Workload Scenario
Modeled after end-to-end real world business case
- Automobile manufacturer whose main customers are automobile dealers
- Incorporating CRM, manufacturing and supply chain management

EAStress Workload
- exclusively for exploratory research and development purposes
- results may be publicly discussed w/o being first reviewed by SPEC
- no comparisons with SPECjEnterprise/AppServer results allowed
- no changes in workload

Metric
SPECjEnterprise2010 EjOPs : jEnterprise Operations Per Second
\[ \text{SPECjEnterprise2010 EjOPs} = \sum \text{successfully completed workflows} \]
- Dealer Domain Business Transactions: Browse, Purchase, Manage
- Work Orders completed in Manufacturing Domain during measurement interval
- average normalized per second

Key Java EE 5 Technologies Used
- Dynamic Web page generation - JSP 2.1
- Web Service based interactions - JAX-WS 2.0, JAXB 2.0 NEW
- Transactional components - EJB 3.0 NEW
- Distributed Transactions - JTA 1.1
- Messaging and asynchronous task management - JMS 1.1
- Object persistence - JPA 1.0 NEW
- Multiple company service providers with multi-site servers

What is measured?
Full-system performance for Java Enterprise Edition (Java EE 5) application servers and supporting infrastructure including
- Software
  - JVM
  - Database
  - Operating System
  - Hardware
  - Processors
  - Network
  - Storage

Novelties – Simplifications
- Java EE 5 NEW – e.g.
  - Annotations and sensible defaulting NEW
  - JPA and Optimistic Locking NEW
  - Web Services NEW
  - Usage of Java EE 5 reduced number of classes and lines of code
  - Faban – facility for developing and running benchmarks
  - Look and feel NEW
  - Integrated and simplified database loader
  - Vertical/horizontal partitioning assuming data access transparency
  - Data model, e.g. Locations
  - Emulator
- Increased CPU consumption by additional workload
- Increased contention on database
- Improved plugin points for vendors

References
- Results: http://www.spec.org/jEnterprise2010/results
- FAQ
- Run And Reporting Rules
- User Guide
- Design Document