



Introduction Of Cloud Computing TF

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Agenda



- 1. History of establishing “Cloud computing TF”**
- 2. Activities**
- 3. results**
- 4. Future**

1. History of establishing “Cloud computing TF”

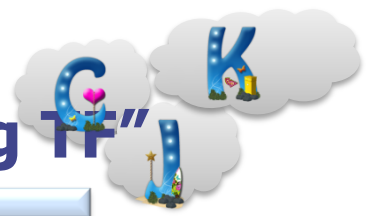


- the 7th NeaOSSPF later, WG1 members Started to discuss the issue about Cloud Computing , such as at “Security TF” meeting in, Korea,
- And other WG1 meeting in China ,Japan; we also found many discussed issues were related to Cloud computing ;

1. History of establishing “Cloud computing TF”



- In the 8th NeaossPF ,Cloud Computing is one of the hot topics discussed by CJK .
 - More and more users accept the Cloud Computing service.
 - Cloud Computing is one of the trend of IT developing in the future.
- In the Cloud Computing field ,In order to promote Communication, and cooperation of CJK WG1 members , establishing “Cloud computing TF(CCTF)” in the WG1 meeting , 2009 Tokyo , Japan.



1. History of establishing "Cloud computing TF"

- Held the 1st CCTF meeting at Japan, 18th Oct.



1. History of establishing "Cloud computing TF"



In the 1st CCTF meeting, WG1 members agreed:

● Goal

- sharing the situation of each CJK cloud computing and collaborating evaluation works based OSS stack.

● Schedule

- 1st F2F CCTF meeting (Oct. 2009, Japan),
- 2nd F2F CCTF meeting (1Q, 2010, China),
- 3rd F2F CCTF meeting (July, 2010, China),
- 4th F2F CCTF meeting (Nov, 2010, Korea);

● CJK roles

- C: collecting and evaluating OSS stacks
- J: collecting and evaluating OSS stacks
- K: testing OSS stacks and making the corresponding testbed

● CJK members (> 15)

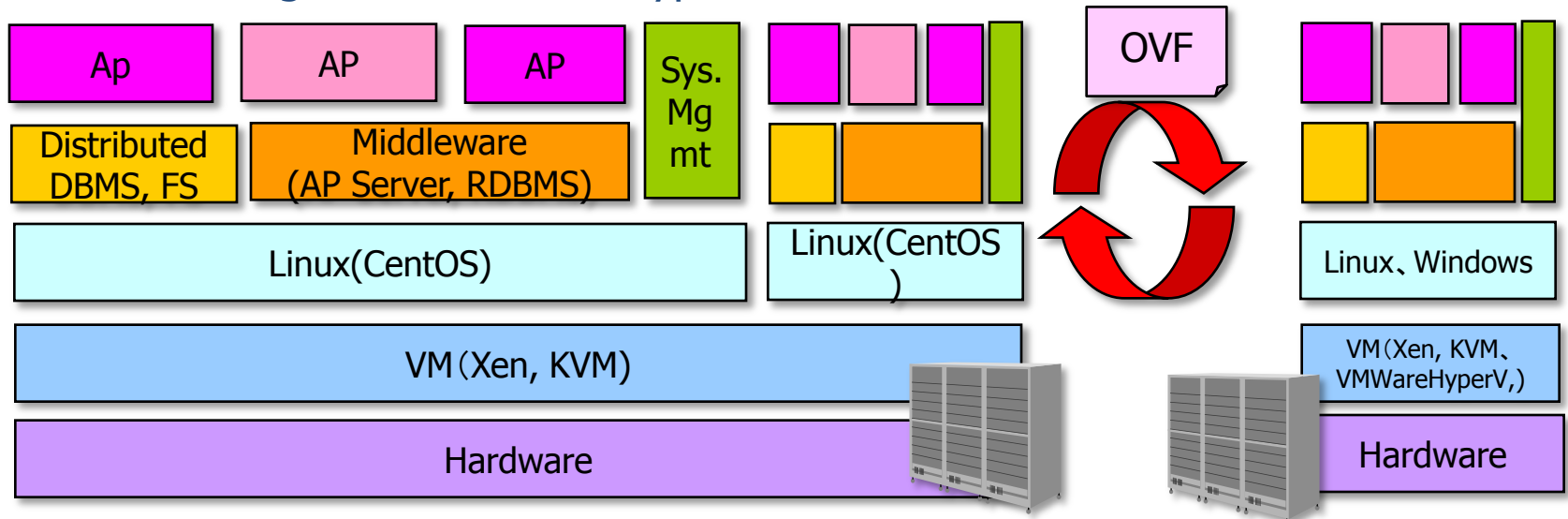
- C: CSIP, CS2C, BCC, Tsinghua, CESI, ...
- J: NEC, Hitachi, NTTdata, Fujitsu, Good Day...
- K: KCSA, SKC&C, Haansoft, KISTI, ETRI

1. History of establishing "Cloud computing TF



OSS stack for private cloud

- Virtualization: Xen, KVM
- Virtualization Management tool: virt-manager
- Linux: CentOS
- Distributed DBMS, Distributed FS: Hadoop (DFS, MapReduce), HBase
- Middle ware: Apache, Tomcat, JBoss, MySQL, PostgreSQL
- JavaVM: OpenJDK
- System Management tool, Cluster: Zabbix, Nagios, GroundWork, Heartbeat
- Authentication: OpenLDAP, OpenSSO
- Cloud Management tool: Eucalyptus



1. History of establishing "Cloud computing TF"



Evaluation point and plan

- Reliability of the new OSSs
 - KVM, OpenJDK, Eucalyptus, virt-manager, ...
- Error recovery procedure, configuration, structure
- Add resource(planned, unexpected)
- Remove resource by degrade of load, and Migration
- Overhead of virtualization, distributed file-system, DBMS
- Authentication between systems
- Logging for audit trail
- OVF(Open Virtualization Format)

Output

- Documentation of result, evaluation procedure, tools
- Proposal to improve these OSSs

2. Activities



2010.2.25~26 the 2nd CCTF Meeting in Beijing, China
about 30 persons attended the CCTF
provided 21 presentations



2. Activities



2010.7.27 the 3rd CCTF Meeting in Beijing ,China;
about 30 persons attended the CCTF
provided 16 presentations
and discussing to set up NACCRC (Northeast Asian
Cloud Computing Research Center)



2. Activities



2010.11.3 the 4th CCTF Meeting in Seoul ,Korea;
about 30 persons attended the CCTF
provided 9 presentations

3.results



-CCTF in NeaOSSPF

- China ,COFU,CSIP—Cloud Computing research center ;
- Japan,IPA ---Cloud sub committee;
- Korea,NIPA and ETRI

-sharing the situation in CJK

- By CCTF , we knowed Cloud Computing is developing rapidly in CJK, CJK have invested a lot of works to promote the development of cloud computing industry;

-Collecting solutions about Cloud Computing

1. Zhongsou Business Cloud
2. 21vianet's CloudEx
3. Home Device Interconnection Based on Cloud
4. H3C Cloud Computing
5. Practical Applications of Beijing Industrial Cloud
6. Cloud computing solutions in Baidu
7. NeoShine Cloud Platform
8. Tsinghua Cloud
9. Cloud Computing in NTT DATA
10. Cloud System Management Tool
11. Research for the Society Cloud Computing
12. Disk I/O Bandwidth Control in Virtualization Environment
13. Testing and Development Plan for CC Platform
14. Smart Grid Data Analysis Platform Based on Cloud Computing
15. Cloud Computing & Standardization
16.

3.results



- Created Cloud Computing Testbed from Korea
 - Cloud service Testbed can provided the free test service for WG1 members now;
- The output about Evaluation OSS stacks
 - KVM performance/reliability evaluation
 - OpenJDK reliability evaluation
 - OSS cloud system management reliability evaluation
Eucalyptus, OpenLDAP, OpenSSO, System Management tool
 - Basic Evaluation of ioband-V
- Created the OSS Catalog for Constructing Internal Cloud Computing System;

3.results



-Created the OSS Catalog for Constructing Internal Cloud Computing System;

- (1) Survey on Virtualization Mechanism
- (2) Survey on System Monitoring & Management System
- (3) Survey on Authentication Infrastructure for Users
- (4) Survey on Distributed Processing Infrastructure, Distributed File System & DB
- (5) Create Guidelines for Constructing Cloud Computing System

Evaluation Aspect	Evaluation Item
Basic Information	Communities In Japanese
	Standards Compliant
	Internationalization
	Programming Languages
	Operating Environment
Support System	Document
	Supporting Companies
	Support Communities
Stability of the Development Team	Main Developers
	Number of Core Developers / Commuters
	Policy of Formulate Requirements
	Development Road maps
	Development Community
Maturity	History
	Popularity
	Bug Handling
	Number of Announced Vulnerabilities and Fixed
	QA / Testing Policies / Releasing Condition
Features	(differs depending on work(1)~(4))



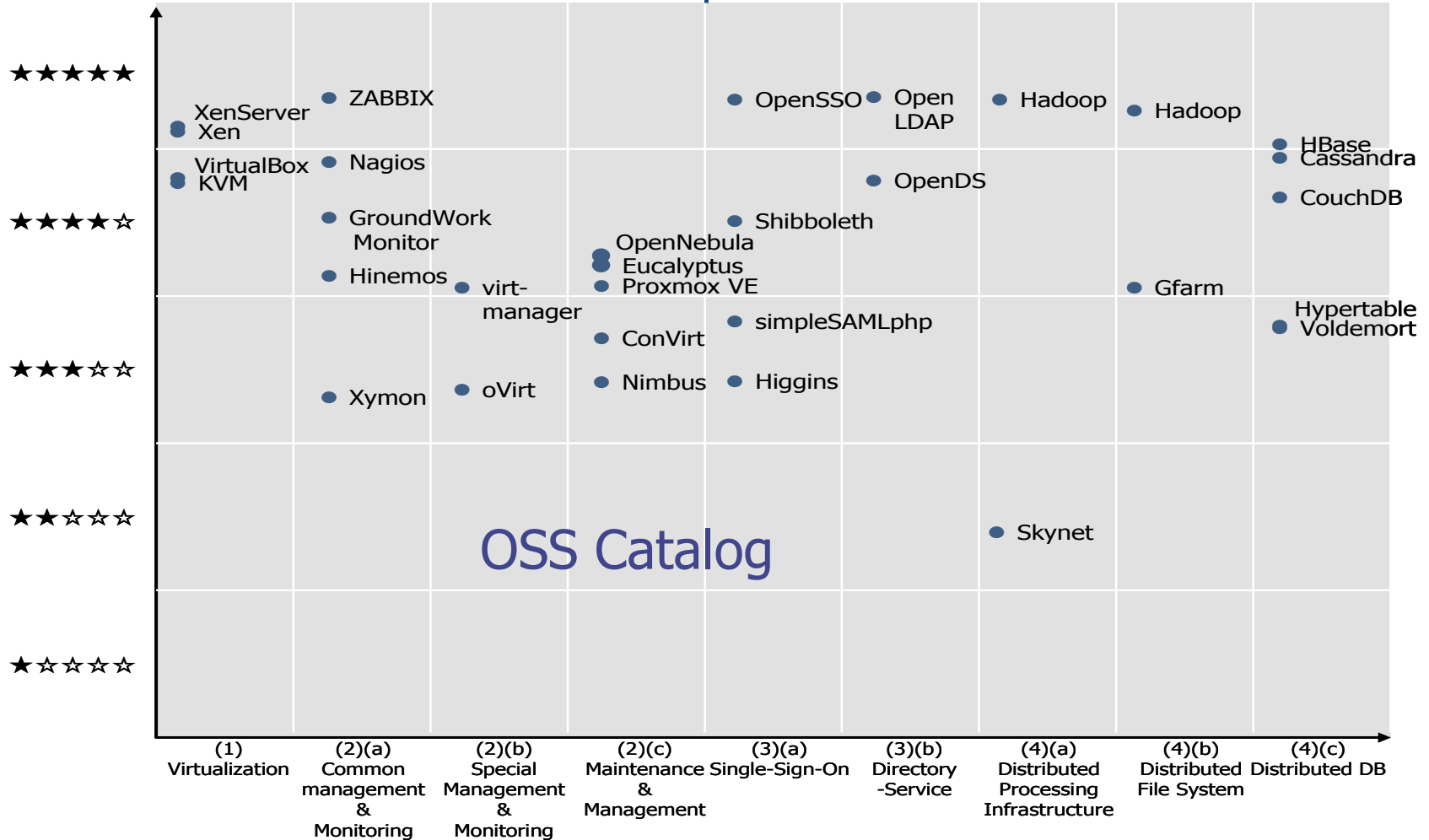
Evaluation Method

The number of stars basically represents its score. "1-1.4 = ★", "1.4-1.8 = ★★", ... , "2.6-3 = ★★★★★"

3.results



Be good to constructe Cloud Computing System based on oss stacks for some small and mid-sized companies in CJK.



3. Future



- Firstly ,We appreciate **CJK governments, OSS related organizations and engineers** for your kindly support.
- **we will continue to do CCTF**
 - **Continue** to sharing the situation of CJK about Cloud Computing field;
 - **Continue** to talk about NACCRC .
 - **Need** to find the way of cooperation about business in Cloud Computing field.
 - **Continue** to evaluate OSS stack and give some proposal to **improve** these OSSs ;
 -



WG1 CCTF

Thanks!
ありがとうございます!
감사합니다!

