

**10<sup>th</sup> NEAOSS Promotion Forum  
WG2  
Human Resource Development**

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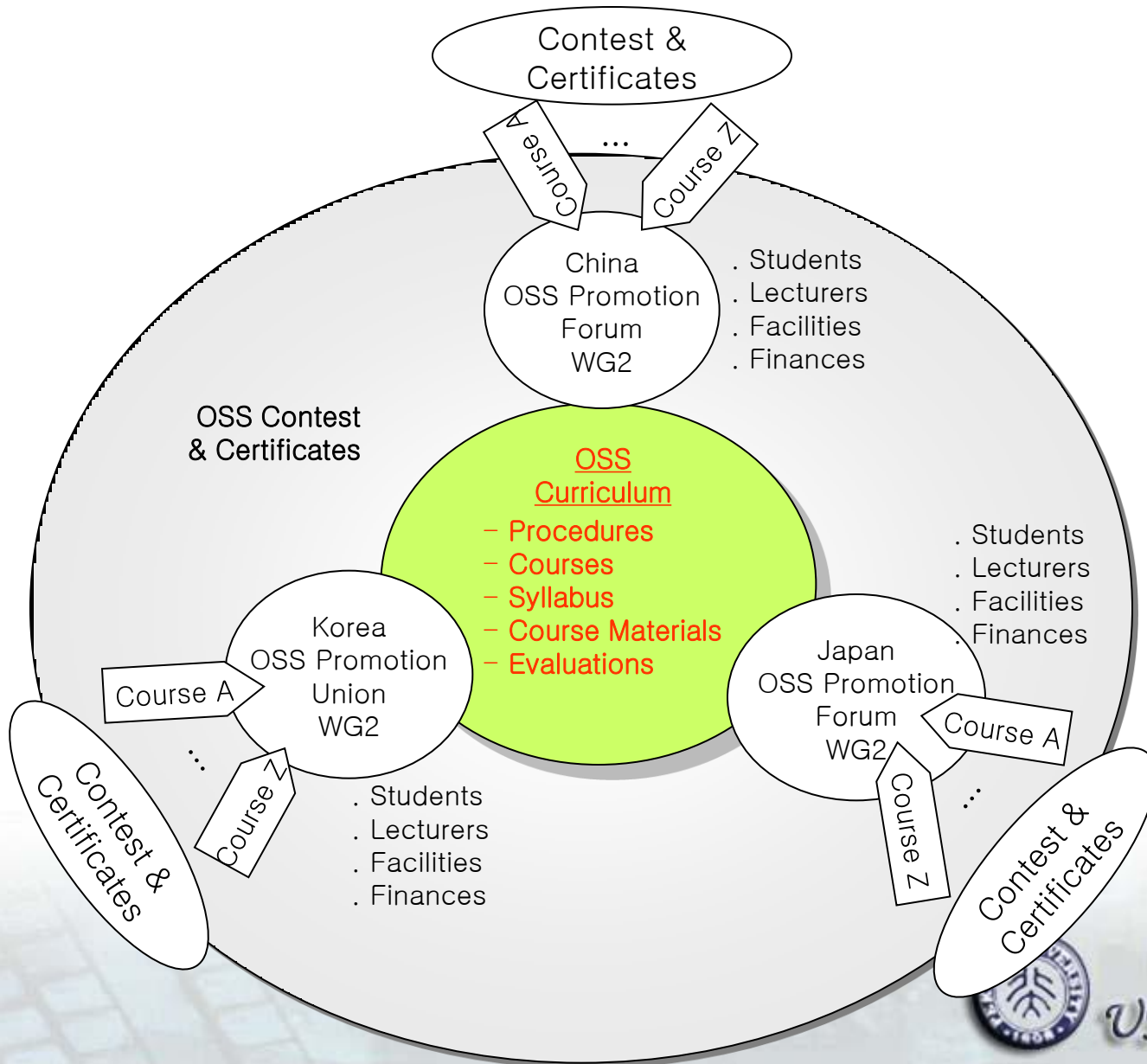


# Agenda

- Summary of WG2 activity
  - Sample Curriculum
  - NEAOSS Wiki
  - Training Camp
  - OSS Awards
- Brief Summary of CJK Activities
  - China WG2 work report
  - Japan WG2 work report
  - Korea WG2 work report



# NEAOSS WG2 for HRD - Cooperation Framework









# Sample Curriculum

- Sample Curriculum defines 9 Skill Categories, 38 Skill-sets
  - 14 Skill-sets are fully described by end of 2010 and released in 2.0
  - 6 Skill-sets are described in 2011 and to be released in 3.0
- Version History of Sample Curriculum
  - 2008 : 1.0 (for Embedded Software Developers )
  - 2009 : 2.0 (for Web-Based Enterprise Application Developers )
  - 2010 : 2.1 (revised based on the comments from lecturers and industry experts after applying the Sample Curricula to training students and engineers)
  - 2011 : 3.0 (for System Administrator)
- Sample Curriculum v3.0 will be released in 2012
- Websites and Wiki ways of cooperation on SC
  - <http://www.neaossforum.org>
  - <http://wg2.neaoss.org>
  - <http://wiki.neaoss.org>





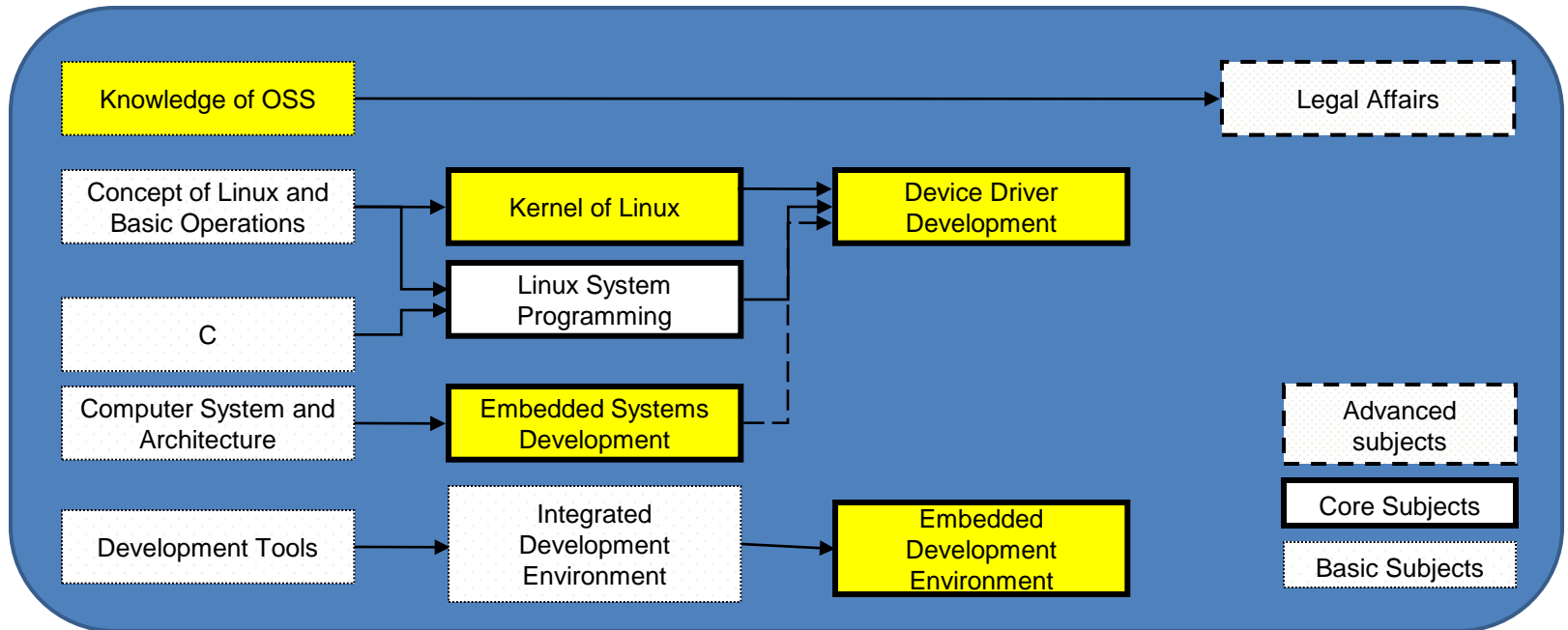
Skill Category	Skill	Skill Category	Skill
Basic	Knowledge of OSS	Multimedia System	Multimedia Programming
	Legal Affairs		Multimedia Service Platform
	Computer System and Architecture	Development system	Development Frameworks
	System Architecture		Development Tools
Concept of Linux and Basic operations	Integrated Development Environment		
System	Kernel of Linux	Security	Software Testing
	Linux System Management		Fundamental of Cryptography
	Linux System Programming		Network Security
	Network Server Management	DB	OS Security
	Cluster System Architecture		Basic Skills in DB
	Concurrent System Programming		DB system management
	Java EE Application Server		DB Applications Development
	Network	Network Architecture	Embedded SW
Network Management		Embedded Development Environment	
Network Programming		Embedded Application Development	
Programming	Java	Embedded System Optimization	
	C	Device Driver Development	
	C++	Done → 	
	Script Language	China → 	
	GUI	Japan → 	
	Web Programming	Korea → 	



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# Sample Courses for Embedded Software Developer

Curriculum



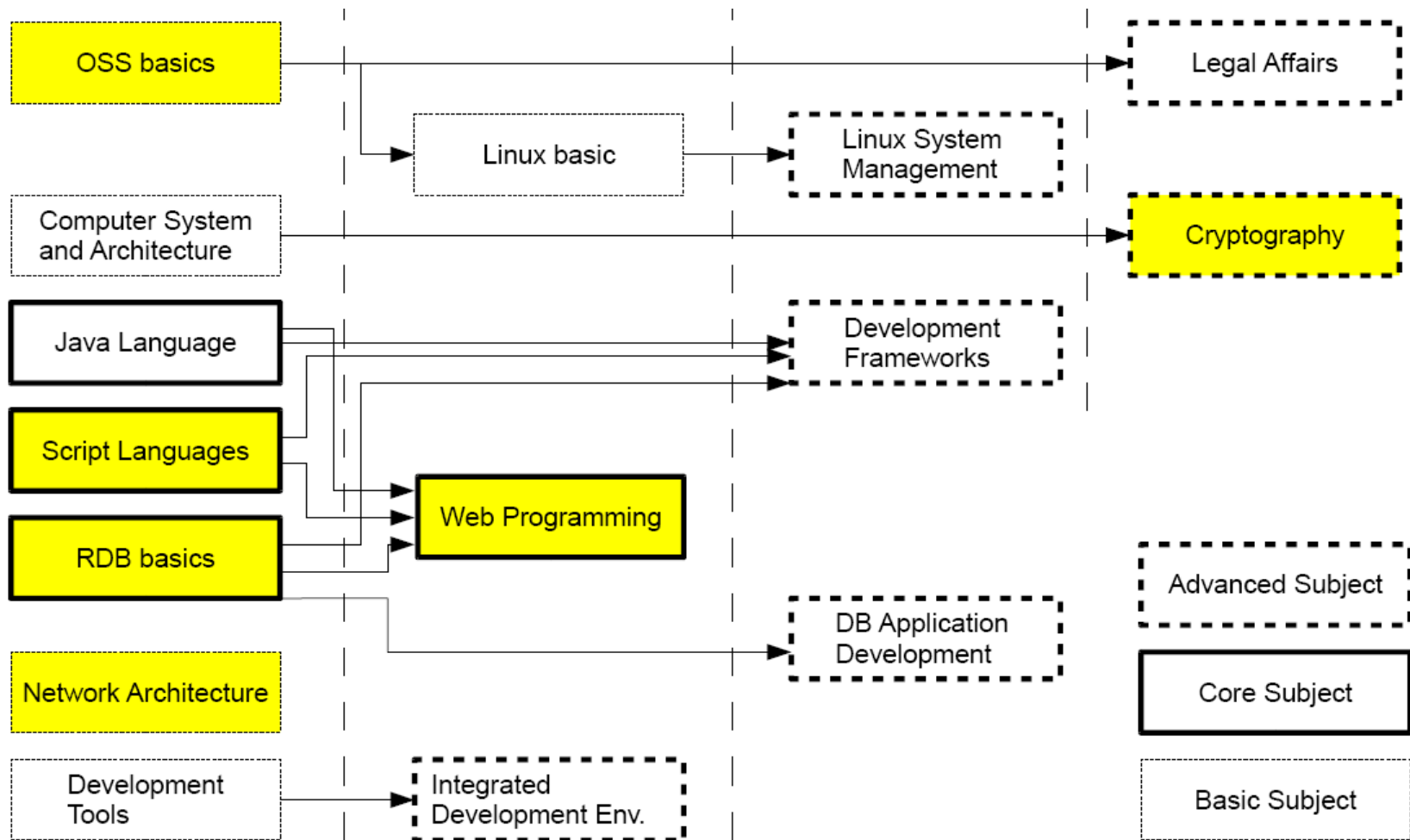
Subjects as selections of units

Knowledge of OSS	Kernel of Linux	Embedded System Development	Device Driver Development	Embedded Development Environment
Introduction (1-1-1-*) History (1-1-2-I) Use of OSS (1-1-8-I) Community (1-1-10-I) OSS sites (1-1-11-II) OSS OS deployment (1-1-12-II)	Introduction (2-2-1-I) Scheduling (2-2-2-I) Interrupt (2-2-4-I) System Calls (2-2-5-I) Process mgmt (2-2-6-*) Memory mgmt (2-2-7-1) File systems (2-2-8-I)	Task and Scheduling (9-1-1-II) Resource mgmt (9-1-2-II)	Linux Kernel (9-5-1-II) Kernel Debug (9-5-2-II) Kernel Config (9-5-3-*) Character Dev. (9-5-4-II) Building Target (9-5-7-I) Kernel Synch (9-5-9-II) Kernel Thread (9-5-10-II)	Project Building (9-2-1-II) Mgmt Project (9-2-2-I) Cross Dev. Env (9-2-4-I) Remote Debugging (9-2-7-I)

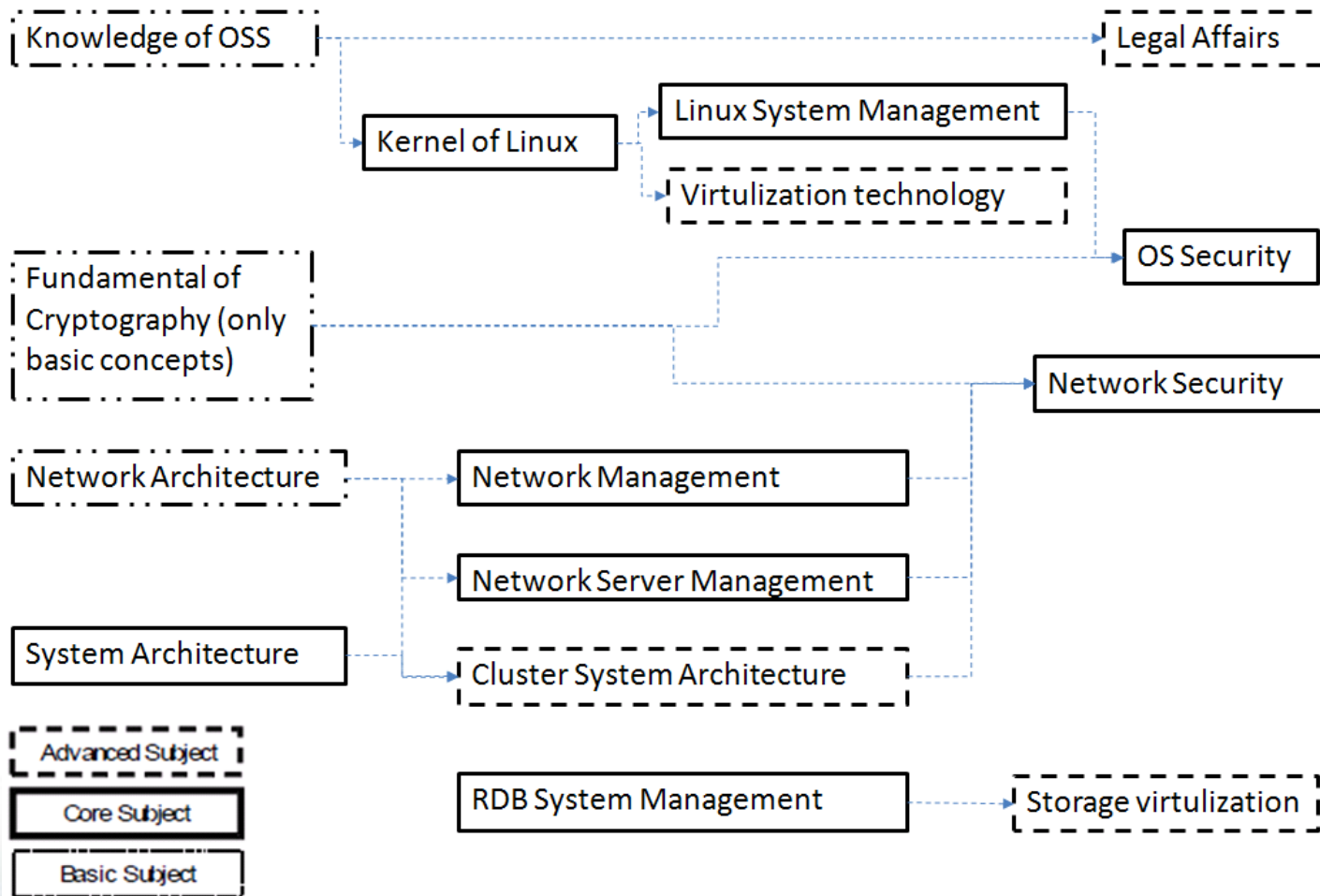


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# Sample Courses for Web-based Enterprise Application Developer



# Sample Courses for System Administrator





# Skill definition form

SKILL CATEGORY NAME	< Name of Skill Category >		SKILL CATEGORY NO.	<N>
SKILL NAME	< Name of the Skill >		SKILL NO.	<M>
TOPICS	LEVEL	DESPRIPTIONS & SUBTOPICS		Topic Code
Topic 1 ( has a level II topic with prerequisite >	I	-		-
	II	Objective	< Descriptive objective of the level of topic 1 >	N-M-1-II
		Prerequisite	< prerequisite topic code(s) >	
		- Subtopic 1 ■ Sub-subtopic . ■ ... - Subtopic 2 ■ ...		
III	-		-	
Topic a < has a code shared level I topic, and a level II topic with no prerequisite >	I	Objective	< Copied objective from the shared topic P-Q-r-I >	CODE SHARE P-Q-r-I
	II	Objective	< Descriptive objective of the level of topic a >	N-M-a-II
		- Subtopic 1 ■ Sub-subtopic . ■ ... - Subtopic 2 ■ ...		
		-		
III	-		-	
Topic b < Code shared topic Level I with X-Y-w-I, Level II with X-Y-w-II>	I	Objective	< copied objective from the shared topic X-Y-w-I >	CODE SHARE X-Y-w-I
		Prerequisite	< copied prerequisite codes from shared topic X-Y-w-I >	
	II	Objective	< copied objective from the shared topic X-Y-w-II>	CODE SHARE X-Y-w -II
	III	-		-



# NEA OSS Wiki

- WG2 established and improved 'NEA OSS wiki'
  - promote, share and improve the Sample Curriculum
  - gathering common and practical knowledge from world-wide OSS experts
- <http://wiki.neaoss.org/>



The screenshot displays the NEAOSS Wiki interface. At the top left, there is a search bar with the text "Search this site:" and a "Search" button. Below the search bar is a "User login" section with fields for "Username: \*" and "Password: \*", and a "Log in" button. There are also links for "Create new account" and "Request new password". The main content area features a "Home" header and a featured article titled "Markup Language for Web Programming" by wxj, dated Tue, 08/17/2010 - 16:02. The article includes a "Code No" field and lists "Skill Category No: 4", "Skill No: 6", "Topic No: 2", and "Level: 1". The "Objective:" section states: "Present the basic Language for Web programming. Describe Web programming using HTML, CSS, JavaScript and XML."



# Training Camp

- 1<sup>st</sup> NEAOSS Training Camp : on 9<sup>th</sup> NEAOSS Promotion Forum
- 2<sup>nd</sup> NEAOSS Training Camp
  - 4.5 hours of training
  - Lecturers from CJK
    - Mr. Claude Zhou (Eucalyptus Systems, China)
      1. Open Source boosting Cloud Computing- Eucalyptus Systems
    - Mr. Yoshihiko Hara (Fujitsu Social Science Laboratory Ltd., Japan)
      1. Introduction of Ruby
      2. Introduction of "How to make Web Application using Ruby"
    - Mr. Sun-Jin Jang (Software in Life Inc., Ltd., Korea)
      1. Cloud Computing(Google App Engine) and RESTful Web Service
      2. Google App Engine and BigTable





# CJK OSS Awards

- CJK OSS Award
  - NEA OSS Forum Contest
  - OSS community
- CJK OSS Special Contribution Award
  - people who have made great efforts and achievements on OSS Promotion in his own country and/or OSS community
- In the 10<sup>th</sup> NEAOSS Promotion Forum
  - the 6<sup>th</sup> CJK OSS Award
  - the 4<sup>th</sup> CJK OSS Special Contribution Award





# OSS HRD activities - China (1)

- OSS education in colleges and Universities
  - 40 Linux training and promotion centers
  - Practice-based training
  - Enterprise cooperation
- OSS teacher training
  - Oversea training
    - Since 2008
    - Sponsored by SAFEA
    - 2011: 2.14-3.7 (21 days), 18 teachers from 12 Universities
  - Short-term trainings: android/MeeGo/.....
- Other trainings
  - Red flag
    - 608+ man-days OSS training
    - OSS lectures for Technicians from 24 countries of Asia- Africa- Latin America
    - .....





# OSS HRD activities - China (2)

- OSS education/training via Learning-by-Doing scheme
  - Hands-on projects designed based on Sample Curriculum 2.0
  - Promote application of the comprehensive practice outcomes
  - Interaction with OSS community in China
  - Teaching materials compilation and sharing
- OSS related workshop/conferences
  - Open Source China, Open Source World (2011.6.29)
  - OSS and Big Enterprises
  - OSS application and copyright (with black duck)
  - U-Alliance Jiangxi e-Gov Conf. (22-24 April)
  - .....
- Survey of OSS-based software development
  - Government support (policy, project, finance...)
  - U-alliance
  - E-government
    - Jiangxi/Nanchang





# OSS HRD activities - Japan (1)

- 7<sup>th</sup> Japan OSS contribution award
  - progress and plan to have a ceremony in 2012 Feb./Mar.
- OSS Curriculum
  - Finish upgrading OSS model curriculum V2 in March 2011.
  - Promote the curriculum in web sites.
  - Several colleges and universities have already deployed it now.





# OSS HRD activities - Japan (2)

- Security and programming camp 2011
  - the 8<sup>th</sup> camp in August 2011 by IPA.
  - 60 students ranged from 13 yrs to 22 yrs.
  - Fostering top level OSS/security developers
  - Some magazine promote 13-yrs-old student as new age of genius.
  - Lecturers = Top level OSS developers such as
    - Mr. Yukihiro "Matz" Matsumoto, creator of Ruby language
    - Mr. Tetsuo Handa, creator of TOMOYO Linux, a Linux Kernel and Security Hacker.





# OSS HRD activities - Korea (1)

- OLC (Open Source Learning Community)

- <http://olc.oss.kr>

- Sample Curriculum Lectures

- 14 Skills covered under CC-BY

- Other OSS Online Training Contents

- Mobile Programming

- Android, Hybrid web with HTML5

- E-government Solutions

- Java, Spring Framework, other solutions

- Advanced Computer Science Issues

- Computer Architecture, Compiler, Database, Operating System, Programming Languages

- Other OSS and Tools

- Cubrid (RDBMS), Eclipse, SVN, GITHUB



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# OSS HRD activities - Korea (2)

- Survey of OSS Human Resource is in progress
- OSS World Challenge 2011 (with Intel, NHN, SK-Telecom)
  - Total prize money : about ~US\$100,000
    - International division : US\$22,000
  - Support OSS-License Verification, Test for the entries
    - By OSS Competency Plaza
  - 150 entries worldwide
- OSS Community Support
  - Support for OSS Community projects
    - 22 projects in 2011, US\$25K ~ US\$150K per project
  - Support for OSS community activities (US\$1K ~ US\$3K)
- KOSS Law Center and NIPA OSS License Task Force
  - To support companies on OSS license issues

