Static analysis with VM consolidation
정적 분석을 통한 클라우드 환경에서의 가상 머신 병합 방법
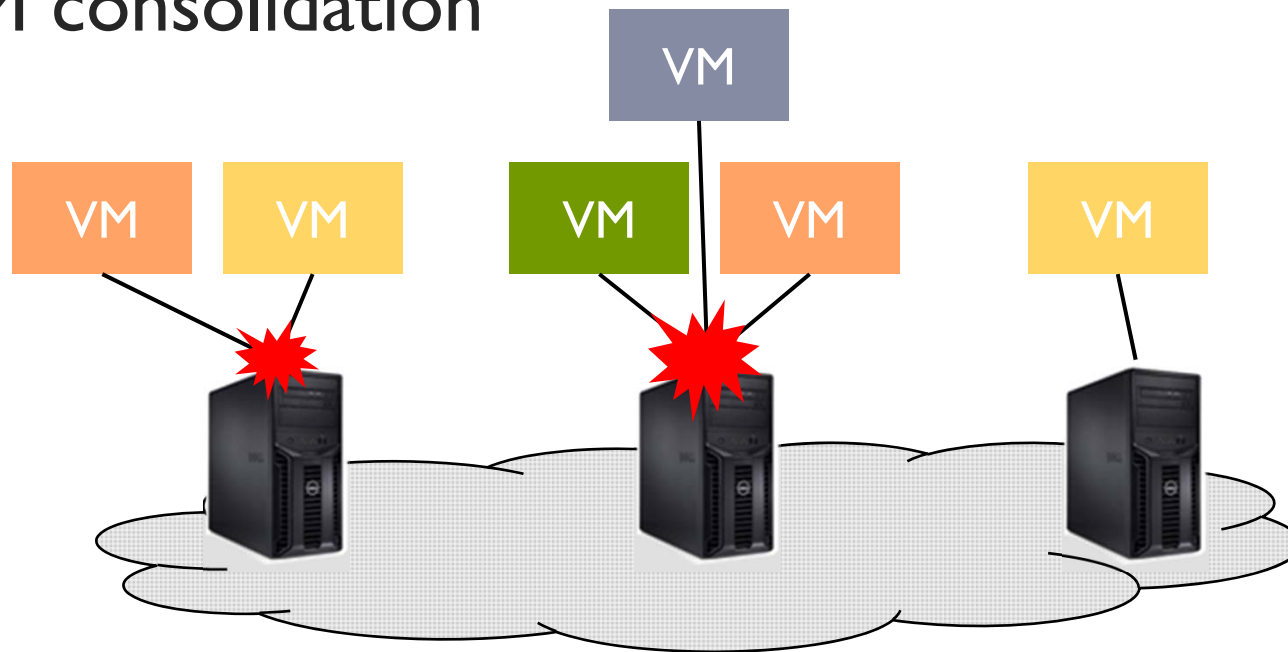
서울대학교 분산시스템 연구실 송내영 2012-07-26

R☉SAECcenter
Research On Software Analysis for Error-free Computing
소프트웨어 무결점 연구센터 NRF ERC

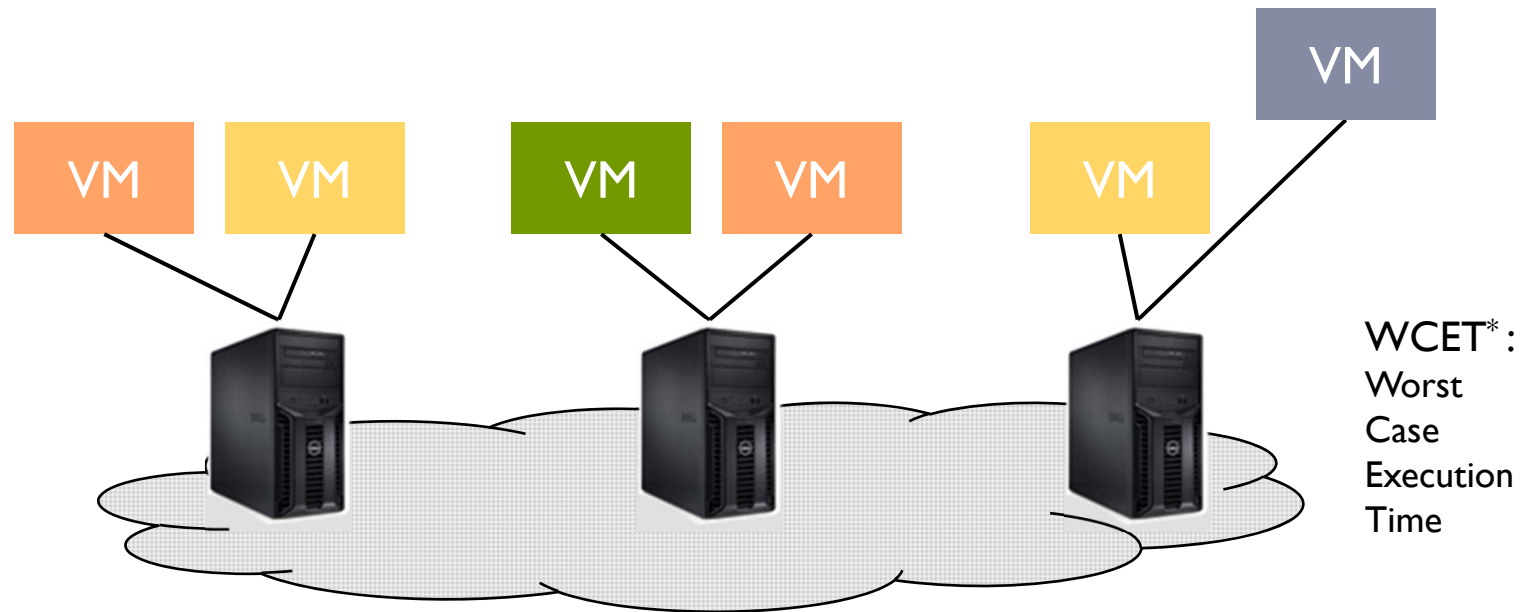VERI LUX TAS MEA

DCS Distributed Computing Systems Laboratory

↗ VM consolidation

VM

VM   VM   VM   VM   VM

Resource Contention : CPU, memory, storage, network, etc.

↗ VM consolidation

WCET* :
Worst
Case
Execution
Time

Resource Contention Prediction
WCET* prediction

→ **Static analysis**

Static analysis with VM consolidation

↗ Static analysis of WCET

  ↗ Worst Case Execution Time

  ↗ Overhead of dynamic analysis!!

- Static analysis on C binary code
- Analysis without annotations
- Support for current Intel architectures
- Program-level analysis rather than function-level one

➢ **Reasonably accurate WCET!!**

QnA?

Thank you ☺