

# SYMPOSIUM'16

# AMERICA – EUROPE – ASIA



THE ASIAN SPEC SYMPOSIUM ON SERVER EFFICIENCY

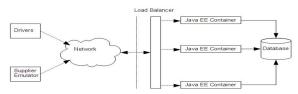
## Java Enterprise (JEE) Applications Performance

### SPECjEnterprise2010

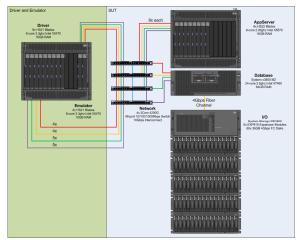
 System benchmark measurement and characterization of performance of Java EE 5 servers and supporting infrastructure such as JVM, Database, CPU, disk and servers.

#### **Workload Scenario**

- · Modeled after end-to-end real world business case
- Emulates automobile manufacturer, incorporates:
  - CRM
  - Manufacturing
  - · Supply Chain Management
- Brokers and Providers Insurance Module
- Utilizes EJB 3.0 and WSEE component architecture



**Example configuration of standard workload** 



**HW** configuration

#### Metric

- jEnterprise Operations Per Second (EjOPs) = ∑ successfully completed workflows
  - Dealer Domain Business Transactions: Browse, Purchase, Manage
  - Manufacturing Domain Business Transactions: 50% EJB, 50% web services
  - · Insurance Transactions completed

### SPECjEnterpriseNext (under development)

- Full-system performance for Java Enterprise Edition (Java EE 7) application servers and supporting infrastructure including software (JVM, Database, OS) and hardware (Processors, Network, Storage)
- Entire SPECjEnterprise2010 functionality implemented as micro services
- Utilized Java EE and HTML technology
  - CDI 1.1, EJB 3.2, JAX-RS 2.0, JPA 2.1, JMS 2.0, WebSocket 1.0 and HTML 5
- New insurance module with web profile technologies
- New security features and REST services

#### **History**

