

WG1 Cloud computing TF report

(Security TF merged)

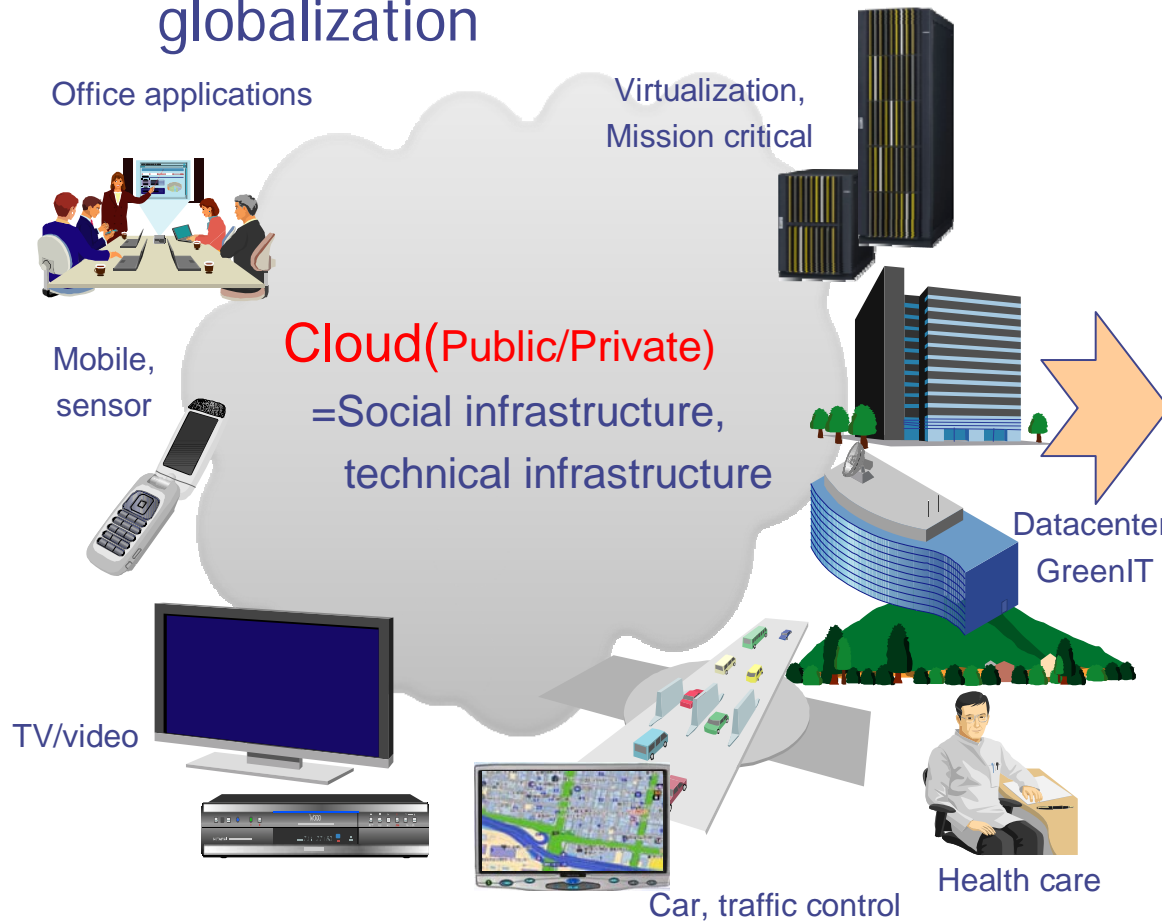


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Korea contact person
Sungin Jung
(ETRI)

1. Background of establishing "Cloud computing TF" in WG1

- Cloud is paid attention, and this cause paradigm shift
- Cooperation is important because of various technology and globalization



Issues

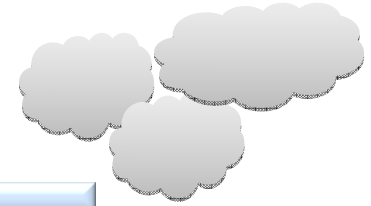
- We need to consider our strategy from the view of not only IT but also various industry.
- Where is cooperative area?
- OSS is enough or not.

2. History of establishing “Cloud computing TF”

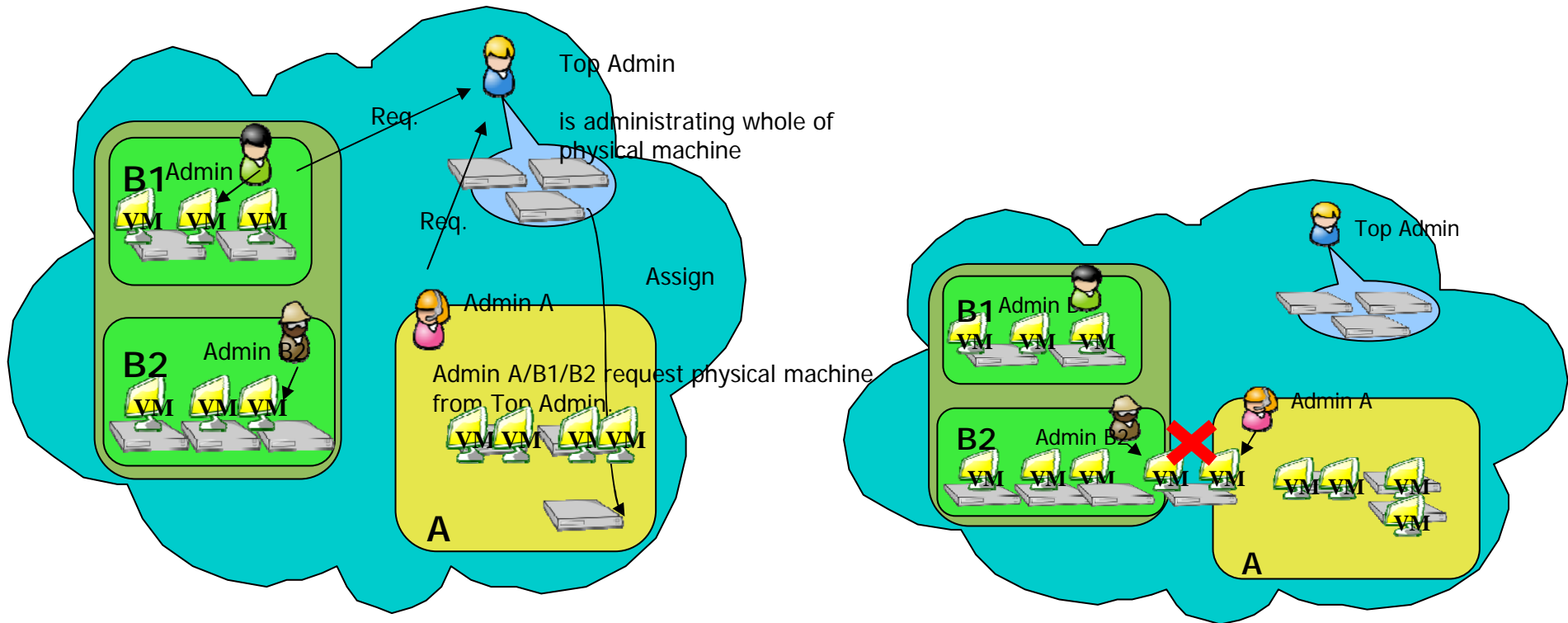


- Start discussing the establishment from Feb. 2009 at “Security TF” meeting in Pusan, Korea
 - many discussion about security issues in Cloud computing
- Reconfirming at CJK contact persons meetings
- Held the 1st TF meeting at LF Japan, 18th Oct.

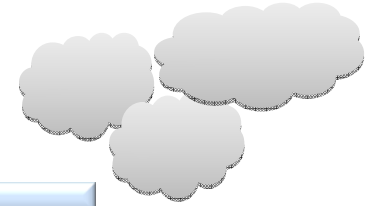
3. Activities of "Security TF"



- Discussed security issues about Cloud computing based on use cases
 - researched real use cases in private Cloud
 - looked into if the OSSs are enough or not

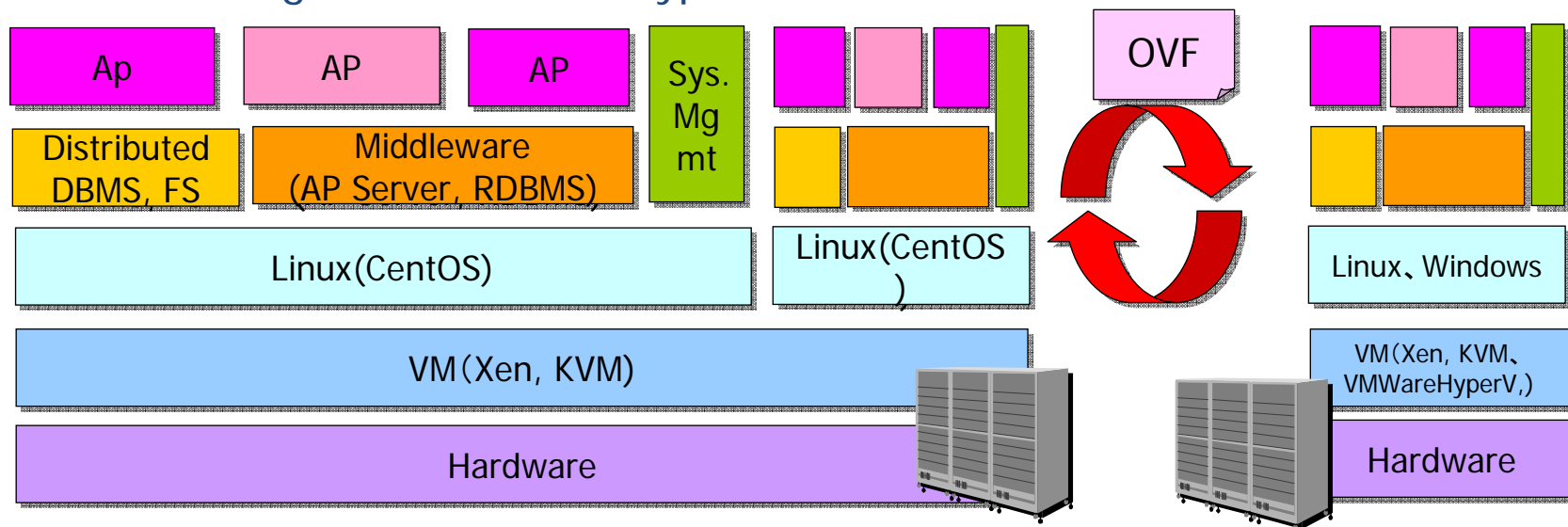


4. Plan of “Cloud computing TF” – OSS stack



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



4. Plan of “Cloud computing TF” – Evaluation



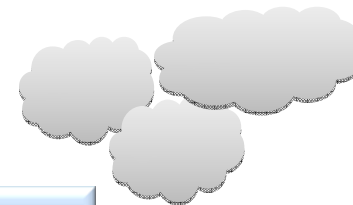
Evaluation point and plan

- 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

5. Future plan



● Goal

- sharing the situation of each CJK cloud computing and planning to evaluate works based OSS stack(1st stage)

● Schedule

- 1st F2F meeting (Oct. 2009), 2nd F2F meeting for planning(1Q,2010, Korea(candidate))

● 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

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