

Participation into Upstream OSS Development

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The 15th NEA OSS Promotion Forum in Cheju

Profile

- ~2000 OS (Mainframe, UNIX, etc.) Development at Fujitsu
- 2001~2005 Linux Dev & Promotion in Fujitsu
- 2006 Head of Open Source Development Lab (OSDL) Japan
- 2007~2011 Head of the Linux Foundation (LF) Japan
- 2011~ Technical Advisor of LF Japan

* Contributions to Japan OSS Promotion Forum including OSS Licensing Analysis, Linux / Windows TCO Comparison, etc.

Stages of OSS Maturity

Stage 1:

OSS Users

Stage 2:

OSS Biz / Product

Stage 3:

**Participation
&
Contribution**

Many Companies have reached to Stage 3 in these 10 years

Participation is not Duty, but...

“To be a part of Global Open Innovation (?)”

<Reason for Participation>

- Innovative Hardware / Applications not possible with OSS as is
- In-house modifications of OSS is possible, but not sustainable without Upstream Participation
- Successful Code Submission to UPSTREAM causes;
 - Reduction of Costs for repeated modification and testing
 - Code Optimization

UPSTREAM FIRST rather than in-house Modifications

Obstacles to Asian Developers

■ Language Barrier

- Codes can speak for smaller patches, but ..
- Ever lasting DEBATE for new features
which enable Enterprise adoptions of Linux Servers

■ Cultural Gap between OSS Communities and Japanese Companies

- ex. Linus was said to be against OS debugging features
such as Trace or Memory Dump, but ...
- ex. Linux Community Leaders noted “OSDL needs to educate
Japanese Vendors”



Construct Bridges between Communities and Companies

- OSDL was nicely positioned
 - Participants from US/Japanese IT Vendors
 - Hired Linus and Andrew in 2005 and accepted advises from Community
 - 2006, OSDL Japan started “Japan Linux Symposium”
 - 1 day event / 3 times a year
 - Invited Linux Community Leaders
 - Japanese Developers explained their ideas in “English”
 - Later, grown to LF LinuxCons (Japan, North America, Europe)
 - Most important means to gather community & company developers together
 - 3 day event / once a year
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How was Consequences ?

- Increase of Contributions from Asian Company Developers
 - >Next Slide
- Community gradually changed (or, simply turned out to be)
 - Linux Community needed Asian Development Resources
 - Enough flexible to accept Companies` needs
 - from Small Embedded Systems to Enterprise Servers
 - wider Coverage than Windows
 - Good Leaders are always nice gentlemen

Companies Contributing to Linux Kernel (1)





Linux Kernel 2.6.11~2.6.24 (2005/3~2008/1)





	Rank	Company Name	% of Total Patches
	1	Red Hat	11.2
	2	Novell	8.9
	3	IBM	8.3
	4	Intel	4.1
	5	LF	3.5
●	14	Renesas	0.9
●	22	Fujitsu	0.5

From LF White Paper “Who Writes Linux (2008)”

Companies Contributing to Linux Kernel (2)

Linux Kernel 2.6.39~2.6.35 (2009/6~2010/8) Linux Kernel 3.11~3.18 (2012/9~2014/12)

Rank	Company Name	% of Total Patches
1	Red Hat	12.0
2	Intel	7.8
3	Novell	5.0
4	IBM	4.8
5	Nokia	2.3
 6	Renesas	2.0
 8	Fujitsu	1.7
 18	NTT	0.8
 24	Samsung	0.6

Rank	Company Name	% of Total Patches
1	Intel	10.5
2	Red Hat	8.4
3	Linaro	5.6
 4	Samsung	4.4
5	IBM	3.2
 11	Renesas	2.1
 19	Huawei	1.0
 24	Fujitsu	0.7

From LF White Paper "Who Writes Linux (2010&2015)"

Looking Forward

■ Open Innovation Further Expands

- LF hosts around 60 Global OSS Projects

AGL	: Automotive Grade Linux
ALLSEEN ALLIANCE	: IoT
DroneCode	: Drone Controller
HYPERLEDGER	: Block Chain Technology

■ Critical Contributions from Asian Companies

- Producing New Projects
- Project Maintainers / Leaders
- ===Inventing Truly Innovative Hardware / Applications===

■ Talented OSS Developers / Leaders in Demand

- More Industries participate into OSS Developments
 - Community Recognition should be reflected in Promotion and Salary
 - Mobility of Top OSS Developers unavoidable
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感謝

