



BUILDING BLOCKS FOR SUCCESS

How to handle open source projects inside a big corporation.

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Agenda

- Overview of Linux at Oracle
- Organizational structure
- Work with the community
- Q&A

Linux At Oracle

- Strategically important operating system
 - **started as a testing the waters project (port our products)**
 - **driver to promote adoption in the enterprise**
 - **use Linux at Oracle in every development organization**
 - base development OS for our products
 - **deploy on all production servers**
 - we believe in our message to our customers
 - **gives us the ability to provide full stack support**
 - Unbreakable Linux program
 - **accelerate feature development in-house**
 - be more competitive with our products



Linux at Oracle

- Create OS enhancements directly related to the main OS kernel
- Create bugfixes of issues we discover through testing or customer reports
- Work on extensions that are more specific to Oracle and are not always useful for the generic user
 - **Oracle Cluster Filesystem**
 - **ASMLib**

Organizational Structure

- Oracle development organizations **use** Linux as OS
 - **database, applications, application server**
- Oracle support organization is trained to provide OS level support to customers
- IT organization uses Linux + commodity hardware to deploy production systems
- Training/Demo/Consulting systems
- Independent organization to handle Linux as a product (Linux engineering) separate in corporate architecture office

Organizational Structure

- Avoid chaos
 - **reduce number of groups that modify open source components.**
 - consolidate them into one organization or a few organizations
 - **set rules for legal purposes**
 - do not mix open source projects with proprietary
 - avoid sharing source controls systems
- Linux is internally considered an Oracle product.
 - **every group talks to the Linux team as if it was another OS vendor to work with**
 - **single point of contact to the outside world**
 - 3rd party vendors, partners

Organizational Structure

- Joint prototype and development projects
 - **Oracle product feature which would need a new OS component**
 - project is easier to start
 - much shorter time to prototype an idea than ever before when we had to work with other OS vendors
- Customer support can handle Linux OS issues similar to “other” Oracle products.
 - **call goes through same workflow and ends up in the Linux Development team if it is a code bug.**

Community

- Often overlooked and downplayed
 - very important to work with the people
 - build a relationship based on contributions and quality of work
 - show respect and willingness to modify where it makes sense
- reduces long-term maintenance work
 - work with the upstream maintainers to include any changes you have (bugfixes, features...)
 - eliminates dependency on working with 3rd party vendors and reduces testing efforts drastically

Community

- Decide on license of the technology early on
 - **kernel extensions are open sourced**
 - **work in open fashion if possible**
 - have discussions with community maintainers
 - discuss intentions and ideas
 - provide source code on a website if possible
 - ocfs2 has been available from our website publically since the start of project
 - write code you know can be merged
 - avoid mistake of too much portable code
 - no need to re-write the thing from scratch

Q & A