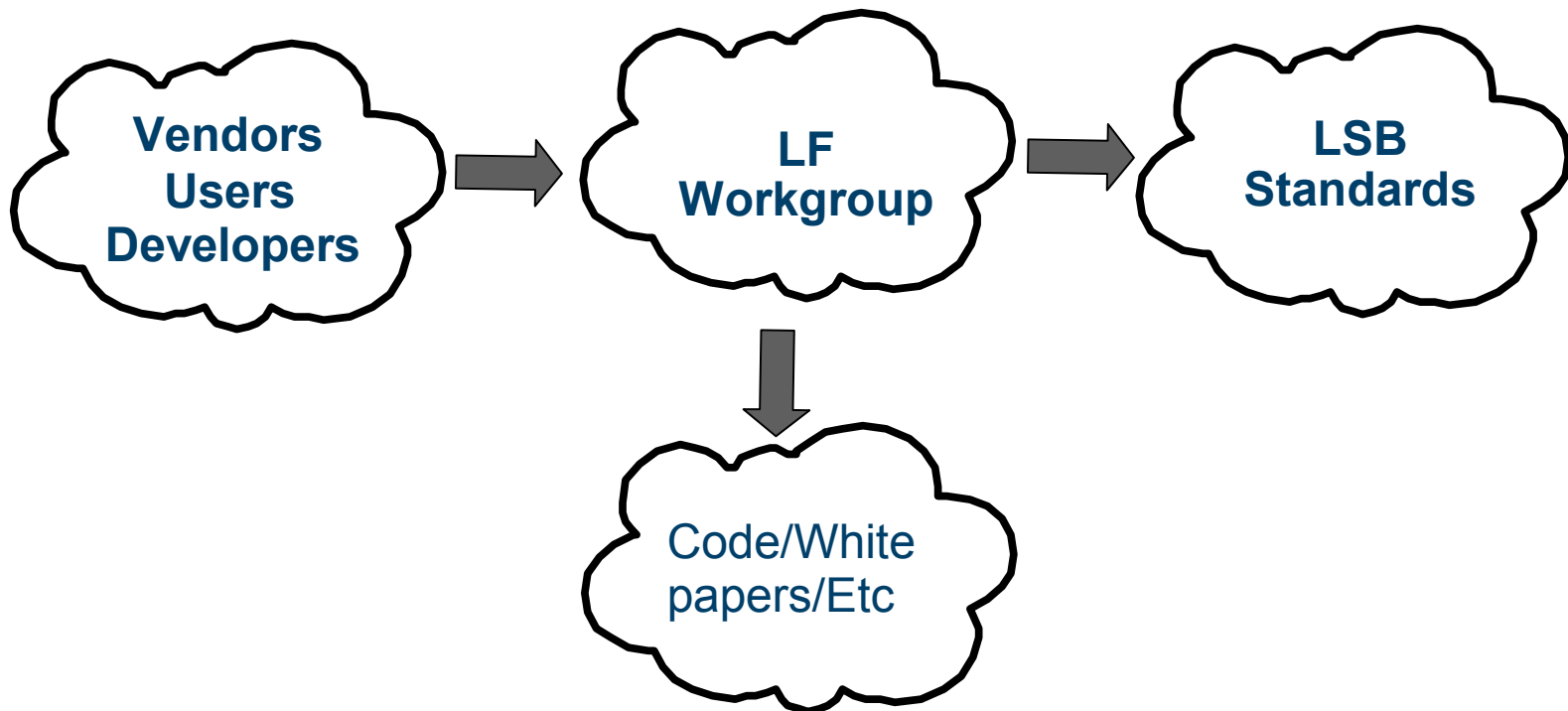
**Do It**

**Standardize It**

**Advisors**

**Workgroups**

**LSB**





# What are the core existing projects at the LF?

## The Five “L’s”

- **Linus et al.**
  - The VAC understands the fellowship fund is an important part of the LF
- **Leadership**
  - There is a need for a neutral voice that responds to FUD.
  - There is also a need for collaboration events that accelerate Linux’s fast demand side learning curve.
  - Carrier Grade Linux represents an important voice for the telco market
- **LSB**
  - At minimum this manages risk of Linux fragmentation
  - At it’s ideal it grows a competitive ecosystem on par with Windows
  - This is the core of the LF for some members and less important to others
- **Legal**
  - The LF needs to break through legal attacks and FUD
- **Local**
  - Symposium in Japan and other regions spread participation in the development community and accelerate commercial adoption



# What are some of the initiatives the VAC would like to see pursued at the LF?

## Kernel Messaging

- **With expanded Linux adoptions, Kernel messages are sometimes difficult for users who are not familiar with Linux source code. Better (World's best) advices to message situations are desirable.**
- **Kernel Message Documentation project to add explanations of Kernel Messages started in Japan. But, difficulty exists in maintenance of the message explanations in terms of following up the Kernel source code changes.**
- **Depending on the discussion with key maintainers at the June Collaboration Summit, in order for messages to be more helpful and explanations to be connected to source codes, the initiative will be proposed ;**
  - to put uniqueness to each Kernel message (line number and source file name as well)
  - to define files to store message explanations
  - to implement linkage between each Kernel Message and its explanation
  - Other optional targets including;
    - I18N of explanations
    - Checking proper message-log-level
- **Avoiding to put new burden on Kernel Developers**
- **Benefit to Users ; TCO reduction**
- **Benefit to Linux Community and Vendors/Distros ; Improved support quality**
- **TLF to facilitate a bridge between Kernel Developer Communities and Vendors**